EYE SURGEONS
AND SURGERY
IN NEW ZEALAND
The longer you can look back the further you can look forward.

— **Sir Winston Churchill**, 
**to the Royal College of Physicians, 1944**
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Undoubtedly some who assisted have been inadvertently omitted. I apologise to them and thank them.
New Zealand/Aotearoa was at the ends of the earth when charted by Captain James Cook in 1769 but, like its neighbour Australia, it became increasingly populated in the subsequent 240 years. As the population grew, the earliest medical practitioners to enter the country were generalists with no expert knowledge in the care of eye disease. Coincidentally, 1769 also marked the birth of Napoleon Bonaparte. His wars in Europe and North Africa would have a profound effect on the establishment of ophthalmology and specialised eye hospitals in Great Britain — to treat servicemen returning from war with trachoma and other eye diseases. Nonetheless, the development of eye specialists and the flourishing sub-specialty of ophthalmology in the northern hemisphere in the early nineteenth century would take some time to percolate through to New Zealand.

Indeed, due to the tyranny of distance, there were few resident medical practitioners in 1840, at the time of the signing of the Treaty of Waitangi (the founding document of New Zealand between Maori and the British crown). It would be another two years before the first with an interest in ophthalmology was to arrive. By 1858 the country’s population had grown to 115,000 with approximately half being of European extraction. It would take another 50 years before the population reached a million and almost 150 to pass 4 million. In that 150 years ophthalmology grew from itinerant practitioners, occasionally more like ‘snake-oil quacks’ than serious medical men, to a highly specialised profession employing cutting edge technology and exploring the boundaries of eye research. In this book, Bruce Hadden chronicles that intriguing story with enlivening anecdote and the insightful perspective that can only come from a lifetime spent in the pursuit of ophthalmology.

The evolution from generalist to specialist in New Zealand in many ways mirrors ophthalmology developments in the northern hemisphere but with the additional hindrance of distance. The need to travel for super-specialist training led to emigration of some of New Zealand’s greatest minds. However, most
returned, and as many overseas experts have been attracted as have departed, to contribute to the melting pot of Kiwi ingenuity in ophthalmology. Early arrivals included Sir Lindo Ferguson, the first full-time ophthalmologist in New Zealand and subsequently the Dean of the University of Otago Medical School. Among those who left, Professor Barrie Jones carved a stellar career at Moorfields Eye Hospital in London. He rose to become Professor of Clinical Ophthalmology, and was the inspiring teacher of many young New Zealand ophthalmologists.

Ophthalmology has changed exponentially in the last 50 years — a surgeon from the mid-twentieth century would barely recognise the equipment used to diagnose and treat eye disease in the twenty-first century. Lasers, both diagnostic and therapeutic, permeate the fabric of practice, computers control many investigations and as many treatments, and cataract surgery can now be accomplished through the tiniest of incisions using ultrasound rather than the scalpel. Research advances apace, with ocular anatomy and pathology being revealed with sub-micron precision as the cellular and molecular nature of eye disease is unveiled by New Zealand researchers.

Thus from the most humble beginnings, in a small country in the midst of a mighty ocean, a dynamic, vibrant culture of ophthalmology and eye research has arisen, exercising influence far beyond its borders. This is its story.

Professor Charles N.J. McGhee  
Director, New Zealand National Eye Centre,  
University of Auckland
Preface

Professor Charles McGhee, head of the Department of Ophthalmology at the University of Auckland, has enthusiasm for and a deep appreciation of history. He had Dr Thiran Jayasundera and Dr Tracey Wong, fellows in his department in 2002, travel around New Zealand and collect a considerable amount of historical material with the aim of creating a written history of ophthalmology in New Zealand. That material provided a platform from which to start.

Writing this history has been an unanticipated joy for several reasons. Our ophthalmic history is surprisingly colourful. Reading about early characters such as Dr John Wilkins is entertaining. Yet we all would have missed out on Wilkins were it not for two comprehensive articles by the late Dr Ronald Lowe in the Australia New Zealand Journal of Surgery. His articles are a valuable lesson on the value of writing before it is too late and all is forgotten. Studying the life of Sir Henry Lindo Ferguson, acknowledged as the first true ophthalmologist in New Zealand, was also inspiring. His reputation as an eye surgeon, added to his outstanding 24 years as dean of the Otago Medical School, ensure his place as the foremost character in any history of ophthalmology in New Zealand.

This history focuses on the personalities over the decades more than on the specialty itself. The progress of medical and surgical ophthalmology parallels that in other western countries, and is not peculiar to ophthalmology in New Zealand. The ophthalmologists, however, are unique.

Deceased ophthalmologists can be discussed the most objectively, and with all the benefits of hindsight. However, for some of the earliest, beyond living memory, there is little more information than their own writings and an obituary. Retired ophthalmologists can be discussed the most completely, as they are with us to tell their own tale, and their careers are complete. However, some restraint may be needed in the interests of sensitivity. Presently practising ophthalmologists are the historian’s dilemma. Several have made contributions which must be included for the book to be reasonably up to date. Yet insufficient time has elapsed for either themselves or some of their contributions to be put into context.
Those not mentioned at all must not feel aggrieved. There are presently over 120 ophthalmologists in New Zealand. Many of those left out will be included in a future publication, by which time their place in the evolution of New Zealand ophthalmology will have become recognised.

Personal interviews have been valuable, and those interviewed have been generous in sharing their memories, documents and photographs.

We hope that this attempt to assemble ophthalmology’s history in New Zealand will help to prevent its colourful beginnings and its development from being lost.

This project would not have been possible without the help of many individuals and institutions, and every attempt has been made to acknowledge them all.

O. Bruce Hadden
Auckland, 2012
Ophthalmology was practised as a separate branch of medicine in ancient Egypt. Philoxenus, who lived around 270 BC, was one of the most celebrated Alexandrian oculists. Many eye diseases were described in the books of Hippocrates, although no mention was made of operations on the eye. However, De Medicina, by Aulus Cornelius Celsus (c.25 BC–AD 50), describes ophthalmology and eye operations. Aetius of Amida (AD 527–565) wrote a treatise on diseases of the eye in the sixth century. The earliest printed book, De Oculis Eorumque Egretudinibus et Curis (1474), was written by Benvenuto Grassi of Salerno. The History of Ophthalmology by Albert and Edwards is an adequately comprehensive work, but Hirschberg’s work is exhaustive. Source Book of Ophthalmology is an illustrated dictionary of 2582 books on ophthalmology published before the year 1900, which are housed in three great American ophthalmic libraries: the Washington University School of Medicine Library in St Louis, Missouri; the Dan Albert Library, Department of Ophthalmology, University of Wisconsin Medical School, Madison, Wisconsin; and the Mary and Edward Norton Library, Bascom Palmer Eye Institute, University of Miami School of Medicine, Miami, Florida.

Ophthalmology has always been a branch of medicine, and all ophthalmologists are medical practitioners who have gone on to specialise in the field. At New Zealand’s first medical school in Dunedin the first professors appointed were those in medicine, surgery, obstetrics and gynaecology, and ophthalmology. The second dean of the Otago Medical School was an ophthalmologist. In Christchurch, the first three doctors were a physician, a surgeon and an ophthalmologist, and the ophthalmologist was the hospital’s superintendent. Globally, ophthalmology was the first of the surgical sub-specialties. The first international medical organisation, the International Council of Ophthalmology, held the first international medical conference in Brussels in 1857.

Perhaps these firsts were because ophthalmology is such a discrete medical specialty. Ophthalmologists are medically trained, and continue to practise both medicine and surgery. Although most surgical procedures on the eye itself are not related to systemic conditions, a number are, particularly those related to the complications of diabetes. Experience in and knowledge of general medicine
remains a prerequisite to the practice of medical and surgical ophthalmology. It
gives a balanced understanding of eye symptoms and signs, judgement of where
they may fit systemically, and the ability to manage, or at least appreciate, the
occasional and unexpected wider ramifications of ocular maladies and surgery.
Chapter 1

BEFORE THE SPECIALISTS CAME

Ophthalmology was a relatively well-established medical and surgical specialty elsewhere, long before New Zealand was first charted by Captain Cook. The earliest medical practitioners to settle and work in New Zealand did not include ophthalmologists, so these pioneers to the new world would have needed to manage ocular afflictions as best they could.

The first resident medical practitioner in New Zealand was Dr A.J. Ross, who arrived in the Bay of Islands in 1833. He built a house at Waitangi, but stayed only a few months. For unknown reasons, he aroused the enmity of Maori. Dr Joseph Croome was the first doctor to practise in the South Island. He landed at Otago Harbour in 1836, where he was surgeon to the Weller brothers’ whaling settlement. In 1838 he intended to return to England but got only as far as Sydney when, for reasons lost to history, he decided to return to New Zealand and to settle in Waikouaiti, another whaling station located about 30 kilometres north of Port Chalmers. The first advantage of settling at Waikouaiti may have been that the notorious Johnny Jones’s homestead was there. The second was that in 1854 Dr Croome married the governess to the Jones family.

Dr Samuel Ford arrived in 1837 under the auspices of the Church Missionary Society. Initially he worked in the Bay of Islands but later moved to Auckland.

Three later arrivals were much more prominent. In the south, Dr Thomas Hocken settled in Dunedin in 1862. Among other contributions, he was a great collector of New Zealand historical books and documents, which are now housed in the Hocken Library in Dunedin. In Auckland, Dr Thomas Philson arrived in 1845. He too contributed in many ways and is best remembered for
founding a library of medicine and surgery in 1883, now known as the Philson Library, within the University of Auckland. Dr E.H. Roche has written excellent accounts of these pioneers.3

The so-called ‘Father of Auckland’, Sir John Logan Campbell, arrived in New Zealand in 1850. He too was a medical practitioner but, fortunately for Auckland and New Zealand, turned to civic affairs, which included becoming mayor. His greatest legacy was gifting his sizeable farm, Cornwall Park, to the city.

The first medical practitioner in New Zealand to leave any record of interest in the eye was Dr David Monro (1813–1877), later Sir David.4 Despite his impeccable medical lineage — his great-great-grandfather, John Monro, was a founder of the Edinburgh Medical School and his great-grandfather, grandfather and father were all, consecutively, professors of anatomy at the school — he emigrated to New Zealand in 1842. We can only speculate on the reasons, but one element could have been shame. His father was professor of anatomy at Edinburgh at the time of the infamous Dr Robert Knox, who obtained bodies for dissection from the euphemistically named ‘resurrectionists’. The macabre Burke and Hare murders were committed to augment the supply of bodies to Dr Knox, who then on-sold the cadavers to the medical school!

Fortunately, Monro wrote a detailed journal of his voyage down the east coast of New Zealand. His ship was aiming for the Bay of Islands, but made landfall just south, at Whangaruru Harbour. There, he observed that about one in eight Maori had inflamed eyes, and a few had ulceration and opacity of the cornea. He postulated that the cause may have been the habit of living in an enclosed hut with a fire but no chimney.5 Monro settled in Nelson, and in 1869 delivered a lecture on the eye at the Nelson Provincial Hall, probably the first ophthalmic lecture in New Zealand.6 Sir Randal Elliott spoke of this in his opening address at the fiftieth annual conference of the Ophthalmological Society of New Zealand (OSNZ) at Wairakei in 1996. Monro, like Sir John Logan Campbell, did not practise

Sir David Monro (1813–1877), Nelson.
NELSON PROVINCIAL MUSEUM,
MISCELLANEOUS COLLECTION: ½ 12.
medicine in New Zealand for long, as he turned successfully to politics. He was elected to the House of Representatives, became Speaker of the House and was knighted in 1866. Sir David died in 1877 aged 63.

John Wilkins (1826–1905) was a colourful, controversial and probably a clever surgeon in the nineteenth century. Consequently, a great deal has been written about him. The most comprehensive articles were written by Ronald Lowe. Sir Lindo Ferguson mentioned Wilkins in his address to the annual meeting of the New Zealand Branch of the British Medical Association in 1922 (see Chapter 2). While in Victoria, Australia, Wilkins wrote extensively, and had 28 papers published in the *Australian Medical Journal* on a wide variety of medical topics. He even invented an anaesthetic machine, mentioned by Dr Basil Hutchinson, an Auckland anaesthetist, at an address for a retiring colleague.

*Lowe described Wilkins as a good author who wrote clearly and without obfuscating verbiage. However, Wilkins was prone to advertising and was rebuked by the Medical Society of Victoria for advertisements in *The Age* newspaper. Ultimately he was forced to resign from the Medical Society of Victoria, which precipitated his move to Dunedin in 1877, later to Christchurch, and finally to Auckland.*

*In the *Otago Daily Times* of October 29 1877 there was a business notice advising that Mr John Wilkins, surgeon, with his detailed qualifications, was available for consultation. His residence was Bell Tower, Dowling Street, Dunedin. He moved to Christchurch in 1880. There he again ran into trouble by advertising in the *Evening Star*, a Dunedin newspaper. His advertisement mentioned that he had been on the surgical staff of the Royal Eye Hospital, London, now the internationally famous Moorfields Eye Hospital. The president of the New Zealand Medical Association therefore wrote to Moorfields, and was advised that Wilkins had never been on the staff. The Medical Association*
held a meeting and passed a resolution that the advertisements were misleading, and this was reported in the *Evening Star* and in the *Australian Medical Journal*. However, Wilkins forwarded documents which proved that he had been appointed as a clinical assistant at Moorfields, signed by the renowned Sir William Bowman, a senior surgeon. The *Australian Medical Journal* then published a retraction and apology. The error was a question of the distinction at Moorfields between ‘honorary staff’ and ‘assistants to staff’.10

Wilkins moved to Auckland in 1884, and gained further publicity in the *New Zealand Herald* of September 18 that year with an article titled ‘A Skilful Operation’. It read:

*About a fortnight since we noticed that Captain Burgess, our Auckland harbourmaster, was laid up from an attack of a disease in his right eye known as glaucoma, producing in it the greatest pain with daily failing sight, and as he had already lost all useful vision of his left eye from previous attacks in it of the same disease, he naturally became greatly disquieted in his mind as to how the present attack was likely to terminate. Fearing blindness in this eye also, he consulted Dr Wilkins of this city, who advised an immediate operation as the only treatment likely to do any permanent good. The doctor performed the operation on the 3rd of this month upon both eyes, with the result that the disease was immediately stopped and sight returned. The progress toward recovery of sight since Dr Wilkins performed the operation has been so satisfactory that Captain Burgess is again able to resume his office duty with excellent sight.*

At around the time that Wilkins relocated to Christchurch, a notice appeared in the classified section of the *Otago Daily Times* of October 4 1879, advising that Dr Grant and Professor Wallenburg, oculists, aurists and specialists, had arrived in Dunedin. It read:

*They may be consulted upon all diseases of the eye, ear, and throat. Deafness, noises in the head, defective sight, cataracts, amaurosis, ophthalmia, *gutta serena*, loss of the eyelashes, inflammation, and all diseases of the eye, ear, and throat, treated upon new and scientific principles. At their consulting rooms, Criterion Hotel, private entrance — Moray Place.*

*Gutta serena: an obsolete term for amaurosis*
The advertisement was followed by glowing opinions of the press. The editor of the *Otago Daily Times*, in company with the editor of the *Saturday Advertiser*, was invited to the doctors’ consulting rooms at the Criterion Hotel. The first case shown to them was a Miss White, aged 11 years, the daughter of a settler at Oamaru, who had been totally blind for years. The editors reported that ‘This young lady had been under the treatment of these clever oculists for three days and, wonderful to say, her eyesight had been perfectly cured. The father of the girl assured us that he had placed her under the care of several medical men who had failed to do her any good, despite the money that he lavished upon her.’

Three other remarkable cases were quoted. The article finished by saying,

*The above cases clearly illustrate that Dr Grant and Professor Wallenburg are without doubt what they profess to be. Oculists, aurists, and specialists. We would strongly recommend that those who are either afflicted with blindness or deafness to consult these gentlemen at once as their stay here is limited.*

In the late nineteenth century, the *Otago Daily Times*, *North Otago Times* and *Southland Daily News* were replete with such ‘miracle cures’ carried out by Dr Grant and Professor Wallenburg, some of these accounts given extra credibility by being headed ‘Opinions of the Press’. In addition, there were letters to the editors of the publications from grateful patients who described their wonderful cures.

Dr Grant must have moved to Auckland, because in the *New Zealand Herald* of June 17 1881 we read in the classified columns on page 3:

*Blindness, Deafness, &c. Dr Grant, Member of Royal College of Surgeons, England, and of the Medical Board of Victoria and New South Wales; also registered in New Zealand and Tasmania. Oculist, Aurist, & Specialist (From Europe), By the desire of friends of his numerous patients, has returned to permanently reside and practice the various branches of his profession in Auckland, and can be consulted at his private Consulting Rooms, corner of Grafton Road and Symonds Street (Opposite the Choral Hall), Auckland, Upon All Diseases of the Eye, Ear, and Throat, Deafness, Noises in the Head, Defective Sight, Squinting, Cataracts, Amaurosis, Ophthalmia, Gutta Serena, Loss of Eyelashes, Inflammation, and all Diseases of the Eye, Ear, and Throat, treated on new and scientific principles, and attention is confidently and particularly requested to the following cases of the Eye, Ear, Throat, and other Special Affections.*
This was followed by testimonials from three patients from Christchurch, which were in turn followed by opinions of the press extolling further miraculous cures of blindness and deafness by Dr Grant. Grant must have been financially successful, because he donated a large collection of Egyptian artefacts to the Auckland Institute and Museum.

Such fanciful self-promotions would not be publishable today and it is difficult to understand how anyone could believe them then, just over a hundred years ago. Wallenburg and Grant moved about, advertising wherever they went, akin to snake-oil salesmen. Wilkins did the same, but he had the backing of some post-graduate training at Moorfields, and when in Victoria, Australia, he published extensively, as mentioned.

It is inevitable that documentation from the medical literature of nineteenth century New Zealand is at times both fragmentary and contradictory. Dr Stedman was definitely appointed the first medical superintendent of Christchurch Hospital in 1862. However, Bennett in his book on the history of Christchurch Hospital, described Stedman as an ophthalmologist, but later said he was the physician, and joint superintendent with Parkerson, who was the surgeon. Wales, in his unpublished history of ophthalmology in Christchurch, described Stedman as an ophthalmologist. Nonetheless we can be certain that Dr Llewellyn Powell was appointed as an eye specialist in 1864, 19 years before Sir Lindo Ferguson arrived in New Zealand.

In Dunedin, William MacStravick Stenhouse (1841–1923), a graduate of Glasgow University, began practice in 1876. He wrote booklets on ‘Our eyes and how to use them’, and ‘The Common Diseases of the Ear, Throat, and Nose’, on which he was a specialist. He also wrote a paper entitled ‘Aetiology of episcleritis’. He was an honorary visiting physician to Dunedin Hospital for 10 years, and may have practised only medical ophthalmology, as he had a limb amputated.

We cannot glean whether these early physicians had significant or any specialist training, or to what degree they confined themselves to ophthalmology, or at least to ophthalmology and ear,
nose and throat (ENT). However, we can be reasonably confident that the first
to practise ophthalmology exclusively, albeit with some ENT in early years, was
Henry Lindo Ferguson, who arrived in Dunedin in 1883.

William MacStravick Stenhouse (1841–1923), Dunedin.

CYCLOPEDIA OF NEW ZEALAND, VOLUME 4, 1905.
Henry Lindo Ferguson (1858–1948) arrived in Dunedin in 1883. He described the ophthalmic scene before he arrived in his address to the first sub-section meeting in eye and ENT held in conjunction with the annual meeting of the New Zealand Branch of the British Medical Association in 1922, as follows:

"I found on arrival that the eye work of the Colony was either dealt with as part of general practice or was done peripatetically by a Dr Schwarzbach, a German who later made Sydney his headquarters and came around New Zealand every year or so after the fashion of an operatic company, making short stays in each centre, and by a Dr Wilkins, who had been in Dunedin but who lived in Christchurch when I arrived and came down periodically for a fortnight or three weeks and paid shorter visits to the smaller towns. Soon after my arrival Dr Wilkins moved to Auckland and later to San Francisco, and his practice was not by any means confined to ophthalmology. From what I saw of their work I should say that Wilkins was a good operator and I have been told that his operating showed what was then referred to as ‘surgical style’, but I must confess that the methods of practice of both men filled me with amazement and dismay. Dr Wilkins’ preliminary advertisements announcing a three weeks visit during which he could be consulted at his hotel had been in the papers..."
when I arrived, and a few days after I landed he came down, but returned to Christchurch next day and since then there have been no peripatetic ophthalmologists in Dunedin, though both he and Schwarzbach worked the North Island for a good many years after that time. When I came in 1883 I was told on all hands that the time was not right for special practice and only two of the local practitioners in Dunedin considered that I might in time make a living, but within a couple of years Mr Humphrey Haines who had obtained his special [ophthalmology] training as house surgeon in my old hospital after I left Dublin made the same experiment in Auckland as I had done in the south, and a few years later there were specialists in Christchurch and Wellington.

Perhaps it is understandable why Ferguson did not mention his predecessors Professor Wallenburg and Dr Grant, the other two peripatetic ophthalmologists, but it is surprising that he did not mention Stenhouse, who must have been practising ophthalmology in Dunedin before he arrived in 1883.

Fortunately, Ferguson also recorded his earlier life. During the winter of 1882–83 in Dublin, Ferguson was working at nights to obtain photographs of the retina utilising his own eyes with the pupils dilated. After so doing, he found that he required glasses for hypermetropia. He also had some ‘chest trouble’. There was a possibility of tuberculosis, which fortunately did not eventuate. Ferguson went to his old teacher James Little, who ordered a ‘complete change’, so he selected New Zealand because its climate was very like Britain’s. His mother and brother accompanied him, the latter very likely having tuberculosis.

Ferguson arrived at Port Chalmers on October 12 1883, by which time he was feeling well and his ocular accommodation was restored, allowing him to dispense with his glasses. It is possible, but nowhere mentioned, that he had been instilling atropine

Sir Henry Lindo Ferguson (1858–1948), Dunedin. DR LINDO FERGUSON CBE.
eye drops to dilate his pupils for the photographs. Atropine paralyses the eye’s accommodation, an effect which may take three weeks to wear off, and occasionally longer.

Ferguson was appointed to the staff of Dunedin Hospital as an ophthalmologist in 1884, and was appointed as a lecturer in ophthalmology by the Council of the University of Otago in 1887. Ferguson became professor of ophthalmology in 1909, the same year that the medical school appointed its first professors in medicine, surgery, pathology and midwifery and diseases of women, attesting to both Ferguson’s status and ophthalmology’s importance.

In his early years in Dunedin, Ferguson practised both ophthalmology and otolaryngology. He later relinquished otolaryngology, when Dr A.J. Hall was appointed lecturer in the specialty in 1915. Dr Winifred Bathgate was Ferguson’s assistant at this time, until the arrival of Dr William Carswell (see below). In this era, the range of ophthalmic surgery was cataract, iridectomy, strabismus, and some lacrimal and orbital surgery. Ferguson’s instruments included four beautiful trephines of the type used to extirpate benign tumours, which raises the possibility that early on he may have done some neurosurgery. However, they were more likely used for mastoid work.3 There were many shipwrecks in New Zealand in the 1800s, and Ferguson knew that the captain of at least one had poor eyesight. He successfully lobbied the government to introduce eyesight tests for deck officers, the forerunner of many more visual standards for various occupations.4 Ferguson is traditionally reputed to be the first true ophthalmologist in Australasia. This originates in part from the president’s medallion, which was presented to the OSNZ by the Ferguson family in 1970. On its reverse side is engraved ‘Sir Henry Lindo Ferguson, CMG, FRCSI, 1858–1948. The first ophthalmologist in Australasia’. However, in Dunedin there was William McStravick Stenhouse, and in Christchurch Llewellyn Powell, as mentioned in Chapter 1. In Melbourne there were James Rudall, Andrew Sexton Gray and Aubrey Bowen. Gray and Rudall are the acknowledged founders of the Royal Victorian Eye and Ear Hospital, in 1863. Rudall of Melbourne is regarded as the first true ophthalmologist in Australia. It is well documented by Lowe that Gray, the founder of the Royal Victorian Eye and Ear Hospital in Melbourne, formally trained in ophthalmology with Dr William Wilde at the St Mark’s Ophthalmic Hospital in Dublin.5 Bowen trained at the Birmingham and Midland Eye Hospital, then did further training at St Mark’s and attended eye clinics at Moorfields Eye Hospital in London, before emigrating to Melbourne.6

In Sydney there were Sir Henry Normand MacLaurin, appointed to Saint Vincent’s Hospital as an ophthalmic surgeon in 1873, and Thomas Evans, appointed to Sydney Hospital as an ophthalmic surgeon in 1882. MacLaurin of Sydney was more of a generalist. Although appointed to St Vincent’s Hospital
as an ophthalmic surgeon to the outpatients, he was later appointed as honorary physician. In addition, Charles Gosse was trained at Moorfields and was appointed to the Adelaide Hospital in 1881 as its first ophthalmic surgeon.

Whether the first Australasian ophthalmologist or not, Ferguson was the first to have a university academic appointment, and was Australasia’s first professor of ophthalmology. Ferguson was hugely influential in both Australia and New Zealand, and his reputation attracted many patients from Australia — a not inconsiderable journey in the late nineteenth century.

Ferguson became the second dean of the Otago Medical School in 1914, succeeding Professor John Halliday Scott. Ferguson retired in 1937, and to date is the Otago Medical School’s longest serving dean. Ferguson’s legacy includes his enormous achievements as dean of New Zealand’s only medical school at that time. The Otago Medical School grew in size, stature and facilities under his leadership. He was extremely successful in persuading politicians and university leaders that the medical school needed adequate funding to achieve high standards, and the neo-classical Lindo Ferguson Building is named in his honour.

From every account, Ferguson was a commanding and inspiring leader. Honours were bestowed upon him. He was a foundation member of the Ophthalmological Society of Great Britain, and of the Royal Academy of Medicine of Ireland. With Sir Hugh Devine of Melbourne and Sir James Elliott
of Wellington, he was involved in the founding of the Royal Australasian College of Surgeons. In 1927–28 the three travelled together to the United States to learn how the American College of Surgeons functioned, and to take advice from that body before establishing the Australasian body. As a result, Ferguson was also made an honorary fellow of the American College of Surgeons. The University of Melbourne conferred on him an honorary Doctor of Medicine. These significant contributions to New Zealand medicine were recognised by His Majesty King George the Fifth, who knighted him (KCMG) in 1924.

Ferguson also found time for some private ophthalmology practice. He operated at Prospect House, a private surgical hospital in St David Street, Dunedin. Prospect House was opened in 1900 by Miss Annie Tombe, a certificated nurse who had served in the Dunedin Hospital. Ferguson charged fees commensurate with his high reputation, and when a solicitor called Mondy refused to pay his fee, Ferguson took him to court. The case received wide publicity, an example of public service and good business practice not being mutually exclusive.

Ferguson operated for cataracts on Sir Logan Campbell, the acknowledged founder of Auckland. (Campbell was also a medical practitioner, but after his arrival in New Zealand he did not practise medicine, as previously noted.)
Despite his wealth, Campbell complained to Ferguson about being sent an account for the surgery, as he had expected that professional courtesy would have applied! Ferguson had private means, and did not insist on a dean’s salary until the age of 70. And even then, he donated that salary back into the school. He was quoted as saying, ‘I was able to do much for the School that a salaried whole time man could not have done. I was absolutely independent and could say what I liked and the [University] Council took it cheerfully.’

Sir Lindo and Lady (Emmeline) Ferguson also personally donated generously to the Otago Medical School, thus founding the Dean’s Fund, which was later renamed the Ferguson Fund.

The depression of 1929 affected even Ferguson. He dispensed with his chauffeur, but then had to drive his bull-nosed Morris Cowley himself. He disliked reversing, a manoeuvre he avoided by creating doors at both ends of his garage and a circular driveway!

Ferguson’s wide interests included stamp collecting, gold mining and wines. He had a large underground wine cellar at his home, Wychwood, in Anderson’s Bay, Dunedin. After his medical training in Ireland he obtained a certificate

*Wychwood, the home of Sir Lindo and Lady Ferguson, Anderson’s Bay, Dunedin.*

HOCKEN COLLECTIONS, UARE TAOKA O HAKENA, UNIVERSITY OF OTAGO.
in mining from Trinity College in Dublin, and in Dunedin he became chairman of an alluvial mining operation, in which it seems the dredge was always in some trouble or other. The directors, one of whom was Sir George Fenwick, often met in his rooms. Sadly, but possibly to the benefit of New Zealand ophthalmology, their golden dreams never eventuated.

In 1935 the generosity of Samuel Saltzman, a Dunedin merchant, provided a modern operating theatre specifically for ophthalmology and otolaryngology at Dunedin Hospital. Ferguson, at the age of 78, performed the first operation in the new theatre, and the last of his illustrious career.

Sir Lindo Ferguson died on January 22 1948. He and Lady Ferguson (1864–1944) had a son, Gerald, and a daughter who died during childhood. Their two grandchildren by Gerald are Mrs Marjorie Macdonald, wife of ophthalmologist the late Gair Macdonald, and Richard Henry Lindo Ferguson, CBE, an ophthalmologist in Auckland.

Other Dunedin ophthalmologists
The earliest, Dr William MacStravick Stenhouse was mentioned in Chapter 1. Dr David John Stuart Burt (1871–1928), an Otago Medical School graduate, practised ophthalmology and ENT for a short while in Dunedin, before moving to Sydney. Also in Dunedin in the early twentieth century were Drs Sylvester L. Geerin, William E. Carswell, Kenneth Ross and Winifred Bathgate. Dr Bathgate was both the first woman and the first graduate of the Otago Medical School to be appointed to Dunedin Hospital’s staff.
Sir Lindo Ferguson performing one of his last operations, aged 78. DRS CALVIN AND PETER RING.
William Elliott Carswell (1882–1958) graduated from Otago in 1906, gained the fellowship of the Royal College of Surgeons, England, and started as assistant surgeon at Dunedin Hospital in 1915. After further study in London, he succeeded A.J. Hall as head of ENT at Dunedin Hospital, and in 1937 succeeded Sir Lindo Ferguson as head of the Eye Department. Carswell retired in 1945, and was replaced by Dr Rowland P. Wilson.

Rowland Wilson MBE (1896–1981), a New Zealander, trained in Edinburgh in both medicine and ophthalmology. In 1926 he became director of the Giza Memorial Ophthalmic Laboratory in Cairo, Egypt, and senior surgeon at Fuad First Eye Hospital. Subsequently, he became professor of ophthalmology at the Medical School in Cairo. While there, he completed significant research in trachoma, which was recognised by Sir Stewart Duke-Elder in his magnum opus System of Ophthalmology. Wilson’s work paved the way for the isolation of Chlamydia as the causative organism of trachoma by T’ang in Beijing in 1957. He was awarded the MBE in 1943 for his work in the civilian defence of Cairo during World War Two. He was also a talented cricketer, and captained the Maadi (Cairo) Sporting Club cricket team for 18 years.

Wilson had international standing, and thus his appointment to Dunedin Hospital as New Zealand’s first full-time academic ophthalmologist was considered a great coup. He arrived in his birth city of Wellington from Cairo on the S.S. Strathmore in 1945, with his wife and four children. In Dunedin, he...
was an inspiration to a young Barrie Jones (see page 248), and he gave Jones a solid education in microbiology and in writing papers. Professor Doug Coster of Adelaide has written an excellent article on these two remarkable New Zealand ophthalmologists. This background certainly contributed to Jones's meteoric career at Moorfields, where he became professor of clinical ophthalmology.

Unfortunately, Wilson's health was compromised by several heart attacks, and he had to decline an invitation to deliver the prestigious Bowman Lecture in the United Kingdom in 1948. Nevertheless, he became president of the OSNZ that year, and editor of its Transactions from 1956 to 1961. Wilson was promoted to associate professor in 1954, and retired in 1977 at the age of 81 (see also Chapter 11).

Interestingly, Professor John Parr credits Wilson, rather than Sir Lindo Ferguson, as laying the foundations of academic ophthalmology in New Zealand. One of Wilson’s innovations was to appoint an optometrist to the Department of Ophthalmology, a move which was opposed by ophthalmologists, especially in northern centres, ostensibly because of patch protection. Parr finally secured the appointment of Gordon Sanderson, an optometrist, as a lecturer in physiological optics in the Department of Ophthalmology in 1971, after pursuing funding for 10 years. Much to the chagrin of many ophthalmologists of that time, Sanderson’s appointment was one of the most successful made to the Dunedin department.

Gair Macdonald (1918–2007), Dunedin.

NEW ZEALAND OPTICS, MARYANNE DRANSFIELD.

Gair Macdonald (1918–2007) began as an ophthalmologist in Invercargill, where his father had practised. Gair was the fourth generation of medical men in the Macdonald family. (His wife Marjorie is Sir Lindo Ferguson’s daughter and therefore Richard Henry Lindo Ferguson’s aunt.) Macdonald was a very capable surgeon, who developed both corneal transplant surgery and oculoplastics in Dunedin. Many registrars* were taught to the level of independently undertaking

*A registrar is an already qualified doctor who is doing post-graduate training to become an ophthalmologist.
a wide range of surgery from corneal grafts to Mustardé cheek rotation flaps under his able tutelage. Macdonald taught surgical skills to many registrars who went through the Dunedin department, for surgery was not Professor Parr's strength.

Macdonald had a propensity for remembering patient details. Although he retired from Dunedin at the age of 62 and moved to the family farm in Geraldine, he continued consulting. When in Geraldine he examined a child with strabismus (squint), took the history that the child's mother had had strabismus surgery, recognised her maiden name and then pronounced that she had a scar under her left breast. He himself had created the wound some 25 years earlier. While performing strabismus surgery on the mother, she suffered a presumed cardiac arrest from the oculo-cardiac reflex, and he gave internal cardiac massage through this incision. He still completed the eye operation.

Mordonald retired permanently when in Geraldine, and moved to a smaller property in Lowburn in Central Otago, where he cultivated lavender.


Born in Roxburgh, Parr secured a place in the Otago Medical School by gaining A passes in all four pre-medical subjects, a harbinger of his future academic career. He excelled at medical school, winning the University of New Zealand Travelling Scholarship in Medicine in 1945. Fortunately, as a house surgeon he came under the influence of Wilson. Parr had been training under Wilson for only two months before Wilson had the first of several heart attacks which meant that Parr suddenly acquired increased responsibility. This stimulated Parr to learn fast and gave him an insight into the specialty of ophthalmology, which influenced his decision to pursue the specialty. Parr travelled to England and, characteristically, passed the primary examination of the Royal College of Surgeons of England within a month of arriving in London in 1949. He soon after passed the Diploma of Ophthalmic Medicine and Surgery (DOMS), in early 1950. He was appointed to the House of Moorfields Eye Hospital, a very competitive post, later the same year. He was setting a trend; of the six registrars...
to follow Parr at Moorfields, four were also New Zealanders: Randal Elliott, R.H. Lindo Ferguson, Deen Brosnan and Barrie Jones.

Parr described the Moorfields training as predominantly surgical with insufficient emphasis on medical ophthalmology and related topics such as neuro-ophthalmology. The surgical training, however, was top class, being then in the era of giants. There was Sir Harold Ridley, the pioneer of intra-ocular lenses, and Hyla (Henry) Stallard, whose textbook *Eye Surgery* is a classic, and who was an Olympic bronze medallist in the 1500 metres in Paris in 1924.

In London, Parr shared a flat with Randal Elliott. They remained great friends throughout their careers in Dunedin and Wellington respectively, although Parr recognised their contrasting backgrounds: he, the son of a rural school teacher, and Elliott, whose family were part of the capital’s rich and powerful. Parr described his personal meeting with Sir Stewart Duke-Elder, founder of London’s Institute of Ophthalmology and renowned author of the *Textbook of Ophthalmology*, and later the invaluable, scholarly 15-volume *System of Ophthalmology*. Duke-Elder impressed Parr with his genuine interest in an ‘ignorant colonial’, and his readiness to give advice. Surgery was not one of Duke-Elder’s strengths, and Parr described how the great man often held his patients’ hands and reassured them how the operation was progressing, while a colleague was performing the procedure.¹⁴

For reasons of patriotism rather than opportunity, Parr returned to New Zealand in 1952 and commenced hospital and private practice. He was advised by colleagues that he could not make a living in private practice without combining otolaryngology with ophthalmology, but he quickly disproved that. Parr’s Dunedin colleagues were Rowland Wilson and Gair Macdonald. In 1961 Parr succeeded Wilson as full-time senior ophthalmologist at Dunedin Hospital and senior lecturer in Ophthalmology, University of Otago, when Wilson finally retired in 1977. When Parr went overseas for three months in 1961 his locum was carried out by Colin Fenton, who had just returned from post-graduate study in London, but to Parr’s disappointment and Wellington’s gain, Fenton decided to establish himself in the capital.

Parr lamented the difficulty of attracting staff to Dunedin because its relatively small population could not support a number of privately practising ophthalmologists. Parr described his often strained relationship with northern New Zealand ophthalmologists, being regarded as a southern socialist. In Parr’s presidential address to the OSNZ in 1965, he spoke in support of employing medical auxiliaries, optometrists and orthoptists. As Parr said, why use ophthalmologists who take 13-plus years to train to do tasks which can be done by others appropriately trained? This was bitterly opposed by his northern colleagues, and by Australian ophthalmologists. Of course time has
proved Parr was right, and the employment of optometrists and assistants is now widely accepted.

The large number of medical students placed a huge teaching burden on Parr and his department’s small staff in a small city. Relief came in 1969 when Richard Reynolds arrived from Oxford, England, as a part-time hospital ophthalmologist. However, after 10 years he relocated to Guernsey. Another part-time hospital colleague, Dr John Bowbyes, established himself in Dunedin in 1974. It was Parr’s hope that his registrar Richard Clemett would return from overseas to an academic post in either Dunedin or Christchurch, and that Bowbyes would do likewise. Clemett duly accepted the post of senior lecturer in Christchurch. Bowbyes returned to Dunedin, but to Parr’s disappointment was based largely in private practice, in which he did very well, and therefore was only part time at Dunedin Hospital.

Despite being in a small, isolated city with a heavy teaching load, Parr made many contributions to New Zealand ophthalmology. Undoubtedly his foremost contribution was in education, not only of medical students, but of registrars training in his department, and those throughout Australia and New Zealand who attended his outstanding course in the basic sciences of ophthalmology. This was a four-week residential course designed to prepare candidates for the part one examination of the Royal Australasian College of Surgeons and the Royal Australian College of Ophthalmologists (RACO), as the latter was then known. Parr established the Education and Qualification Committee of the OSNZ in 1975, and remained its chairman until 1982. He maintained that education comes before qualification — hence the title of that committee — whereas the Australians called their equivalent the Qualification and Education Committee. (However, the name Qualification and Education Committee is now the name in both countries.) He also maintained that all examiners should come from the teaching stock and none should examine who did not undertake a major teaching role. This committee oversees registrar selections and training programmes throughout New Zealand.

Parr published 21 papers, many of which were original contributions to the knowledge of retinal circulation. His contribution to education in ophthalmology became worldwide with the publication of his book *Introduction to Ophthalmology*, first published in 1976 by the University of Otago Press, and subsequently by the Oxford University Press, and now in its third edition (1989). It received favourable reviews overseas, including in the *New England Journal of Medicine*, and by Trevor-Roper in the *British Journal of Ophthalmology*.

In addition to his academic work in laying a good foundation for the training of ophthalmologists, Parr wrestled with the problem of maintaining a good standard of public ophthalmology in the smaller centres such as Oamaru.
and Invercargill. The frequently changing administration of the health system resulted in fiercely independent locally elected hospital boards which imagined that all that was required to provide a good ophthalmology service was to appoint an ophthalmologist. Having done so, they would renge on promises of support and equipment, and sabotage the referral of complex cases to larger centres by refusing to assist needy patients with travel costs. These attitudes meant that ophthalmologists tended to leave. Parr also persuaded the Department of Health to pass a regulation that departments should not be established with fewer than two ophthalmologists. This was not consistently adhered to.

There were also examples of administrators appointing people without properly checking their credentials. The classic example was in 1994, when an ophthalmologist had an appointment in Wellington to be interviewed for registration in New Zealand. Just before his interview, a colleague found a copy of a notice on his desk, indicating that the interviewee was wanted in California for offering false hope to cancer victims, and had been barred from practising, although he was continuing to offer alternative treatments in Ireland. Fortunately, he did not turn up for the interview.

It would be natural for one of Parr’s academic ability to be considered as a prospective dean of the School of Medicine. In fact, when Professor Barrie Jones of Moorfields was visiting, he spoke to the powers that be, and his departing shot to Parr was that he was ‘expected to be the next Dean’. However, the position went to Edward (later Sir Edward) Sayers, a physician from Auckland. Parr said he didn’t want the job, as the difficulties faced at the time by the Otago Medical School were so great. He became the medical staff representative on the committee which dealt with the Christie Report, which did the school a favour by slamming the government for ‘grossly under-resourcing, and expecting everything to be done for nothing’.*

Parr’s living legacy is the ophthalmology registrars whom he trained. Early ones included Richard Clemett, Tony Lee and John Bowbyes. Subsequently, Ian Elliott was the first ophthalmology trainee to pass the final fellowship of the Royal Australasian College of Surgeons as a registrar, before travelling overseas.

* Professor Ronald Christie, Dean of the Faculty of Medicine at McGill University, Montreal, Canada, was engaged by the Otago University Council in 1967 for three months to report independently on the problems facing the Otago Medical School. He found that the Faculty of Medicine ‘must be one of the most economical in the English-speaking world’. His findings were supported by the university, the Otago Hospital Board, the University Grants Committee and the Department of Health. In summary, he stated that to avert its total demise, the Otago Medical School needed hugely increased funding and facilities, and modernising of its medical curriculum. Fortunately, many of the far-reaching recommendations were implemented.
He was awarded the prestigious Hearst fellowship in neuro-ophthalmology with Professor William Hoyt in San Francisco. Others who trained in Dunedin with Parr included John McKinnon, Paul Herrick, Tom Ellingham and Ken Tarr. Rod Keillor was Parr’s last registrar.

In ophthalmic practice, Parr’s strength was in the field of medical ophthalmology, and he complemented this with significant research in retinal and optic nerve blood flow.

As mentioned above, the highly successful four-week residential course in the ophthalmic basic sciences was conceived and developed by Parr. Such a course was certainly needed for candidates taking the part one ‘Primary’ examination for fellowship of the RACO, and places were highly sought by candidates throughout Australia and New Zealand. This very successful course ran in Dunedin from 1982 to 1999, when it was replaced by the Post-graduate Diploma in Ophthalmic Basic Sciences at the University of Otago. A similar two-week residential course in Dunedin for more senior trainees taking the part two examination of the Royal Australian and New Zealand College of Ophthalmologists (RANZCO) was started in 1998. This course is overseen by Associate Professor Gordon Sanderson, and it remains very popular.

When in England, Parr met and married Diana Cretney, the nursing sister of the private ward at Moorfields, and they enjoyed a long and happy marriage until Diana’s passing in 1994. Some time later, Parr renewed his friendship with Miss Margaret Swan, whom he had known when she was a young nurse and he a young registrar in Dunedin, before Parr travelled to England. They married in 1996, and Parr was blessed with a second happy union until his passing in 2009.

Parr was president of the OSNZ in 1965, and was granted a personal chair at the University of Otago in 1977. The John Parr Prize for the top fifth-year medical student in ophthalmology at the Dunedin School of Medicine was established in 1989. In 2008 Professor Parr was honoured by the RANZCO with its Distinguished Service Medal.

Gordon Sanderson’s appointment to Dunedin Hospital in 1971 was controversial because he was a trained optometrist. The difficulty of attracting ophthalmologists to Dunedin was a catalyst for the inspired decision by Rowland Wilson, subsequently pursued by John Parr, to appoint an optometrist rather than an ophthalmologist to the academic department. After years of wrangling by Parr, the post of lecturer in physiological optics at the Otago Medical School was finally advertised in England, and Sanderson was appointed in 1971. He arrived in Dunedin in February 1972, and the appointment is widely acknowledged as a great success story from its beginning.

At that time the idea of employing an optometrist was anathema to most
ophthalmologists, especially those in the north of New Zealand. So Sanderson was quite chuffed when, at a Dunedin meeting in 1973, Dr Rod Suckling, head of ophthalmology at Christchurch Hospital, said to him in a corridor, ‘We need someone like you in Christchurch.’

Sanderson was aged 25 when he arrived in New Zealand in 1972. Together, he and Parr taught medical students to a new standard for many years.

Sanderson was keen on physics and had particular interest in ophthalmic optics which he applied to the benefit of medical and post-graduate students, and his interest in contact lenses and low-vision aids was applied to the benefit of patients. This interest and expertise in low-vision aids led him to become a member of the board of the Royal New Zealand Foundation of the Blind and subsequently he became chairman of the Foundation. He was also appointed a foundation director of the New Zealand National Eye Bank in 1989.

Sanderson’s unique contributions to ophthalmic education in Australia and New Zealand were justly recognised by his being made an honorary member of the OSNZ in 1995, and an honorary fellow of the RANZCO in 2003. Recently Sanderson was made chairman of the Otago Post-graduate Medical Society, an honour usually restricted to medical practitioners. Most deservedly, he was recognised by the nation in 2006, being created a Member of the New Zealand Order of Merit (MNZM).

Anthony Molteno accepted a full-time post in Dunedin and arrived from South Africa in 1977. In South Africa he had been the acting head of department at the University of Stellenbosch, Tygerburg Hospital. Molteno is a true academic with a broad intellect and such a wide range of interests that he is widely regarded as a ‘Renaissance man’. In ophthalmology his particular interests are optics and glaucoma.

In Molteno’s early days in Dunedin, it is fair to say that he and John Parr did not immediately develop a working rapport. Indeed, Parr would despair of ‘that madman Molteno’, while Molteno would ask which phase the moon
was in.\textsuperscript{18} Later, each came to respect the other’s broad and deep but differing intellects, and together they led a strong department.

Professor Anthony Molteno ONZM at the RANZCO Conference in Brisbane, 2009, when he was presented with the Distinguished Service Award of the college in recognition of his contributions to the treatment of glaucoma, and the education and training of registrars.

\textit{NEW ZEALAND OPTICS, MARYANNE DRANSFIELD.}

Molteno was the first in the world to successfully develop, in the late 1960s, a surgical drainage procedure using the innovative eponymous ‘Molteno drainage implant’ for treating complex and severe cases of glaucoma. Since then he has studied the implant and its clinical outcomes which has led to modifications of the implant and the surgical technique for its insertion, and improved drug regimes to increase the chances of long-term success. Features of the Molteno implant have subsequently been copied by other glaucoma drainage device developers, as the double-plate Molteno implant has become the ‘gold standard’ device to which all subsequent devices have been compared. In recent decades the Molteno and subsequent glaucoma drainage devices have increasingly been used worldwide in the management of glaucoma.\textsuperscript{19} The Molteno3 implant is the most recent modification of the implant. These devices have become so widely accepted and associated with the inventor that the surgery is now often called a ‘Molteno tube’ procedure by glaucoma surgeons.*

For many years Molteno was an examiner in optics for the Royal Australian and New Zealand College of Ophthalmologists. In the days of oral and practical examinations he was prone to producing unusual or antiquated items of

* The Otago Glaucoma Surgery Outcome Study follows cases of trabeculectomy or Molteno implant insertion performed at Dunedin Hospital since 1976. In October 2010 the study database had details of 1005 cases of trabeculectomy and 955 cases of Molteno implant. This study has been largely funded by the Healthcare Otago Charitable Trust. The study has both clinical and clinico-pathological arms, and both are the largest studies of their kind worldwide.
equipment and asking jittery candidates about their optical details. Frequently his co-examiners were almost as intimidated as the candidates. For better or worse, the modern requirement that examinations be fair and transparent has removed such eccentricities of flair and showmanship to identify especially talented candidates.

Associate Professor Molteno succeeded Professor Parr as head of the Department of Ophthalmology in Dunedin in 1987.

Molteno has applied his innovative mind to many, often diverse, research areas, including bone-derived hydroxyapatite orbital implants (the M-Sphere orbital implant nicknamed ‘moa bones’) used to re-create orbital volume after eyes have been removed. He also invented the Otago photoscreener, which is used in public health programmes to detect squint early in young children and thus enhance their chances of a good visual outcome. He developed an ultraviolet camera for photographing the outer surface of the eye, which has revealed the absorption prominence of corneal epithelial iron in the region of the Hudson-Stahli line, and a pattern reminiscent of vortex keratopathy. He has used Fourier analysis to assess and grade cataract severity. This non-invasive, quick and cheap technique is currently being further investigated. As cataract extraction is one of the most common elective surgical procedures, Fourier analysis has significant potential. Most recently he has been investigating the optical performance of intra-ocular lenses.

His research has extended to the histology of the tuatara pineal complex* and cataracts in sheep. His research output resulted in a body of work approaching 100 scientific papers and chapters by 2010. He is technical director of Molteno Ophthalmic Ltd, a private limited liability company established in Dunedin in 1982 to manufacture and distribute high-quality ophthalmic surgery medical devices.

Molteno has received many deserved national and international awards during his career. A special award was in 1994 when he received the second Goldmann Medal from the International Glaucoma Association for his significant contribution to the understanding and treatment of glaucoma. In 2001 he was granted honorary fellowship of the South African College of Physicians.

In 2002 Associate Professor Molteno was belatedly recognised by the University of Otago and granted a personal chair in Ophthalmology, which

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* The tuatara is a reptile native to New Zealand. It is the sole survivor of a very ancient group, and is thought to have been in existence for over 200 million years. It has a well-developed pineal gland, a midline structure on the dorsum of the brain. It is covered thinly by skin, and has structures homologous with the cornea, lens and retina of the eye. The tuatara’s pineal gland is thought to be light sensitive, and is sometimes called the ‘third eye’. All vertebrates, including humans, have a pineal gland.
many considered long overdue after almost 30 years of research activity in New Zealand. Professor Molteno is therefore the third professor of ophthalmology in Otago’s history, having been preceded by Sir Lindo Ferguson (1909) and Professor John Parr (1977). In the New Year’s Honours list of 2006 he was made an Officer of the New Zealand Order of Merit (ONZM).

Molteno and his wife, Tess, have always been very supportive of others, especially those Molteno works with, such as registrars and the 10 Molteno grandchildren. Life around Molteno is never dull. He has been overhead more than once telling a patient in the eye clinic the requirements for consideration for being trained as a witch doctor and what the process would involve, and that ‘presbyopia was invented by God so that you couldn’t see your partner’s wrinkles’ as you get older. His registrars get to view the ice caps on Mars through a telescope on his lawn. His grandchildren have an extraordinarily rich environment, as diverse as viewing amoebae from the sheep trough through a microscope or being taught how to safely shoot opossums.
In 2002 the inaugural Postgraduate Diploma in Ophthalmic Basic Sciences (PGDipOphthBS) for New Zealand and Australian medical graduates commenced at the University of Otago, initiated and organised largely by Gordon Sanderson. The purpose of the course is to provide a post-graduate diploma in ophthalmic basic sciences for medical graduates who are seeking a position on the RANZCO’s approved vocational training programme or who are currently engaged in such a programme. Diploma teaching staff are mostly practising ophthalmologists with a particular interest in basic sciences. Since 2004, it has been run jointly with the University of Sydney.

Candidates who achieve a good pass in the PGDipOphthBS are eligible to complete a full year of research towards a Master of Ophthalmology (MOphth). This degree is one of the first of its kind in the world, although a similar degree is now being offered by the University of Adelaide.

In essence, Dunedin was the only eye academic centre in New Zealand for many decades, under the successive headships of Ferguson, Wilson, Parr and Molteno. In Christchurch, Richard Clemett was appointed as a full-time senior lecturer in 1973 by the University of Otago. In 1977, the same year that Molteno took up his academic post in Dunedin, Sir William Stevenson endowed an academic post in Auckland, but there was no appointment for several years.

Although Dunedin continues to be disadvantaged by its small population, it remains a strong academic centre, principally because of Molteno. Ongoing efforts in research and in maintaining post-graduate courses which are sought after by trainees throughout Australasia also ensure that Dunedin continues to contribute well above its weight, in terms of being a unit in a small city, once at the outer limit of the British Empire.

Academic and public hospital services have been Dunedin’s proud strengths, not only in ophthalmology, but also in other medical disciplines, largely because of the presence of the Otago School of Medicine in the city. Dr Mary Jane Sime (née Houliston) moved to Dunedin after her marriage in 2009 and joined the department as a full-time hospital ophthalmologist.

In the private sector, Dunedin has never been large enough to support a stand-alone day-surgery centre. Private practitioners and part-time hospital consultants over the years have included William Carswell, Sylvester L. Geerin, Ian Rutherford, Gair Macdonald, John Parr (for a short period), Richard Reynolds, John Bowbyes, David Peart and Rod Keillor. Sir Lindo Ferguson and successors operated privately at Prospect House in St David Street. The present centre for Dunedin’s private medical and surgical specialists is the Marinoto Clinic and Mercy Hospital in Newington Avenue, Maori Hill.
In 1862 Dr Silas Stedman was appointed the first medical superintendent of the newly opened Christchurch Hospital. Dr Harry Wales, in his unpublished history of the Department of Ophthalmology at Christchurch Hospital, described Stedman as an ophthalmologist. However Bennett, in his book *Hospital on the Avon*, described Stedman and Burrell Parkerson as joint superintendents, with Stedman as the physician and Parkerson as the surgeon.

As superintendent, Dr Stedman agitated for more facilities as there was no mortuary, no dispensary, no kitchen, no chapel and, not least of all, no operating room! Surgery was performed in a room which doubled as a consulting room. The Provincial Council eventually acceded to some of his requests. However, Dr Stedman eventually gave up the fight, and entered private practice in Armagh Street. He died a little later, in his mid-forties, from typhoid fever. (Such deaths from infections were not uncommon in nineteenth century New Zealand. If born in 1876, the life expectancy for men was 50 years, and for women 54 years.)

In 1864 the Provincial Council appointed Dr Llewellyn Powell (see picture page 24), a graduate of Heidelberg University, as an ophthalmologist. He was also science master at Christ’s College, the first lecturer in biology at Canterbury University, secretary of the Acclimatisation Society, and president of the Philosophical Institute. Little wonder that he died at the age of 47 in 1879.

By 1870 the medical staff at Christchurch Hospital had risen to three: one physician, one surgeon and one ophthalmologist. Application was made to the New Zealand government for the medical staff to be paid, but this was not to happen for another 70 years. Honorary hospital appointments were common in New Zealand until the 1940s, giving rise to the professional sentiment that public hospital work was largely charity work, supported by the physicians’
income from private practice, and in many instances in those days from personal wealth.

In 1876 a medical school was planned for Christchurch, to be associated with Canterbury University College and Christ's College, and Powell was to be lecturer in physiology and demonstrator in ophthalmology. However, when the Provincial Council was disbanded, the medical school project lapsed. Powell resigned in 1879.

In 1882 the Christchurch Hospital Department of Ophthalmology was cared for by Drs Morton Anderson and Robert Hall Bakewell. Anderson was a general practitioner, and Bakewell a member of the Royal College of Surgeons of England and licentiate of the Society of Apothecaries of London. The historian Michael King said that Bakewell worked at Florence Nightingale's shoulder at the Battle of Balaclava in 1854 during the Crimean War.4

Bakewell arrived in New Zealand in 1873. He practised for a few years in Dunedin before moving to Hokitika and finally to Christchurch. He was criticised in the *Australasian Medical Gazette* in 1883 for advertising in the *Lyttelton Times* newspaper. At this time a Dr Maurice Louisson was apparently also doing ophthalmic surgery, as his son, Dr George Louisson, an honorary gynaecologist at Christchurch Hospital, remembered his father doing cataract operations. Louisson had the distinction of playing cricket against the famous W.G. Grace. Perhaps an optimist, at the age of 85 he purchased a new dinner suit as his old one was out of fashion, and the following year he attended the yearling sales at Trentham racecourse, promising he would not buy a horse. He returned home with two, which would be ready to race in about four years, when Louisson would be 90.

In 1881 the peripatetic Dr John Wilkins (see picture page 21) from Victoria and Dunedin was appointed to the staff of Christchurch Hospital. Wilkins's time in Christchurch was also troubled. There was an argument about who should appoint hospital staff: the newly created hospital board, the government or the hospital staff themselves. As a result all positions were cancelled, and new staff were appointed. Wilkins was the only staff member to be reappointed. Later, members of staff laid charges against Wilkins, ostensibly the reason being that he ‘operated before the prescribed time of 3.00pm’. Wilkins replied that eye surgery required a good light and that he had to start earlier to obtain that. In the same year, 1883, Wilkins was reported to have attempted to transplant a rabbit cornea into a human patient.5 The outcome was not reported, but it must have failed, if only because immunological rejection of an animal cornea always causes it to become vascularised and opaque.

Soon after Wilkins moved to Auckland, where he was again criticised for advertising, as had occurred in Melbourne (see Chapter 1). Perhaps Wilkins was
then forced out of Auckland practice as well. Sir Lindo Ferguson recalled that Wilkins moved to San Francisco, but this cannot be substantiated. Wilkins is certainly buried in Purewa Cemetery in Auckland.

In 1895 a Mr Hyman Marks left £5000 in his will for a new hospital ward. This was supplemented by the government, and the foundation stone was laid in 1896. Thus the two Hyman Marks wards were opened in 1898.

Dr Charles Chilton (1860–1929) graduated from Canterbury College (now the University of Canterbury) in zoology which remained his principal interest. Then in 1895 he changed to medicine, and graduated from Edinburgh, where he also studied ophthalmology. He practised as an ophthalmologist in Christchurch in 1901 but soon after accepted the chair in biology at the University of Canterbury.

When Wilkins left for Auckland, he was replaced at Christchurch Hospital by a Dr Manning. Dr W. Stevenson joined the staff in 1905.

In 1910 Manning heard that there was a new ‘monkey treatment’ purported to cause rejuvenation, and so he departed for England to receive it. We have no documentation either about the treatment or why he wished to pursue such outlandish and undoubtedly ineffective treatment. Dr Terras Bell was appointed in his place.

By 1911 the medical staff of Christchurch Hospital comprised three surgeons, three physicians, two ophthalmologists, one anaesthetist, one pathologist and one radiologist. There were never any surgeons at Christchurch Hospital who operated in both ophthalmology and otolaryngology.

In 1912 both Drs Stevenson and Bell resigned after a disagreement with another staff member, but in 1913 Stevenson reapplied, and was elected by the board on a ballot. Bell joined the army and regrettably was killed in action in the 1914–18 war. Fortunately, Manning returned from England at this time, but unfortunately the monkey treatment had not rejuvenated him.

In 1912 the board issued regulations for the Eye Outpatient Department, which make interesting reading.

*The Eye Outpatient Department will be open between the hours of 9 am and 12.00 noon on specified days. Outpatients must first visit the secretary's office to give proof of their circumstances before gaining a recommendation for treatment. No patient who is not punctual will receive any advice or treatment. All patients must bring their own bottle for medicine. All patients will pay one shilling and sixpence for each attendance, or less if they are destitute.*
At this time, there were no facilities for recording the field of vision, no slit lamps, and intra-ocular pressures were assessed digitally. Seemingly of more importance was that no doctor was to be late for morning tea, which was a ceremony complete with a silver teapot and proper decorum.

In 1918 Stevenson resigned from the hospital staff after 31 years of service, and again the board advertised for an ophthalmologist — but again with no success. Manning continued to work alone on a voluntary basis, attending hospital half a day a week, only if requested. The hospital board was desperate for more staff, and offered a subsidy of up to £100 to the private practice of any applicant for the first year or two. The British Medical Association objected to this incentive, but subsequently withdrew its objection.

As a result, in July 1920 Dr Harry Wales (senior) was appointed to the staff. He came from Auckland, having sold his practice to Dr Herbert Goldstein. He took over from Manning, who retired in the same year having served the hospital in an honorary capacity since 1887.

Wales continued as the sole ophthalmologist at Christchurch Hospital until 1924, when Dr J.A. Newell was appointed. He has been described as an irascible gentleman, hard to get along with at times, and in 1928 he suddenly resigned. Dr James Gossip was then appointed, and he retired in 1932. He was replaced by Dr Caroline Stenhouse (1900–1988).

Stenhouse graduated from the Otago Medical School in 1924. She trained at Moorfields Eye Hospital in London, then practised in India for three years as a missionary. She moved to Christchurch in 1930, and joined Dr Stevenson’s practice.

Dr Caroline Stenhouse (1900–1988), Christchurch. NEW ZEALAND MEDICAL JOURNAL.

Stenhouse was appointed visiting ophthalmic surgeon at Christchurch Hospital in 1932, and was the first woman ophthalmic surgeon in New Zealand. Later, Dr Roy Holmes assisted her at surgery. As Holmes related, ‘The first thing she did was remove her hearing aid, so as not to hear any stupid remarks while operating. Her tremor was frightening, as if the Graefe knife were aiming for the patient’s ear. But she
glided it to the limbus, as her tremor somehow diminished.  

Stenhouse was ophthalmic consultant to the New Zealand Army from 1939 to 1945, and was a foundation member of the OSNZ. Again from Holmes: ‘The Society's problem was, as a woman, what to do with her when the Society's formal annual dinner was held at a gentlemen’s club? At Christchurch a sherry gathering was arranged at the Queen’s Club, which was pretty musty. So the wives had to parade there, while their husbands ate and drank up large a few blocks away.’

Although New Zealand was the first country to give women the vote back in 1896, the Ophthalmological Society could not cope with having a woman president in Stenhouse’s era, regardless of her capabilities. However, New Zealand’s second woman ophthalmologist, Dorothy Potter, became president of the society in 1984, by which time male chauvinism was eroding, but not yet gone.

After Stenhouse retired, her outpatient clinics were inherited by Rod Suckling. This gave Suckling a very high regard for her standard of practice.

It is interesting to note that at some time during the 1920s inpatients paid for their hospital treatment: nine shillings a day for adults, six shillings and sixpence a day for children. All the medical staff were honorary appointees. Indeed, in 1921 Medical Superintendent Dr Walter Fox stated that the hospital board should realise how much the cost would be to the taxpayer if it was ever foolish enough to replace the honorary staff with salaried staff.

Payment of hospital staff was first mooted in 1940 and reactions were mixed, with some staff preferring to remain honorary, others opting for a salary. The final result was that a stipendiary staff came into being. In 1941 social security became law under the Labour government, and Christchurch Hospital became free for both inpatients and outpatients. This of course greatly increased the number of patients.

In 1942 Dr Harry Wales senior had a stroke which caused an homonymous hemianopia.* His son Dr Harry Jenner Wales was appointed as an assistant ophthalmologist prior to his overseas training, and he and Stenhouse looked after the department World War Two.

After World War Two, Wales junior did two years’ further training in London, gaining the Diploma in Ophthalmic Medicine and Surgery (DOMS), and returned to Christchurch in 1947.

Dr Lindsay Burns (1911–1998) was appointed visiting ophthalmic surgeon in 1946, when Wales senior resigned because of ill health. Burns had served

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* A stroke or cerebro-vascular accident in the brain which may cause a loss of half of the field of vision in both eyes, on the side opposite to that of the affected side in the brain.
as ophthalmic surgeon with the British forces in North Africa, Greece and Italy, attaining the rank of lieutenant colonel. Burns reputedly was quietly spoken, impressive, respected and stubborn. All the instruments had to be present on the tray before the operation started. If one was missing, no matter that it took 15 minutes to sterilise. In his fastidiousness, he used a metronome to time the application of retinal diathermy. Nevertheless, he was widely considered the pre-eminent eye surgeon in Christchurch at the time. He was head of the Department of Ophthalmology at Christchurch Hospital from 1957 to 1972. Both he and his father W.C. Burns were foundation members of the OSNZ. Subsequently, Lindsay Burns was the society’s president in 1959–60.

Dr Tony Sandston returned from overseas service in World War Two and was appointed as a full-time house surgeon in the Eye Department, the equivalent of the present-day registrar. In 1948 Stenhouse left for overseas and Sandston took over her private practice and her hospital work but a year later the positions were reversed when Sandston went overseas and Stenhouse returned.

In 1950 the Eye Outpatient Department moved to the former St Andrew’s Sunday School room, and there it functioned until 1979. The area was shared with ENT, dermatology, an oncology clinic and others.

In 1959 there was discussion about appointing an optometrist or refractionist. Auckland ophthalmologists objected, and because most of the work was medical rather than refractive, the proposal was dropped. Auckland ophthalmologists were often perceived by their southern colleagues as being more retail orientated.

In 1951 Dr Leslie Sutherland joined the staff, but his input lasted only until 1953, when Sandston was appointed in his place.

In 1958 the ophthalmic staff consisted of Drs Stenhouse, Burns, Wales and Sandston. Sandston was a quiet, gentle person, who sold himself short, while his colleagues thought well of him. Sandston was on the Disciplinary Committee of the Medical Association for many years. He, too, like Maurice Louisson, was a...
racing man, and was a member of the Canterbury Jockey Club’s judicial panel. Maybe this was good experience for disciplining medical colleagues?

In 1960 Stenhouse retired and Dr Roderick Suckling was appointed. Suckling (1926–1999) was a dedicated ophthalmologist of great integrity. He was an astute and enquiring clinician, and engaged in several clinical research projects, including a diabetic survey to explore the natural history of diabetic eye disease. He was the first to perform corneal grafts in Christchurch, and was the first New Zealand ophthalmologist to sub-specialise in neuro-opthalmology. He had a strong friendship with Professor William Hoyt of San Francisco, who visited Christchurch on many occasions.

Dr Roderick Suckling (1926–1999).
MEDICAL ILLUSTRATION, CHRISTCHURCH HOSPITAL

Suckling also had special expertise in the management of retinoblastoma and ocular melanoma. He himself had a retinal detachment, which was operated on by Professor Gerard Crock of Melbourne.

Suckling became head of the Department of Ophthalmology at Christchurch Hospital in 1978, when he took over from Lindsay Burns. Suckling was academically able and a keen teacher, and as a result was an examiner for the Royal Australasian College of Surgeons and subsequently the RACO.

Dr Thomas Averill (1928–1994) was schooled at Christ’s College, as were the majority of Christchurch’s ophthalmologists. He trained in England, and returned to Christchurch with the newest techniques for retinal detachment surgery. He remained interested in this field, and was an early user of the argon laser. He was a surgeon to the Order of St John. Averill was appointed to the staff in 1968.

Dr Roy Holmes was eventually appointed to the Department of Ophthalmology in 1964, after a wait of eight years, during which he established his private practice. He was the first Christchurch-educated person appointed who had not attended the prestigious Christ’s College, a sign of evolving egalitarianism. His personality was fully up to combating such a social handicap.
for those days. He read widely, both within ophthalmology and throughout English literature. He had a clever wit and that, together with his large stature, rendered him intimidating to those less secure. He was a great orator and had the statesman-like ability to look beyond the horizon and cast petty issues aside. He was president of the OSNZ in 1983–84, and also president of the Royal Society of Canterbury. He became involved in local politics, and was on the senate of the University of Canterbury for many years. It was said that he had been invited by both the National and Labour parties to stand for election to government, but his principal interest remained in ophthalmology.

Dr W. Roy Holmes.

Holmes was head of the Department of Ophthalmology at the time of the Christie report on medical education (see page 39), and the creation of the Otago Medical School’s clinical branches in Wellington, Christchurch and Auckland. Holmes took a special interest in glaucoma. Through his international travels, he met and personally knew most of the distinguished glaucoma specialists of his day in the world. He realised that glaucoma patients in general clinics got a raw deal. Compliance with using pilocarpine four times a day was poor. Visual fields done with small pupils were unreliable, and fundi were not adequately examined. Glaucoma surgery was risky.

Holmes established a dedicated glaucoma clinic, in which there was time to refract the patient, to dilate the pupils to examine the discs, and to do more reliable fields. It turned out that many had been having unnecessary surgery, and indeed many did not have glaucoma at all. Their diagnosis had sometimes been based on one Schiotz tonometer measurement of the intra-ocular pressure. Iridencleisis, now obsolete, was a commonly performed glaucoma drainage operation. Decades later, when these patients were seen by new ophthalmologists, they were described as having iris entrapment in a scleral wound, associated with perfectly normal optic discs!

Holmes described the Saint Andrew’s Sunday School outpatients area
when he was appointed to the hospital as being ‘four parallel booths. Caroline Stenhouse was deaf and Harry Wales had a very loud voice, and Lindsay Burns had a very soft voice. It was an absolute Paddy’s Market’. The outpatients department was run by nurses whom Holmes described as ‘a race of nurses who had been sisters on troop ships, and were women to be reckoned with. They were very much tyrants. They knew exactly how the shop should be handled and where the place of the house surgeon was, which was right down at the bottom of the pile’.

In those days, everywhere morning tea was an institution. The sister would call ‘Mrs Brown is ready’, which was the command to move to the tea room for chicken and cucumber sandwiches. Holmes instituted a weekly Thursday morning clinical meeting, which Rod Suckling and Richard Clemett developed into an invaluable educational forum for trainees and consultants alike. It gave an opportunity to discuss problematical and interesting cases, which was not possible in the mayhem of the outpatient clinics.

The 1960s were a decade of great progress. In 1964 a boy was admitted with a non-magnetic intra-ocular foreign body, which was removed by a team comprising a radiologist with an image intensifier, a member of the medical physics department and an ophthalmologist. The outcome was successful and the father made a donation of £595, with which Stallard radioactive applicators were purchased. Thus Christchurch became the centre in New Zealand for the treatment of retinoblastoma and ocular melanoma. This national service was carried out by Suckling, and later by Associate Professor Clemett.

Progress continued in 1965 with acquisition of an applanation tonometer and gonioscopy lens. Also in that year Suckling established the diabetic eye clinic, and Dr Tom Averill arrived from England with the first cryo-applicator which was used in retinal surgery. Also in 1968, the Eye Department moved to Ward 12, and for the first time became an independent unit with its own ward sister and staff.

In 1969 Dr James Hay was appointed as a part-time temporary staff member, pending the appointment of a full-time academic by the University of Otago.

Dr Harry Jenner Wales had an interest in electronics, inherited from his father, and he devised and built electro-diagnostic equipment. In 1972 electro-retinography equipment was purchased. Sir William Stevenson of Auckland sponsored an overseas study trip for Wales in 1976.

With the help of a public appeal, Wales set up an electro-diagnostic service in 1974. This was upgraded in 1977, thanks to Wales himself, who raised $46,000 from various sources, the largest single benefactor being again Sir William Stevenson. (Sir William also endowed the first chair in ophthalmology.
Wales received unwelcome publicity after he agreed to do electrical studies on a young ‘blind’ Dutch girl with a dominating father. The examination showed no abnormalities; following it, her vision was restored. This was reported in *The*
Press, and Wales’s phone ran red hot with calls from overseas. Poor Wales was in a bind, knowing that the girl had hysterical blindness, and that he was highly unlikely to be able to repeat the miracle!

Wales was recognised by his peers and became president of the OSNZ in 1969–70. In the early 1970s Dr Anthony Lee set up in private practice in Christchurch. He was never a surgeon at Christchurch Hospital, but for some years assisted in the glaucoma clinic on a voluntary basis. He developed a large practice through his kindness and dedication to his patients. On a yearly basis he made voluntary trips to provide eye services in Lambasa, Fiji.

Associate Professor Richard Clemett was a very able academic and clinician. When appointed as a senior lecturer in Christchurch in 1973, he and Professor John Parr of Dunedin were the only full-time academic ophthalmologists in the country. During training, he won the prestigious Gordon Taylor Prize for the primary examination of the Royal Australasian College of Surgeons in 1965, and then the Moorfields Senior Prize in Ophthalmology in 1969. Clemett worked in Dunedin as a registrar with Rowland Wilson. When Wilson retired, he gave Clemett his invaluable collection of trachoma pathology from Egypt. The collection is housed in the history cabinets in the Eye Department of Christchurch Hospital.

Holmes and Suckling protected Clemett, ensuring that the first full-timer in Christchurch was not abused by serving as an ophthalmic accident and emergency officer, and that all the undergraduate teaching was not put on Clemett’s shoulders. Holmes found in his role as head of the department that Clemett did not always make life easy. However, Clemett did an excellent job, and Christchurch ophthalmology was much enriched by his industry.

Clemett was president of the OSNZ in 1988–89. He was extensively involved in teaching undergraduates and ophthalmic registrars. Despite a busy clinical and teaching workload, he...
published over 50 papers in peer-reviewed literature. These included important contributions on fluorescein angiography, including work with J.V. Hodge, a New Zealand physician and researcher in cardiovascular disease.

Interestingly, Hodge contributed to ophthalmology both with early research work in fluorescein angiography of the retina, and later as chairman of the Maurice and Phyllis Paykel Trust, which was the major donor to the Maurice Paykel Chair in Ophthalmology at the University of Auckland. Hodge was also chairman of the Medical Research Council, now the Health Research Council of New Zealand.

Clemett also worked with Professor John Parr on new light filters for improving resolution in fluorescein angiography, and elucidating the micro-circulation abnormalities in branch retinal vein occlusion. He attended the first world conference on lasers in ophthalmology in Ghent, Belgium, with Alan Bird and Peter Hamilton. Toxocariasis, retinopathy of prematurity screening and ocular melanoma were other areas in which Clemett contributed.

He also studied squash-ball injuries in association with the University of Canterbury Department of Engineering. The deformation of squash balls was analysed, and based on that research, protective eyewear was designed which had worldwide impact. Clemett followed Roy Holmes as head of the Department of Ophthalmology.

Clemett established a macular clinic, in which his special interest lay, and also a diabetic clinic, while Holmes continued to sub-specialise in glaucoma. In 1978 Clemett was appointed associate professor by the University of Otago. Clemett in the south and Dr William Taylor in Auckland together established medical retina as a sub-specialty in New Zealand.

Clemett was one of the last true general ophthalmic surgeons in New Zealand. From 1978 he was doing full-thickness eye-wall resections for melanoma, and detachments with giant retinal tears, using the Ocutome vitrectomy machine, which had been donated by the Lions Clubs in 1977. In the five years before retiring, his surgical practice still encompassed vitreo-retinal, glaucoma, cataract, orbital, corneal grafts, lacrimal and oculoplastics.

Clemett experienced resistance to expanding the academic department; not financial resistance, but resistance from the private practice ophthalmologists, who in Clemett’s opinion feared that a greater number of academic ophthalmologists would lessen demand in the private sector. This has been a commonly expressed concern, but the facts proved otherwise. When Mark Elder was appointed as a full-time academic ophthalmologist, it made no difference. In Auckland, where Professor Charles McGhee has built up a hugely successful academic department, private practice is as busy as ever. Indeed, a thriving academic department creates greater awareness of ophthalmology and eye diseases in the
community, and in very many ways a strong academic department raises the overall standard of eye care.

In 1979, the Eye Department moved to its new location on the fifth floor of the new hospital block, which resulted in many new facilities. This included a new outpatients department solely for ophthalmology. Also in 1979, Dr Harry Jenner Wales retired.

In 1977 Clemett arranged a microsurgery course with Dr Dick Galbraith of Melbourne as the overseas contributor. Although Calvin Ring, Bill Taylor and one or two others had been using the operating microscope since around 1972, Clemett’s course introduced microsurgery to many others throughout New Zealand.

It is well known that in the 1980s Christchurch lagged behind other New Zealand centres in accepting intra-ocular lenses following cataract surgery. Holmes put this down to the influence of Tom Averill, who while in London worked near Dr Peter Choyce, who was inserting anterior chamber lenses. Many of course had poor outcomes, and needed to be removed, which gave Averill and others a jaundiced view of intra-ocular lenses. ‘Inserted at The London, removed at Saint Thomas’s’ was a common one-liner. This view was further reinforced by Professor Paul Henkind, who was the annual New Zealand visiting professor around that time. He was vociferously against intra-ocular lenses. Ironically, sometime later Henkind became even more vociferous against many ophthalmological advances — so much so that friends detected a change in his hitherto intellectual and rigorous personality, and suggested a brain CT scan. Sadly, a malignant tumour was diagnosed, and Henkind succumbed shortly after.

Holmes, himself a strong personality, was cautious about intra-ocular lenses. Unfortunately, he widely criticised those in other centres who were beginning intra-ocular lens surgery. The other obstacle was that in this era many established surgeons were also struggling with the transition from loupes to
microscopic surgery, which is essential for visualising the lens capsule and for accurate intra-ocular lens placement.

This all changed when leading American cataract surgeon Norman Jaffe visited New Zealand in 1981, and convinced all but the diehards that posterior chamber intra-ocular lenses were here to stay. At around the same time the superb results being achieved by Dr Calvin Ring in Auckland became obvious. Dr Robert Sinskey of Santa Monica, California, who designed an early posterior chamber lens as well as some surgical instruments, came to the OSNZ meeting in 1986 at the behest of Ring. Unfortunately he was coldly received by the assembled ophthalmologists. Sinskey returned in 1991 to the same meeting when he was warmly welcomed, but he had not forgotten his cold reception five years previously. Over those five years, intra-ocular lenses had gained worldwide acceptance, for which Sinskey himself deserves considerable credit.

Dr Ken Tarr was an ophthalmic registrar in Dunedin at the same time as his father-in-law, Dr Leslie Chapman, was medical superintendent of Dunedin Hospital. (The other registrar in Dunedin at that time was David Greer, who now practises in Perth, Western Australia.) Tarr then did a post-graduate year in retina with Professor Ian Constable in Perth, followed by a year in Sydney as senior lecturer with Professor Frank Billson. He was appointed to Christchurch Hospital as an ophthalmic surgeon in 1981, and has been an outstanding teacher (see Chapter 11).

Dr Stephen Tuft trained at Christchurch and then Moorfields in London, where he specialised in cornea. He returned to Christchurch as a consultant. However, shortly after, he was offered a consultancy at Moorfields, and returned there after only six months. He was the first full-time consultant at Moorfields trained outside the United Kingdom.

Dr Mark Elder was appointed full-time associate professor in 2001, and took over as head of department when Clemett retired in 2003. He came with a Doctor of Medicine (MD) degree in external eye disease, in particular cicatricial conjunctival disease. Up to this time, virtually no New Zealand academic
ophthalmologists had pursued higher research degrees. Only Dr Gillian Clover, the Sir William and Lady Stevenson senior lecturer in Ophthalmology at the University of Auckland, had gained a PhD by research.

Associate Professor Mark Elder.

Elder has maintained Christchurch’s standing, especially in education. He succeeded Peter Wellings as chairman of the Education and Qualification Committee of the New Zealand Branch of the RANZCO, and he remains an inspector of Australasian training posts and chairs the pathology Board of Examiners, so is on the federal Qualification and Education Committee.

Elder’s wide-ranging research has included a study of the preferred practices of New Zealand ophthalmologists in cataract and refractive surgery. This survey has been conducted on four occasions, and very reliably shows how new techniques gain traction. (With a 90 per cent response rate, the data are accurate. Similar surveys by the American Society of Cataract and Refractive Surgery, although larger in numbers, are probably less accurate because of only an 11 per cent response rate.) Elder has also been involved in workforce studies, and in studies of the lens of the eye utilising sheep, in conjunction with the University of Canterbury and Lincoln University.

Elder has inspired many junior ophthalmologists to become involved in clinical research and has raised the research profile of the Christchurch Eye Department. This has been acknowledged by a number of national and international awards, and his research has generated over 100 scientific publications.

Dr Allan Simpson, glaucoma sub-specialist, was appointed in 1989, when Hay retired. Then in 1991, Dr James Borthwick was appointed as a vitreo-retinal specialist. This was a much needed appointment, as by then vitreo-retinal surgery was rapidly becoming more complex and beyond the capabilities of the general ophthalmologist. Borthwick gave invaluable service to the whole South Island, and was not relieved of shouldering the whole load until Dr Sean Every’s
appointment as a vitreo-retinal specialist in 2008. Nevertheless, Christchurch ophthalmologists still maintained general ocular surgery skills, and when on call, Tarr, Simpson and Elder were still tackling the more straightforward retinal detachments.

Dr Rob Weatherhead trained at Moorfields, then practised in Saudi Arabia for 12 years, specialising in oculoplastics. This involved a lot of major trauma surgery. He returned to Christchurch in 1997. The wealth of oculoplastic experience he gained in the Middle East was in demand for complex cases, often managed jointly with plastic, neuro-surgical, ENT or maxillofacial surgeons. Recently, he accepted a part-time position in the Eye Department and has made a huge contribution to training. His two passions are the practice and teaching of oculoplastics, and golf.

_Eye surgery at Christchurch Hospital was recorded by Meller in 1912._13 In that year, there were 26 cataract operations, 16 needlings, nine iridectomies, two iridotomies, and 10 enucleations. Thus 42 operations were cataract and cataract-related procedures, 11 were for glaucoma, although some of those may have been related to cataract also, and 10 eyes were removed. Fortunately, the range of procedures in this century is very much wider, and the proportion of eye removals is very much lower.

Although Christchurch has never been a stand-alone academic centre, it has a reputation as an excellent teaching department for registrars. Its first academic, Associate Professor Richard Clemett, was a fine teacher, and was supported by part-time visiting ophthalmologists, in particular Rod Suckling and later Ken Tarr. Tarr and Clemett really drove the utilisation of posterior chamber intra-ocular lenses in Christchurch. More recently, Tarr led Glaucoma New Zealand with Professor Helen Danesh-Meyer, and was its foundation chairman.

Tarr is an outstanding teacher, for which he was recognised by the Royal Australian and New Zealand College of Ophthalmologists, when he received the college award for excellence in training in both 2006 and 2007. Only one
other surgeon, Tim Henderson of Alice Springs, has won the award twice. In New Zealand, Keith Small of Wellington won the award in 2007, Helen Long of Wellington and Justin Mora of Auckland won it in 2008, and Rob Weatherhead in 2009. This is another example of New Zealanders punching above their weight, as only 10 or 11 awards are granted each year from the 906 practising ophthalmologists in Australia and New Zealand, of whom only 120 are in New Zealand.\textsuperscript{14}

Private ophthalmology

In the early and mid-twentieth century, private practice in Christchurch was undertaken in individual practices. The first grouping of eye specialists developed around Dr Harry Jenner Wales. Wales had continued the practice of his father and therefore continued the management of many interesting, rare and hereditary eye conditions, a legacy of his father's interest in electrophysiology. Wales, along with Drs Tony Sandston and James Hay, practised in Harley Buildings, the known centre for specialist practices at the time, with a long list of brass plates at the front door. It has a superb view across the Avon but more importantly it is opposite the Canterbury Club.\textsuperscript{8} Wales was well known for having 12 quarter-hour appointments in the morning, and again in the afternoon, with a two-hour break to play snooker and take lunch at his club.

Sandston, a true gentleman, was well known for his interest in and efforts on behalf of the horse-racing fraternity. He was well read in regard to his sport of interest but less so in ophthalmology, and he frequently sought corridor consultations for his patients.

Hay was previously a general practitioner and had a more practical approach to ophthalmology, and the business side of private practice. In the early 1970s he proposed the purchase of Worcester Building, next door to Harley Buildings. The building was available in the early 1970s for $90,000 and 20 years later was worth some millions. Unfortunately, the ophthalmologists of the day couldn’t agree to work together, and did not purchase it.

In 1971 when Dr Richard Clemett became the first full-time hospital eye specialist in Christchurch the private scene was served by Drs Wales, Sandston, Hay, Lindsay Burns, Roy Holmes, Rod Suckling and Tom Averill. Averill was the first in town with experience in ‘modern’ retinal detachment surgery. A year or

\textsuperscript{8} The Canterbury Club was established in 1872 by professionals and businessmen who found their backgrounds and interests to be different from those of the largely rural, gentrified membership of the Christchurch Club, which was established in 1856. Both used to be predominantly male domains. Unfortunately, both have had to close for an indefinite period because of damage caused by the earthquake on February 22 2011.
two later Dr Tony Lee came to Christchurch and developed a full-time private practice. The private scene was certainly over-supplied by ophthalmologists in the early 1970s. Suckling, who was well respected and established, had as few as 12 private surgical cases for a whole year. In that setting it was understandable to be concerned about the influence of an expanding public Eye Department, and the arrival of more ophthalmologists in the form of full-time academics. Nevertheless, Suckling in particular supported the development of the academic department.

Dr Ken Tarr arrived in 1982, and after one year full-time at Christchurch Hospital, joined Suckling in Harley Buildings. They later moved to St George's Hospital, and their old rooms were taken over by an expanding iridology practice! Suckling continued in practice longer than he desired, until Dr James Borthwick's return from sub-specialty training overseas in 1991. Tarr and Borthwick developed Southern Eye Specialists to provide the latest quality equipment and a comprehensive eye-care service. Tarr was its foundation director and manager. In 1986 Dr Russell Lienert returned from working in Afghanistan and took over Wales's practice.

In 1995 Tarr set up Laservision, a company owned by ophthalmologists and optometrists, in order to purchase an excimer laser. Dr Ian Dallison was one of the shareholders. Unfortunately, Tarr was unable to bring everyone together, which resulted in there being two refractive practices in Christchurch. Dallison set up independently, and took over Laservision from the company. Although he had been trained in the Christchurch-Dunedin training network he chose not to take a part-time hospital appointment.

Dr David Kent commenced practice in November 1996, and there being no public hospital positions at that time, set up his own well-equipped clinic, with a major focus on laser refractive surgery. Dallison and Kent both do refractive surgery in robust competition, and are the only refractive surgery practices in the South Island.

Dr Malcolm McKellar took over Lienert's practice when he left for Tajikistan in 2000. Southern Eye Specialists continued to develop as a service company. Dr Allan Simpson moved his practice to Southern Eye Specialists in 2000, and Dr Rob Weatherhead has worked at Southern Eye Specialists since his arrival in Christchurch in 1997.

Private surgery in Christchurch in the 1970s was undertaken at Calvary Hospital, which later became Southern Cross Hospital, and at St George's Hospital. St George's Hospital was originally built by the Anglican Church and run by Anglican nuns, but is now a stand-alone, not-for-profit institution, acting under its own Act of Parliament.

The Oxford Clinic became the third provider of private surgical facilities in
the early 1990s, and Southern Eye Specialists now has eight ophthalmologists conducting their private practices from its premises. With three good private hospitals it was not a viable business proposition for anyone to develop a stand-alone eye-theatre facility.
The earliest known ophthalmologist in Wellington was William George Kemp (1846–1919), who did his medical training at St Bartholomew’s Hospital in London. He worked in Nelson from 1868, before moving to Wellington in 1870, and was an honorary physician at Wellington Hospital from 1879–82. He then spent a short time as a clinical assistant at Moorfields Eye Hospital in London, before returning to Wellington to serve as an honorary ophthalmic surgeon from 1883–86. He returned to England in 1892.

Another early ophthalmologist in Wellington was Francis Wallace MacKenzie (1860–1934), who practised from 1887–1903. He was also on the Wellington Hospital Board.

Charles Webster (1878–1925) graduated from the University of Melbourne and from there moved to Wellington, where he practised for 25 years and was an honorary ophthalmic surgeon at Wellington Hospital from 1910–25. Henry Martindale Kendall (1860–1941) was born in India and graduated in London. In 1889 he travelled to New Zealand and became superintendent of Wellington Hospital in 1892.
the Westland County Hospital in Hokitika. He practised for a short time in Nelson, then moved to Wellington in 1895 and practised ophthalmology and ENT.

Garnet Harty (1880–1949) was born in Dunedin. He spent one year at the University of Otago before continuing his medical education in Edinburgh, which was common in that era. He qualified in 1903. Harty returned to New Zealand to start specialist practice in Wellington in 1907, and also became an honorary surgeon to Wellington Hospital. He did much to set up the Wellington Hospital Ophthalmology and Ear, Nose and Throat Department, until he left the hospital in 1922. He became a fellow of the Royal Australasian College of Surgeons at its founding in 1929.

Dr Garnet Harty (1880–1949), second patron of the OSNZ.

NEW ZEALAND MEDICAL JOURNAL.

Because of declining health, he relinquished surgery in 1941 and retired from practice in 1946. He lived his last three years in Wanganui with his daughter. At the time of his death in 1949, he was the second, and the last, patron of the OSNZ.

Ernest Marchant OBE (1881–1976) was at Wellington Hospital from 1914–29. In World War One he served with the New Zealand Medical Corps in Egypt and France. He retired from the hospital before World War Two, but returned to the hospital to provide cover during the war, from 1943–46.

Louis Cohen (1887–1946) was born in Palmerston North but did his medical education in London. He served in World War One in France and Palestine. After the war he returned to England to further his studies in ophthalmology and ENT and qualified fellow of the Royal College of Surgeons of Edinburgh in 1919. He set up specialist practice in Wellington in 1920.

James Baird (1900–1985) was in Wellington from 1930–33 and then moved to Wanganui, where he practised ophthalmology and ENT from 1934–73, succeeding his father William S. Baird (see page 142).

At the time of the founding of the OSNZ in 1947, the only ophthalmologists in Wellington were Drs William Simpson, John Alexander Doctor and Walter J. Hope-Robertson, one of the founders of the Society. Without a doubt, the dominant personality in Wellington, until his untimely sudden death in 1958 at the age of 57, was Hope-Robertson.

Hope-Robertson (1901–1958) qualified at the Otago Medical School and travelled to England to obtain the Diploma in Ophthalmic Medicine and Surgery. He failed the English fellowship but subsequently passed the Edinburgh fellowship before returning to Wellington, where he joined the staff of Wellington Public Hospital and also built up a large private practice. He took an interest in visual screening and safety, which included working on visual standards for occupations, in particular the Railways and the Post Office, and eyesight testing of school children. Randal Elliott described Hope-Robertson as an ‘abrasive go-getter’, and as ‘a tough New Zealand farm boy who spoke with an agricultural colonial accent’. He contrasted Hope-Robertson to Sir Lindo Ferguson, who was known for his gift of calm persuasion. Elliott described Hope-Robertson as sometimes infuriating, and ruthless to patients. He was known to sit reading the Wellington morning paper *The Dominion* at the hospital Eye Department until 11 o’clock, while 40 patients were waiting. His excuse was that patients appreciated they were seeing a good doctor if they had to wait.¹

When Elliott took the Australasian fellowship himself, Hope-Robertson was one of his examiners. To quote Elliott, ‘Such was the ferocity of Hope-Robertson’s oral that the other examiner is a blur — but I think it was Graeme Talbot of Auckland.’² Colin Fenton agreed with Elliott, describing Hope-Robertson as a person you could respect but who was difficult to like.³

William H. (Bill) Simpson (1893–1954), a New Zealander, served in World War One soon after graduating, but was invalided home after the 1916 Battle of the
Somme. He went to England, where he became one of New Zealand’s early Moorfields-trained surgeons. He returned to Wellington where he practised as a specialist ophthalmologist for 31 years, both in private practice and at the Eye Department at Wellington Hospital. By repute, he was a racehorse enthusiast, drank extensively, consorted with women and led a great social life. During World War Two, as a colonel, he was in command of the Number Four Field Ambulance, which went to Syria to support the Ninth Army. Simpson thought the war would be static for around four weeks, so in order to maintain his lifestyle he supplemented his income by selling the tyres off the ambulances, which immobilised them. As a result, when Rommel broke through the lines, the Fourth Field Ambulance was unable to move. Simpson was court-martialed, sent back to New Zealand and stripped of his rank. He was supposedly in disgrace, but the story amused so many people that he lived it down. Indeed, he probably tripled his income by being the only ophthalmologist in Wellington during the remainder of the war.

Dr William H. Simpson (1893–1954), Wellington. NEW ZEALAND MEDICAL JOURNAL

Colin Fenton was a registrar in Wellington during the twilight of Simpson’s career. Fenton described Simpson’s ability to smoke using a cigarette holder while at the same time looking at a patient with the direct ophthalmoscope. Simpson ran enormous clinics, seeing 50 to 60 patients in a morning. Sir Randal Elliott was with Simpson when he was on his deathbed, and was entertained by his life’s story, an experience made more pleasant by Simpson’s use of gin and heroin. Simpson had a son, Derek, who also studied ophthalmology at Moorfields, but subsequently practised in Canada.

John Alexander Doctor (1883–1980) was born and trained in Glasgow. He commenced general practice in Ross, on the West Coast of the South Island. After serving in France in World War One, he practised for a while in Featherston, before returning to Scotland for a year. He gained the FRCS (Edinburgh) then settled in Wellington, where he practised ophthalmology and ENT.
Sir Randal Elliott (1922–2010) was born into a prestigious and wealthy medical family in Wellington. Many would have swallowed the silver spoon and lived a comfortable and unstressed life. Elliott instead led an extraordinary life packed with community service in New Zealand and volunteer medical service overseas, including in the South Pacific, in Vietnam in 1973–74, and in Jerusalem, Israel. His father, Sir James Elliott, was a Wellington surgeon who married a wealthy Edinburgh lady, Annie Allen, and they lived at 43 Kent Terrace, Wellington. Their home is now the New Zealand headquarters of the Royal Australasian College of Surgeons. Randal Elliott described how they had a cook, a parlour maid, and other helpers, and that they dressed for dinner. At their holiday home at Silverstream they also had staff, including two gardeners. Silverstream had formal gardens with five acres of orchard.5

Sir Randal Elliott (1922–2010).

NEW ZEALAND OPTICS, MARYANNE DRANSFIELD.

Sir James Elliott was editor of the *New Zealand Medical Journal* for 25 years, and chairman of the New Zealand Medical Association, as well as writing three books: his autobiography *Scalpel and Sword*, and biographies of Joseph Firth, headmaster of Wellington College, and missionary Henry Williams. Annie Elliott was a founding member of the Wellington Women’s Club.

Randal attended Wanganui Collegiate, where he was dux in the lower sixth form but in the upper sixth was beaten by Gilbert Bogle, who later became a Rhodes Scholar and brilliant physicist. Elliott attempted to join the Royal New Zealand Navy, but when examined by one of his future mentors, Walter Hope-Robertson, he was told that he had incipient myopia which would get worse, and was therefore ineligible.

He began studying medicine at the outbreak of World War Two and after two years joined the Territorials, becoming a weapons instructor at Waiouru in 1940. He was called back to Dunedin to finish his medical degree, which was a pressure-cooker course in the war years in order to graduate more doctors. He felt almost guilty being in Dunedin while colleagues were overseas being killed,
but he did spend his university holidays in military camp. As a hard-working house surgeon Elliott was still able to enjoy some pleasures of life because of his family, such as a sports car and yacht. Yet his politics became increasingly more left than his solid right-wing parents. He remained keen on the Armed Forces and learned to fly with the Air Force.

In 1948 he travelled to England to study ophthalmology at Moorfields and shared a flat with John Parr, later professor of ophthalmology in Dunedin. Despite their contrasting backgrounds, Elliott admired Parr as a truly dedicated and academic ophthalmologist.

Calvin Ring and George de Lacy Fenwick were also training at Moorfields around this time, though both a year or two ahead of Elliott, and Lindo Ferguson, Sir Lindo’s grandson, was there a little later. Along with others during that period, Elliott described the training as heavily surgically orientated at the expense of medical ophthalmology. This was remedied later when New Zealander Barrie Jones became clinical director.
In 1949 Elliott married Pauline Young, a nurse whom he had initially met at Wellington Hospital. In keeping with the Elliott family’s status, the New Zealand High Commissioner in London, Bill Jordan, gave the speech at their London wedding. The Elliotts had six daughters and one son. Their son is a general practitioner in Kumeu, West Auckland, somewhat serendipitously in practice with William Ferguson, son of Lindo Ferguson.

The Elliotts returned to New Zealand in 1953 and Randal took over the practice of Dr Bill Simpson just the year before his death. At Wellington Hospital Elliott initially was one of only three ophthalmologists, the others being Drs Hope-Robertson and Doctor.

After Hope-Robertson’s early death, Wellington ophthalmology was dominated by Elliott. He was equally as energetic and forthright as his predecessor, but whereas Hope-Robertson devoted his whole energies to ophthalmology, Elliott’s influence extended far beyond the eye into the wider fields of general medical politics, community affairs, road safety, search and rescue, the Order of St John, and service in the South Pacific and South-east Asia. He was hugely successful and influential in many spheres. In 1969 he was deputy chairman of the New Zealand Medical Association, and later its chairman. His political skills were invaluable when Labour Minister Roger (later Sir Roger) Douglas’s controversial ‘White Paper’, *A Health Service for New Zealand*, was presented in 1974. It proposed 14 Regional Health Authorities to replace the 30 existing hospital boards. There was resistance from many localities, which feared the loss of hospital boards would mean the loss of their local hospital. Other proposals in the White Paper were resisted by both general practitioners and specialists, who viewed them as a threat to professional independence and the freedom to charge private fees.

Like Hope-Robertson, Elliott contributed in the field of preventive ophthalmology. He was a successful leader of the national campaign to institute blood- and breath-testing of suspected drunken drivers, which has subsequently helped save hundreds of lives. He was active also in the compulsory seatbelt and laminated windscreen campaigns; the adoption of both dramatically reduced the number of penetrating eye injuries. Also, in 1969 he had a role in the crusade to decrease pollution in Wellington Harbour. In the same year he was appointed as consultant advisor on ophthalmology to the Department of Health.

In 1975 Elliott worked for two months at St John’s Ophthalmic Hospital in Jerusalem, to which he later returned a further seven times, five with his nursing-trained wife Pauline. In the same year he was invested with the OBE. In 1976, he was again working in Jerusalem at the time of riots on the West Bank in the Gaza Strip. He was honoured with the Bailiff Grand Cross Order of St John, an honour conferred on only three other New Zealanders, one of whom was his
father. Indeed, it was the first occasion within the Commonwealth that a father and son had both become Bailiff Grand Cross holders. The honour is limited to 12 living people worldwide at any one time.

Elliott was knighted in 1978, and in the 1980s was on the shortlist to become New Zealand’s Governor-General. Not one to rest on his laurels, in 1988 Sir Randal spent another three months working in Jerusalem at a time of much violence between Israeli troops and the Arab population. Other places he worked included the Tokelau Islands, Samoa and Malaysia. In Malaysia and Singapore he taught corneal graft surgery.

Historically, Hope-Robertson and Elliott seemed dominant, making it too easy to under-value contributions by others in that era. In the 1960s also in the field were Drs Lenn Bell, Colin Fenton, Murray Ashbridge, David Warnock, Deen Brosnan, Roderick Ferguson and David Sturman.

Roderick Ferguson (1916–1969) was in the New Zealand Medical Army Corps during World War Two. After discharge, he did most of his ophthalmology training at the Oxford Eye Hospital. He returned to Auckland briefly, then moved to Wellington where he entered into partnership with Hope-Robertson. His health began to fail, so he decided to move back to Auckland in 1966, where he lessened the tempo and did just a few clinics at Auckland Hospital. His son Stuart is a prominent paediatric surgeon in Auckland.

Lenn Bell (d. 1983) was the head of the Wellington Hospital Eye Department in the late 1960s at a time of low morale. He was responsible for initiating organised monthly departmental meetings to which all the staff were invited, including nurses and secretarial staff, which helped enormously. The first meetings were at his home. Unfortunately he became alcohol dependent. When Bell finally accepted that he needed help, he consulted Dr Charles Burns, a retired physician with an interest in addictions. To the credit of them both, he did not touch alcohol thereafter.
George Davidson was in Wellington in the 1960s and ’70s. He was a Scotsman who had been a medical missionary. Davidson confined himself to medical ophthalmology. He was in practice on The Terrace and also did outpatient clinics at Wellington Hospital.

Murray Ashbridge worked in Wellington for a few years before moving to Rotorua in 1972 for a quieter lifestyle and to develop his passion for growing orchids.

David Sturman (1927–1994) started ophthalmology a little later in life. He spent six years as a general practitioner in Paraparaumu before taking up ophthalmology. He travelled to the United Kingdom, where he took the Diploma in Ophthalmology in 1964, and the primary examination of the Royal College of Surgeons. He returned to an eye-registrar position in Wellington and passed the fellowship in ophthalmology of the Royal Australasian College of Surgeons in 1967.

Sturman was a gentle, quiet person. He had an interest in epidemiology and ocular genetics, in particular Leber’s optic neuritis. He gained an MD from the University of Otago in that subject, which was a most uncommon distinction at that time, before the expansion of academic ophthalmology. He and his wife Ann were very proud of their daughter Nancy, also a doctor, who was one of the first New Zealand women to become a Rhodes Scholar. Despite being a fitness enthusiast, Sturman unfortunately died suddenly of a heart attack at the age of 67, at the end of a speech he had delivered at a school function.

Colin Fenton was born and bred in Wellington, worked as eye registrar in Wellington, and continued his ophthalmic education at Moorfields in London. He returned to New Zealand in 1961, initially doing a locum for John Parr in Dunedin, and was invited to remain there. However, as a Wellingtonian his heart was set on living in his home town, to which he and his wife Aileen moved in 1962.

Fenton lived in Lower Hutt but practised at Wellington Hospital, and privately on The Terrace. Fenton was head of the Wellington Hospital Eye Department in the early 1980s. He did
a lot of undergraduate and post-graduate teaching and had a lifelong interest in ophthalmic education. He was one of the founding members of the Education and Qualification Committee of the OSNZ. Fenton became chairman of that committee in 1982 and he also was on the part two board of examiners of the RACO. He was the Society’s president in 1978–79. In 2007 Fenton was honoured with the College Medal for outstanding services to ophthalmology and ophthalmic education.

Peter Wellings was another born and bred Wellingtonian who made notable contributions throughout his career. In 1966 the position of eye registrar in Wellington was reserved for David Sturman, who had already completed two years’ training in Dunedin and held a diploma in ophthalmology, so Wellings was forced to ‘mark time’ for a year during which he served as the city’s first neurosurgical registrar. His belief that neurosurgery was his second choice for a career was confirmed when the first operation at which he assisted lasted eight hours and the patient died the next day. However, the neurosurgical experience fostered Wellings’s interest in neuro-ophthalmology and gave him a solid basis for his other sub-specialty of orbital surgery.

Wellings trained at Moorfields Hospital when Professor Barrie Jones was at his peak. At the time Wellings was there, so also were fellow New Zealanders Richard Clemett, John Bowbyes, Bill Taylor, Thiers Halliwell and Antony Morris. Possibly Jones’s position as director helped New Zealanders to get ‘on the house’.

Moorfields gave excellent surgical experience, and Jones had by that time improved the training scheme so that the medical aspects of ophthalmology

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*Being ‘on the house’ at Moorfields means being accepted into the established three years and four months of formal training in ophthalmology, a much sought-after and prestigious position. It is quite separate from the many shorter training periods and fellowships which are available to post-graduates at Moorfields.*
were less neglected than formerly. At Moorfields, Wellings did his first corneal
graft operation unsupervised, which would be untenable today. He also had the
distinction of assisting Sir Harold Ridley at his last cataract operation.

Wellings returned to Wellington in 1973, taking with him expertise in
indirect ophthalmoscopy and modern scleral buckling techniques for retinal
detachment, as well as expertise in neuro-ophthalmology and orbital surgery. He
was full time at Wellington Hospital for just under two years and then stepped
aside for Thiers Halliwell, who took over the full-time position in 1976.

Wellings established a private practice on The Terrace, which by then was
Wellington’s ‘Harley Street’, and continued part time at Wellington Hospital. He
enjoyed what was possibly the longest rise through the ranks of any Wellington
Hospital staff member. Initially he worked as cleaner in the nurses’ home, then as a
secondary school student he did holiday work making outpatient appointments,
and later was a porter in the operating theatres. Subsequently, he was a medical
student, house surgeon, registrar and finally consultant ophthalmic surgeon.

Like Fenton, Wellings contributed greatly to teaching and education. He
was also a long-standing member of the college’s Education and Qualification
Committee and was its chairman from 1990 to 1998. He was president of the
OSNZ in 1992–93. For many years he was also on the board of examiners for
the part two, the final examination for fellowship of the RACO. In 1999 Wellings
was offered the position of chairman of the part two board of examiners, and
would have been the first New Zealander in that post, but he declined because
of his dislike of so much travelling across the Tasman, so the chairmanship went
to Bruce Hadden.

Nigel Warden returned from overseas training in Cambridge, England in the
early 1970s and took over the practice of Murray Ashbridge when the latter
moved to Rotorua. Warden was head of the Eye Department at Wellington
Hospital from 1985–90.

Thiers Halliwell, born and bred in Gisborne, was eye registrar in Wellington
in 1968–69 then furthered his training at Moorfields. He distinguished himself
by winning the Senior Prize there, an accolade won by only two other New
Zealanders, Richard Clemett and Antony Morris. After training, Halliwell and
his wife Barbara did missionary work in Tanzania for a year before returning to
Wellington in 1976. Later he spent short periods working in Pakistan and the
Solomon Islands.

Halliwell dedicated his entire career to practise as a full-time ophthalmic
specialist at Wellington Hospital, through a wish to be of service to those unable
to afford private healthcare, and also because, as he modestly put it, he had ‘no
desire to run a business, and no business acumen’. Nor did he have an interest
in a university job, as research did not appeal. But following the establishment of the Wellington School of Medicine, along with colleagues in other clinical disciplines, he was appointed as a clinical lecturer with responsibility for medical student teaching. He was also a physiology examiner for the RANZCO for many years.

Halliwell was a hands-on doctor who served Wellington Hospital with distinction. He was a superb diagnostician, and surgically he did everything from corneal grafts to complex vitreo-retinal procedures. Because of his expertise, many of the most challenging cases were referred to him, and indeed Halliwell was perhaps the unsung hero of Wellington ophthalmology throughout his career.

He introduced vitreous surgery to the area in the early 1980s after taking an extended study tour of the United States. Naturally, this led to his gradually taking over the retinal detachment work from Peter Wellings. Halliwell was head of the Eye Department from 1992–2000. To Wellington's loss, he retired at the early age of 60 in 2002. Over the following years he and Barbara have enjoyed British summers on their canal boat.

Paul Herrick graduated from the Otago Medical School in 1967, being in the same year as ophthalmologists Tom Ellingham of Palmerston North and Bruce Hadden of Auckland. Herrick was an eye registrar in Dunedin, then proceeded to the United Kingdom, where he trained under Wallace Foulds in the Tennent Institute of Ophthalmology in Glasgow. After working for six months in Iraq, Herrick returned to Wellington in 1975. He specialised in medical retina, and established a fluorescein angiography service in Wellington. Herrick set up Wellington's first public satellite clinic at Porirua. He has held the posts of chairman of the New Zealand Branch of RANZCO and president of the Save Sight Society.

Andrew Logan joined the Wellington Hospital Eye Department in 1988 following the retirement of Sir Randal Elliott in 1986. He had had several years of overseas experience at Riyadh in Saudi Arabia. Logan was the first ophthalmologist to practise laser refractive surgery in Wellington, and has also
been enterprising with several other anterior segment surgical techniques. He was the first in Wellington to do phaco-emulsification, and the first in New Zealand to do corneal implants and collagen cross-linking, used in particular to stabilise keratoconus. He was joined by Wilfried Rademaker, trained in Germany, and in 2010 by Reece Hall, a New Zealand-trained ophthalmologist, both of whom do refractive surgery.

Keith Maslin began his medical career in general practice in Invercargill before undertaking ophthalmology training in Christchurch, at the Western Ophthalmic in London, and at St John’s Ophthalmic Hospital in Jerusalem. He was appointed consultant at Wellington following the retirement of David Sturman.

Diabetic retinal screening in the Wellington region was headed up by Maslin. This is a big task and so to share the load, the Capital and Coast District Health Board, in conjunction with the Wellington Independent General Practitioners Association and a group of optometrists, organised a different model in 2002. Rather than a system coordinated by the ophthalmologist, patients are referred directly from the general practitioner to the optometrist, who screens them photographically with a non-mydriatic digital fundus camera. The optometrist reads the photograph, shows the patient and discusses any findings. Patients are referred on to ophthalmology, according to Ministry of Health guidelines.

Working with optometry has several advantages for the patient and ophthalmologist. For the patient, travelling distances are minimised as there are 10 optometry practices involved in the greater Wellington area. The ability to receive an instant report and the opportunity for discussion is appreciated by the patient and important in their understanding of the disease. For the ophthalmologist, avoiding the screening process frees up time for treating patients. Checks and balances include quarterly reviews and occasional audits. The system has proved its worth, having the highest rate of attendance at screening in the country, and the ophthalmologists involved have found the process to be very reliable. Most of all it has proved to be a model of the optometry profession working alongside ophthalmology to save sight from a very serious eye disease.

Increasing sub-specialisation has been the biggest change in Wellington ophthalmology over the past 10 years. Neil Aburn was the first to return with formal sub-specialty post-graduate fellowship training, having undertaken a neuro-ophthalmology fellowship at Wills Eye Hospital in Philadelphia. Then Keith Small returned with sub-specialty training in vitreo-retinal surgeon, having completed fellowships in Bristol and in Manchester, with David McLeod. As happened elsewhere, retinal detachments and other vitreo-retinal cases rapidly became sub-specialty procedures, creating a heavy load for vitreo-
retinal surgeons. In Wellington Small was very busy until relief came with the appointments of Steve Mackey and Kolin Foo. Both had completed vitreoretinal fellowships in Manchester. Tony Wells returned from Moorfields, a fellowship-trained glaucoma specialist, and Helen Long trained in uveitis and medical retina in Bristol and London. Reece Hall, as previously noted, returned in 2010 with sub-specialty training in cornea and anterior segment in Perth and Singapore.

In 2004 Wells, Small and Andrew Logan established the Capital Vision Research Trust to promote ophthalmic research in the Wellington region. They were joined shortly afterwards by the dynamic Dr Helen Long. The four trustees hold a long-term view of developing a vision-research facility with full-time researchers based on a private practice model similar to that used by the highly successful Lions Eye Institute in Perth. The idea was initially backed by the New Zealand Lions, but failed to raise the funding required. However, there is significant ongoing research being funded by the Capital Vision Research Trust, and the key goal remains to maintain and expand upon this foundation.

Wellington Hospital Eye Department
The history of the medical staff of Wellington Hospital, including its ophthalmologists, has been made readily accessible by an excellent website created by Dr Ron Easthope, a retired Wellington cardiologist. The Eye Department at Wellington Hospital has always been a major component of ophthalmology in the capital. Public hospital ophthalmic practice was more dominant in Wellington than in Auckland; indeed, throughout New Zealand the emphasis on public hospital service is greatest in the south, and as one moves north private medicine and surgery exert increasing influence. However, the early honorary appointments to Wellington Hospital as given by Easthope show that many early specialists spent only a short period of their careers in the public system. Unfortunately, this is sometimes still the case today, especially in northern centres, even though public specialists are now paid.

Dr William G. Kemp was an honorary surgeon from 1886, Dr F. Wallace Mackenzie from 1890 to 1902, and Dr Henry W.M. Kendall from 1902 to 1910. By 1912 there were two honorary ophthalmic surgeons, Drs Garnet Harty and C.F. Garcia Webster, and by 1914 there were three, when Dr Eric Marchant joined. Harty left the hospital in 1922 but practised until 1946. Dr Louis D. Cohen joined in 1922, Dr John Alexander Doctor in 1925, and Dr William Simpson in 1926, in which year Webster retired. Dr Walter Hope-Robertson joined in 1928.

With this long history, it is surprising that ophthalmology had no permanent
home at Wellington Hospital until the Eye, Ear, Nose and Throat Department opened in 1920. It comprised male and female wards, with accommodation for 24 patients and an operating theatre (later two). This satisfactory accommodation survived until 1969, when the building was demolished.

Sir Randal Elliott described the standard of ophthalmology in Wellington in 1953, when he returned home from England, as not particularly high. Retinal detachment surgery was not being performed, and intra-capsular cataract surgery had not been taken aboard. No corneal grafts had been carried out in Wellington when Elliott returned, and he performed the first corneal transplant in Wellington Hospital.

Colin Fenton returned to Wellington from Moorfields in 1962 to take up a consultant position at Wellington Hospital and start in private practice on The Terrace. Murray Ashbridge was also appointed to the hospital at around the same time. Also on the scene were Drs Lenn Bell, David Warnock, Deen Brosnan, Roderick Ferguson and George Davidson.

During the 1960s the department suffered the exodus of several consultants, each having personal reasons for moving. Brosnan relocated to Canada having married a woman from the Canadian Embassy; Ashbridge relocated to Rotorua because of his keen interest in growing orchids; Warnock relocated to Palmerston North, his home town, partly because of a marriage breakdown; and Ferguson moved to Auckland to slow his pace of living because of health problems. Their departures foreshadowed a prolonged period of staff demoralisation that reached its lowest ebb in 1969, when the building which housed the Eye Department was demolished to make way for the new clinical services block. In 1969 the Wellington Hospital Eye Department was staffed only by Elliott, Bell and Fenton, plus Davidson, who did only outpatient clinics. At the time, Roy Holmes despairingly described Wellington as an ‘ophthalmic Siberia’.12

Fortunately, after an unsatisfactory two years of fragmented services being spread here and there, the department was relocated to the former Alexandra Women’s Hospital. That move reestablished a proper unit with its own operating theatre and ward, although most outpatient clinics remained at the base hospital, half a kilometre away. Alexandra Hospital was the department’s home for 10 years and this, together with Colin Fenton’s appointment as head, improved the esprit de corps. Fenton initiated weekly clinical meetings, in addition to the monthly management meetings attended by the whole department. (Indeed, David Wilson of Blenheim used to fly his own plane across Cook Strait to attend the clinical meetings.) Fenton also developed a very good working relationship with the senior nurse, Alison Edwards, who was a daughter of Sir Arnold Nordmeyer, a Labour Cabinet minister under whom the Accident Compensation Corporation was founded. At that time the hospital was run by the Director of
Medical Services, the Director of Nursing Services, and the Director of Financial Services. The head of each department reported to the Director of Medical Services, and Alison Edwards to the Director of Nursing Services. Everybody knew what was going on. Layers of managers were still 20 years away.

As head of the department, Fenton negotiated its move in 1981 to a refurbished surgical wing of the main hospital, which was a ‘temporary’ wartime structure. He overcame opposition by management, and thereby established an effective service with side-by-side inpatient and outpatient facilities that ensured efficient use of staff and resources. Hospital management was not convinced that the Eye Department needed a dedicated operating theatre as well, and attempted to squeeze ophthalmic surgery into whichever minor theatre happened to be available. Fortunately Thiers Halliwell made a very strong and successful case for ophthalmology needing a full-sized theatre with a ceiling-mounted microscope. This of course made the theatre unusable by most other specialties and provided long-term security for ophthalmic surgery.

The department eventually moved in 2010 to the redeveloped ninth floor of the Grace Neil Block, adjacent to the new regional hospital. This is a superior facility to the temporary home and will hopefully soon have a day-stay theatre. Dallas Alexander is the present clinical leader of the Wellington Hospital Eye Department and has been very involved with this latest redevelopment.

In addition to the base hospital services, Wellington ophthalmologists also conduct outpatient clinics at Hutt Hospital, and for a time at Silverstream Hospital. Paul Herrick was the first to staff a Wellington Hospital branch clinic at Porirua, and he continues to work at Kenepuru Hospital. Following the establishment of the eye clinic at Kenepuru, from time to time the department was under pressure to provide comprehensive ophthalmic services including surgery at both Hutt and Kenepuru hospitals, but this was resisted on the grounds of cost, inefficient use of expensive duplicated resources and concerns about maintenance of clinical standards.
The first ophthalmologist to establish himself in Auckland and to provide a life-long service to its citizens was Arthur Challinor Purchas (1860–1941). He was described as an ophthalmic surgeon and oculist of Symonds Street, Auckland. He was the second son of the Rev. Dr Arthur Guyon Purchas (1821–1906), one of New Zealand’s early colonists, who was qualified both in medicine and as an ordained priest in the Anglican Church. Arthur junior graduated in medicine in Edinburgh in 1884, returned to New Zealand in 1886, and practised in Auckland for over 50 years.

Purchas was an honorary surgeon to the Auckland Hospital, and was president of the Auckland Division of the British Medical Association. At the outbreak of World War One he joined the New Zealand Medical Corps, in which he served during the Gallipoli campaign, and rose to the rank of Major. His wife Evelyn, a nurse, volunteered to go to Gallipoli with him, where she cared for the sick and wounded, but where she unfortunately died of enteric fever. Their two sons, Arthur and Thomas, also fought in the Great War.

On return from the war, Purchas donated 16 Egyptian artefacts to the

*Dr Arthur Challinor Purchas (1860–1941), Auckland. SIR GEORGE GREY SPECIAL COLLECTION, AUCKLAND CITY LIBRARIES, 31-WP583.*
Auckland Institute and Museum.* Although Purchas was an ophthalmologist, he practised more broadly, as was common in that time. It was recorded that in 1885 he was sued by a woman for £500 pounds (the equivalent of $85,000 today) for performing a more extensive skin graft than what she had consented to. Purchas won the case.

A thread of living memory remains in the twenty-first century, in that Charles Swanston (see below) recalls a young George de Lacy Fenwick and himself as schoolboys riding on the running board of Purchas’s car from St Mary’s Cathedral Church in Parnell to Purchas’s home in Pitt Street.

Dr C. Humphry Haines (1856–1924) arrived in Auckland in 1886, the same year as Purchas returned from Edinburgh. Haines was born in Cork and educated at Edinburgh, where he gained the Edinburgh fellowship in surgery. He trained at the National Eye and Ear Infirmary in Dublin, two or three years after Sir Lindo Ferguson had trained there. While a house surgeon he wrote an article in the *Ophthalmic Review* describing a new instrument for facilitating retinoscopy. This instrument introduced a disc of 12 lenses which could be mounted on the back of a chair and placed in front of the eye of the patient so that retinoscopy could be carried out simply by rotating the disc rather than changing individual lenses. The description makes it an early phoropter.

The *British Medical Journal* records in 1886 that Haines delivered this

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*A Interestingly, the Auckland War Memorial Museum has benefitted from several ophthalmologists over the decades. Dr Grant also donated artefacts, and Drs William Fairclough, Lindo Ferguson and Harold Coop all served as presidents of the Museum Council.*
paper to a meeting of the Ophthalmological Society of the United Kingdom.\textsuperscript{1} He then wrote an article in the \textit{New Zealand Medical Journal} in 1888 entitled ‘Evisceration of the eyeball with introduction of artificial vitreous or Mules’ operation’.\textsuperscript{2} The artificial vitreous was in fact a glass ball.

Haines signed himself as honorary ophthalmic surgeon to the Auckland Hospital Board, but there is no other record of his ophthalmic work in Auckland. However, we know a little more of his other interests. He belonged to the Northern Club, in common with almost all ophthalmologists until recent times, and was the Club’s president in 1896–97 and 1898–99. He was a Maori linguist, and devoted his later years to compiling a collection of Maori proverbs, which was published. When camping west of Lake Rotomahana in the 1880s, he witnessed the first spouting of a nearby geyser. He named it Waimangu, meaning black water, by which name the geyser has been known ever since. Perhaps his interest in the thermal areas came about because he and Arthur Purchas had arrived in Auckland in 1886, the same year as the eruption of Mt Tarawera.

Purchas and Haines, with the early surgeons resident in Wellington, Christchurch and Dunedin, may well have been concerned about their contemporaries Grant in Dunedin, and Wallenburg and Wilkins in Dunedin and Auckland, who were travelling about the country in these years and inserting inflated testimonials in the public press.

Alfred George Talbot (1867–1958) graduated with honours in mathematics and physics from the University of Canterbury and then pursued medicine, in which he graduated from the University of Edinburgh with medals in anatomy and general pathology. He was a clinical assistant at Moorfields in 1914, then completed his ophthalmology training in Germany just before World War One. He returned to practice in Christchurch where he had been brought up, but soon moved permanently to Auckland.

Subsequently, he was a visiting ophthalmic surgeon at Auckland Hospital from 1919 to 1936. He had two sons, Graeme, an ophthalmologist (see below), and Raeburn, a general surgeon. A daughter, Leigh, was Matron of Auckland Hospital.

\textit{Dr Alfred George Talbot (1867–1958).}

AUCKLAND DISTRICT HEALTH BOARD.
George Ernest Oswald Fenwick (1878–1955) was the older son of Sir George Fenwick, then a leading citizen in Dunedin who was editor and managing director of the *Otago Daily Times*, New Zealand’s first daily newspaper. George’s younger brother Eardley, Wellington’s first specialist consultant physician, died prematurely in 1934.

Both brothers attended Otago Boys’ High School. George won a Junior University Scholarship and was an undergraduate at the Otago Medical School for three years before proceeding to University College, London, where he graduated in medicine. After specialist training in the United Kingdom he returned to Auckland in 1911, where he was an honorary ENT surgeon at the Auckland Public Hospital for a few years. In private practice he initially practised both ENT and ophthalmology but later specialised solely in ophthalmology. He practised in Auckland for a total of 44 years, until a few days before his death.

Some 17 years after separating from his first wife, Fenwick married Lilian Swanston, the widow of Charles Swanston, who was a general surgeon and father of Charles Swanston, the Auckland ophthalmologist (see below). Subsequently, many have thought that George E.O. Fenwick’s son, George de Lacy Fenwick, and Charles Swanston the ophthalmologist were half brothers, but this was not so, as they had neither the same mother nor the same father.

Despite George de Lacy Fenwick being a well-trained ophthalmologist, George E.O. Fenwick chose to bring Charles Swanston into his practice in the Lister Building in Victoria Street West, and also to leave to him his majority shareholding in the building. Understandably, George de Lacy’s relationship with his father remained distant thereafter. Unsurprisingly, there was also a strained relationship between George de Lacy and Swanston, but happily that mellowed with time. When Swanston was awarded the OBE in 1984 he was delighted to receive a congratulatory letter from his step-brother.\(^5\)
Herbert Myer Goldstein (1878–1954), son of a rabbi in Wellington, was educated at Auckland Grammar School and the University of Auckland, then went to London where he trained in ophthalmology, and became a fellow of the Royal College of Surgeons of England in 1903. On returning to Auckland in 1905 he began practising as a physician.

He was initially a consultant anaesthetist at Auckland Hospital but then became an eye surgeon. He never had the size of practice or the status as a specialist to match that of his contemporary William Fairclough (see below). Reputedly, Goldstein had a ‘shaky hand’, and was not considered a good operator. Nevertheless, Graeme Talbot described him as a fine man with a sense of humour.

Goldstein remained a bachelor, and lived at the Northern Club, as did George E.O. Fenwick for several years. When Goldstein was dying of carcinoma of the lung, Talbot visited him in the Mater Misericordiae Hospital, where Goldstein quipped, ‘They have the sides on the bed now; tomorrow they will be swinging the top on’.

William A. Fairclough (1881–1968) was born in Canterbury, educated at Christchurch Boys’ High School, and graduated from the Otago Medical School in 1905. After training in ophthalmology in England he returned to Auckland in 1910, where he practised for his entire career save during World War One, when he served on hospital ships and at a base hospital in the Middle East and Salonika. Fairclough was a senior visiting ophthalmic surgeon at Auckland Hospital for 28 years.

At Auckland Hospital, Fairclough was regarded as the leading surgeon and was head of the department. Somewhat incongruously for such a robust man, he was known as ‘Fairy’ to many of his friends. However, when addressed as ‘Fairy’ by a younger colleague, he retorted that ‘my close friends call me Fairy, and you are not one of them’. He was a foundation fellow of the Royal Australasian College of Surgeons in 1927 and was the first president of the OSNZ in 1947.

In common with two later colleagues, Lindo Ferguson and Harold Coop, Fairclough had a life-long attachment to the Auckland War Memorial Museum,
Dr William A. Fairclough (1881–1968).
AUCKLAND DISTRICT HEALTH BOARD.

...and was president of the Auckland Institute and Museum in 1941. A paragraph in his obituary in the *New Zealand Medical Journal* written by F.J. Gwynne pictures the greater time available for contemplation in his era.

*Seated at home or in his Club, he would speculate on the eye and vision. His ideas on the evolutionary changes, culminating in the eagle’s eye used as a telescope when in flight above the mountains and as a microscope when close to the earth, never failed to provoke wonder in himself and in his auditors.*

Fairclough more than wondered: he published a superbly written, detailed scientific article entitled ‘Birds and Vision’. Dr Calvin Ring, Auckland’s first registrar in ophthalmology, worked under Fairclough for a year and was inspired by him. Ring gave a presentation recounting these early years to the OSNZ in 1995, the written record of which his son Dr Peter Ring wisely kept. It is reproduced with his permission in Appendix 4.

James Beaumont (1896–1988) practised in Wellington from 1927–1939. He moved to New York for a short while, but returned to New Zealand and practised for many years in Auckland. He was not in the mainstream, being best remembered for the legacies of his strabismus surgery. When his strabismus patients consulted a colleague years or decades later with a divergent eye, there was little doubt who had performed the original surgery for esotropia! Beaumont’s operation was very quick, as it was simply to do a medial rectus full-thickness myotomy. Surprisingly, most eyes remained reasonably straight for varying periods of time. Unfortunately, when it inevitably came time to re-operate on the consecutive exotropia, it was difficult or impossible to locate the cut medial rectus muscle. Also, Beaumont persisted in doing significant operations in his office and in patients’ homes at a time when all but minor procedures were expected to be done in registered hospitals which adhered to surgical standards (see Chapter 9).
Howard Vincent Coverdale (1898–1971), like so many early New Zealand ophthalmologists, was educated at Wanganui Collegiate. He initially went into aviation, when it was in its infancy, and received a Royal Air Force commission in 1918. However, he then resumed scholarship and graduated in medicine from the University of Cambridge in 1925. He was the first New Zealander appointed as a house surgeon to Moorfields Eye Hospital in London, where his contemporaries included the notable British surgeons Frank Moore and Hyla (Henry) Stallard, as well as Dr Bruce Hamilton of Tasmania. As noted elsewhere, many New Zealanders followed in Coverdale's footsteps.

Coverdale practised in Auckland until he enlisted in the Army in 1940. He served as an ophthalmic specialist to the New Zealand Forces in Egypt until 1945 (see Chapter 16), working again with Stallard in the Middle East. Coverdale was a foundation member of the OSNZ, editor of its Transactions for 10 years, and president in 1952–53. He was also an associate editor of English Ophthalmic Literature, and a member of the international editorial board of the American Quarterly Review of Ophthalmology. Despite his academic abilities and reputation as a fine surgeon, he was an honorary surgeon to the Auckland Hospital for only a short period, from 1932–35, being more comfortable in private practice. Graeme Talbot described Howard Coverdale as the best surgeon in Auckland.10

Cecil Pittar (1905–1978) was born in Dunedin and educated at King’s College in Auckland, but studied at the University of Sydney as his family had lived there for some time. At university he was a superb athlete, being awarded triple blue in boxing, rowing and gymnastics. He became a highly regarded surgeon and a pioneer of corneal grafting. At that time corneal transplants were held in place by overlying 4-0 silk sutures from limbus to limbus. Pittar designed a small splint to support corneal grafts, which was used until sutures were made fine enough to suture the graft edges directly to the host cornea.
Dr Cecil Pittar (1905–1978).

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In World War Two Pittar was in the Royal New Zealand Navy, and was called up to sail in HMS Achilles with two hours’ notice. He was on board when she fought the famous battle of the River Plate against the German battleship Graf Spee. He later served with the British Admiralty in London and attained the rank of surgeon-lieutenant-commander.

After the war Pittar practised in Wentworth Chambers in Symonds Street. He was joined by Dr James Kriechbaum, an American ophthalmologist, in 1952. Later they were joined by Lindsay Poole.

Pittar retired in 1976 and endured a slow demise caused by amyotrophic lateral sclerosis (a motor neuron disease) and died in Gisborne in 1978. Bruce Hadden joined the practice four months before Pittar died.

Graeme Gibson Talbot (1903–1992) was born in Christchurch, a son of Alfred George Talbot (see above). At the age of nine the family moved to England for two years, where his father trained in ophthalmology and ENT. During the time in England, Talbot was taught at home by his mother, who had a Master of Arts with honours in English and Latin.

The family returned to Auckland in 1915 and Talbot attended King's College, where he was dux in 1919. He modestly described that as not of much moment, as he thought the school had a poor academic standard. Indeed, at that time, he was only the second pupil from King's College to enter medicine, and no students from King's College had yet gained a university scholarship.

Talbot conjectured that King's had too many sons of farmers to compete with Auckland Grammar.11

Talbot attended the University of Otago School of Medicine from 1921 to 1925, gaining the McCallam medical medal and the senior and junior medals in surgery. He then went to England in 1933 to train in ophthalmology, and there met his wife Joan. They were married in 1939.

He was keen on the army and at the outbreak of war joined the Royal
Army Medical Corps. He served in Egypt, Sicily, France and Germany, and towards the end of the war personally saw the horrors of Belsen concentration camp. He rose to the rank of colonel, and was awarded the OBE.

Talbot returned to Auckland in 1946 with the intention of practising in Christchurch, but there was a senior job on offer in Auckland, so he took that opportunity. Although his father had almost retired from ophthalmology practice in Auckland, he claimed this was not a factor, as building a private practice was not a problem in Auckland where, unlike Christchurch, there was a shortage of ophthalmologists.

Talbot described himself as being more interested in administration than in clinical work. He was elected to the Auckland Hospital Board and was its deputy chairman for many years, including the time when Sir Douglas Robb was chairman. He was also on the steering committee for the new Auckland Medical School.

He retired from the Auckland Hospital at 60, which was the compulsory age at that time. One of his campaigns was to raise the retirement age to 65, which was introduced shortly after his own retirement!

George de Lacy Fenwick (1916–1994), son of George E.O. Fenwick (see page 84), graduated from the Otago Medical School in 1940, and was a house surgeon in Wellington in 1942 before joining the Royal New Zealand Air Force. He rose to the rank of squadron leader and served in the New Hebrides (now Vanuatu). In 1946 he travelled to Moorfields in London, where he trained in ophthalmology, returning to Auckland in 1950. He became a consultant at the Auckland Hospital, from which he retired in 1982.

Fenwick took an early interest in retinopathy in premature infants. (The relationship between retinopathy of prematurity and oxygen therapy had been first published by Dame Kate Campbell, an Australian paediatrician, in 1951.12) Because of this interest, he imported a binocular indirect ophthalmoscope for viewing the peripheral retina. He was one of the first in New Zealand to use the
instrument, which later became the gold standard for examining the peripheral retina, especially in retinal detachment.

Dr George de Lacy Fenwick (1916–1994).
AUCKLAND DISTRICT HEALTH BOARD.

Fenwick was president of the Asia-Pacific Academy of Ophthalmology when its conference was in Auckland in 1971 — the largest, and the first truly international ophthalmological conference to be held in New Zealand. He served on the Academy’s Council for many years, and formed a local trust which provided fiscal support for ophthalmologists from the Asia-Pacific region to spend time on further training in New Zealand. In 1971 Fenwick was also president of the OSNZ.

Outside the sphere of ophthalmology, the Fenwick family is particularly prominent in our nation’s history. The patriarch, Sir George Fenwick of Dunedin, George de Lacy’s grandfather, was editor of the *Otago Daily Times*, founded the New Zealand Press Association and was involved in many other businesses and charities. George de Lacy’s wife, Ethel, was the daughter of Sir Frank and Lady Mappin, who gifted their home in Epsom, Auckland, to the New Zealand government. It remains Government House, the Auckland residence of the Governor-General. Ethel Fenwick co-authored an invaluable biography of the Fenwick family in New Zealand.13

George and Ethel’s son Rob founded a successful public relations consultancy, and is a prominent Auckland citizen. Maintaining family ophthalmology connections, he is chairman of the Fred Hollows Foundation in New Zealand. In his role as Chancellor of St John he led New Zealand fundraising campaigns to support the eye hospital in Jerusalem, where a number of New Zealand ophthalmologists, particularly Sir Randal Elliott, also a former St John Chancellor, have worked as volunteers. Among other activities, Rob Fenwick has been on the board of the World Wide Fund for Nature (WWF) and the Auckland Institute and Museum Council. He is a Knight of Grace in the Order of St John, and has been president of the Northern Club in Auckland.

Fenwick was encouraged in many of his civic roles by Lindo Ferguson. He was awarded the CNZM in 2009.
Charles Swanston, as mentioned above, is the step-son of George E.O. Fenwick. At the time of writing he was New Zealand’s oldest ophthalmologist and the author had the privilege of interviewing him in 2010, at the age of 94. As previously noted, Swanston remembers Arthur Purchas, Auckland’s first true ophthalmologist.

Swanston trained at the Royal Westminster Ophthalmic Hospital in London. During World War Two he was in the Royal New Zealand Air Force and was posted to Guadalcanal in the Solomon Islands, but fortuitously was offloaded at the American base at Espiritu Santo in the New Hebrides (now Vanuatu).

After the war, in 1946, Swanston joined George Fenwick senior in practice. Fenwick retired in 1955 and in the 1970s Swanston was joined by Drs David Murdoch and Ian Elliott. In the 1990s they were joined by Dr Dianne Sharp, Elliott’s wife. In 2002 Murdoch confined his practice to the North Shore, while Elliott and Sharp, with Dr Rachel Barnes, established Retina Specialists in Parnell.

Charles Swanston had a life-long interest in aviation, and did a lot of ophthalmic consulting for the Air Force and Civil Aviation Authority. For this and his contribution to ophthalmology, he was awarded the OBE in 1984.

Charles Calvin Ring (1916–1998) was the most influential and dedicated ophthalmologist in Auckland in the second half of the twentieth century. His schooling days belied his future eminence and scholarship.

Ring did not enjoy King’s College and thought that if he stayed there he would not pass matriculation. At his own instigation he attended the Auckland Business School, where he said knowledge was pounded into him. He matriculated from there, but hated his first year at the University of Auckland, and failed medical intermediate because of his dislike of physics and mathematics. Ring's difficulties are put into context by Graeme Talbot’s account of King’s College a decade earlier (see above).
Ring transferred to the University of Otago, where he gained the medical intermediate, and his stellar career germinated. He was inspired by great teachers, in particular Professor Percy Gowland in anatomy, Professor Malcolm in physiology and Professor D’ath in pathology, at the Otago Medical School and did well.

When Ring first saw William A. Fairclough performing eye surgery at Auckland Hospital he knew that ophthalmology was for him (see Appendix 4). He stayed a third year as a junior doctor and acted as a registrar in ophthalmology and ENT. When World War Two broke out he joined the New Zealand Medical Corps, along with two other friends who also achieved subsequent prominence: William (later Sir William) Manchester and Fred Moody, who later became superintendent of Middlemore Hospital and chairman of the Auckland Hospital Board. Ring and Manchester served together in both Egypt and Italy. At times in Egypt Ring assisted a senior colleague, Howard Coverdale, with eye operations. He was mentioned in dispatches while with the 22nd Battalion in Italy, and saw front-line action at the time of the invasion in 1943. Ring rose to the rank of major.

Ring also found himself in Egypt and Italy with his future wife Joan, a nurse whom he had met as a student in Dunedin. They were married just before the end of the war and then moved to England. Their first son, Peter, a future Auckland ophthalmologist, was born in London in 1946.

It did not take Ring long to secure one of the sought-after positions as a house surgeon at Moorfields. He became the senior house officer, which was a position of responsibility respected by the senior surgeons. He described the cataract operation of the day as being a rapid extra-capsular procedure using the Graefe knife, under local anaesthetic with cocaine crystals. Glaucoma operations were accomplished using a cornea-scleral trephine.  

When Ring returned to Auckland in 1948, the two eye surgeons at Auckland Hospital were Graeme Talbot and Cecil Pittar. Ring, being the junior surgeon before the days of registrars, had to do the emergency work, but he described the team of three as a happy group.

At the same time, Ring began private practice in Alfred Street, which is
now incorporated in the city campus of the University of Auckland. The house belonged to Sir Carrick Robertson, a pioneer Auckland surgeon. Sir Carrick’s son David, a neurosurgeon and good friend of Ring’s, offered to share a consulting suite in his father’s house. Ring described his early days in private practice as being reasonably competitive. The others in active practice at that time were Fairclough, Talbot, Pittar and Goldstein, although Goldstein had a smaller practice.

Ring got an early break when Fairclough invited him to apply for his position at the Mater Misericordiae Hospital when he retired. At that time the Mater had its own nursing school and public beds, which enabled private patients who required surgery but could not afford private surgery to be admitted as non-fee-paying patients. Although the surgeon did not get paid, it did enable him to continue caring for his own patients rather than have their care taken over entirely by the public hospital system. However, these free beds disappeared when the Mater (now Mercy Hospital) nurses’ training school ceased in the late 1970s. Ring, although not a Roman Catholic himself, greatly admired the dedication of the Sisters of Mercy and their very high nursing standards.

Ring’s great contributions to ophthalmology were in the areas of education and surgery. He gave unstinting service to the public system. Every week for half an hour before his busy clinic, he conducted a teaching ward round on his patients for the benefit of the nurses, house surgeons and registrars. He would always have prepared a tutorial which related to one or two of his patients. His surgical standards were very high and he expected the same of his registrars. ‘If you take your eye off the eye, take the instrument off the eye’ was a one-liner remembered by many trainees, including the author.

In 1978 Ring founded the Auckland Eye Research and Education Trust. Initially the trust raised funds from business houses, but in the longer term it was maintained by donations from patients. Every patient discharged from the eye ward at Auckland Hospital was given an envelope containing a letter and a circular, to encourage them to donate. The funds accumulated were used for education, such as supporting ophthalmic nurses to attend conferences and registrars to travel to Australia for educational purposes. Later, when the University of Auckland Chair in Ophthalmology was being planned, Ring and the trustees decided that when the chair was established the residual funds should support it.

Ring was also involved in overseas ophthalmic education. He joined Dr John Bignall from Melbourne to work in Thailand on three occasions. He also joined the Asia-Pacific Academy of Ophthalmology, which was started in 1960 by Dr John Holmes of Hawaii and Dr Geminiano de Ocampo from the
Philippines. This academy grew to include 30 nations and became recognised internationally, holding conferences every four years in a different country. Its 1971 meeting was a grand affair in Auckland, when Dr George de Lacy Fenwick was the president, and chairman of the conference. Ring became president of the Asia Pacific Academy at the time of the 1990 meeting in Kyoto, Japan, at which 35 countries were represented. As many were developing countries, prevention of blindness was a particularly important issue for the academy.

Ring’s surgical skills allowed him to be more intrepid than most of his colleagues, thus he was a natural to pioneer the use of intra-ocular lenses in New Zealand. He was not the first — that honour belongs to Dr Grant Johnston of Hamilton — but Ring was the first to produce good long-term results. At the time, the mid-1970s, intra-ocular lenses had a poor reputation, partly because of Peter Choyce at London Hospital in the United Kingdom, who persisted in using lenses which gave indifferent results. Many had to be removed. Ring met Dr Lawton Smith, the famous neuro-ophthalmologist from the Bascom Palmer Eye Institute in Miami, Florida, who advised not to give up on the idea but to visit Dr Cornelius Binkhorst in Holland, which Ring did with his son Peter in 1974. He then visited Dr Norman Jaffe in Miami, accompanied by Dr Bruce Hadden, who was training at Bascom Palmer at the time. Jaffe was performing extra-capsular extractions with irido-capsular supported intra-ocular lenses.

Ring returned to New Zealand and began this technique with good results. Unfortunately, Ring's results were regarded sceptically by colleagues, and he was subjected to considerable opprobrium. Ring gave his first paper on the technique in 1978 and heard hisses from the back of the room. He was professionally ostracised, especially by South Island colleagues. However, many ophthalmologists didn’t realise the huge difference between the technique of intra-capsular extraction and anterior chamber lenses used by Peter Choyce and extra-capsular extraction with iris-clip lenses. Intra-ocular lens surgery was well established for many years before the Christchurch surgeons finally adopted it, at a time when they were becoming increasingly criticised for denying their patients the benefits of modern techniques.

Ring subscribed to six ophthalmic journals and Scientific American. In 1991 he predicted that the future of ophthalmology lay in refractive corneal surgery and in retinal advances, in particular the treatment of macular degeneration, and within a decade he was correct on both counts. New Zealand’s first ophthalmologist trained in the country to fellowship standard, Dr Ian Elliott, was advised to transfer from Dunedin to Auckland for his last year, mainly to have the benefit of Ring’s tutelage, even though there was no academic department in Auckland at that time.

In a city that often seems as close-knit as a village, Ring had influential
friends, in particular Sir Woolf Fisher and Maurice Paykel, joint founders of Fisher and Paykel Ltd. Another was Sir William Stevenson. With Ring’s encouragement, Stevenson supported the establishment of the academic Department of Ophthalmology at the University of Auckland (see Chapter 14). Years later, Paykel endowed the Foundation Chair of Ophthalmology, the foundation professor being Charles McGhee, who took up the appointment in 1999.

Ophthalmology was Ring’s life and love. His avocation was horse racing, which would have come from his father, who was a veterinary surgeon with special interest in equine work. Ring loved horses and he loved the characters in the racing industry. He described racing people in Auckland as being city slickers and those in the provinces as being just great guys. As a medical professional he never felt out of place among the racing fraternity, as he related to it so knowledgeably. He became a steward at the Auckland Racing Club, then a committee member, and finally president, until 1986.

Ring was of course very proud that Peter, the oldest of his three sons, became an ophthalmologist. They practised together and both said they never had an argument. Calvin Ring continued consulting until just a few months before his passing in 1998.

Lindo Ferguson is a son of Gerald Ferguson, one of the two children of Sir Lindo and Lady Ferguson who reached adulthood (see page 32). Gerald Ferguson was a dairy farmer at Waimate North, where Lindo was brought up by a governess. Gerald gave up dairy farming in the 1929–30 depression, and the family moved to Dunedin. Thereafter Lindo’s father lived essentially as a gentleman, but remained a director of dairy factories, a deep-sea fishing enthusiast, and was very much involved in the Order of St John, becoming the Dominion Cadet Superintendent.

Lindo Ferguson attended John McGlashan College in Dunedin and then Christ’s College in Christchurch. When a young doctor he married Laetitia Bell, a grand-daughter of Sir Francis Dillon Bell, a prominent colonial New Zealander, sheep farmer at Shag Valley in North Otago, and Minister of Internal Affairs in the New Zealand government.

As a final-year medical student Ferguson won the Ardagh Memorial Prize in medicine in Christchurch. He trained in ophthalmology at Moorfields, and returned to Auckland in 1952. He started in private practice in Alfred Street and subsequently in Whitaker Place off Symonds Street, and was appointed visiting ophthalmologist to Auckland Hospital. He was later joined in private practice by Drs Garth Powell and Harold Coop. Ferguson and Powell were not compatible partly because of Garth’s smoking habit and after a short while Powell practised independently. Later, in 1975, Dr Antony Morris joined the
practice. Amusingly, Ferguson’s secretary reported that some patients after their consultation expressed surprise that they had not seen the very old man they had expected.

With Dr Hylton Le Grice, who had just returned from Moorfields, and the help of Dr Fred Moody, Middlemore Hospital’s medical superintendent, Ferguson set up the Middlemore Hospital satellite eye department in 1968, including some inpatient beds.

Ferguson contributed particularly to ophthalmic education and to the RACO (see Chapters 9 and 11). For several years, starting in 1968, he taught optics, at a time when New Zealanders began obtaining their ophthalmological qualifications while still in New Zealand, before travelling overseas for subspecialty fellowship training. In the 1980s, the Royal Australasian College of Surgeons stopped examining in ophthalmology, and the examinations were taken over by the newly formed RACO. However, New Zealanders were not members of the college, which has the potential to leave New Zealand trainees in limbo, but thankfully Ferguson, supported by others including Dr Roy Holmes of Christchurch, negotiated for New Zealand ophthalmologists to be eligible to take the examination and to become New Zealand fellows of the college.

Ferguson’s contributions to education resulted in his being made an honorary fellow of the RACO. The only other New Zealander to be so honoured was Professor John Parr, also for contributions to education. It was not until 1999 when the OSNZ was totally absorbed into the college that New Zealanders, as members of the New Zealand branch of the college, became equal fellows with voting rights and the right to hold office.

Ferguson was also co-founder, with Dr Calvin Ring, of the New Zealand Society for the Prevention of Blindness, now the Save Sight Society (see Chapter 17).

Ferguson’s outstanding and life-long contributions to community affairs, politics and heritage began in 1950. In that year, Auckland’s 100-year-old landmark, Partington’s Mill, was demolished. It included a huge windmill on a stone tower, prominently situated at the top of Symonds Street. Seabrook Fowlds,
the car company, had obtained permission to demolish the structure, yet all its
demolition accomplished was the creation of two parking spaces. There was a
public outcry. Many citizens were incensed, and Ferguson, with his interest in
heritage, was very concerned.* This bureaucratic vandalism, regretted by many
Aucklanders to this day, spurred Ferguson to enter local body politics and he was
elected to the Auckland City Council. He subsequently became deputy mayor
of Auckland, deputy chairman of the Auckland Regional Authority, Chancellor
of the University of Auckland, and president of the Northern Club. He served
on many other community and charitable bodies; in particular he was president
of the Auckland Institute and Museum Council, and was recently honoured as
a Companion of the Auckland War Memorial Museum. He was chairman of
the Cornwall Park Trust Board and of the Sir John Logan Campbell Residuary
Estate Trustees. The educational centre in Cornwall Park is named the Lindo
Ferguson Education Centre in his honour. He became a Knight of the Order of
St John, and was awarded the CBE in 1987.

Both Lindo and Laetitia Ferguson have continued to contribute to New
Zealand’s heritage in their retirement. Their property at Mangonui in the Far
North includes Butler House, a whaler’s cottage built in 1847, which they
have fully restored. They maintain an important Maori pa on their property,
and also a cemetery. They have also built a whaling museum, which has a huge
collection of whaling artefacts to which they are still adding, a show garden and
a macadamia nut plantation. Their property is open for educational tours, and
almost every school in the north has had groups of children tour the property.
In 2007 Ferguson was made an Honorary Life Member of the New Zealand
Historic Places Trust.

Also in the early 1950s, Drs Garth Powell and Lindsay (Jiggs) Poole returned
from Moorfields to practise in Auckland. Powell, who was head prefect at
King’s College, is a past president of the OSNZ. Poole was widely known for the
church-like art gallery attached to the homestead on his farm at East Tamaki. He
had an extensive New Zealand art collection, including many paintings by his
friend the late Garth Tapper.

Hylton Le Grice was also educated at King’s College in Auckland and graduated
in medicine from the University of Otago, where he won both the T.W.J. Johnston
Memorial Prize in medicine and the Sir Carrick Robertson Prize in surgery.

* Although the preservation society of the time was unsuccessful in retaining Partington’s
Mill, its efforts and the demolition itself were instrumental in the development of the
heritage movement in New Zealand as we know it today, and the New Zealand Historic
Places Trust.
Above: Dr Lindo and Mrs Laetitia Ferguson at their whaling museum, Mangonui, Northland, in 2010. AUTHOR.

Below: Dr Lindsay Poole’s retirement from Eye Institute, Auckland, 2001. The painting is by John Horner. Left to right: Drs Antony Morris, Bruce Hadden, Peter Ring, Trevor Gray, Lindsay Poole and Professor Helen Danesh-Meyer. AUTHOR.
Le Grice went to the United Kingdom and trained with Dermot Pierse, the pioneer of microsurgery there. He worked with Pierse in the design of the first British Keeler operating microscope and, having an interest in strabismus, he was entrusted with independently conducting a strabismus clinic and theatre list. He thus began at Moorfields with an already substantial surgical experience, and during his training there had the distinction of being chosen by the consultants to be the Senior Resident Surgical Officer.

Le Grice returned to New Zealand in 1965, and was appointed as the first senior lecturer in ophthalmology at the University of Auckland’s new School of Medicine in 1971. He was later promoted to Clinical Reader. He singlehandedly provided ophthalmology lectures and practical sessions to Auckland’s medical students for 13 years, until the arrival of Dr Gillian Clover, Auckland’s first full-time academic, in 1985. At the same time Le Grice had a large private practice, to which Calvin Ring had initially contributed by providing many patients whom he was unable to see.

Le Grice also made wide-ranging contributions beyond the specialty. In medicine, he was the deputy chairman of the medical staff and staff representative on the board of management of the Mater Misericordiae (now Mercy) Hospital, and was for 18 years a board member and later chairman of directors of the Southern Cross Medical Care Society. He is a past president of the OSNZ and was the society’s appointee on the Opticians’ Board. His business interests included being a director of Montana Wines, New Zealand’s largest wine producer; a director of Metlifecare Ltd, at the time New Zealand’s largest operator of retirement villages, and chairman of the New Zealand Symphony Orchestra. Le Grice was also president of the Northern Club in 2002–03, the third ophthalmologist to be president, after C. Humphry Haines in 1896–97 and 1898–99, and Lindo Ferguson in 1992–94.* Le Grice continues as a director of

*In 1959, when the Northern Club was 90 years old, nine of Auckland’s 10 ophthalmologists were members. Only Dr James Kriechbaum, who had emigrated from the United States that year, did not belong. Dr Duncan Macdiarmid of Hamilton was a country member. The same would have held true for the gentlemen’s clubs in other cities.
several public and private companies. For these and other contributions he was deservedly awarded the OBE in 1995, and the Companion of the New Zealand Order of Merit (CNZM) in 2010.

Dr Harold Coop. AUCKLAND DISTRICT HEALTH BOARD

Harold Coop, a pupil of Auckland Grammar School and Otago Medical School, returned from Moorfields in 1968. He arrived with modern techniques of retinal detachment surgery, including the use of the binocular indirect ophthalmoscope. He introduced photo-coagulation, in particular for diabetic retinopathy. Initially he used the Zeiss xenon-arc photocoagulator, and later the argon laser. This was pioneering work, before the major United States clinical trials, and quite soon after the discovery that pan-retinal photocoagulation in diabetic retinopathy caused existing neovascularisation to resolve, even if not treated directly, and removed the stimulus to further neovascularisation. This was far more effective than treating only the areas of neovascularisation. Pan-retinal photocoagulation prevented or reduced the sequelae of rampant neovascularisation, in particular vitreous haemorrhage and tractional retinal detachment, both being causes of blindness from diabetic retinopathy. He also wrote on retinal detachment surgery.

For many years Coop was also an influential writer in the news media, mainly on the controversies of public and private medicine, and the controversial ‘White Paper’ on health reforms produced by the Labour government in 1974. He also wrote on environmental, educational, church and ethnic issues.

Coop has had a life-long interest in culture and was president of the Auckland Institute and Museum Council. He is also a widely respected professional artist, with his work displayed in several galleries. He was commissioned to do a large mural at the main entrance of the School of Medicine in Auckland. In retirement Coop has produced calendars featuring his art, and a book devoted to his work has been published. He spends several months each year painting in France.

William (Bill) Taylor returned from Moorfields in 1972, and was the first full-time tutor specialist at Auckland Hospital for two years. He made great contributions to medical and surgical retina, and firmly established a fluorescein angiography service. In this he was greatly assisted by Alex Fraser, Auckland Hospital’s
medical photographer, who has had a life-long interest in ophthalmic imaging. Taylor also took over orbital surgery for many years until the arrival of Dr Paul Rosser.

Taylor was very energetic and innovative. He organised a comprehensive teaching programme, in which he involved all the ophthalmologists. The early beneficiaries were Bruce Hadden, Gillian Clover and Ian Hass. Taylor took over the chairmanship of the Eye Department from Calvin Ring, rejuvenated the clinical meetings, and notably organised a special meeting with Ian Constable of Perth, Australia, as the guest speaker. Every ophthalmologist in Auckland was required to give a presentation, and it was a great success.

Taylor also put much effort into planning the new fit-out of the Wallace Block. This was to be a temporary location as the building was an earthquake risk, and was due for demolition in around 1978. However, the 1920s building served ophthalmology until 2004, when the Eye Department relocated to the Greenlane Clinical Centre.

For such a talented surgeon, Taylor ceased operating surprisingly early. Among other community contributions, he was chairman of the board of governors of Sacred Heart College.

Dr Ian Elliott returned from sub-specialty training in San Francisco in 1973 as Auckland’s second tutor specialist. He had gained the prestigious Hearst fellowship to train in neuro-ophthalmology with Professor William Hoyt in San Francisco. As previously noted, Elliott was the first to train to fellowship level in New Zealand, and the first to complete a full post-graduate fellowship in the United States. He was awarded the Gordon Taylor Prize in the general primary examination of the Royal Australasian College of Surgeons in 1968, and his expertise in anatomy has been utilised by the RANZCO for many years as an examiner in anatomy.

Through his work, Elliott established much needed clinical liaisons with neurologists. In 1987 he introduced the use of botulinum toxin, mainly for the treatment of blepharospasm and hemifacial spasm.

Dr Ross McKay was an eye registrar in Auckland in 1967–68. He returned

_Drs Ian Elliott and Dianne Sharp._

NEW ZEALAND OPTICS, MARYANNE DRANSFIELD.
in 1975 from post-graduate training at Moorfields Eye Hospital to be Auckland’s third tutor specialist. His expertise was in paediatric ophthalmology and corneal surgery. McKay provided screening for retinopathy of prematurity at National Women’s Hospital for many years. In 1976 he joined Dr Hylton Le Grice in private practice, and took up a part-time visiting appointment at Auckland Hospital. He was chairman of the Auckland Hospital ophthalmic surgeons from 1986 to 1988, and again from 1992 to 1999. During this time he also became clinical director, when that position was first created by the hospital CEO Marie Colwill. McKay was one of the longest serving ophthalmologists in public practice in Auckland, having held continuous appointments for 36 years, from 1975 until his retirement in 2011.

McKay followed Le Grice as the New Zealand Medical Association’s appointee on the Opticians’ Board, until an ophthalmology representative on the board was no longer required. He was a trustee of the Royal New Zealand Foundation of the Blind from 1980 to 1986.

Dr Gillian Clover, originally from England, did her medical degree at the University of Otago and her house-surgeon and eye-registrar years at Auckland. Towards the end of her time as eye registrar, she spent six months at the National Hospital in Apia, Western Samoa, then went to London where she studied for eight years at Hammersmith Hospital and at the Institute of Ophthalmology in London, where she pursued significant retinal research. Clover was appointed to the Sir William

Associate Professor Gillian Clover.

AUCKLAND DISTRICT HEALTH BOARD.
and Lady Stevenson Senior Lectureship at the University of Auckland in June 1984, and her contributions to academic ophthalmology in Auckland are recorded in Chapter 13. She was also chair of the Eye Department from 1990 to 1992.

Dr Dianne Sharp was awarded a Smith and Nephew Fellowship to train at Moorfields as a medical retina fellow with Professors Alan Bird and Geoff Arden, a pioneering electrophysiologist. After marrying fellow Auckland ophthalmologist Dr Ian Elliott in 1986, they returned to Auckland.

In 1988 Sharp led the inaugural meeting of the New Zealand Retinitis Pigmentosa Society, a patient support group, which later became Retina New Zealand. She helped to establish the Vision Assessment Clinic at Auckland Hospital, which included a clinic to assist those with impaired vision.

Sharp was invited to the Eye Institute in 1998 to manage fluorescein angiography, and there she also set up New Zealand’s first private ophthalmic electrodiagnostic unit. In 1999 she began photodynamic therapy for age-related macular degeneration (ARMD).

In 2003 Sharp established Retina Specialists in Parnell, with Elliott and Dr Rachel Barnes. Dr Peter Hadden joined part-time as a vitreo-retinal surgeon, and Dr Andrea Vincent as an ocular geneticist, and in 2010 she established Macular Degeneration New Zealand (see page 263).

Public ophthalmology in Auckland

The main building of Auckland Hospital was built in 1876 and demolished in 1964. Ophthalmology outpatient and surgical services were in the Wallace Block at Auckland Hospital from its opening in 1926 until its demolition in 2004. (The block was named after William Wallace, who was chairman of the Auckland Hospital Board from 1918 to 1936, and president of the Hospital Boards Association of New Zealand from 1925 to 1932.) The Wallace Block stood on the highest ground of the hospital site, on the corner of Park Road and Domain Drive. For much of its life, the ground floor housed the eye clinic and the ENT clinic and operating theatre. The first floor was the combined ENT ward, and the eye theatre. The second and third floors were women’s and men’s medical wards and the fourth and fifth were hospital laboratories. The basement housed the intravenous solutions unit.

In 1978 the Eye Department expanded to occupy three whole floors of the Wallace Block when ENT and the medical wards moved to the new main block. The eye clinic and seminar room were on the ground floor, the first floor became a dedicated eye ward, and the two eye operating theatres and orthoptic department were located on the second floor. In 2004 ophthalmology moved to
a purpose-built unit in the Greenlane Clinical Centre on the site of Greenlane Hospital.

The annual reports of the superintendent-in-chief of the Auckland Hospital Board included a paragraph on each department, written by the senior physician or surgeon. In the annual report for the year ending March 1963, the Auckland Hospital medical superintendent, Dr D.R. Goodfellow, mentioned in his report that there were ‘practical courses for opticians in the ophthalmic department’, and that in the eye clinic ‘the acquisition of a dictaphone in this department and the allocation of extra clerical help will further improve the service’. That year the departmental report was written by Cecil Pittar as senior surgeon, in the year of his retirement.

In those days the visiting specialists were sub-divided into visiting senior ophthalmologists and visiting ophthalmologists, and in that year the visiting senior ophthalmologists were Cecil Pittar, Calvin Ring and Graeme Talbot,
and the visiting ophthalmologists were George de Lacy Fenwick, Lindo Ferguson and Charles Swanston. It was reported that Talbot retired during that year and Fenwick was raised from visiting ophthalmologist to visiting senior ophthalmologist, while Lindsay Poole replaced him. It was also mentioned that a xenon-arc photocoagulator had been installed, and that it had not been possible to fill the post of registrar, which remained vacant.

In the report for the year ending March 1964, Pittar had been appointed as an honorary consultant, which was an automatic accolade for retiring specialists. The honorary consultants were prominent in the reports, being listed on the front page, and the recent honoraries — that is, retirees — had their photographs included. Pittar was replaced by Swanston as senior ophthalmic surgeon, and Garth Powell was appointed as a visiting ophthalmologist.

In 1965–66, under Calvin Ring, there was an expansion of medical ophthalmology services. A glaucoma clinic was instituted, run by Dr Roderick Ferguson, who had recently moved from Wellington. A new position of outpatient officer was accepted by James Kriechbaum, an American ophthalmologist who emigrated to New Zealand in 1952. A new outpatient clinic was started for the examination and care of welfare patients who were directed to the Eye Department by the Welfare Department of the hospital board, conducted by Dr Donald McGregor, an ophthalmologist with a Diploma in Ophthalmology, appointed as a medical officer of special scale.

Ring, who wrote the reports for the years ending March 1965 and 1966, mentioned in 1965 that ‘W. (Bill) Taylor had been appointed as a registrar and was helping fully in the running of both the outpatient sections and the wards’, and in 1966 that ‘our registrar Dr Taylor provided great help in arranging and taking part in the teaching activities. Appreciation of his generous help with all clinical matters must also be recorded.’

Ring instituted a new activity, the clinical hour, which was held once a month. This was a meeting where interesting and puzzling clinical cases were discussed. The meetings were educational and beneficial to patient care, and were attended by the Auckland ophthalmologists as well as ophthalmologists from Whangarei, Hamilton and occasionally elsewhere, and also by specialists from other departments, particularly neurologists. Since Taylor, there have always been registrars in the Eye Department. After Taylor’s sterling two years’ work, undoubtedly the visiting specialists would have found it very difficult without a registrar. In 1968 the registrars were Drs Andrew S. Brook and E. Jean Mander. Unfortunately neither continued with ophthalmology.

By 1969 the annual report of the superintendent-in-chief was showing signs of egalitarianism. The honorary consultant staff were listed without photographs of the newly retired. Annual reports by the senior specialists in the departments
were no longer featured. There was an expanded report by the Matron-in-Chief, signalling the increasing status of nurses and other health professionals.

By 1970, the tiers of visiting senior ophthalmic surgeon and visiting ophthalmic surgeon were abolished. In that year the ophthalmic surgeons were Fenwick, Ring, Swanston, Ferguson, Kriechbaum, Poole, Powell, Le Grice and Coop. Also listed was McGregor, the ophthalmologist who conducted the welfare clinic. In that year Drs Antony Morris and Desmond Dowse were the registrars.

Dowse subsequently studied ophthalmology in England for nine months, then moved to his home city of Gisborne, where he was in general practice with an interest in ophthalmology. In his youth he was the New Zealand senior breaststroke and butterfly swimming champion. Sadly he died in 1977 of a subarachnoid haemorrhage at the age of 51.

In 1967–68 Dr Ross McKay was the eye registrar, in 1969 Morris, and in 1971 Dowse and Bruce Hadden were the registrars. During that year they were joined by Ian Elliott, who had moved up from Dunedin after being a registrar there for three years. Elliott was very knowledgeable and passed his final fellowship examination later that year.

This time marked the beginning of young doctors deciding on a career in ophthalmology deliberately planning to work and study in New Zealand to fellowship standard prior to further training overseas. Those who followed immediately after included Hadden; Ian Hass, who subsequently practised in Canada; and Gillian Clover, who eventually became associate professor in Auckland. In Dunedin there were John McKinnon and Tom Ellingham.

In the 1970s and '80s ophthalmic lasers were rapidly being developed. Auckland Hospital took delivery of its first argon laser for retinal work in 1976, the same year Hadden started vitreo-retinal surgery there.²⁰ By 1985, extracapsular surgery with implantation of an intra-ocular lens was rapidly becoming the cataract procedure of choice, and the much improved visual results increased the demand for surgery.

In 1988 there were 1682 patients on the cataract waiting list alone. At that time an Auckland Hospital Board member, psychologist Dr Peter Davis (husband of Helen Clark, who later became New Zealand's Prime Minister) suggested that one way of reducing this waiting list would be for the surgeons to revert to a simpler and faster type of cataract surgery. He was referring to avoiding the use of intra-ocular lenses, but of course he had no concept of the huge gain in quality of vision and lifestyle that these lenses provided. This suggestion was properly and publicly denounced by Antony Morris, ophthalmologist and executive member of the Auckland branch of the New Zealand Medical Association, and by Stuart Ferguson, its president. It is hard to imagine a more retrograde way to reduce surgical waiting lists.
After cataract surgery, a few eyes develop a thickened posterior lens capsule, which causes blurred vision. A small operation called a needle capsulotomy was required to restore the vision until the advent of the neodymium YAG laser. This made the procedure of posterior capsulotomy much safer, as there was no chance of infection or other ‘open eye’ surgical complications. Laser capsulotomy was also quicker and more economical, being carried out in the clinic rather than in an operating theatre.

Nevertheless, the laser cost of $150,000 made its purchase by the Auckland Hospital impossible until late 1985, when Molly Carr, daughter of the late Sir Ernest Davis, mayor of Auckland, donated $200,000 to Auckland Hospital for new equipment. Like several other benefactors, she was persuaded to donate by Calvin Ring. Ring also encouraged Sir William Stevenson, who endowed the Senior Lectureship, and the Wallath family, who donated both a second laser to the Mater Misericordiae (now Mercy) Hospital and updated vitreous surgery equipment, the Ocutome System, to Auckland Hospital.

The Auckland Hospital Wallace Block had housed the Eye Department since 1926, but in 1978 it was deemed to be seismically unsafe and faced demolition. The Eye Department was temporarily housed for over a year in the old radiology building at Auckland Hospital while the interior of the Wallace Block was given a limited refurbishment. This turned out to serve for another 24 years, until the department finally moved to the Greenlane Clinical Centre in 2004, and the Wallace Block was demolished. However, the department did not move without a fight and considerable reservations. The ophthalmologists, now strengthened by Professor Charles McGhee as chairman, were reluctant to move to Greenlane, citing isolation from related specialties such as neurology and neuro-surgery, and from CT and MRI facilities. Also, the Wallace Block was conveniently just across the road from the University Department of Ophthalmology in the Faculty of Medical and Health Sciences, enabling ready interaction around teaching and collaborative research between academic staff, senior medical officers and trainees.

Auckland ophthalmologists have always resisted peripheral services in the public sector, being concerned with the quality of patient care and concerns about working in relative isolation with less access to collegial support and to specialised diagnostic equipment, both within ophthalmology and in other departments, especially radiology. Peripheral units also weaken the central department, with its comprehensive facilities, including diagnostic, library and seminar facilities. However, the hospital management has always taken the view that services should be taken to the people, and would not have been blind to private ophthalmology clinics being successfully run by solo ophthalmologists in several suburbs. However, those practices are different from a major teaching centre.
Eventually in 1968 a public clinic was established at Middlemore, with an orthoptic service and strabismus surgery. Lindo Ferguson visited Middlemore for many years, as well as Hylton Le Grice and Graeme Talbot, for a short time after his formal retirement. Registrars regarded it as a good training experience in strabismus, as Le Grice had a special interest in that sub-specialty. There was also a diabetic retinopathy screening clinic at North Shore Hospital.

Currently there is a large ophthalmology service at the Manukau Super Clinic, headed by Dr Anmar Abdul-Rahman, which now provides most ophthalmology services, with the exception of emergency care and retinal surgery. Inevitably, peripheral services will continue to expand as Auckland’s population grows and spreads.

Sub-specialisation in Auckland
Simply because of its size, sub-specialisation evolved in Auckland earlier than in other New Zealand centres. Before 1972, all Auckland ophthalmologists were generalists, although a few had sub-specialty interests to some degree, such as Cecil Pittar in corneal transplants.

Sub-specialisation really began when the tutor specialist position was established, whereby a newly qualified specialist returning from overseas would do one or two years full time in the public system. The first was Bill Taylor in 1972, who brought back sub-specialty expertise in retinal and orbital surgery, although he also was very competent in a much wider range of ophthalmic procedures. He, along with Richard Clemett in Christchurch, established the sub-specialty of medical retina in New Zealand. All subsequent tutor specialists returned with sub-specialty skills and expertise. Over the following approximately 20 years retinal detachment surgery in particular became sub-specialised, with the majority carried out by either Harold Coop, Taylor or Hadden. Since the 1990s, in Auckland only a vitreo-retinal sub-specialist would do retinal detachment surgery, and only a corneal specialist would do a corneal transplant.

In 2001 Dr Brian Joondeph, a talented vitreo-retinal surgeon from Denver, Colorado, uprooted with his family to spend two years experiencing life in New Zealand. His efforts greatly shortened the ballooning waiting list for elective vitreo-retinal operations. This sub-specialisation was in contrast to Christchurch, where Associate Professor Richard Clemett continued to competently encompass the whole gamut of ophthalmic surgery until he retired in 2002.

However, with the increasing range of procedures available, increasingly complex technology and increasingly high expectations for good outcomes, sub-specialisation will continue to dominate practice, at least in the main centres. But for the time being, training in general ophthalmology with a general
fellowship examination remains a necessary education so that quality general ophthalmology services can be maintained, particularly in non-metropolitan areas.

The academic Department of Ophthalmology at the University of Auckland has been a very positive influence on Auckland, and indeed on New Zealand ophthalmology, since its expansion in 1999. A number of practising ophthalmologists have undertaken higher research degrees, including Professor Helen Danesh-Meyer, Associate Professor Philip Polkinghorne and Professor Gerard Sutton of Sydney, who have attained doctorates of medicine from the University of Auckland. Several young doctors have undertaken Doctor of Philosophy (PhD) degrees to increase their exposure to clinical and laboratory research. These include Christina Grupcheva, Dipika Patel and Rachael Niederer, all of whom were awarded top university prizes for the exceptional standard of their theses. Interestingly, the number of New Zealand ophthalmologists with a higher research degree has risen from only three in 1999 to around 15 per cent of all ophthalmologists in 2011.

Taking time out to complete a doctorate (MD or PhD) in ophthalmic research is not encouraged as a means of improving the chance of junior doctors being accepted onto the RANZCO programme, partly because this trend has raised the average age of those starting vocational training to 32.5 years,²¹ which is older than ideal.

The on-call vitreo-retinal surgeons in Auckland, at a dinner at the Northern Club in 2001 to welcome Dr Brian Joondeph. Left to right: Drs Archie McGeorge, Michael Fisk, Philip Polkinghorne, Brian Joondeph, Bruce Hadden and Brendan Vote (Fellow). PROFESSOR CHARLES MCGHEE.
Professor Charles McGhee’s personality and leadership has enabled academic ophthalmology to not just co-exist with private practice, but to favourably influence practising ophthalmologists in a way which is envied elsewhere in Australasia. At the time of writing there were 39 ophthalmologists practising in Auckland, a proportionally large rise since the arrival of Professor McGhee, 11 years previously in 1999, when there were 28. Quite surprisingly, some 34 of these 39 ophthalmologists now enjoy an active association with the academic department, either by working part time within it or by holding an honorary appointment.

Private ophthalmology in Auckland

Private practice has always been stronger in Auckland than in southern centres. For decades, private practices were either solo or two to three ophthalmologists, and ophthalmic surgery was carried out at the Mater Misericordiae Hospital in Mountain Road, Epsom. However, complicated procedures tended to be referred to the Auckland Hospital ophthalmology department.

In 1982, Drs William (Bill) Taylor and Bruce Hadden jointly purchased New Zealand’s first private fluorescein angiography equipment and argon retinal laser. They called themselves Retina Associates and provided this private service together, while keeping the remainder of their ophthalmological practices
separate. In 1986 Taylor bought out Hadden’s half share, and Taylor continued providing medical retina services in his office at Mount Street in Auckland Central.

The real momentum gathered in March 1993, when the first multi-specialty group practice opened at the St Marks Eye Centre, now Auckland Eye. Initially there were four ophthalmologists: Bill Taylor, Philip Polkinghorne, Paul Rosser and David Pendergrast. Dr Stephen Best joined a year later. They offered sub-specialty expertise in medical retina, vitreo-retinal surgery, oculoplastics, glaucoma and neuro-ophthalmology.

Dr Stephen Best. ROYAL AUSTRALIAN AND NEW ZEALAND COLLEGE OF OPHTHALMOLOGISTS.

In 1990 the Mater Misericordiae Hospital purchased the first phacoemulsification unit, four years before that advance became available in the public sector. However, Philip Boulton in Palmerston North was actually the first surgeon in New Zealand to use phacoemulsification for cataract surgery, again in the private sector.

The following years saw a relentless increase in technology and its cost, which drove the formation of further group practices. In 1992 Drs Antony Morris, Peter Ring and Bruce Hadden purchased New Zealand’s first excimer laser for refractive surgery, costing over $1 million. Introducing New Zealand’s first refractive surgery laser only three years after Dr Marguerite McDonald performed the world’s first photo-refractive keratectomy (PRK) was a risky investment, and carried the additional stresses of peer jealousy and public criticism. During the month the first laser refractive procedure was carried out, an article featured prominently on the front page of the New Zealand Herald, entitled ‘Long view plea in eye surgery’. It began:

The Royal Foundation for the Blind has questioned the advisability of a new laser surgery technique to treat short-sightedness. Three Auckland eye specialists are due to begin performing the surgery this month at a cost of about $1500 an operation.
The procedure, known as photo-refractive keratectomy, involves the sculpting of the cornea at the front of the eye with a laser. The re-shaped cornea corrects the focusing defect of short-sightedness.

The Foundation’s acting Chairman, Mr Gordon Sanderson, said operations had been performed on humans for only three years. The technique was yet to be approved by the United States Food and Drug Administration. Mr Sanderson said he feared that over the years scarring produced by the operation could cloud patients’ vision.

This surgery may be putting at risk the corneas of otherwise healthy eyes. We may see in 10 or 20 years time the outcome of this particular form of surgery as yet another cause of visual impairment.

Adding to the vitriol was that refractive surgery, to be successful, needs to be marketed. It is not mainstream medicine, but rather a lifestyle choice, so it requires entrepreneurship and advertising — both intrusions into traditional

Auckland Eye, New Zealand’s first multi-sub-specialty clinic. DR PAUL ROSSER, AUCKLAND EYE.
medical practice, and both potentially straining collegial relationships.

In the early 1990s only syncretists and prophets would have said refractive and cataract surgery went together, but in the twenty-first century the term refractive-cataract surgery is *de rigueur*. Even older patients with cataracts now expect a designer refractive outcome.

As previously noted, until the 1980s, in Auckland private practices were either solo, or two- and three-person practices. In Remuera Road there was Calvin and Peter Ring at the Ely Clinic, Hylton Le Grice and Ross McKay at 122 Remuera Road, Garth Powell by himself, and Lindo Ferguson, Harold Coop and Antony Morris at 77 Remuera Road. In the city there was the Lister Building practice of Charles Swanston, David Murdoch and Ian Elliott, and in Mount Street there was the practice of George de Lacy Fenwick and William (Bill) Taylor, and two doors along James Kriechbaum, Lindsay Poole and Bruce Hadden. On the North Shore there was John Chapman-Smith. However, in the 1990s, because of technology and sub-specialisation, the face of private practice in Auckland changed from small, individual practices to multi-sub-specialty clinics.

In 1994 Morris, Peter Ring and Hadden built the Remuera Eye Clinic, now the Eye Institute, which was the first stand-alone dedicated ophthalmic day-surgery centre. St Marks Eye Centre, now Auckland Eye, opened its day-surgery centre shortly after.

Although Hadden started private vitreo-retinal surgery in a small way from 1978, Philip Polkinghorne returned from training at Moorfields in 1992 and firmly established the sub-specialty. St Marks Eye Centre purchased its first excimer laser in 1996, and since then both groups have continued to invest heavily in this technology, including new excimer lasers and then the femtosecond laser, used for accurately cutting the corneal flap in the laser-assisted keratomileusis (LASIK) procedure.

High-cost technology is not limited to cataract, refractive and vitreo-retinal surgery. It now includes diagnostic instruments, including fluorescein angiography, ultrasound, partial-coherence laser interferometry for measuring the required power of the intra-ocular lens, and optical coherence tomography for glaucoma assessment and retinal imaging. Since all modern microsurgery requires a sophisticated operating microscope, it is preferable if this is ceiling-mounted, which limits the operating room to ophthalmology only.

By the turn of the millennium, the whole scene was different. In Remuera there was Auckland Eye in St Mark's Road, comprising Drs William Taylor, Philip Polkinghorne, Paul Rosser, Stephen Best, Archie McGeorge and Justin Mora. In Remuera Road there was Eye Institute comprising Drs Antony Morris, Peter Ring, Bruce Hadden and Trevor Gray. In Parnell, Retina Specialists was
soon to commence with Dr Dianne Sharp, Rachel Barnes and Ian Elliott. On
the North Shore there was the Milford Eye Clinic with Drs John Chapman-
Smith, Michael Fisk and Brian Sloan, and the solo practice of David Murdoch.
The private sector had satellite consulting services north, south, east and west,
with satellite surgical services being developed at South Auckland and Albany.

In the mid-1990s, long public hospital waiting-lists for surgery, in particular
cataract surgery, were being publicised. The Northern Regional Health Authority,
which at that time was the government body which funded Auckland Hospital,
decided that it would call tenders for private practices to carry out cataract
operations on people waiting on the Auckland Hospital list. An article in the
New Zealand Herald in April 1995 headed ‘Eye operations cause furore’ said:

\textit{The Head of Auckland Hospital has launched a broadside at North Health, claiming the funding agency could be advancing the powers of a cartel of eye surgeons. Maree Colwell [manager of Auckland Hospital] fears a Northern Regional Health Authority move to buy cataract operations directly from surgeons operating privately would reduce the public system to a dumping ground for unwanted work.}

At the same time an article in the Wellington Evening Post was headed ‘Eye surgeons criticised for private work’. It began: ‘A Government Health funding agency is helping a cartel of million-dollar-a-year private eye specialists in

\textit{Eye Institute, Auckland’s first ophthalmology day-stay surgery centre. AUTHOR.}
Auckland weakening the public hospital system, an Auckland Hospital manager claims’. At that time, around 300 cataract operations were contracted out to the private sector, which of course did help to reduce the public waiting list. However, because the move was politically unpalatable, no further eye operations were contracted to the private sector until about three years ago. The practice has now become politically acceptable and, as before, it benefits the patients at no significant cost difference to the taxpayer to the same procedures being carried out within public hospitals.

Presently there appears to be a good balance between public and private ophthalmology, with the one system complementing the other. In Auckland at least, more elective procedures are done in the private sector than in the public and more acute procedures are done in the public sector than in the private. While enough elective procedures continue to be done in the public sector to provide adequate training for registrars, this is a good balance. It serves the needs of patients, minimises costs to the taxpayer and reduces the temptation for more ophthalmologists to emigrate to Australia.
The central North Island’s first ophthalmologist was Dr Alexander Watt Beveridge (1879–1954). He was born in Edinburgh, where he gained the fellowship of the College of Surgeons (FRCS Edin.). He immigrated to Auckland at the age of 34, and during World War One was an honorary eye surgeon at Auckland Hospital. He returned to Scotland, but then moved back to New Zealand permanently in 1921 and commenced private practice in Hamilton. He was a visiting specialist at Waikato Hospital for 16 years, from where he retired in 1937.

Duncan Macdiarmid (1898–1985) was born in Linares, southern Spain, when his father Roderick was a doctor in the silver mines. The family emigrated to New Zealand in 1910. Roderick Macdiarmid was appointed to the Huntly Mining Company, and subsequently became a long-serving general practitioner in Huntly. Duncan Macdiarmid returned to the family’s home town, Glasgow, to undertake medical studies, which were interrupted by World War One, in which he saw service in the Royal Army Medical Corps.

In 1918 Macdiarmid returned to New Zealand and completed his medical training at the Otago Medical School, graduating in 1922. He joined his father in general practice in Hamilton.

Dr Duncan Macdiarmid (1898–1985).

DR J.D.C. MACDIARMID.
practice in Huntly in 1924 then after six years went to Oxford, England, to study ophthalmology, before returning to Hamilton.

In 1937 Macdiarmid bought Dr Beveridge’s practice, and for the next 16 years he was, as Beveridge had been, the only ophthalmologist in the central North Island. (The nearest ophthalmologists were to the north in Auckland, and to the south, Dr Jack Monro in Palmerston North.) He retired from Waikato Hospital in 1965 but continued in private practice until 1970.

Macdiarmid developed the use of egg membranes for chemical burns, the forerunner of using amniotic membrane. His enduring sub-specialty interest was in retinal detachment surgery, and he was adept at using the monocular indirect ophthalmoscope, an instrument which was largely confined to Europe. He used the Weve principles of retinal detachment surgery. He stressed the importance of localising the retinal breaks with indirect ophthalmoscopy, and using both surface and penetrating diathermy to make a chorio-retinal adhesion. In 1949 Weve described creating a scleral buckle by a reefing technique. Lamellar suture bites were taken in full-thickness sclera using a cross-stitch technique. The stitches could be placed equatorially or radially. Tightening them indented the sclera between the suture bites. Weve was a visiting speaker at the OSNZ’s annual meeting in 1953.

Two full histories of Waikato Hospital have been published. The history by Armstrong was written with the help of a professional historian at the University of Waikato, Dr Rosalind McLean, wife of Dr James Stewart, a Hamilton ophthalmologist. Waikato Hospital was a so-called ‘closed hospital’, meaning that the surgical staff were full-time hospital employees and there were no visiting specialists. However, an exception was Duncan Macdiarmid, being engaged by the hospital as a part-time specialist with a retainer of £250 a year. He looked after ocular surgery and trauma and did follow-up clinics on those patients, but there were no hospital clinics for initial referrals. Such unpaid honorary part-time surgeons performed essential services in many New Zealand centres.

In the late 1930s the Labour Party wanted a salaried service but many of the honorary surgeons felt they did not need to be paid, because being unpaid gave them more freedom, and in some a feeling of altruism, luxuries made possible by fees for private surgery being relatively high by today’s standards. Indeed, a cataract operation cost 75 guineas and a small Ford car was around 105 guineas, meaning that two operations would purchase a car. After World War Two this honorary system was dispensed with and part-time specialists were paid, albeit at a very low rate because of the perception that they did not really need the extra income.

However, with payment came obligations and conditions. In 1932 a resolution was passed at the annual general meeting of the New Zealand section
of the Royal Australasian College of Surgeons recommending that hospitals adopt the open or visiting system for their surgical staff, allowing part-time surgeons to work in the public hospitals. At Waikato this was opposed by the entrenched full-time surgeons, and the hospital did not adopt the open system until 1949. Its hand was somewhat forced by the hospital being singled out by the Otago Medical School, which was advising its students not to take positions at closed hospitals as they would receive better training at hospitals with visiting specialists (see Chapter 15).

In the late 1950s Dr Hector Levien (1917–2009) started practising on his own in Hamilton. The relationship between him and Duncan Macdiarmid was strained; they each did two weeks of on-call duties at Waikato Hospital and there was friction about taking over each other's patients. Both had firm ideas about how things should be done. At the beginning of the new week in the eye ward, all the eye drops had to be re-charted and protocols for dressings, theatre preparation and all other aspects of patient care changed to follow the requirements of the incoming surgeon.

Levien remained in Hamilton for only seven years before he went to Hong Kong, Ontario, Canada, and London after which he returned to Wanganui, where he practised for the remainder of his professional career (see Chapter 8).

Grant Johnston (1917–2007) was a general practitioner in Kaponga, Taranaki, for seven years before taking up ophthalmology. On returning from ophthalmology training in England, he took over Levien's practice in Hamilton in the early 1960s. Johnston did the first intra-ocular lens procedures in New Zealand in 1960. Initially he inserted Choyce anterior chamber lenses made by Rayner as a secondary procedure after intra-capsular cataract extraction. Unfortunately the Rayner lenses were heavy and many patients developed uveitis, glaucoma and hyphaema, the so-called 'UGH syndrome', and the lenses needed to be removed, in the same way many Choyce lenses inserted at St Thomas's Hospital, London, had to be removed by another surgeon at Moorfields. In Hamilton, many Choyce lenses inserted at Braemar Private Surgical Hospital were removed at Waikato Hospital. Later Johnston changed to using the Hessberg anterior chamber lens which was also not ideal, but towards the end of his career he converted to extra-capsular extraction and posterior chamber lenses after their superiority had been demonstrated by Calvin Ring in Auckland, and subsequently by Jim Macdiarmid (Duncan Macdiarmid's son, see below), who had observed Ring's procedures. Johnston was much admired as a talented surgeon, but tended to be forthright with patients, especially if they had a surgical complication. When the new Hamilton Eye Clinic was built, it was decided to sound-proof Johnston's consulting room!
Duncan Macdiarmid’s son Jim was another ophthalmologist schooled at Wanganui Collegiate. He did a year as an eye registrar in Auckland and then specialist training in Edinburgh, where he was a registrar under Professor George Scott in the Professorial Unit. It was a department strong in medical ophthalmology with a particularly strong diabetic department, which gave a solid training for practice in Hamilton.

Macdiarmid returned to Hamilton and served the Waikato with distinction for the whole of his professional life. Like his father, he had a sub-specialty interest in medical retina and retinal detachment. He was appointed as part-time visiting ophthalmologist to Waikato Hospital and joined his father in his private practice. They operated privately at Braemar Hospital.

Macdiarmid was academically able, and played a large role in the OSNZ. He was a foundation member of the society’s Education and Qualification Committee, a long-serving honorary secretary-treasurer from 1971–78, and president in 1982–83. Macdiarmid and Peter Waterhouse, an academic optometrist practising in Cambridge, had written some papers together, and as result he was asked by Lindo Ferguson in 1969 to help teach ophthalmic optics to registrars in Auckland. The first candidates were Ron Tingey, already an established ophthalmologist in Tauranga, followed by Tony Morris and Bruce Hadden. Macdiamid finished operating when he retired from Waikato Hospital in 1996, but continued with medical ophthalmology at the Hamilton Eye Clinic until 1999.

Eric Lawton emigrated from South Africa to Taranaki in 1973, and a few years later joined the Waikato Hospital Eye Department, where he worked as a full-time specialist until his retirement in 1997. In South Africa he had worked for a considerable period in an isolated mission hospital, where he carried out eye and general surgery. His colleague was the physician, and they shared the obstetrics. Cataract surgery was just one of many procedures Lawton performed, and it was while sharpening up his cataract skills that he was diverted to training in ophthalmology. He was never fazed by messy facial injuries and was quite comfortable if surgery strayed outside the confines of the eyelids. After his retirement from Waikato Hospital, Lawton worked for a number of years
in Goroka in the highlands of Papua New Guinea under the auspices of the Christian Blind Mission (CBM).

Dr Keith Gross also spent a few years at Waikato from 1992, before moving to Rotorua, and Dr Clive Straker emigrated from South Africa as a specialist ophthalmologist in July 1993. Straker was a full-time ophthalmologist at Waikato Hospital for many years, in particular providing a much-needed medical retina service, replacing Jim Macdiarmid. Later he moved to Tauranga.

From the mid-1990s there was an influx of new sub-specialists: David Worsley and Stephen Guest in vitreo-retinal, John Dickson in paediatric ophthalmology, James Stewart in glaucoma, and Stephen Ng and Peter Montgomery in oculoplastics. Montgomery soon left to join the many other expatriate New Zealand ophthalmologists in Queensland. Rohan Weerekoon arrived in 2003 (see page 137).

**Waikato Hospital Eye Department**

Before 1959 there was no space specifically for an Eye Department at Waikato Hospital. There were some inpatient beds in an annexe off one of the surgical wards, and outpatients were seen by an accident and emergency doctor in a dark room attached to what was then called ‘Casualty’.

With the disappearance of diphtheria, the children’s infectious diseases ward was no longer required, and in 1959 plans were drawn up for its conversion for use by ophthalmology, with the former tracheostomy theatre becoming the eye and ENT theatre. The ophthalmic service flourished there until the mid-1970s, when it moved into the seventh floor of the new Menzies Building, with a wonderful view and a purpose-built eye theatre.

The first registrar in Hamilton was Dr Brett Rogers, who worked there for two years in the 1980s. Rogers was then a registrar in Auckland, before returning to Hamilton, where he passed the fellowship. He then moved into specialist practice in Invercargill.

Subsequently, Hamilton became part of the Northern Regional Training Scheme whereby registrars based in Auckland rotated to complete one or two years of training at Waikato. To this day the registrars enjoy the rotation to Hamilton because they feel they have more independence and also the opportunity for more surgical experience. The Hamilton Eye Department is heavily involved in teaching University of Auckland medical students in their fifth-year ophthalmology attachments, and many of the ophthalmologists are honorary clinical senior lecturers.

For many years ophthalmologists at Waikato Hospital have also conducted clinics at Thames, Tokoroa, Te Kuiti and Taumarunui.
Private ophthalmology

When Cassell Hospital developed a new operating suite in the late 1980s, Grant Johnston, Jim Macdiarmid and Doug Cox joined forces and converted the old theatre suite into a modern and spacious facility, the Hamilton Eye Clinic. They were soon joined by several younger ophthalmologists, and this very successful clinic quickly outgrew its premises. Dr James Stewart took up the challenge and drove the planning and construction of the ambitious and successful Bridgewater Building. Located beside the Waikato Rowing Club, it was fittingly opened in 2004 by New Zealand Olympic rowers Rob and Sonia Waddell. It includes eight examining rooms, other ancillary rooms and two operating theatres. It also houses an excimer laser suite, used by Drs Doug Cox and Michael Merriman.

Another arrival around this time was Dr Chris Murphy, who practises independently.

Hamilton is now a fully fledged tertiary ophthalmic centre, serving the central North Island's rapidly growing population. The Waikato catchment area has a population of 400,000, and Waikato Hospital provides tertiary services for 800,000, stretching from Gisborne to Taranaki to the tip of the Coromandel Peninsula.

The Bridgewater Building, housing the Hamilton Eye Clinic, Bridgewater Laser Eye Surgery and Bridgewater Day Surgery. Dr James Stewart
Palmerston North’s first ophthalmologist was Dr Edgar Whitaker, who practised there from 1908 until 1921, when he returned to England to take over the family business, *Whitaker’s Almanack*. He was followed by Dr William Bransgrove in the 1920s, remembered at Palmerston North Hospital for his unusually brusque manner.

Dr Jack Monro provided ophthalmological services from 1927 to 1958. He was a talented ophthalmologist and artist and was president of the OSNZ in 1954–55. Interestingly, Jack’s father was Charles Monro, a son of Sir David Monro, who as noted in Chapter 1 was the first doctor in New Zealand to have left any record of an interest in ophthalmology. If Charles Monro had studied medicine there would have been seven generations of ‘doctors Monro’ but he did not; his alternate claim to fame was to have introduced the rules of rugby to Nelson sportsmen, where the first rugby match in New Zealand was played in 1870. However, his three sons restored the tradition by becoming medical graduates from Edinburgh. They included Jack the ophthalmologist, Jack’s

*Dr Jack Monro, President OSNZ, 1954–1955. Dr David Warnock.*
older brother David, who had a distinguished career in the British Army, and his younger brother Peter, who was a surgeon-general practitioner in Feilding.

Jack Monro was joined in Palmerston North in 1953 by Dr Rowland Rees, who had emigrated from Great Britain. Dr Rees was born in Swansea and attended University College Medical School, London. After graduating he joined the Royal Navy as a medical officer and served aboard corvettes until the end of World War Two. His ophthalmology training was at the Bristol Eye Hospital.

Dr Rees was reputedly a very hard worker at both the Palmerston North Hospital and in private practice. He had a great love for farming and bought a farm near Pahiatua, where he established the Wheatcroft Hereford stud. He died suddenly at the early age of 47 in May 1968. His son Dr Martin Rees is a plastic surgeon in Auckland.

Dr John Croke graduated from Otago in 1948 and entered the Air Force, where he was a medical officer for several years. He was an eye registrar in Dunedin under Professor John Parr, then went to the United Kingdom for further training and obtained the Diploma of Ophthalmic Medicine and Surgery (DOMS) in Ireland. He arrived in Palmerston North in 1959, and was an early user of the operating microscope and of anterior chamber lenses. His presidential address to the OSNZ in 1976 included his experience of optic nerve-sheath decompression for central retinal vein occlusion. He retired from Palmerston North in about 1980, and continued some private practice in Howick, Auckland, where he retired.

Croke and Rees had been joined by Dr John Henderson in 1968 some three weeks before Rees died. A few months later, Dr David Warnock moved up from Wellington. Dr Philip Boulton and his wife Dr Lesley Boulton arrived in 1973, increasing the number of ophthalmologists in Palmerston North from two in 1967 to five in 1973.

Dr John and Mrs Carolyn Henderson.

Dr Philip Boulton.

John Henderson was educated at Otago Boys’ High School and graduated from Otago Medical School in 1958. He joined the Royal New Zealand Air Force Territorial Squadron and obtained his ‘wings’ during the university holidays. After
his house-surgeon years he entered the Air Force at Wigram full time for three years. By that time he had logged up over 1000 hours of flying time. He passed the surgical primary examination in Glasgow, then moved to London where he trained at the Royal Eye Hospital under Drs Arnold Sorsby and Alan Friedman.

Henderson moved to Palmerston North on the encouragement of John Croke, whom he knew from Air Force days, and because his wife’s family farmed in the area. There, Henderson did a number of bilateral intra-capsular cataract operations. He had hoped that these patients would find it easier to cope with the aphakic glasses, but found that the ease of use was not much better. Bilateral cataract surgery was frowned upon by the powerful ‘conservatives’ of the day, who cited the risks, in particular, of bilateral endophthalmitis. Now, 30 years later, because of safer and more predictable surgical outcomes, bilateral cataract surgery is finding some renewed favour for its faster visual rehabilitation and economy.

As the use of anterior chamber intra-ocular lenses had not been very successful in the early 1970s, Henderson decided that it was worth trialling the Rayner Binkhorst iris-clip lenses, and had considerable success. This also attracted much criticism from the ‘conservatives’. At the 1980 meeting of the Ophthalmological Society of New Zealand in Auckland, the chairman of a session asked for a show of hands as to who were using intra-ocular lenses. Henderson was relieved that one of the hands that went up was that of Calvin Ring, who was universally highly respected.

David Warnock was brought up in Woodville and educated at Palmerston North Boys’ High School and the University of Otago. Dr Fred Hollows was also brought up in Palmerston North, and when he was an eye registrar at Wellington Hospital he encouraged Warnock to take up ophthalmology. Warnock later followed Hollows to Cardiff Royal Infirmary, where Hollows was the senior eye registrar. Warnock was subsequently appointed senior registrar at Cardiff for three years and Hollows took up a medical research post to investigate the incidence of chronic simple glaucoma in the South Wales population. Warnock often assisted with this survey work.

*Dr David Warnock as OSNZ president, 1990. Dr David Warnock.*
Geoffrey Duff, from South Africa, also trained at Cardiff several years later, before settling in Wanganui.

After gaining the Edinburgh fellowship, Warnock returned to Wellington where he joined the practice of Roderick Ferguson, Murray Ashbridge and George Davidson, the last being a medical ophthalmologist. After two years, however, Warnock was lured back to his home ground. He joined John Croke and John Henderson in Palmerston North in 1968, where he worked for the remainder of his career until retiring in 1992. He brought with him a Welsh orthoptist wife, Tess, who worked at the hospital and in private practice for many years. Warnock was president of the OSNZ in 1989–1990.

Philip Boulton also attended Palmerston North Boys’ High School and Otago University. After two years as a house surgeon at Palmerston North Hospital he spent a year farming. He chose to train in ophthalmology but no registrar post existed in Palmerston North, so one was created. Within a month the Department of Health had approved a position for a specialist registrar — eyes or ENT — and he was appointed to start in 1966. Palmerston North had eye registrars thereafter until 1997 (see below).

Boulton trained at the Bristol Eye Hospital and then in London, before returning to Palmerston North in 1973 with his ophthalmologist wife Lesley. He was president of the New Zealand Society for the Prevention of Blindness for several years and president of the OSNZ in 1996–97.

At the Palmerston North Hospital, Boulton undertook a heavy workload
in managing diabetic retinopathy and many aphakic and pseudophakic retinal detachments. Initially he used the East German xenon arc photocoagulator, until Palmerston North Hospital acquired New Zealand’s second argon laser photocoagulator in 1977. At that time Palmerston North was providing a wide range of diabetic and other ophthalmic services to Poverty Bay, Hawke’s Bay, Tararua, Wairarapa, Taranaki and Wanganui. Boulton’s trip to London in 1977 resulted in purchase of a Peyman vitrector in 1978. He was early to utilise modern techniques in retinal surgery such as vitrectomy and sulphur hexafluoride gas tamponade, and also did New Zealand’s first phaco-emulsification in 1988 (see below). He retired from the public hospital in 2000 and from private practice in 2004.

Lesley Boulton was a graduate of Birmingham Medical School and trained at the Birmingham and Bristol Eye Hospitals. In 1975 she and Noel Holland, a retired optometrist, established a public hospital Low Vision Clinic in Palmerston North, which was a successful Department of Health pilot scheme for the whole country. She subsequently served on the National Advisory Committee for the Community Welfare of Disabled People and was a member of the Royal New Zealand Foundation of the Blind’s Specialist Advisory Committee, as well as being a regular speaker on low-vision care.

Tom Ellingham moved from Timaru to Palmerston North in 1979, when John Henderson moved to Whangarei. Ellingham had been schooled in Palmerston North and educated at Otago University and Medical School. He was an eye registrar in Dunedin under Professor John Parr, from where he passed the fellowship of the Royal Australasian College of Surgeons.

In England he worked with Dick Welham for two years as a senior registrar in a joint post between the Royal Berkshire Eye Department in Reading and Moorfields, London, in the Lacrimal and Dry Eye Unit. On returning to New Zealand he settled in Timaru for three years before moving to his home territory of Manawatu. Ellingham developed further special interests in contact lenses and paediatric ophthalmology.

Ellingham was chairman of the New Zealand Medical Association Specialists Committee in 1995–97, chairman of the New Zealand Branch of the RANZCO in 1999–2000 and chairman of the Aorangi Hospital Board in Palmerston North in 2003–05.

Dr Lyndon Baillie lived in Palmerston North with her paediatric consultant husband and assisted as a medical officer of special scale (MOSS) at hospital clinics for a few years in the 1980s.

Dr Archie Mackillop arrived in Palmerston North in 1990 from Kirkcaldy,
Scotland, having trained in the north of England. He worked in both the public and private systems for 17 years. He left for South Australia in 2007.

Dr Richard Holmes arrived in Palmerston North in 1999. He has special interests in paediatric ophthalmology and oculoplastics. Dr Sue Hendeles, medical retina specialist, moved from Dunedin in 2005. Dr Kay Evans, vitreo-retinal surgeon, worked in Palmerston North in 1988, then did further training in Great Britain, was appointed a specialist in Hawke’s Bay, and finally returned to Palmerston North in May 2006. Dr John Ah Chan, medical retina specialist, arrived in 2007.

Cataract surgery in Palmerston North

While in Bristol, Philip Boulton had inserted iris-clip intra-ocular lenses at the time of intra-capsular cataract extraction. These were the lenses produced by Rayner in either the Binkhorst or Fyodorov design, and were supplied in only one power of +19.0 dioptres. They came in an ampoule containing sodium hydroxide solution. On opening the ampoule the intra-ocular lens was placed in a small bowl containing sodium bicarbonate solution from a second ampoule for neutralisation, and then it was rinsed with saline before placing in the pupil without rupturing the anterior face of the vitreous. (This was before visco-elastics.) Thereafter, a daily miotic eye-drop was instilled into the eye to prevent intra-ocular lens dislocation. A few such intra-ocular lenses were inserted during the 1970s but the introduction of extra-capsular surgery and posterior chamber implants made both the intra-capsular technique and the intra-ocular lenses designed for it obsolete.

The next major advances in cataract surgery were visco-elastics and phaco-emulsification. After instructional workshops in both Australia and the United States, Dr Boulton performed the first phaco-emulsification surgery in New Zealand at Aorangi Hospital, Palmerston North, on October 19 1988. For the first year or so, a Storz machine was used. It had a diaphragmatic suction pump that was very positive so iris trampolining was easy to induce.

Massey University in Palmerston North has New Zealand’s only veterinary school. Craig Irving, a veterinary ophthalmologist, from time to time involved the local ophthalmologists in some interesting combined procedures. David Warnock recalled operating on a horse’s cataract. John Henderson did cataracts in a few dogs with Irving. Unfortunately none of the dogs could see post-operatively because they also had optic atrophy, suggesting the cataracts were part of a genetic condition.

Later in the same day in 1988 on which Boulton did New Zealand’s first human phaco-emulsification, the same equipment was used by Irving in his
veterinary clinic. Irving not only gave the general anaesthetic but also performed the first veterinary phaco-emulsifications on three dogs under Boulton’s tutoring eye. Irving then obtained his own machine for veterinary work.

Conferences
Regional ophthalmic meetings were a regular feature in Palmerston North, especially in earlier days when overseas travel was more difficult. One notable meeting in the 1980s was attended by Dr Emmanuel Rosen of Manchester, England, a world pioneer of extra-capsular cataract surgery with the use of visco-elastic and posterior chamber lenses. He operated on four eyes, assisted by the registrar Dr John Elliott, son of Sir Randal Elliott. Twenty-five ophthalmologists watched the surgery live in an adjacent theatre and were able to converse with the surgeon.

The first conference of the OSNZ to be held in Palmerston North was in 1976, when Dr John Croke was president. Dr Gholam Peyman, visiting speaker from Chicago, showed a video of a vitrectomy, as did Bruce Hadden, who had recently returned from training at the Bascom Palmer Eye Institute in Miami.

The 1990 conference was also in Palmerston North, with David Warnock as president. Robert Osher of Cincinnati, Ohio, spoke on phaco-emulsification which speeded its adoption by New Zealand surgeons.

The OSNZ conferences of 1997 and 2000 were in Palmerston North too, under Philip Boulton and Tom Ellingham respectively. One of the invited
speakers at the 1997 meeting was Dr Hugh Williams, a New Zealander who graduated from the Otago Medical School and was an eye registrar in Wellington. He subsequently completed his training at Moorfields, but unfortunately never returned to work in New Zealand. Professor Charles McGhee, as a relatively new arrival to New Zealand in 1999, gave his first national lecture as an invited speaker at the 2000 conference.

Registrar training in Palmerston North

As mentioned above, Philip Boulton was the first eye registrar in 1966–67. Initially, trainees went to Palmerston North in their first year when they were both studying for the part one basic sciences examination and beginning clinical ophthalmology. Many trainees then continued in Wellington. Palmerston North later became part of Wellington’s training programme rotation, and registrars who had passed the part one examination came from Wellington for their second or third year, then returned to Wellington to complete their training.

Registrars who spent time in Palmerston North included Drs Philip Boulton, Russell Lienert, Ken Adams, Dianne Sharp, Ian Davies, John Elliott, Ian Dallison, Stephen Hing, Marc Gimblett, Kay Evans, Neil Aburn, Dallas Andrews, Keith Small, Stephen Ng, Geoff Wallace, Shuan Dai, Bill Talbot, and Tony Wells. The year in Palmerston North was popular with registrars, and it
was unfortunate that it ceased abruptly in 1997 when three ophthalmologists resigned over a short period. Locums were utilised until new permanent appointments were made — Richard Holmes, Kay Evans, John Ah-Chan and Sue Hendeles. Kellaway and Maryan wrote a full history of Palmerston North Hospital, with many references to the eye department.²

Private surgery in Palmerston North was carried out at two hospitals. Northcote Hospital was taken over by Southern Cross Healthcare, the medical insurance company, in 1985 and rebuilt in 1987 and is now called simply Southern Cross. Aorangi Hospital started in 1939 and was renamed Mater Misericordiae and then Mercy when it was taken over by the Catholic Church. When the Church later sold it to a consortium of 23 doctors, its name returned to Aorangi. Most private eye surgery is now performed at Aorangi, and Dr Ellingham was chairman of its board in 2003–05.

The medical museum
After the death of local ENT surgeon Dr Neil Little, David Warnock was asked if he would undertake to establish a medical museum utilising a collection of Dr Little’s antique hearing devices as a nucleus. Thus began the N.C. Little Memorial Museum in 1980.

Warnock has been the curator and chairman of the board of trustees since its formation in 1991, and attended a course at Massey University for a year to complete a Diploma in Museum Studies to facilitate this. Hard work and dedication has seen the museum’s collection increase enormously and it is housed in the hospital grounds. There is a large display area within the museum building, as well as 10 other display cabinets within the hospital itself. It has a unique and irreplaceable collection of medical equipment from all specialties and of course includes ophthalmology. It includes 400 books, the oldest of which was published in 1792. Items of interest have been sourced from overseas as well as throughout New Zealand.
Invercargill
Dr John George Macdonald (1877–1968) was the first eye and ENT specialist resident in Invercargill. He was reputedly a good ophthalmologist and very popular. He was a foundation member of the OSNZ. His son Gair Macdonald practised ophthalmology for a short while in Invercargill, before moving to Dunedin (see page 35).

Dr Geoffrey Orbell was born at Pukeuri near Oamaru and graduated from the Otago Medical School in 1934. After training in eyes and ENT overseas, he spent his entire professional life serving Invercargill and Southland.

However, Orbell is perhaps best known for his momentous discovery of the flightless takahe in the Murchison Mountains in November 1948. The South Island takahe, a brilliantly coloured flightless hen-like bird with the zoological name *Porphyrio hochstetteri* (previously *Notornis mantelli*) had not been seen since 1898, and was presumed extinct like its North Island counterpart. Orbell had had a fascination for the takahe since his father had shown him photographs of a stuffed specimen in the Otago Museum in Dunedin.

Orbell had a love of the Southland mountains and in 1943 built a holiday home at Te Anau. But his rediscovery of the takahe near there was more than just good luck. He spent considerable effort studying evidence, including local folklore and reports from trampers and hunters, and had mapped out probable areas where the takahe might still exist.

On an expedition in April 1948 he thought he heard the call of the takahe, and he saw footprints which he believed to be those of the bird. Photographs and written descriptions were sent to experts. Brian Marples, professor of zoology at
the University of Otago, said the footprints were too large for the tahake and were more likely those of the white heron. However, Marples’s curiosity was aroused, and in the spring of 1948 he arranged an expedition into the Murchison Mountains. Hearing of this, Orbell and his companions Rex Watson, Neil McRosstie and Joan Telfer decided to go back to where they had seen the tracks. On November 22, a large, iridescent blue-green bird stepped out from the snow tussock, and was soon followed by another. They photographed the birds on the shore of Lake Despair, a small lake west of Lake Te Anau, in the Murchison Range.

This sensational ornithological event was featured in The Times of London, the Illustrated London News, and National Geographic magazine. Subsequently the lake was renamed Lake Orbell, and in 1953 Orbell was invested with an MBE by Queen Elizabeth, both for his discovery and for his later work associated with ensuring the takahe’s survival.

Dr Geoffrey Orbell MBE (1909–2007) with a takahe. DR MICHAEL ORBELL

There are still takahe in the Murchison Mountains, although a few have been transferred to offshore islands which are free of predators. There are also takahe at the Te Anau and Mount Bruce wildlife centres. The total number of birds today is about 220.

Orbell was a man of energy and talents. He built over 90 wooden boats, ranging from a 2 metre punt to a 14 metre ketch, and made many wooden toys. During over 40 years in Invercargill he served the community generously, at various times being chairman of the Southland High Schools Board, chairman of the Southland Hospital Board and deputy mayor of the city of Invercargill. In keeping with his interest in the back country, he co-founded the New Zealand Deerstalkers’ Association and was its first president and later its patron.

Geoffrey and Sheila Orbell celebrated their seventieth (platinum) wedding anniversary in 2005. He passed away at the age of 98 in 2007.

Ken McMillan, eye and ENT specialist, moved to Invercargill in the early 1960s when John Macdonald retired. After four years he moved to New South Wales.

In the 1970s Dr Ian Jamieson worked for some years in Invercargill in both
public and private practice. He had ongoing difficulties with the Dunedin Eye Department, partly because he undertook some consecutive bilateral cataract operations, which was frowned upon by the Dunedin establishment. He moved to Australia in 1977. Bilateral cataract surgery is now finding renewed favour.

A Dr Killen from Scotland was in Invercargill for a few years in the late 1970s. There was then no public ophthalmology department (it was established in 1986). For a time Dunedin ophthalmologists provided clinics at Southland Hospital, but these later stopped and patients without their own transport had to travel on the infamous ‘Eye Bus’, a weekly service, which carried patients on the six-hour return journey to the Dunedin eye clinic. It left Invercargill in the early hours with a full load of often elderly patients who arrived at the Dunedin Eye Department en masse and then had to wait until the end of the long day for the return bus journey home. While it was better than nothing, there was local discontent that a better service wasn’t provided for Southland, given that Dunedin received considerable funding for the health care of Southlanders. Southlanders remained very keen to have their own eye service again.

Dr Ross Earnshaw, who had previously been an ophthalmologist in Dunedin before moving to England, returned to Invercargill briefly from 1986 until 1990. As a child, Earnshaw had lived in various parts of Southland, where his father was a postmaster. Aware that Southland had had no ophthalmologist for over nine years since the sudden departure of Jamieson in 1977, Earnshaw wanted to contribute something back to his home province before he retired. His aim was to set up a new ophthalmology department in Invercargill and to attract younger ophthalmologists to the city, who might remain after he retired. Considerable funding was provided, and Earnshaw’s efforts encouraged Dr Brett Rogers to return to Invercargill.

Rogers had previously enjoyed working at Southland Hospital for much of his trainee-internship some years earlier. He trained as Waikato Hospital’s first ophthalmology registrar, and then at the Auckland Eye Department. Rogers worked in both the public and private sectors in Invercargill for 20 years, providing a relatively thankless one-in-two, and often sole, on-call service, before deciding in 2006 to continue only in private practice, and to spend more time with his family.

Dr Graeme French, who did some training in Dunedin before travelling to England to obtain his qualifications, joined Rogers in Invercargill from 1991 until 1995 before settling in Blenheim, where he took over from Dr David Wilson. Dr Mark Elder, who had recently returned to Christchurch from overseas, helped retain eye services in Invercargill by providing monthly weekend clinics there from the time of Dr French’s departure until the end of 1999. A good working relationship with Christchurch consultants continued,
in contrast to the difficult relationship Southland had with Dunedin.

From 2000–05, and again more recently, Dr Mylan Van Newkirk helped out in Invercargill, commuting from his home in Queenstown. Van Newkirk was a highly regarded retinal sub-specialist in the United States who came to live in Queenstown because of his wife’s health and his love of hunting, shooting and fishing. By invitation he wrote the volume on international ophthalmology in the American Academy of Ophthalmology *Basic and Clinical Science Course*. For some time he also did clinical work in Dunedin in the early days of injecting the vitreous with anti-vascular endothelial growth factor (VEGF) substances for neovascular (wet) macular degeneration and other retinopathies.

Dr Wayne Birchall from England worked in Invercargill from 2006 until 2008. He moved to Whangarei soon after his front-page newspaper criticism of Southland Hospital’s management in 2008, in which he described the Southland Hospital eye clinic as ‘undoubtedly the worst facility in the country with no sight of improvement’.

Several long-term full-time locums have worked at Southland Hospital in recent years, including Dr Anne Cees Houtmann from Belgium and until recently Dr Jonathon Ross from Scotland. This has allowed the contractual volumes to be met each year, without help from Dunedin.

**Timaru**

Leonard Smith Talbot, the second son of the second chairman of the Timaru Hospital Board, graduated from the Otago Medical School in 1902. He travelled to the United Kingdom where he gained the fellowship of the Royal College of Surgeons and trained in eyes and ENT. During World War One he returned to Timaru to be acting medical superintendent of the hospital.

Talbot and his wife were strict Anglicans and teetotters. Their home life was intellectual, consisting of play-reading and bridge circles, and his wife was a scholar in Latin, which she taught to their children. Undoubtedly that helped their two sons (Kenneth) Jim and Arthur with their medical intermediate, when Latin was a compulsory subject.

During World War Two Talbot was in his sixties but nevertheless went with the army’s Eighth Brigade and Third Division into the Pacific. His older son Jim returned from specialist training in the United Kingdom to look after the practice. Both Leonard and Jim Talbot were foundation members of the OSNZ at its inaugural meeting in 1947. Arthur, Jim’s younger brother by seven years, also pursued ophthalmology and practised in New Plymouth.

Tom Ellingham (see page 126) was a registrar in Dunedin, then did further training with Dr Dick Welham at the Royal Berkshire Hospital in Reading,
England, and with Peter Wright at Moorfields. He was enticed to Timaru by Gair Macdonald. Jim Talbot retired after Ellingham had been in Timaru for only a year.

Ellingham was not keen to spend his whole career in solo ophthalmological practice. Also, the hospital board continued to earn its reputation for poor staff relations, and private surgery provided little more than a case a month. He had been brought up and schooled in Palmerston North, so after three years moved there, replacing John Henderson who moved to Whangarei.

This left Timaru without a resident ophthalmologist until Dr Kelvin Findlay arrived in 1984. Findlay, a Canadian, was well versed in the then new technique of posterior chamber intra-ocular lenses. He did numerous intra-ocular lens operations and the excellence of his work is part of the local folklore. However, Christchurch colleagues were unbelieving of his success and banned him from their clinical meetings. Findlay left and went to Vancouver where he has had a successful career as a retinal surgeon.

When Michael Mair was a resident at Moorfields, Anthony Molteno enticed him to move to Dunedin, to work together on motility and the Otago photoscreener. Mair arrived to a senior lecturer position in 1985. He had an interest in theories of language and hoped to work on the communicative functions of micro-movements of the head and eye at the University of Otago. Mair subsequently moved to Timaru in 1988. He reconfigured his interests into creating an electronic management system for ophthalmology with the New Zealand Software Corporation, and has worked in a paperless fashion since 1995. His ideas have been realised in the success of the programme, which is now widely used throughout Australia and New Zealand. Interestingly, when Mair moved to Timaru, the only other ophthalmologist in the South Island doing posterior intra-ocular lenses was John Bowbyes, yet the technique was already well established elsewhere.

Nelson

Nelson is an historic New Zealand city, being settled by the New Zealand Company in 1842, as were Wellington, Wanganui and New Plymouth. David Monro (see Chapter 1), the first doctor in New Zealand to have recorded any interest in ophthalmology, gave a talk on the eye in the Nelson Provincial Hall in 1869 (see Chapter 1).

Nelson’s first ophthalmologist was possibly Henry Martindale Kendall, who lived there from 1868–70, before he moved to Wellington. He definitely practised ophthalmology in Wellington, but we cannot be certain that he did so while in Nelson.
Dr Lionel Lewis (1883–1965) graduated from the Edinburgh Medical School in 1910, and was posted to India during World War One. He was a foundation member of the OSNZ in 1947. He practised in Nelson from 1944, then in Christchurch for six years, and then moved back to Nelson until he retired in 1960.

Dr Gordon Burtrim Campbell (1897–1987) was a general practitioner on the West Coast, in Granity and Millerton. He then travelled to Edinburgh where he took the fellowship of the Royal College of Surgeons, and returned to Nelson to practise ophthalmology until around 1982. Dr Norman Manson was in his seventies when he finished practising in Nelson at about the time Dr John McKinnon arrived in 1975.

McKinnon farmed for five years before going to university and medical school at Otago. As a medical student he was a very good climber, and took the opportunity of travelling to Nepal with Sir Edmund Hillary in 1964. This was the first of more than 15 annual trips to Nepal with Sir Edmund. Seeing the large number of Nepalese who were blind, often because of cataracts, encouraged McKinnon to take up ophthalmology, in which he was supported by Professor John Parr. McKinnon did his ophthalmology training in Dunedin, then spent two and a half years with Barrie Jones, at the time Jones was in Iran.

McKinnon's ongoing involvement with Sir Edmund's projects in the Himalayas led to his becoming chairman of the Himalayan Trust. His

Dr John McKinnon with Sir Edmund Hillary at Khumjung School sports day, May 1974. DR JOHN MCKINNON
summation of Hillary’s contributions was ‘he changed people’s lives’. McKinnon described Sir Edmund as a superb organiser with the ability to keep tabs on several simultaneous projects, such as organising the building of schools and hospitals.

In 1969 Sir Edmund arranged for two expensive Hamilton jet boats to be sent from New Zealand to Nepal, hoping that they would be useful for transportation up the rivers. McKinnon was on one of the jet boats on the huge Arun River, with several others including Dr Max Pearl of Auckland and a Sherpa. The very valuable boat sank. Fortunately all were wearing life jackets and managed to reach the shore, where Hillary was standing. The driver was full of humble apologies to Sir Edmund, who replied, ‘Well, it just doesn’t matter. Nobody was hurt.’

Dr Douglas Coop and his wife Margaret, both ophthalmologists, spent a short time in Nelson before moving to Australia, as did Dr John Loughlin before moving to Napier.

Dr Lloyd Weerekoon (1918–2008), from Ceylon (now Sri Lanka), trained in Great Britain and returned to Ceylon in 1954, where he practised ophthalmology. However, he wanted better opportunities for his family, so moved firstly to be head of ophthalmology at the new medical school at the University of Malaya, where he stayed for three years, then to Nelson in 1971.

Weerekoon worked solely in the public system. He did some corneal grafts, for which he had donor eyes flown in by the Sri Lanka Eye Donation Society. He was of diminutive stature and a proper gentleman of the old school, being very polite and never without a necktie.

Weerekoon retired at 65 and returned to Sri Lanka. His son Rohan graduated in medicine from the University of Auckland and trained in ophthalmology in Wellington and Sydney. He worked in Australia and then in Sri Lanka for 12 years. In 2003 he settled into ophthalmology practice in Hamilton, his wife’s home town.

John Davison trained in Dunedin, and subsequently completed a glaucoma fellowship in Vancouver with Dr Stephen Drance. Davison returned to Nelson in 1983, six months after Weerekoon had left. Later, Dr Derek Sherwood arrived from Whangarei. The latest specialist to set up in Nelson, Antony Suter, is another Dunedin trainee with post-graduate experience in the United Kingdom. Suter replaced Graham Wilson, who had been in Nelson for three years but then moved to Dunedin for a year before finally settling in Gisborne.

In Nelson, as in many provincial centres, public hospital ophthalmology dominated private ophthalmology, especially private surgery. Private surgery is carried out at the Manuka Street Hospital, which is a community trust private hospital. Later Dr Derek Sherwood, who had moved to Nelson from Whangarei,
set up a day-stay surgical unit with an ENT surgeon and general practitioners, called the Rutherford Clinic,* which has been successful, even though there are now two facilities for a relatively low volume of private surgery.

Marlborough

David Wilson, the son of Rowland Wilson (see page 34) was born in Cairo, Egypt, in 1930. The family moved back to Dunedin in 1946, and Wilson graduated from the Otago Medical School in 1955. He did his house-surgeon years in Dunedin followed by one year as an eye registrar. He then was enticed to move into a general practice in Roxburgh in Central Otago where he stayed for seven years. In 1967 he moved to general practice in Blenheim, and because the local general practitioners knew he had some experience in ophthalmology they began sending him eye patients. At the same time Doug Coop, who was practising in Nelson, was going across to Blenheim once a week to see patients. David Warnock also occasionally travelled across from Wellington.

After three years Wilson decided to continue his education in ophthalmology. He worked as an eye registrar in Wellington in 1971, then travelled to England, leaving his wife Jocelyn and their five children in Blenheim. Finances were tight, but he managed to stay for two years, long enough to obtain the London and Irish diplomas in ophthalmology. In a remarkable double success, Wilson won the junior prize for ophthalmology at Moorfields soon after arriving in London, in the same year that fellow New Zealander Thiers Halliwell won the senior prize.

Wilson returned and set up the first ophthalmology practice in Blenheim. He sent his second-opinion patients to Wellington. He became particularly interested in cataract surgery and was interested in Calvin Ring's progress with intra-ocular lenses in Auckland.

In 1978 Wilson visited Robert Sinskey in Santa Monica and Steve Shearing in Las Vegas, both of whom were using posterior chamber intra-ocular lenses. In 1979 Sinskey came out to New Zealand and demonstrated posterior chamber lens surgery in Wellington — the first lens of this type inserted in New Zealand. The following year Wilson returned to the United States and spent a month with Sinskey. On his return he began posterior chamber implants in Blenheim in 1981, making him one of the first in New Zealand to use the technique. At that time Sinskey was beginning to use phaco-emulsification, but as previously noted

* Lord Ernest Rutherford was brought up in Nelson. As a physicist at the Cavendish Laboratory at the University of Cambridge, England, he was the first to split the atom in 1914, and is regarded globally as the father of modern nuclear physics. He won the Nobel Prize in Chemistry in 1908.
that was not practised in New Zealand until Philip Boulton in Palmerston North started in 1988. Wilson commenced phaco-emulsification cataract surgery soon after, as did surgeons in Auckland.

Wilson also did some developing-world work, spending a few weeks in Burma in 1992 with Project Orbis. In 1996 he worked in Tashkent, the capital of Uzbekistan, and in Afghanistan. He was president of the OSNZ in 1991–92, and hosted a very successful annual scientific conference in Blenheim.

Wilson retired from ophthalmology in 1996, and established a vineyard in Renwick, Marlborough, later retiring to Wanaka. Graeme French, another Dunedin trainee, took over his practice in Blenheim.

Masterton
Dorothy Potter (1922–2009) was born in Auckland, the daughter of Victor Usher, an Auckland surgeon. She was educated at the Hilltop School for Girls in Auckland and then at Woodford House, Havelock North. Potter did her medical training at Otago, from where she graduated in 1948. Her house-surgeon years were in Napier, where she was influenced towards ophthalmology by Dr Jim Gray.

She left for England in 1950, where she worked at the Royal Westminster and Central Eye Hospitals in London, obtaining the Diploma in Ophthalmology in 1952. While in England Potter was influenced by many ‘big names’ in ophthalmology but in particular she developed a strong admiration for Professor Ida Mann, who was the first woman to become a professor of ophthalmology in Britain and to become a professor at the University of Oxford in any subject. Mann published pioneering work on the development of the eye and its developmental abnormalities.

Dorothy married Charles Potter, a Wairarapa sheep farmer, and they settled in Masterton. She agreed to marry on two conditions: no housework, and keeping her maiden name Usher. However, as Potter put it, the people of Masterton could not handle the latter so in 1965 she took her married name. Potter was widowed in 2008.

Potter practised only medical ophthalmology, dividing her work between Masterton and Wellington. In Wellington she worked with Drs Roderick Ferguson and Walter Hope-Robertson.

She became the first woman president of the OSNZ in 1984, and to date is the only woman to have been president of the society. (To date has there has never been a woman president of the RANZCO nor of any of its branches.) Potter planned the 1985 annual conference of the OSNZ in Masterton, and many were fearful of its success, being in such a small centre with only two
ophthalmologists, Potter and Graham Moore. However, she put enormous personal effort into the meeting, which was well rewarded, as it is remembered as one of the society’s most successful conferences.

Potter toiled for five years to obtain an official coat of arms for the society.
Understandably after that effort, she was not in favour of the merger with the RACO, which resulted in the OSNZ being replaced by the New Zealand Branch of the RANZCO, and consequently redundancy of the OSNZ coat of arms.

Potter started the New Zealand Glaucoma Society and helped establish the Glaucoma Trust Fund. She was a co-founder of the New Zealand Branch of the Australia and New Zealand Medical Aviation Society and was an examiner for the Civil Aviation Department. She helped establish the Wellington branch of the Medical Women’s Association in 1971 and was made an honorary life member in 1991. She did clinical research among Maori in the East Cape region and published several papers on ocular allergy. For all these endeavours Potter was deservedly awarded the CBE in the New Year’s Honours List of 1993.

Graham Moore (1924–1991) was a fighter pilot in World War Two, when he was shot down over Yugoslavia and escaped through Greece. After the war he attended the Otago Medical School from which he graduated in 1953. While at Otago, in 1949, he played for the All Blacks, the only ophthalmologist to have reached that pinnacle of New Zealand rugby.

He was in general medical practice until 1965, when he took up a returned servicemen’s bursary to study ophthalmology in Hong Kong for three years. After that he went to London briefly to take the diploma in ophthalmology, and then...
returned to ophthalmological practice in Masterton. He operated at Masterton Public Hospital, and did weekly public hospital clinics in Dannevirke.

After Moore’s sudden death from a heart attack while mowing his lawns in 1991, Sir Randal Elliott and Thiers Halliwell helped with weekly visits to Masterton. Potter arranged for Seymour Migdale, a South African neuro-ophthalmologist who had been working in California, to practise in Masterton, which he did for nine years in the 1990s. Since then, Dr Kay Evans of Palmerston North and several Wellington surgeons have helped with clinical visits.

Wanganui

Wanganui’s first ophthalmologist was William Stephen Baird (1873–1948). Remarkably, his two brothers and two of his three sisters also studied medicine in Glasgow and all became medical practitioners in New Zealand.7

The family was brought up in Winton, Southland, where their father was the Presbyterian minister for 22 years. William, the eldest son, was dux of Southland Boys’ High School in 1888, before studying medicine in Glasgow, where he won the Hunter Medal.

After 12 years of general practice in Southland and Nelson, he was a junior assistant at Moorfields for eight months in 1916, until interrupted by service in France in World War One with the Royal Army Medical Corps. He practised in Wanganui from 1929 until his death in 1948.

His son James Bruce Baird (1900–1985) graduated from the Otago Medical School in 1922, and practised ophthalmology firstly in Wellington, from 1930 to 1933, then in Wanganui until he retired in 1973.

George Hector Levien (1917–2009) graduated from the Otago Medical School in 1940. He served in the Second New Zealand Expeditionary Force at El Alamein and Monte Cassino, and rose to the rank of major.

After the war he trained in England, where he won the Moorfields Medal, and married his ‘English rose’ Nonnie in Sloane Square. He practised in Hamilton for a few

*Dr William Stephen Baird (1873–1948), Wanganui.* SUSAN MACLEAN.
years (see Chapter 6), then in Hong Kong, then London, then Ontario, and finally settled permanently in Wanganui. He retired to Auckland, and was replaced in Wanganui by Geoffrey Duff. Duff continues at Wanganui, only in private practice. He operated at Wanganui's Southern Cross Hospital until it closed, and now operates at Aorangi in Palmerston North. Jan de Koch from South Africa has been practising in Wanganui for 10 years.

Frank Howes, from South Africa, worked full time at Wanganui Hospital for a few years before moving to England, and finally to Queensland, where he now specialises in cataract and refractive surgery. He was aiming to establish vitreo-retinal surgery in Wanganui, but as a solo practitioner there did not have the support of colleagues.

New Plymouth

Rex Brewster (1853–1952) was a foundation member of the OSNZ in 1947. He began ophthalmic practice in New Plymouth in 1914. This was interrupted by war service from 1916 to 1920, during which he gained the Military Cross. His wife Monica was a foundation benefactor of the Govett-Brewster Art Gallery in New Plymouth, and was its first patron. The gallery has developed into a leading museum of contemporary art in New Zealand.

Eustatius William Barton Griffiths (1901–1942), known as Peter, was born in New Plymouth, graduated from the Otago Medical School in 1928, then studied ophthalmology in Edinburgh and London, gaining the fellowship of the Royal College of Surgeons of Edinburgh. He worked as an ophthalmologist at the Taranaki Base Hospital for a year in 1936 to relieve Brewster. He then practised in Hastings from 1937 for two years, until he was recalled to the active list of the Royal Air Force in 1939, and posted to Sembawang, Northern Singapore. He was promoted to Squadron Leader in 1941, but in February 1942 he was killed by Japanese enemy action in Singapore.

Arthur Talbot (1917–2008) was the second son of ophthalmologist Leonard Talbot of Timaru (see page 134). After war service in Senigallia, Italy, he undertook a year of specialty training at the Royal Victorian Eye and Ear Hospital, where he gained the Melbourne Diploma in Ophthalmology. It was a time of big names in Melbourne, including Dame Kate Campbell, a paediatrician who first identified the relationship between retinopathy of prematurity and oxygen therapy in the newborn; Archie Anderson, who did the first corneal transplant in Melbourne; and Ronald Lowe, a leading glaucoma expert and later historian. Talbot then took up a job offer in New Plymouth, and Brewster retired shortly after Talbot’s arrival.

Talbot was a modest man. He did 3000 cataracts in his 48 years in New Plymouth.
Plymouth and said ‘I got no better as I got older’. After 27 years’ service, in 1962, he took three months’ study leave at Moorfields but was disappointed at the lack of progression in British ophthalmology. Surgeons were still wearing their suits and waistcoats in the operating theatres, using only over-gowns, and they were still using magnifying loupes (glasses) rather than operating microscopes. On his second study leave at Moorfields in 1978 he was more impressed, for by that time they had filtered, air-conditioned operating theatres, better asepsis, operating microscopes, television cameras and were truly in the new era of microsurgery.

Talbot had a mischievous sense of humour. If patients were taking too long in delivering their medical history, he would deliberately hit his typewriter keys forcibly, the noise making further conversation impossible. If a female patient decided to further engage in lengthy discussion at the end of a consultation, he would simply pick up and carry her handbag out of the consulting room. The hapless lady would scurry after him to retrieve her bag, only to find it placed on the reception counter. Talbot meanwhile had whisked his next patient into the consulting room. Talbot was president of the OSNZ in 1972–73.

Heather Mackintosh (1951–2009), a graduate of Dunedin and Christchurch, moved to New Plymouth in 1983. She worked alongside Talbot for a few years until he retired, then with Kevin Taylor, all the while juggling the demands of a young family. During her professional career she was a firm advocate for women in medicine and was active in a number of regional and national committees. Mackintosh was secretary-treasurer for the Save Sight Society for over 18 years.

Very sadly, Macintosh died suddenly of a dissecting aortic aneurysm at the age of 57, at the peak of her career. She had just operated on a patient, and had returned home for tea where she collapsed. Her patients and colleagues genuinely loved her and at her very moving funeral scores of patients overflowed out into the church car park. Kevin Taylor joined Talbot and Macintosh in 1985, at which time Talbot
reluctantly retired at the age of 74. Taylor was a graduate from the University of Auckland School of Medicine, but his first career choice was to be an orchestral musician. He won a three-year scholarship to London to study music and composition. However, his father advised that music would not pay the mortgage and he was encouraged into ophthalmology after working as a trainee intern with Gabriel Martinez in Gisborne.

Taylor trained in ophthalmology in Christchurch, and was enticed to New Plymouth by Talbot. He soon became active in local Taranaki medical politics, and then in national medical politics. In 1996 he was elected onto the executive of the OSNZ, becoming secretary 1996–2001. He was the first two-year chairman of the New Zealand Branch of the RANZCO, from 2002–04.

The relatively poor remuneration of medical specialists in provincial centres motivated Taylor to negotiate a fee-for-service arrangement for public patients to be seen in private rooms. This also benefitted the patients, as the private offices were better equipped. He also negotiated a fee for service for public patients’ operations, whether they were performed in the private hospital or the Taranaki Base Hospital.

There are now several provincial centres where similar contracts exist for the delivery of public services. They are cost-effective for the public purse, and generally provide better service for the patients. The metropolitan centres have instead developed large, fully equipped multi-sub-specialty private clinics and retained salaried work in the public hospitals.

Ross Neville-Lamb joined Macintosh and Taylor in their private practice in 1995, and Simon Nicholas joined the practice in January 2010. He is one of the regrettably few ophthalmologists who, having been raised in provincial New Zealand, has returned to his provincial roots. He still finds that when his secretary asks for payment, some patients try saying, ‘Oh, but I knew him as a young lad!’

Dr Kevin Taylor.
Napier-Hastings

Stuart Scoular graduated from the Otago Medical School in 1915, and trained in ophthalmology in Bristol, England. He returned to New Zealand and practised in Napier for 25 years. He also gained an MD (New Zealand). He died in 1949.

Jim Gray graduated from the Otago Medical School in 1922. He was a house surgeon at Waikato, and then went into general practice in Kaponga, Taranaki. He played rugby for the University of Otago, then for Waikato, and when in general practice, he became president of the Taranaki Rugby Union. In 1946, at the age of 46, he went to England to train in ophthalmology, and returned to Napier where he joined Dr Scoular. Gray practised in Napier until the day of his sudden death at the age of 64 in 1965. He was president of the OSNZ in 1962.

Eustatius William Barton (Peter) Griffiths practised in Hastings from 1937 to 1939, when at the outbreak of war he was recalled to the Royal Air Force active list and posted to Singapore, where he was killed in action (see pages 143, 252). Ernest Velvin also practised in Hastings, and was president of the OSNZ in 1969–70.


Sabiston had special interest in the management of keratoconus, and in contact lenses for corneal grafts and aphakia. He was president of the OSNZ in 1986–87, president of the New Zealand Contact Lens Society in 1968, and was elected a life member of the Contact Lens Society in 1999. He also wrote the history of the Contact Lens Society, published in 2005.11

Since retiring, Sabiston has been involved in Rose Charities, which supports an eye clinic in Phnom Penh, Cambodia. His wide community involvements include being president of the Hawke’s Bay Racing Club, president of the Napier Rotary club and patron of the Bluff Hill Bowling Club. For...
these and his professional contributions in New Zealand and overseas he was deservedly made a Member of the New Zealand Order of Merit (MNZM) in the 2010 New Year's Honours list.

John Loughlin (1930–2004) qualified in pharmacy before deciding to study medicine. He completed the Diploma in Ophthalmology in London and returned to practise for a short while in Nelson, before settling in Napier, where he joined David Sabiston in 1968. With Sabiston he founded the Hawke’s Bay Ophthalmic Trust, which funded an operating microscope, argon and YAG lasers, and an ophthalmic ultrasound for Napier Hospital. He was on the Hawke’s Bay Hospital Board for 30 years. In his fifties he developed the Waimarama Estate Winery.

Peter Bannister was a mainstay in Hastings for many years. He trained at Moorfields, High Holborn, where he was ‘on the house’. Bannister’s main interests were paediatric ophthalmology, and later refractive surgery. He performed many corneal transplants in the 1980s, which led to his interest in starting radial and astigmatic keratotomy in 1986, around the same time as Antony Morris and Peter Ring in Auckland. Bannister was also early into excimer laser refractive surgery, which he began in 1996, and he imported New Zealand’s first Orbscan topography unit in the same year. He worked 35 years for the Hawke’s Bay Hospital Board, and retired in favour of golf and skiing in 2010.

John Beaumont was brought up in Hawke’s Bay and trained in Dunedin and in Sydney, with Fred Hollows at the Prince of Wales Hospital. He returned to Hawke’s Bay in 1987 and practised general ophthalmology. He was an original investor in the redeveloped
Royston Hospital and Specialist Centre. He has served on the executives of the New Zealand Branch of the RANZCO, the Cornea and Contact Lens Society of New Zealand, and the New Zealand National Eye Bank.

Kay Evans trained in England, where she gained the FRCS before emigrating to New Zealand with her husband, a paediatrician. She completed her training in New Zealand by doing a year as an eye registrar in Wellington in 1986, and a further year in Palmerston North. She returned to the United Kingdom from 1989–96. She has a special interest in vitreo-retinal surgery, and worked in Hastings for four years from 1997–2001, then in England from 2001–06, before finally returning to Palmerston North, where she specialises in vitreo-retinal surgery.

Mary Jane Sime (née Houliston) joined John Beaumont in Hastings in 1997, with a special interest in paediatric ophthalmology. She has been honorary secretary-treasurer of the New Zealand Branch of RANZCO since 2005. After her marriage in 2009, she moved to Dunedin (see Chapter 2).

Alex Buller emigrated from England in 1998, and joined John Beaumont at the Royston Centre, where he practises with an interest in glaucoma. Philip MacDonald commenced in 2003, and practises general ophthalmology with an interest in oculoplastics.

Royston Private Hospital in Hastings was founded in 1921. It was redeveloped in 1997 into the Royston Hospital and Specialist Centre, and is now a major medical facility with specialists’ suites, radiology, including MRI, and three operating theatres. Private facilities in Napier were not established until 1971 with the Princess Alexandra Hospital, which was later purchased by Southern Cross. It was closed in 2001 when all hospital facilities, public and private, moved to Hastings.

Gisborne

The first ophthalmologist to live and practise in Gisborne was Violet MacFarlane (b.1914). She qualified from the University of Glasgow, followed by the Diploma in Ophthalmic Medicine and Surgery (DOMS). MacFarlane was a visiting ophthalmic surgeon in Wellington from 1949–52, when she moved to Gisborne, where she practised until 1959. She then moved to Sydney, where her husband had been appointed as a professor in veterinary science. From her leaving until 1974, Drs Jim Gray, David Sabiston and John Loughlin, of Napier and Hastings, visited Gisborne in rotation.

Dr R. Bruce Morrison was in general medical practice in Gisborne from 1965–2003. He had an interest in ophthalmology and provided a valuable service until Gabriel Martinez arrived in 1974. Morrison performed such tasks
as removing corneal foreign bodies, meibomian cysts and pingueculae, and screening for glaucoma. He communicated frequently with Sabiston, and credits Sabiston for teaching him. For his considerable endeavours in ophthalmology Morrison was made an associate member of the OSNZ.

Gabriel Martinez trained in Glasgow and Liverpool and gained the Edinburgh fellowship. He then worked for two years in St Lucia in the West Indies and two years in Malaysia. Martinez immigrated to Gisborne with his wife Claire and three daughters in 1974.

Martinez was an excellent general ophthalmologist who gave sterling service to Gisborne and Poverty Bay for an uninterrupted 28 years, until he retired in 2002. In the late 1990s he got some respite when Dr Mary Jane Houliston of Hastings began regular visits.

After Martinez retired, the Hawke’s Bay ophthalmologists once again visited. Sabiston’s visits were particularly helpful until he retired in 2006.

Then Gisborne ophthalmology once again struck good fortune when Dr Graham Wilson arrived with his wife Amanda and two children, having come from an academic post in Dunedin. He continues to provide the region with quality ophthalmic care, while pursuing his academic interests.

Interestingly, Gisborne has been a breeding ground for ophthalmologists. It was the home city of Walter Hope-Robertson, Cecil Pittar, Lindsay Poole, Alan Nicoll (Perth), Thiers Halliwell and, more recently, Mark Saunders (Tauranga) and Sonya Bennett (Auckland).

Tauranga

Ronald Tingey (1924–2007) was the first ophthalmologist in the Bay of Plenty. He started practice in Tauranga as an eye and ENT surgeon in 1955. He had planned to become an engineer but an encounter with Rex Brewster, ophthalmologist of New Plymouth, changed his career path.

Tingey was an eye and ENT registrar in Dunedin, and did his ophthalmology training in London and Ireland, where he gained the Diploma in Ophthalmology and Diploma in Ophthalmic Medicine and Surgery. In 1961 he developed double vision secondary to measles encephalitis, an impossible condition for an ophthalmic surgeon. Fortunately it was rectified by surgery and he fully recovered.

To Tingey’s great credit, he undertook the daunting task for someone in busy private and public practice to take the newly introduced ophthalmic primary examination of the Royal Australasian College of Surgeons. He paid visits to Auckland during 1969 and was tutored by Lindo Ferguson in optics and George Hitchcock in general pathology, but had to learn general and ophthalmic
physiology and anatomy of the head and neck with only minimal guidance. He passed the ophthalmic primary examination and two years later passed the final fellowship in ophthalmology of the Royal Australasian College of Surgeons. Fred Hollows was a house surgeon in Tauranga and suggested to Tingey that he saw all the eye cares at the hospital and assist in the operations, ‘providing that at the end of the year we’ve got to the point where I can take out a cataract safely’.12 Little would Tingey have realised that this was the genesis of such an illustrious career (see Chapter 16). Tingey was joined in practice for some years by medical ophthalmologist Dr Gar Hutton from Rhodesia (now Zimbabwe).

After Hutton retired, Peter Haddad arrived in Tauranga in 1984. He had emigrated from South Africa to Dunedin in 1977, where he had been an eye registrar for two years and a specialist for six. Haddad was the main driver in constructing the new Park Street Eye Clinic and its stand-alone day-surgery facility, which opened in 1998. By then he had been joined by Ken Adams and Neil Murray.

Haddad negotiated with Lester Levy, then CEO at Tauranga Hospital, the then novel concept that the ophthalmologists be paid for each patient seen and per operation, rather than per standard clinical session. This was unheard of in the public system elsewhere, but was a sound productivity incentive. At Tauranga Hospital the outpatient facilities were in need of upgrading and theatre space was stretched, so after much negotiation both the public outpatient work and elective eye surgery were subcontracted by Pacific Health to the Park Street Eye Clinic. After ophthalmology outpatients were subcontracted to Park Street Eye Clinic the ‘patient did not attend’ rate dropped from a substantial 12 to 1 per cent.

Tauranga has thus developed a very efficient public ophthalmology service. Indeed, it could well be copied by other centres (and has been by New Plymouth), especially centres without registrar-training programmes. However, it needs someone prepared to persevere with negotiations and a public health body with administrators whose horizons are not constrained by political ideology.

Ronald Tingey. COURTESY MRS PAM TINGEY.
Nielsen was the second ophthalmologist in the Bay of Plenty, after Ron Tingey in Tauranga, when she moved to Rotorua in 1955. Being Irish, she did her medical training at Trinity College, Dublin, where she gained the final year prize in surgery. She trained in ophthalmology in Birmingham, England, and obtained the diploma. Nielsen then took a registrar position for two and a half years in Wellington where she gained considerable surgical experience.

Nielsen was encouraged by the Department of Health to take a part-time position in Rotorua, which was the centre of a large Maori population without ophthalmic services. Patients came to Nielsen from far and wide. Some walked from Opotiki, and district nurses brought Maori children from outlying schools. After some years she had Maori patients from as far away as Northland. Her impression was that some preferred to go to Rotorua because the Auckland ophthalmologists tended to talk down to them!

The dominant pathology was advanced cataracts but there was also a smattering of mild trachoma. In the older Maori population diabetic retinopathy was prevalent.*

Nielsen’s life in Rotorua was far from relaxed. As the only ophthalmologist there, she operated on a lot of trauma cases. She had considerable night work before the days of seat belts and laminated windscreens in cars. Her husband George remembers getting kicked in bed when he was required to get up to open the garage door, and getting up again when he heard the car’s horn to open the door for Muriel’s return.14 Their busy life included bringing up four children.

Murray Ashbridge (1926–2008) arrived in Rotorua 16 years later, in 1971. As noted in Chapter 6, Murray had been a consultant ophthalmologist in Wellington but moved to Rotorua to enjoy a more relaxed lifestyle and to grow orchids.

Dr Ashbridge had the foresight to develop a cost-sharing practice, and instigated the building of the Lakes Care Medical Centre, which provided communal specialist rooms, a general practice on-call service, and radiology. He was chairman of the Lakes day-stay surgical facility.

The common difficulty in arranging succession in a provincial centre forced Drs Nielsen and Ashbridge to continue practising longer than either would have wished. Keith Gross emigrated from England in 1992, and was a full-time

* Maori have a higher incidence of diabetes than New Zealanders of European descent, because of a genetic predisposition, together with other factors including an unhealthy western diet high in saturated fats and sugars.
ophthalmologist at Waikato Hospital. He joined Ashbridge’s Rotorua practice two years later, and provided modern anterior segment surgery. Together they delivered medical retina services, in particular a diabetic photoscreening service and retinal laser, so necessary for the large Maori population, and they developed the Rotorua Eye Clinic.

Later, a joint venture was established with Rotorua Public Hospital. This independent company was chaired by Ashbridge, with hospital co-directors involved. The model eventually developed into all outpatient facilities being provided in the private Rotorua Eye Clinic by contract, with surgery and inpatient facilities at Rotorua Public Hospital. Combining forces in this manner helped to upgrade equipment more cost-effectively.

More recent ophthalmologists in Rotorua include Dr Marc Gimblett, with a sub-specialty interest in oculoplastics; Dr Derrell Meyer in glaucoma and Dr Neil Murray, with a sub-specialty interest in anterior segment. With the expansion of staff and sub-specialty interests a new Rotorua Eye Clinic was built, and opened by the Minister of Health Tony Ryall in 2011. It is an important public/private facility for the region, which contributes to the training of registrars and medical students. Rotorua has been accepted as a six-month registrar training post in ophthalmology, and the ophthalmologists there are honorary senior lecturers at the University of Auckland.

Whangarei

Northland patients had to travel to Auckland for ophthalmic care until the arrival of Bernard Bowden in 1960, although there was optometrical care in Whangarei. Bowden (1927–1980) was strong academically at school and university, and graduated from the Otago Medical School with distinction in surgery. After graduating, he married Dr Katharine Thomson, and trained in ophthalmology in Bristol.

He had a lifelong interest in marine biology, and was a guest lecturer at the Department of Zoology at the University of Auckland. He and Katharine lived on

\[Dr\ Bernard\ Bowden\ (1927–1980),\ Whangarei.\ DR\ KATHARINE\ BOWDEN.\]
a coastal farm at Matapouri. He served Northland and the Northland Hospital Board for the whole of his professional life.

Bowden was one of many talented provincial ophthalmologists who could well have been leaders in a sub-specialty in a main centre, and one wonders if local populations appreciate their good fortune that some very talented professionals elect a more rural lifestyle.

At the time of his premature death from lymphoma at the age of 53, Bowden was president of the New Zealand Medical Association and an examiner in ophthalmology for the Royal Australasian College of Surgeons before the examinations were taken over by the then Australian College of Ophthalmologists.

Dr John Henderson (see page 123) moved from Palmerston North to Whangarei in 1979. He was persuaded to move there by Bowden, and found the north a welcome fresh environment following re-marriage. His wife Carolyn trained as an ophthalmic assistant and was in that role for 16 years.

Bowden died within a year of Henderson’s arrival so he found himself on call seven days a week. He worked feverishly hard, frequently into the evenings; the Northland Hospital Board insisted that monthly he should visit Kaitaia, Kaeo and Rawene on the Hokianga. Brief relief came when Michael Britten, an English ophthalmologist, arrived, but he stayed for only 18 months before returning home. Slightly more lasting relief came when Ken Adams arrived in Whangarei in 1983.

In 1989 Henderson set up the Eye Centre Primecare, which included an ophthalmic day-stay surgical facility, the first such centre in New Zealand, although the theatre was used by other specialties. Unfortunately Adams stayed only six years before moving to Tauranga shortly after Primecare opened. Once again Henderson was left as a solo practitioner for the city and region. Urgent trauma surgery was frequent, because of both car-windscreen injuries before laminated glass and seat belts, and a high rate of alcohol abuse.

Relief came again when Derek

Dr Geoffrey Wallace (1961–2007), Whangarei. NEW ZEALAND OPTICS, MARIANNE DRANSFIELD.
Sherwood arrived in 1991, then David Dalziel two years later in 1996. Sherwood moved to Nelson in 1993. Dalziel practises in Whangarei to this day.

In 1997, Brian Kent-Smith moved from South Africa to Whangarei. He built Eye Specialists, a separate clinic and ambulatory surgical centre, with Dr Geoff Wallace. Both ambulatory surgical centres thrive, as Whangarei serves the whole of Northland.

Henderson retired from surgery in 2005. Wallace was tragically drowned in a boating accident in 2007 at the age of 46. Presently Dalziel and Andrew Watts are at Primecare, and Kent-Smith and Wayne Birchall are at Eye Specialists. All four work part time at the Whangarei Base Hospital and carry out clinics in Kaitaia and Hokianga.
Although New Zealand frequently claims (inaccurately) to have had the first properly trained ophthalmologist in Australasia in Sir Lindo Ferguson, New Zealand certainly cannot claim to have had the first ophthalmological society. The Ophthalmological Society of Melbourne was founded in 1899, and was succeeded by the Ophthalmological Society of Australia in 1938. The society became the Australian College of Ophthalmologists in 1969. Winton has written a full history of the Ophthalmological Society of Australia and of the college.\(^1\)

The genesis of OSNZ was a meeting in February 1946 at the eye section within the conference of the New Zealand Branch of the British Medical Association. Present were James Beaumont, Howard Coverdale, William Fairclough, George E.O. Fenwick, Herbert Goldstein, Cecil Pittar and Graeme Talbot, all of Auckland, Duncan Macdiarmid of Hamilton, Garnet Harty and Ernest Marchant of Wellington, Lindsay Burns and Lionel Lewis of Christchurch, and Rowland Wilson and William Carswell of Dunedin.

Dr Walter J. Hope-Robertson of Wellington opened a discussion by reading the following paper:

\[\text{Gentlemen, for some time past I, together with various other}\]
\[\text{practising ophthalmologists in New Zealand have been interested}\]
\[\text{in the formation of an ophthalmological society in New Zealand.}\]
\[\text{In 1939 as a result of receiving a copy of the programme of the}\]
\[\text{first Annual Meeting of the Ophthalmological Society of Australia}\]
\[\text{and an invitation to be present at that meeting, I wrote to make}\]\n
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tentative enquiries as to whether it would be possible for New Zealand members to join that Society and possibly rename it the Ophthalmological Society of Australia and New Zealand.

During April 1943 I sent you all a letter explaining the result of my communications with the Ophthalmological Society of Australia and suggesting the formation of such a society in New Zealand. I have all that correspondence, if any member wishes to inspect it. I did not proceed any further with the matter because I did not consider the time opportune owing to exigencies of medical practice in New Zealand consequent upon the outbreak of the Second World War at the end of 1939. However with the introduction of Social Security Legislation in 1943 I again felt the urgent need of a society which among other aims and objects would help to protect the interests of ophthalmologists in this country.

As a result of that letter I received replies from practically every ophthalmologist in New Zealand, all of whom seemed to be unanimously in favour of the formation of such a society although some were not keen on affiliating with our Australian brethren, while one or two did not like the idea of our society working under the auspices of the British Medical Association (BMA) who would have the power of dissolving us. The question of affiliation with the Ophthalmological Society of Australia is a minor matter and can be decided at any time, but the question as to whether we should work under the auspices of the BMA is a matter of some importance and I will have something to say about that later.

Again, owing to the war no suitable opportunity arose which would enable us to hold a preliminary meeting. However the advent of this first Annual Meeting of the BMA since the close of World War Two seemed to be an opportune moment to attempt to form an ophthalmological society in New Zealand, particularly in view of the fact that we have been informed that the Government intends this year to make drastic alterations in the Social Securities Act — alterations which must affect us all as practising ophthalmologists.

Toward the latter end of last year I attended the Annual Meeting of the Ophthalmological Society of Australia and I was much impressed by the standard of their papers, and of the great benefits to be derived from the membership of such a society. I do not, at the moment, wish to waste time by going in to the various
reasons as to why I think an ophthalmological society is needed in New Zealand, but I would like to read to you the objects of the Australian Ophthalmological Society as laid down in the book of rules of that society. These would, I believe, be the main objects of a like society in New Zealand. Some members may not entirely agree with these objects — they may wish others added or some deleted, but that is a matter which can easily be adjusted in the future when we finally ratify the rules of our own society.

However whatever the objects and aims of such a society may be in New Zealand I do feel that because of the present trend of social security legislature in New Zealand, an ophthalmological society is urgently needed in order to help protect the interests of practising oculists in this country. As stated previously the Government this year intends bringing down a bill which will profoundly affect specialist practice in this country. It is absolutely essential that we have an authoritative body to put forward the views of the oculists. Optical benefits are envisaged in the near future — this must of necessity entail a fight with the opticians — here again an authoritative body representative of the oculists is an absolute essential. Collectively we can make ourselves heard but individually we would cry in the wilderness.

One vital matter to be decided is whether or not we will work under the auspices of the New Zealand branch of the BMA. I do not propose to go in to the pros and cons of this matter at the moment. I have an open mind with perhaps some preference for working under the BMA. However I suggest that if a preliminary committee is set up it should bring down some recommendations in this important matter to a subsequent meeting of members. I recall in passing that the Ophthalmological Society of the United Kingdom is an entirely separate body from the BMA. On the other hand both the Ophthalmological Society in Australia and the Obstetrical and Gynaecological Society of New Zealand work under the auspices of the BMA. Should members wish to form the Society under the BMA then it is necessary to obtain permission from the Council of the BMA for the formation of such a society.

In order to facilitate matters in the formation of a society I have already obtained permission from the Council of the BMA to form such a society but such permission in no way prejudices our position if we decide to form a society outside the BMA.

In view of the fact that we have in New Zealand the only living
foundation member of the Ophthalmological Society of the United Kingdom, after consultation with Mr Coverdale I took the liberty of asking Sir Lindo Ferguson that, if the members so desired, would he be willing to accept the office of patron of our society. I would like to read his reply. ‘Mr Chairman and gentlemen, I feel sure that an ophthalmological society in New Zealand would be of great benefit not only to oculists themselves but also to the whole of the medical profession and the general public of New Zealand and I therefore wish to propose that the oculists of New Zealand form a society to be known as the Ophthalmological Society of New Zealand.’

Harty of Wellington seconded the motion, saying that he considered such a society would be very useful in keeping case records. He asked how many of those present would be prepared to publish a case each year.

Talbot said that he was also in favour of the formation of such a society and that he considered that the BMA was out of touch with the oculists. He also said that the Ophthalmological Society of the United Kingdom was not a political society and therefore in his opinion it was not as effective as it might be.

Lewis said that he also was in favour, and he felt that the future of ophthalmology in New Zealand was in dire danger. He thought practising ophthalmologists should have opposed the registration of the opticians in 1928. He drew attention to the fact of how in his opinion it was possible for an optician to overrule the opinion of an oculist in giving certificates for driving licences.

Coverdale said that as there appeared to be general agreement that a society should be formed, he put a motion to this effect, which was unanimously passed.

A sub-committee comprising Drs Wilson, Pittar, Coverdale, Fairclough and Hope-Robertson was then set up to establish the rules for such a society and present them at a full meeting three days later on Friday, February 15 1946.

The subsequent meeting was held in the Ophthalmological Department of the Auckland Public Hospital, with Coverdale in the chair. The proposed rules were read out and agreed to, in the presence of the following: Dr Harty (Wellington), Dr Beaumont (Auckland), Dr Lewis (Christchurch), Dr Simpson (Wellington), Dr D.C. Macdiarmid (Hamilton), Dr G.E.O. Fenwick (Auckland), Dr G.G. Talbot (Auckland), Dr Goldstein (Auckland), Dr Pittar (Auckland), Dr R. Wilson (Dunedin), Dr Fairclough (Auckland), Dr Bransgrove (Palmerston North), Dr J.G. Macdonald (Invercargill) and Dr Hope-Robertson (Wellington).

Nominations were then called for president. Fairclough was nominated by Fenwick and seconded by Coverdale. Harty was nominated by Lewis
and seconded by Bransgrove. A vote was taken, and Fairclough was elected president. Harty was elected vice-president unopposed and Hope-Robertson was elected secretary-treasurer unopposed. Members of the executive were Drs Wilson, Marchant and Coverdale (see below).

There was a unanimous decision to ask Sir Lindo Ferguson to act as patron of the society.

The committees of the OSNZ

The Executive Committee
The Executive Committee was composed of the officers of the society and two or three elected ordinary members. The officers were the president, president-elect, vice-president, immediate past-president, honorary secretary-treasurer, chairman of the qualification and education committee, and the editor of the Transactions. There is only one known photograph of any executive of the society.

The executive of the OSNZ, Wellington, 1993. Back row left to right: Drs Bruce Hadden, Kevin Taylor, Russell Lienert, Tom Ellingham, Paul Herrick. Front row left to right: Professor Anthony Molteno, Drs Peter Wellings (president), Peter Haddad.

DR PETER WELLINGS
The executive’s roles included admittance of new members, appointment of honorary members and honorary life members, and setting the time and place of future annual meetings. The executive also recommended appropriate new officers to the annual general meeting, in particular the next vice-president, who would then usually become the next president-elect. On only one occasion was this recommended nominee challenged by another nomination from the floor of the annual general meeting, thus necessitating an election.

**Qualification and Education Committee**

At the conjoint meeting of the Australian College of Ophthalmologists and the OSNZ in Sydney in 1975, Professor John Parr and Dr Calvin Ring spearheaded the formation of an education committee of the OSNZ, to study and advise on post-graduate ophthalmic training in New Zealand, which hitherto had been ad hoc. This important standing committee’s founding members were Parr as chairman, with Drs Ring, Colin Fenton and Richard Clemett, and Jim Macdiarmid as honorary secretary.

The committee oversaw ophthalmic training in New Zealand. It was responsible for coordinating a national selection process for ophthalmic registrars, for advising on the numbers and ensuring the standards of training posts, and for advising the New Zealand Medical Council on training and becoming credentialed in ophthalmology. The most difficult of these was advising on the further training and assessment required of individual overseas-trained ophthalmologists wanting to practise in New Zealand as their previous training was so varied, and sometimes difficult to verify.

The committee also arranges the annual visiting professor, who is an international sub-specialist who travels to each of the main centres for two or three days over a two week period. Usually the visits combine sessions for all ophthalmologists, with separate sessions for registrars.

Long-serving members of the committee included Parr, who retired in 1986 and was chairman from 1975 until 1982, when Fenton took over. Dr Peter Wellings was secretary for 12 years from 1978–90, and then chairman until 1996. Dr Doug Cox was briefly chairman in 1997, but was replaced by Associate Professor Mark Elder in 1998, who in turn was replaced by Dr Brian Sloan of Auckland in 2004. The present chairwoman, Dr Ainsley Morris of Christchurch, was elected in 2010.

Since the amalgamation of the OSNZ with the RACO in 1999, the name has been changed to the Qualification and Education Committee, a standing committee of the New Zealand Branch of the RANZCO. However, Parr’s original choice of name of Education and Qualification Committee is more logical as, in his own words, education comes before qualification.
New Zealand Branch Qualification and Education Committee chairs have a place on the Australian Federal College Qualification and Education Committee, as do the chairs of the Qualification and Education Committees of the other Australian state branches of the college.

**Visual Standards Committee**
Of less importance than the Qualification and Education Committee, this committee nevertheless carried significant responsibility as the OSNZ was occasionally consulted about visual standards for driving and for occupations.
The Education and Qualification Committee of the OSNZ at Masterton, 1985.
Back row left to right: Associate Professor Richard Clemett, Drs Colin Fenton, Peter Wellings, Jim Macdiarmid, David Warnock and John Murchland (censor-in-chief of the Royal Australian College of Ophthalmologists). Front row left to right: Drs Thiers Halliwell, Ian Elliott and Professor John Parr (chairman). DR PETER WELLINGS.

Below: The Education and Qualification Committee of the OSNZ in Wellington, 1993. Back row left to right: Associate Professor Philip Polkinghorne, Dr Ken Tarr, Associate Professor Gillian Clover, Drs Doug Cox, Thiers Halliwell, and Malcolm Capon (Sydney, representing the censor-in-chief).
Front row left to right: Drs Jim Macdiarmid and Peter Wellings (chairman), Professor Anthony Molteno, Dr Tom Ellingham. DR PETER WELLINGS.
During Bruce Hadden’s chairmanship of the committee in the 1990s, it produced two books. One was entitled *Visual Standards for Occupations*, published jointly with the New Zealand Association of Optometrists in 1992. It listed visual standards and how they should be measured for occupations such as the police, fire service, railways, civil aviation and the Armed Forces. The other was a revised edition of the booklet for assessing visual loss. This was mainly for accident compensation assessments, now almost exclusively used for assessments required by the Accident Compensation Corporation.

**Therapeutic Committee**
This committee has been more active in recent times because of its input into the prescribing of therapeutic agents by optometrists. It has also been involved in advising Pharmac, a quasi-autonomous non-governmental organisation or ‘quango’, about which ophthalmic preparations should be available in New Zealand, which should be subsidised, and the question of generic equivalents.

**Conferences and annual general meetings**
Ophthalmological conferences were initially part of the eye and ENT section of the annual Australasian Intercolonial Medical Congress. The first congress, held in Adelaide in 1887, was associated with the fiftieth jubilee of Queen Victoria, but did not have an eye and ENT section. The second was in Melbourne in 1889, at the time of the International Exhibition, and did include such a section, as did succeeding congresses. It was attended by Lindo Ferguson and C. Morton Anderson of New Zealand, both of whom presented papers. The third congress was in Sydney in 1892 and the fourth in Dunedin in 1896. Ferguson and Dr Ferdinand Batchelor, a Dunedin obstetrician and gynaecologist and congress president, undertook a pre-conference tour of Hobart, Melbourne, Adelaide and Sydney to generate support, a time-consuming journey in the late 1800s. Ten papers were read on ophthalmology. Ferguson was president of the eye and ENT section at the fifth congress in Brisbane in 1899, and Henry Martindale Kendall of Wellington was also present.

The sixth Intercolonial Medical Congress was in Hobart in 1902. Due to Australian federation, subsequent congresses were called Australasian medical congresses. The tenth in the series of congresses was held in Auckland in 1914, when the president of the congress was Auckland ophthalmologist Arthur Challinor Purchas. The president of the eye and ENT section was Francis Antill Pockley of Sydney, and the secretary George E.O. Fenwick of Auckland. Pockley had previously had the honour of being the first ophthalmologist to be president of the whole conference in Sydney in 1911. Incidentally, Pockley had
been in Vienna with Purchas and John Lockhart Gibson of Brisbane in 1884 — all young men in their twenties at the time — to see Carl Koller demonstrating the use of cocaine for topical anaesthesia.

From 1923, the meetings were renamed British Medical Association congresses. They took place every three or four years, and were always attended by a few New Zealand ophthalmologists. The eye and ENT section of these meetings ceased with the founding of the Ophthalmological Society of Australia in 1937.

In New Zealand, there were annual meetings of the New Zealand Branch of the British Medical Association. The first of these which included an eye and ENT section was in 1922, and Ferguson inaugurated this first meeting of the section with a discourse on the dangers of sub-specialisation. He had been president of the old independent New Zealand Medical Association in 1896 when it decided to merge with the British Medical Association. It remained a branch of the British Medical Association until 1967. The last eye and ENT section in the annual meeting of the New Zealand Branch of the British Medical Association was in 1946, when the OSNZ was founded.

The first annual conference of the OSNZ was held in Auckland from February 19–21 1947. Those present were Drs W.A. Fairclough (president), G.W. Harty (vice-president), D.C. Macdiarmid, J.H. Beaumont, C.A. Pittar, H.M. Goldstein, S. Scoular, W.H. Simpson, W.L.B. Burns, K.J. Talbot, J.S. Monro, H.V. Coverdale, G. Talbot, L.A. Lewis, W.S.V. Bransgrove, G.E.O. Fenwick, and W.J. Hope-Robertson (honorary secretary-treasurer). Those members who had joined since the meeting of February 1946 were Drs L.S. Talbot, J.S. Monro, Stuart Scoular, K.J. Talbot, J.A. Doctor, R.C. Brewster and W.L.B. Burns. There were 35 foundation members (see Appendix 3). Three families of ophthalmologists were involved: Dr Leonard S. Talbot of Timaru and his two sons, Kenneth J. (Jim) Talbot of Timaru and Arthur N. Talbot of New Plymouth; Dr W.C. Burns of Timaru and his son Lindsay Burns of Christchurch; and Dr Harry Wales and his son H. Jenner Wales, both also of Christchurch. (Families of ophthalmologists in New Zealand are listed in Appendix 5.)

The honorary secretary of the first conference was Dr Cecil Pittar. Presenting papers at the first conference were Fairclough, on industrial lighting, and on direct inheritance of retinoblastoma; Pittar, on intra-capsular cataract extraction; Hope-Robertson on pseudo-tumour of the orbit; Coverdale on ocular lesions associated with dendritic ulcer, and a case of angiomaticos retinae; Dr Graeme Talbot (unrelated to the Talbots of Timaru and New Plymouth) on alternative operations to corneo-scleral trephining in the treatment of glaucoma; Dr John Macdonald on spasm of accommodation; and Dr Simpson on the section in cataract extraction. All these papers were published in the first volume of
The programme of the first annual conference of the OSNZ, February 1947.

OPHTHALMOLOGICAL SOCIETY OF NEW ZEALAND.
the *Transactions.*\(^3\) In addition, there was a clinical demonstration, and a demonstration of microscopic sections of retinal tumours.

On the first evening a dinner was held at the Northern Club, and on the second evening an ‘At Home’ at Fairclough’s residence at 576 Remuera Road. On the afternoon of the third day there was a scenic drive and afternoon tea.

At the first annual general meeting in 1947, the question of establishing an Eye Bank for corneal grafting was proposed by Pittar, who was subsequently appointed the Eye Bank Registrar. At the second meeting, in 1948, further details of the proposed Eye Bank were discussed, including air transportation of donor eyes from one centre to another. However, there was no further discussion regarding the proposed Eye Bank in subsequent meetings. The idea lapsed until the New Zealand National Eye Bank was established by Dr (now Associate Professor) Gillian Clover in 1989.

Topics from early annual general meetings which recurred year after year were more often about the business of ophthalmology practice rather than the science, and the same still applies. At the first annual general meeting Hope-Robertson raised the topic of the proposed changes to the Social Security Act and the possibility of the government instituting specialist fee subsidies in New Zealand. A concern was that the government might agree to pay a fixed amount to the patient for certain ophthalmological services, and that the government would want to be assured that individual eye specialists would not charge the patient anything above a certain specified amount. Hope-Robertson thought that members should be advised to agree on a maximum and, if they wished, a minimum rate that they were prepared to accept for all ophthalmological work. He stated that some time previously he had sent to members of the society a proposed scale of fees for a full specialist service working under the Social Security Act. This scale of fees was published in the minutes, and a copy was also sent to the Department of Health! No doubt this acted as a guide in those days but publication of fees today would likely be considered fee fixing, anti-competitive and unlawful.

The second recurring topic was relationships with opticians (optometrists). At that first meeting Hope-Robertson reported that he had received a letter from Dr Rowland Wilson in Dunedin asking for the views of the members regarding the employment of opticians in the Eye Department of the Dunedin Public Hospital. Members were unanimously against the employment of opticians in public hospitals. Nevertheless, the Otago Hospital Board had advertised through the newspapers of New Zealand for an optician but no applications had been received.

The question of opticians being employed in public hospitals came up
TABLE 1

Scale of fees as suggested by sub-committee for operations and examinations as a guide (1946)

(One guinea, or 21 shillings, in 1946 is approximately $85 in 2012)

<table>
<thead>
<tr>
<th>Service Description</th>
<th>Fee</th>
</tr>
</thead>
<tbody>
<tr>
<td>Examination, investigation and consultation [It was felt that examinations carry a number of factors involving varying degrees of skill and time so the fee should be elastic.]</td>
<td>2–5 guineas</td>
</tr>
<tr>
<td>Examination and report</td>
<td>5–10 guineas</td>
</tr>
<tr>
<td>Foreign bodies</td>
<td>2 guineas</td>
</tr>
<tr>
<td>Corneal graft</td>
<td>60–100 guineas</td>
</tr>
<tr>
<td>Enucleation (and implant)</td>
<td>30–50 guineas</td>
</tr>
<tr>
<td>Cataract operations</td>
<td>60–100 guineas</td>
</tr>
<tr>
<td>Capsulotomy</td>
<td>20 guineas</td>
</tr>
<tr>
<td>Glaucoma operations</td>
<td>40–50 guineas</td>
</tr>
<tr>
<td>Detachment of retina</td>
<td>50–100 guineas</td>
</tr>
<tr>
<td>Squint operations</td>
<td>30–40 guineas</td>
</tr>
<tr>
<td>Dacryocystectomy</td>
<td>20–30 guineas</td>
</tr>
<tr>
<td>Dacryocystorhinostomy</td>
<td>40–50 guineas</td>
</tr>
<tr>
<td>Pterygium</td>
<td>15–25 guineas</td>
</tr>
<tr>
<td>Tarsal cyst</td>
<td>4 guineas</td>
</tr>
<tr>
<td>Baby’s epiphora</td>
<td>6–8 guineas</td>
</tr>
<tr>
<td>Ptosis</td>
<td>40–50 guineas</td>
</tr>
<tr>
<td>Ectropion and entropion</td>
<td>15–30 guineas</td>
</tr>
</tbody>
</table>
again in 1948, but again it was not resolved. Dr Leonard Talbot sensibly said that ‘it would be quite impossible for [Rowland] Wilson to do all the work that was expected of him, while at the same time spending three quarters of his life doing the hack work of refractions’. Suggestions as to who might do refractions were varied, and included clinical assistants, orthoptists, house surgeons or, in the future, eye registrars, but opticians were not on the list. In the meantime, the Otago Hospital Board had employed a Mr Dick, who was an orthoptist as well as a qualified optician.

In the minutes of the 1950 meeting we read that Dr Bruce Hamilton of Hobart, president of the Ophthalmological Society of Australia, would not allow any of the society’s members to train or lecture to opticians. Dr Pittar then proposed that no member of the OSNZ should take part in the training of opticians in New Zealand. This was seconded by Dr Roderick Ferguson, and the motion was carried unanimously. So began a long period of a difficult relationship with the optometrical profession, which fortunately has greatly improved over the past 20 years.

Hope-Robertson, as the first honorary secretary-treasurer of the OSNZ, was a large contributor to the society’s success. He was the ophthalmology consultant to the New Zealand Armed Forces during the whole of the Second World War and was advisor in ophthalmology to the Department of Health. He travelled widely and became well connected with leading overseas ophthalmologists, many of whom travelled to New Zealand as visiting speakers at subsequent OSNZ conferences, enriching the scientific value of the meetings.

The second conference of the society was held in Dunedin in February 1948, with Dr Rowland P. Wilson as president. Wilson was also the first editor of the society’s Transactions. Sir Lindo Ferguson had died the previous month, so the new patron was Dr Garnet W. Harty of Wellington, who had retired to Wanganui. Thereafter, there were no further patrons of the society.

The third annual conference was held in Wellington in May 1949. By this time there were 36 members. It is interesting to note that Dr Barrie Jones, as a registrar in Wellington, presented a paper titled ‘Demonstration of an apparatus to remove non-magnetic intra-ocular foreign bodies’. Jones later became the clinical professor of ophthalmology at Moorfields Eye Hospital in London, and was the mentor of many future Australian and New Zealand ophthalmologists (see Chapter 12). A cocktail party was held at the home of Dr and Mrs W.H. Simpson, and the annual dinner was segregated, with the men at the Wellington Club, and ladies at the Queen’s Club.

A special meeting of the society was held in Christchurch in October 1949 to hear two distinguished visitors from London, James Doggart and Keith Lyle. The fourth annual meeting was held in Christchurch in 1950, when the visiting
speaker was J. Bruce Hamilton of Hobart, president of the Ophthalmological Society of Australia.

At the annual conference in 1952 the notice of motion was put and passed that ‘no member of this Society shall regularly perform major ophthalmic operations except in a public hospital or private hospital clearly licensed for medicine and surgery’. The reason for this became apparent the following year when it was noted in the minutes that letters were received stating that members had evidence that Dr James Beaumont had performed a major ophthalmic operation in a hospital which was not a recognised surgical hospital. It was noted that Beaumont did a lot of major surgery in his own rooms. It was decided that the secretary write to Beaumont asking for his resignation, which was received in 1956. The clear issue of operating in non-recognised premises was used as a mechanism to oust Beaumont, whose standard of practice was considered to fall short of accepted standards.

Dr Jack Monro from Palmerston North was elected president in 1954. He thought that his home town was too small to host a conference, so there was no meeting that year.

A recurring topic in the minutes of meetings continued to be the relationships between ophthalmology and optometry, including the role of optometrists in examining Armed Forces personnel, and employment of optometrists by public hospital eye departments. In 1953, an optometrist was elected to the Wellington Hospital Board, which raised the ire of the members, but of course they had to live with it.

In April 1959 there was a special general meeting at Palmerston North Hospital on the occasion of the visit of radiotherapist Dr Ian Lederman under the auspices of the hospital’s post-graduate committee, the Otolaryngological Society of New Zealand, the New Zealand Society of Radiotherapists, the British Empire Cancer Campaign Society and the OSNZ.

The fourteenth conference of the society was held in Christchurch in 1960. At that meeting the importation of micro-corneal contact lenses was first mentioned. It was moved at the 1960 meeting that the OSNZ recognise the New Zealand Contact Lens Society. At this time Hirst Laboratories was already manufacturing contact lenses in New Zealand. Also at the meeting, Dr K. Jim Talbot made a plea for cooperation with opticians. He said opticians were here to stay and suggested they be treated as colleagues. Dr Ring said the School of Optometry was also here to stay and its sphere must be defined.

The sixteenth conference of the OSNZ in 1962 was the first conjoint meeting with the Ophthalmological Society of Australia. Dr Jim Gray was inducted as the new president by Dr Cecil Pittar. It was held at Surfers Paradise in Queensland.
The second conjoint meeting of the Australian and New Zealand societies was held in Rotorua in October 1966. It was opened by the Governor-General Sir Bernard Fergusson. The meeting included the inaugural meeting of the New Zealand Society for the Prevention of Blindness. Dr Calvin Ring was the first president of that society, and Dr Lindo Ferguson its first secretary. It was originally intended to be associated with the Royal New Zealand Foundation of the Blind and then after two years to become a separate society. However, the foundation was determined that any preventative society should be a sub-committee within their Act. Finally, a separate legally-incorporated New Zealand Society for the Prevention of Blindness was formed.

In 1964, the issue arose of the development of the School of Optometry at the University of Auckland. Talbot had been asked to lecture to optometry students and asked for guidance from the society about what to do. A softening of the approach to optometrists was evident in the following motion, which was passed:

*That the Society approves the following:*

1. *That it supports the policy that ophthalmologists should take part in the training of optometrists.*

2. *That it believes the curriculum of the School of Optometry which was formed without prior consultation with this Society to be unsatisfactory.*

3. *That in the present circumstances the Society cannot approve of members delivering lectures to the School of Optometry until the Society is given a clear definition of the scope of optometry and until the Ophthalmological Society of New Zealand has a voice in the direction of the affairs of the School.*

4. *That for the above purpose and to provide a positive policy for cooperation between ophthalmologists and optometrists particularly with regard to training, the Society set up a sub-committee which has the power to wait on the Minister of Health if considered necessary.*

The feeling of the Ophthalmological Society members at the time is encapsulated in this sentence from the minutes of the 1965 annual meeting:
The Ophthalmological Society accepted this course of one year medical intermediate, three years at the psychology department, and one year of optometrics, on the basis that it probably would discourage applicants to the course, and this was proving to be so, as there were very few opticians in training.

The same meeting continued with considerable discussion and opinions but in the final analysis it was decided that Talbot should be advised not to lecture in the School of Optometry until the Ophthalmological Society was fully informed of the contents of the course.

At the 1967 AGM, Talbot said, ‘The school was getting few candidates. The students feel they might as well go in to something worthwhile.’ However, Talbot also made a plea for cooperation with opticians. He suggested that opticians were here to stay, and they should be treated as colleagues. Opinions were still clearly divided, but at least some thawing was beginning.

As late as 1989 it was recorded that Dr John Murchland, censor-in-chief of the RACO, never supported the concept of optometrists being employed in ophthalmic practices.

Thankfully, relations with optometry greatly improved in the 1990s, more so in New Zealand than Australia. As an example, in 1994 optometrists established the Vision Education Forum, a body funded to educate the public via various media outlets of the value of eye care such as glaucoma checks. The New Zealand Society for the Prevention of Blindness financially contributed to this. In the same year the OSNZ donated $1000 to the New Zealand Association of Optometrists to produce a poster warning about ready-made spectacles, stating that the purchaser would miss out on an eye examination to detect asymptomatic disease.

In 1968 the imminent introduction of the government specialist benefit led to a discussion on the qualifications required to be a specialist and a member of the society. It was decided that a diploma in ophthalmology was not adequate, and that the specialist register should be restricted to those holding a fellowship of one of the royal colleges of surgeons, notably London, Edinburgh or Australasian. However, there were many exceptions made, and of course existing members holding only a diploma were included on the specialist register.

The specialist benefit was introduced in 1969. This initiated discussions on whether ophthalmologists should use the refund system or the schedule system, i.e. whether patients should individually claim their own specialist benefit refund from a government agency, or whether ophthalmologists should apply for the benefit on behalf of the patients and reduce the gross fee by the amount of the benefit. Clearly the refund system was more principled as the
government’s contribution was clear to the patient. Also the refund system was preferred in principle. A few principled ophthalmologists worked the refund system for some years but the majority opted for the simpler but less transparent schedule system.

At the twenty-fourth annual conference in Christchurch in 1970, the handsome President’s Medallion, generously commissioned by the Ferguson family and designed by Cecil Thomas of London, was presented to the society to be used by future presidents. Dr H. Jenner Wales, president, received the medallion from Dr R.H. Lindo Ferguson CBE, Marjorie Macdonald (daughter of Sir Lindo), and Mrs Gerald Ferguson (Sir Lindo’s daughter-in-law, and mother of Dr Lindo Ferguson). It was presented

*The OSNZ President’s Medallion.*

NEW ZEALAND MEDICAL ASSOCIATION.

*The President’s Medallion modified after the amalgamation, showing its front (left) and reverse (right) sides.* DR MIKE O’ROURKE.
in memory of Sir Lindo, first patron of the society. On its reverse side is engraved ‘Sir Henry Lindo Ferguson, CMG, FRCSI, 1858–1948. The first ophthalmologist in Australasia’. When the OSNZ amalgamated with the RACO, the medallion was modified and it continues to be worn by the chair of the New Zealand Branch of the college.

The annual meeting of the Ophthalmological Society in 1972 was held in April during the fourth congress of the Asia-Pacific Academy of Ophthalmology. This was the largest ophthalmological meeting ever held in New Zealand. At the time, Dr George de Lacy Fenwick was the president of the Asian-Pacific Academy of Ophthalmology as well as president of the OSNZ. The opening was a glittering function in the Auckland Town Hall, and the conference itself and the trade exhibit were at the Auckland War Memorial Museum.

Dr Caroline Stenhouse was elected an honorary life member of the society in 1974, and Rowland Wilson of Dunedin was conferred the same honour in 1976. Dr George Hitchcock (1926–2010), pathologist, was nominated an honorary member of the society in 1981 for his teaching of pathology to many registrars, and his interest in ophthalmic pathology. More prestigiously, he had also been elected an honorary fellow of the Royal Australasian College of Surgeons for his teaching and examining in pathology for all surgical sub-specialties.

In 1980 Dr Lindo Ferguson represented the OSNZ at a thanksgiving service in Westminster Abbey to mark the centenary of the Ophthalmological Society of the United Kingdom. The OSNZ sent a formally inscribed message:

*The President and members of the Ophthalmological Society of New Zealand extend their warmest congratulations and best wishes to the Ophthalmological Society of the United Kingdom on the occasion of its centenary. They acknowledge with pleasure and gratitude the close and long standing ties that exist between the two Societies by virtue of formal affiliation, common membership, and shared aims.*

Dr Ferguson’s presence was fitting, as his grandfather Sir Lindo had been the only New Zealand ophthalmologist to be a foundation member of the Ophthalmological Society of the United Kingdom in 1880.

The annual conferences of the OSNZ were always well supported by both the ophthalmologists and their spouses. They were social occasions to look forward to and they were also valuable educationally.

Until the 1980s, registrars were not encouraged to attend OSNZ annual meetings. The social hierarchy of those years would have inhibited seniors from ‘letting their hair down’ in the presence of young trainees, and vice versa.
Socialising was undoubtedly more boisterous in years past. It was around 1992 when registrars first began to feel welcome at the meetings, and their presence has enriched the programme. There is a prize each year for the best presentation by a registrar.

A group photograph of all conference attendees was taken at only one meeting, in Palmerston North in 1990 when Dr David Warnock was president.

Usually there were two invited experts from overseas. Being small meetings, it was easy for members to have the benefit of individual discussions with the overseas speakers.

There were always many papers presented by the members. As Calvin Ring said, the person who learns the most from a presentation is usually the presenter. And as Roy Holmes said, attendees came away from the meetings feeling more in touch with how others were practising.

The annual general meetings of the society were held at the same time as the scientific meetings. Rarely were they political affairs, but the annual general meetings did become more animated in the mid-1990s when discussions began about the amalgamation of the society with the RACO.

After full amalgamation with the college in 1998, New Zealand Branch
meetings have continued to be an important focus for local ophthalmologists, and have always been more structured and better supported than most of the state branch meetings in Australia. The conferences are listed in Appendix 2.

Transactions of the Ophthalmological Society of New Zealand

The Transactions was an annual publication of the presentations of members and visiting speakers at the annual scientific conferences. It continued uninterrupted from 1947 until 1985, when the publication combined with the Australian Journal of Ophthalmology, which was renamed the Australian and New Zealand Journal of Ophthalmology. This was 13 years before the OSNZ was fully merged with the college to form the RANZCO.

Seminal presentations and publications in the early years include the first president’s address on industrial lighting, and the 1948 president’s address by Rowland Wilson, a world authority on conjunctivitis and in particular on trachoma. Dr Cecil Pittar gave pioneering presentations, in 1947 on intracapsular cataract extraction, and in 1949 and 1951 on corneal transplantation. In the 1952 Transactions there was an early group discussion on the use of cortisone by visiting speaker Dr Arthur Lister of London, and Drs Walter Hope-Robertson and Graeme Talbot. Selected later publications are mentioned in Chapter 12.

Dr Howard Coverdale edited the Transactions until 1956 when the editorship was taken over by Dr Rowland Wilson, who continued the task until 1962, when the position was taken over by Professor John Parr. Parr, being a meticulous writer, was also a meticulous editor, occasionally to the annoyance of less meticulous authors. Parr filled the arduous post with considerable distinction and benefit to the standard of the Transactions. Associate Professor Richard Clemett took over in 1981.

After the Transactions ceased in 1985, Clemett continued as joint editor of the Australian and New Zealand Journal of Ophthalmology with Frank Martin AM of Sydney (see page 239).

Annual visiting professors

Another educational activity which continues is the annual visiting professor. The invitee was selected by each of the main centres in turn, and the same centre was responsible for organising the visit. Each visitor spent two or three days in each of the main centres. In some years the northern centre visited has been Hamilton, rather than Auckland.

Starting in 1980 with Professor Creig Hoyt of San Francisco, the earlier visitors were funded by the Royal Australasian College of Surgeons, as a
Second row, left to right: Graham Moore, Ross McKay, Geoffrey Duff, Paul Herrick, Allan Simpson, Mark Elder, unidentified, Roy Holmes, Ian Davies, Randal Elliott,
John McKinnon, unidentified, Peter Wellings, Murray Ashbridge, Rod Suckling, Philip Polkinghorne, Mark Gimblett (at rear).

Seated, left to right: David Sturman, Gillian Clover, Philip Boulton, Richard Clemett, Harold Coop, Peter Hardy-Smith, David Warnock (president), Robert Osher, Graham Barrett, Ivan Goldberg, Dorothy Potter, Muriel Nielsen, Heather Macintosh. On floor, left to right: Michael Mair, Peter Bannister, Ken Adams, Peter Haddad, David Wilson. DR DAVID WARNOCK.
final token of support for ophthalmic education. Medical and surgical supply companies funded some of the more recent visitors.

These visits have been continued because they are educationally valuable. Spending two days with small groups in their own area allows ophthalmologists, registrars and others to have more of a one-to-one exchange with the visitor than is possible at a conference. Also, the visitor usually holds a teaching session specifically for registrars in each centre. A list of the visiting professors is in Appendix 2.

Amalgamation with the Royal Australian College of Ophthalmologists

The most important activities of the OSNZ — education and qualification — were integrated with the RACO in the 1980s, when the Royal Australasian College of Surgeons opted out of ophthalmology. Around 1992 Bruce Hadden initiated discussions on amalgamation of the OSNZ with the RACO. In this he was strongly supported by Dr Ivan Goldberg of Sydney, who was the College’s censor-in-chief.

Associate Professor Ivan Goldberg AM.
ROYAL AUSTRALIAN AND NEW ZEALAND COLLEGE OF OPHTHALMOLOGISTS.

An amalgamation committee was formed in 1994, comprising Professor Ian Favilla of Melbourne, Dr Peter Wellings of Wellington and Hadden. Wellings was chosen partly because initially he was not in favour of amalgamation, thus giving balance to the committee.

The reasons for wanting amalgamation were: firstly, that New Zealand fellows did not have the right to vote or to hold office in the college, despite the college being the education and qualification body for New Zealand ophthalmologists; secondly, being part of a strong trans-Tasman college would be advantageous for New Zealanders and being able to take the college’s fellowship examination would confer on them a world-recognised specialty qualification; and thirdly, it would give New Zealand
ophthalmology more political strength. Key arguments against amalgamation were loss of local control and a rise in subscription fees.

Dr Allan Simpson, honorary secretary-treasurer of the OSNZ at the time, extracted items related to amalgamation from the minutes of the annual general meetings of the OSNZ from 1993 to 1997. They are reproduced in abbreviated form in Appendix 6. In these discussions, the overriding majority of New Zealand ophthalmologists were in favour of amalgamation. A secret ballot in 1996 was 51 in favour and only one against. The substantive issues discussed were the fate of the coat of arms of the OSNZ, which had been obtained through great efforts by Dr Dorothy Potter only three years previously, the wish for a New Zealand emblem to be included in the new coat of arms of the combined college, and the name of the combined college.

The Council of the RACO accepted full amalgamation, which took place on July 1 1997, when Dr Philip Boulton was OSNZ president. The New Zealand Branch was entitled to three seats on the college council being in proportion with the number of members of the other branches in Australia.

There was further discussion about whether the new name should be the Royal Australasian College of Ophthalmologists or the Royal Australian and New Zealand College of Ophthalmologists. The college council initially favoured ‘Australasian’, but all the New Zealanders favoured ‘Australian and New Zealand’, and that was the name the council finally agreed upon.

The last hurdle was the question as to whether the royal appellation could be retained after the change of name. Advice was that royal patronage would need to be applied for. New Zealand’s representative of Her Majesty’s College of Arms, London, Philip O’Shea, advised that should the OSNZ cease to exist as a distinct legal entity, its armorial bearings would become dormant. It was estimated that designing and applying for a new coat of arms might cost around $20,000.

The decision was made that the existing coat of arms of the RACO would be retained, but ‘put in the bottom drawer’. A new coat of arms, incorporating an emblem of New Zealand, would be designed and used, although it would not be the ‘official’ coat of arms. Thus Dr Harold Coop of Auckland, ophthalmologist and renowned artist, was invited to design a new coat of arms. His design received trans-Tasman acclamation, cost the college nothing, and now appears on all college publications. The ‘official’ coat of arms has not seen the light of day since!

The last scientific conference of the OSNZ was held in Auckland in 1998, and Dr Peter Ring was the last official OSNZ president. His successor, Dr Ken Tarr of Christchurch, was the first chairman of the New Zealand Branch of the RANZCO.
At this time there was a Commerce Commission investigation against the OSNZ and some of its members (see below). Legal advice was taken that the OSNZ should not be wound up, but should remain intact with its assets frozen. Thus every New Zealand Branch chairman from 1999 until the final winding up in 2004 was also president of the OSNZ. In that sense only, Kevin Taylor was the last OSNZ president, during his term as chairman of the New Zealand Branch of the RANZCO in 2004.

The Commerce Commission case
The successful prosecution against the ophthalmologists and the OSNZ starkly shone a light on those factors that separate commercial from professional interests. The events leading to this case occurred in the mid-1990s, a period of upheaval in the public hospital system. Hospitals were being set up as competitive business models and each was competing for additional funds. During the same period, medical practice was bearing the brunt of adverse publicity. In 1988 there had been the inquiry into the ‘Unfortunate Experiment’ at National Women’s Hospital in Auckland, during which doctors were accused of a lack of morality. This allegation was to be repeated during the Gisborne Cervical Screening Inquiry over a decade later. In 1996 there was the high-profile trial on three counts of manslaughter of a Christchurch cardiothoracic surgeon. Those manslaughter prosecutions reinforced the need for clinical input when appointing doctors, particularly to senior positions, and the difficulties in transitioning from one country to another, even when the mother tongue is the same. Relationships between clinicians and managers were challenged as a result of differing perceptions about what should be prioritised in the new competitive model. The supposed earnings of ophthalmologists and other doctors were being publicly criticised and the cost of cataract operations was being compared with the cost of operations done by the Fred Hollows Foundation in developing countries. New Zealand specialists were accused of making the entry of overseas graduates overly difficult in order to keep down numbers, to protect what were portrayed as their lucrative private practices. The case was brought at a time when public sympathy for surgeons, and eye surgeons in particular, was at an all-time low. But it was also a time when doctors keenly felt a responsibility to speak up to avoid injury to patients from both individuals’ failures and organisational shortcomings.

The Commerce Act 1986 had been enacted to promote competition in markets for the long-term benefit of consumers within New Zealand. Section 27 of the Act prohibited the entering into arrangements with the purpose of lessening competition. It was a section that had been used effectively in
addressing issues of anti-competitive behaviour by entities such as oil companies, taxi companies and communication giants, such as Telecom and Clear. Section 30 of the Act\textsuperscript{14} created a legal presumption that certain types of behaviour were anti-competitive. Essentially, if the result of an arrangement was a fixed price then that presumption was triggered. The defendants then had the burden of proving to the contrary, something that was very difficult in law to do.

Such a presumption is clearly appropriate for organisations such as oil companies who have no need to be collaborative in the provision of the services. The situation, however, is very different for health professionals. To provide 24-hour care for patients requires collaboration. Indeed, Right 4(5) of The Health and Disability Commissioner (Code of Health and Disability Services Consumers’ Rights) Regulation 1996 provides that ‘Every consumer has the right to co-operation among providers to ensure quality and continuity of services.’ In addition, the Medical Council was later to issue guidelines which included a requirement that doctors have a responsibility, as advocates for their patients, to seek the provision of appropriate resources for their patients’ care and report any deficiencies to the appropriate authorities.\textsuperscript{15}

At the time, a number of centres in New Zealand had significant waiting lists for surgery, including cataract surgery. Prior to the Southland case being heard, issues with cataract surgery waiting lists had been identified in Auckland. Hospital management and clinicians had entered into what could, from an absolutely purist point of view, be described as collusive and anti-competitive behaviour. A number of clinicians agreed to the public hospital setting the fee to carry out surgery to reduce the public hospital waiting list. Many surgeons carried out the operations during lunch times and weekends to maximise the use of limited hospital resources. There was a high degree of cooperation among all health professionals to carry out the pre-operative assessments and post-operative follow-up and all the surgeons donated all fees to the hospital and the University of Auckland to be re-invested in patient care. Led by Professor Charles McGhee, it was a wonderful example of medical altruism and collaboration occurring to the advantage of patients and the wider community.

The waiting list issue was addressed differently in Invercargill. The problem of the waiting list there was not new. The age of patients facing surgery for cataracts in Invercargill meant that patient group was at the challenging end of the spectrum. It would be expected that the patient group in question would be very different from those able to obtain private surgery at a time early in the onset of the condition. This was acknowledged by an expert called by the Commission when cross examined. The judgment recorded her evidence as ‘[she could] fully understand their [the ophthalmologists’] position and things, when she operated in Queensland, were totally different’.\textsuperscript{16} The CEO of Southland
Health at that time was an Australian, Anthea Green. She had been appointed little more than four months previously, in mid-1996, and left that position well before the case went to court. She succeeded in obtaining government money to fund surgery for about 140 cataract cases on the waiting list in Southland. The total amount per operation was $1270, which included the surgeon’s fee. The resident surgeon had previously performed such cataract surgery for Southland Hospital for a surgeon’s fee of between $900 and $1100, a fee which included administration of the local anaesthetic and performance of the biometry*. Unlike the approach taken in Auckland, clinical involvement was not sought. Anthea Green did not ask the local surgeon, other ophthalmologists or the OSNZ for assistance. Instead, she had discussions with a newly qualified Australian eye surgeon whom she knew. That surgeon initially agreed to do the surgery, but later discussed the contract with colleagues and the RACO, and decided not to go ahead.

By that time Anthea Green had already made a very prominent press statement that ‘an Australian’ was coming to perform the surgery. Now that that had fallen through, it may well have put her in a position where she needed to pursue a similar arrangement to allow her to save face. Another Australian was approached. He was a high-volume cataract surgeon in Sydney. With what appeared to be very little planning and very short notice, it was arranged that this surgeon would carry out 150 operations for a surgical fee of $600 per operation. There was also to be an additional $300 anaesthetist fee per operation plus a fee for the biometry, to have been performed by a locum optometrist who had never seen a biometer, giving a total fee well in excess of $900 per case. It would be expected that further additional costs would have included travel and accommodation. Before finalising this contract, the local surgeon was asked to give a price and he offered to do the procedures with a colleague for a lower surgical fee than the Australian price. Doubt was expressed that he had the time in his schedule to carry them out, despite his giving a detailed timetable of how he could. The Australian was contracted to do the surgery. It was understood he was going to stay in Invercargill for only two or three weeks, just long enough, in his opinion, to do the operations.

In addition to the lack of consultation with clinicians, it should be noted that at no time did Southland Health invite tenders from New Zealand ophthalmologists, either in the public press or through the OSNZ. This fact was confirmed in a letter by the president of the society to Anthea Green. Dr Jim Macdiarmid, a highly regarded surgeon in Hamilton conversant with the New

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* Biometry in this context means measuring the curvature of the cornea and the length of the eye by ultrasound or laser methods, as part of the calculation to determine the correct power of the artificial intra-ocular lens to be inserted into the eye at cataract surgery.
Zealand public health system who was on the verge of retiring, said years later that he would have leapt at the chance of a few weeks operating in Invercargill, but, like almost every other New Zealand ophthalmologist, he was completely unaware of the opportunity. As a qualified specialist he would not have required supervision and would have been familiar with the New Zealand system. It appeared to be a closed, non-competitive contract, a point not relevant to the prosecution subsequently brought.

Shortly before Christmas of 1996, awareness of the proposal spread through the profession. The response of the society and various ophthalmologists led to what was found to be an anti-competitive arrangement. The Commerce Commission believed that there was collusion between the OSNZ and various specialists consulted at the time either in the role as officers of the society or clinicians approached to provide supervision. Only the fourth defendant, who, at the time, was the sole ophthalmologist in Invercargill, serving the whole of Southland, had the possibility of any direct financial gain or loss from what happened with the arrangement. One defendant was the president of the OSNZ at the time, but the case was finally heard much later, in 2003. He did not even practise on the same island. Other defendants were either full-time public hospital specialists in Christchurch with no pecuniary interests whatsoever, as well as being in a distant city, or busy surgeons in both the public and private sectors in Christchurch, who likewise were not concerned with fiscal issues in Invercargill.

At what is always a pressured time of the year, the president of the society contacted the president of the RACO, the president of the Royal Australasian College of Surgeons, and the chairman of the New Zealand Specialist Committee. All agreed that there were possible quality issues of concern for reasons including the large volume of surgery being done by a visiting surgeon in a relatively small and isolated centre.

It should also be noted that Australian ophthalmologists are not registered medical specialists in New Zealand. Therefore the Medical Council of New Zealand requires that a registered New Zealand specialist should provide ‘oversight’ to ensure appropriate standards. The judgment in this case refers the oversight issue as being largely a formality; however, two cases brought against doctors by the director of proceedings for the Health and Disability Commissioner highlight that providing supervision is not without professional risk.17

For various stated reasons, including other commitments, the Christchurch and Dunedin ophthalmologists declined to provide oversight. The secretary of the Medical Council of New Zealand said that oversight could be provided by a general surgeon in Invercargill. Many specialists thought this to be a mockery
of the responsibility because ophthalmology is unknown territory to a general surgeon as is general surgery to an ophthalmologist. In any case, it transpired that the general surgeon had not agreed to provide oversight and was reported to be upset that his name had been put forward by Anthea Green without his knowledge.

The inability to obtain oversight was given as the reason for the overseas surgeon cancelling his proposed visit, which he did on December 23 1996. This resulted in a press release by Southern Health which generated national interest. Eventually, on December 30 1996, the Southland incumbent tendered for the procedures and was engaged to carry out half of the operations at a surgical fee of $675 per case. The balance of the procedures was done by specialists from Christchurch.

The Commerce Commission alleged that the above-mentioned defendants entered into an arrangement to keep the Australian surgeon from being able to carry out the arrangement, with the intention of substantially reducing competition. A prosecution was brought.

The court found that:
1. there was a consensus among the defendants giving rise to an expectation that some proscribed inaction would take place;
2. the OSNZ was liable due to the authorised actions of its officers;
3. the anti-competitive behaviour caused difficulties in obtaining registration due to the practitioner not being able to get supervision and uncertainty about collegial cooperation and emergency care;
4. the intention and good motives were irrelevant because of the legal presumption that applied; and
5. the conduct reduced competition in the marketplace.

The president of the Medical Council of New Zealand had stated in March 1997 that the visiting surgeon required oversight by a professional colleague and that the Medical Council was satisfied with the arrangements proposed. Although that may be true, the fact remains that the New Zealand ophthalmologists understood that oversight was not a perfunctory duty, even if the visiting surgeon was an expert, and that they could be responsible for any problems that arose. Contrary to what many non-ophthalmologists believe, both minor and vision-threatening problems can arise from cataract surgery, regardless of the skill of the surgeon.

A weakness of the ophthalmologists' defence was that the judge considered that the defendants were expressing concerns about safety in terms of inadequate post-operative follow-up arrangements without knowing precisely what the visiting surgeons' post-operative arrangements were to have been. The judge
formed the view that the arrangements were satisfactory. The judge also said that he did not accept that a surgeon of that doctor’s reputation and experience would have proceeded with any surgery if possible risk existed, ignoring the event leading to the prosecution of the cardiothoracic surgeon for manslaughter. However, like all surgeons, the visiting surgeon experienced his share of complications. There was a view that the evidence of Dr Landers from Adelaide, an expert witness called by the Commerce Commission, very much underestimated the chance of complications from cataract surgery and his evidence was not backed up with statistics. That contrasted with the expert witness for the defendants, Professor Charles McGhee of Auckland, whose evidence was based on the complications of cataract surgery documented in overseas peer-reviewed studies, as well as figures from the public health service in New Zealand.

The anaesthesia for surgery was to have been peribulbar injection,* given by locally employed anaesthetists and a general practitioner, none of whom were familiar with the procedure. It is understood that they had simply been sent a journal article about how to perform it. The judge appears to have preferred the evidence of Dr Sherriff, director of anaesthesia at Southland District Health Board, who considered that the arrangements for administering local anaesthetic injections were sound, over the highly expert evidence of senior anaesthetist Dr Phil Guise from Auckland, who had extensively studied and written about anaesthesia for eye surgery and its risks. The judge stated that he preferred the evidence of Dr Sherriff and Dr Landers over the evidence of Dr Guise and Professor McGhee, despite the latter two being most definitely acknowledged international experts in the field of local anaesthesia and cataract surgery respectively. The problem for the ophthalmologists in defending this case was that before they reached a view about whether or not to provide supervision they discussed the risks and reached a consensus view. That consensus resulted in a finding of an arrangement being entered into. Had the specialists acted in an individualistic way, making decisions without that discussion, then it is unlikely the prosecution would have succeeded.

To gather evidence about the ‘arrangement’ as part of the investigation carried out by the Commerce Commission, orders were made, resulting in disclosure of all of the personal and business telephone records of the defendants. This was an invasive process. When finding against the defendants, the judge placed significant reliance on the many letters and telephone calls, and the meeting of the Christchurch Hospital ophthalmologists on December 12 1996. These communications were viewed as part of an understanding

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* Peribulbar anaesthesia is the injection of local anaesthetic into the tissues surrounding the eyeball using a fine needle. One significant complication is perforation of the eye itself, which is vision threatening.
or arrangement to oppose the visiting surgeon operating in Invercargill. The judge also mentioned that the Christchurch ophthalmologists gave ‘unanimous support for the Southland specialist’s “predicament”’. There was an issue at the hearing as to whether the predicament was the patients’ or the local surgeon’s personal predicament. It was argued that the local surgeon would have been faced with post-operative problems in patients who had had cataract surgery by the visiting Australian ophthalmologist who had long since left. Most specialists who subscribe to the view that it is more ethical and very much in the patients’ best interests if the surgeon who does the operations deals with the post-operative problems unless circumstances make that impossible. As previously mentioned, there is a view among specialists that, to be optimal, providing oversight to a visiting overseas specialist who is not registered to practise in New Zealand should not be undertaken from a distance, and if it is, it makes a mockery of the New Zealand Medical Council’s requirement and also puts the overseeing surgeon in a highly risky legal position should things go wrong. In relation to the visiting surgeon, the judge said ‘It is far-fetched, on the facts as they relate to [the visiting surgeon], for the suggestion to be made that liability and negligence, professional misconduct, or exemplary damages could remotely arise from [the resident surgeon] signing an oversight provision for the surgeon in these circumstances’. The basis for him having this view is not very clear from the judgment. It is not inconceivable for a doctor in good standing in his own community to conduct himself differently in a new and foreign environment. It is a common problem when considering surgical services that lay people will emphasise quantity, timing, and cost, and will take scant regard of the quality of the surgery and post-operative care. Surgeons on the other hand often put less importance on quantity and costs and much more emphasis on the quality of the surgery itself and the surgical outcome. This however was not relevant to the court, the test being objective not subjective. The finding was made against the defendants, despite there being at least a reasonable, if not strong basis, for the surgeons being concerned about the ability of the local anaesthetist to administer the local anaesthetics, and the lack of arrangements for post-operative care. It should however be acknowledged that the experts disagreed. The judge preferred the anecdotal evidence of Dr Landers that he did not get complications with cataract surgery, over that of Professor Charles McGhee who presented world statistics and New Zealand statistics of the complications in cataract surgery. It is widely appreciated that the only surgeons who say that they do not get complications are those who conveniently forget, or who have done very little surgery.

This was the first time a Commerce Commission case had been brought against health professionals. The doctors reacted and responded to an
arrangement that in their view put patients at risk, by declining to be directly involved in the arrangement, having no obligation to be involved. Unlike large corporations, they did not think about commercial risk or issues of competition when considering the situation. They were caught by legal presumption and informal reactionary communications prepared with a focus on patient rather than competition issues. Had the court been very critical of the defendants then all could have received the significant fines available under the Act. Indeed, in respect of one of the defendants the court said this:

Although possibly acting as Vice-President of the Society, [the third defendant] fell within s27 only because he was a party, and subscribed to the agreement or arrangement (along with other doctors) at the Christchurch doctors’ meeting. His letter was to his President. [The sixth defendant] falls into the same category. His later actions in relation to resisting the provisions of post-operative care were understandable, based upon misunderstanding of the true position, and did not derive from the prohibited arrangement. He acted in good faith and is only liable to the declaration because, when the facts are viewed objectively, he was a party to the arrangement reached at the Christchurch meeting. But he is not deserving of any pecuniary penalty.18

While an appeal against the decision was considered, one of the defendants put it meaningfully when he said:

We had spent seven years of our lives worrying about this case and being troubled by it. It seemed totally inappropriate to pursue it any further. We had no fine, our names were besmirched to some degree in that we were found guilty, but [two other defendants] and I were not going to receive any penalty as a consequence. So we dropped it . . . we were advised by our legal counsel to walk away from it. But it leaves a bad feeling. I think that life is too short, given a great deal of energy had been expended which we could have used in other directions. It was time to call a stop to the nonsense. And it was at a time when public opinion was somewhat against ophthalmologists. It was the time when people said ophthalmologists were charging too much for cataract surgery. Why can’t they do it for $25 like Fred Hollows? It was a bad time to have a case against you. And I think very few people took account of the environment within which we found ourselves. It was the
time of the competitive environment within the public hospital system. We were running a competitive health model at that stage even in public, and it is curious that the administration who directed us to liaise with Invercargill was itself never questioned nor brought to account.

The author believes that this case was lost before it was heard. Before the case commenced the Commerce Commission argued in the High Court for a change in the Statement of Claim. This was successfully altered for the case to include New Zealand as the market not just Southland and altered the terms of the case from routine cataract surgery, to cataract surgery and routine ophthalmic procedures. The OSNZ took this result to the Court of Appeal and won, with costs awarded against the Commerce Commission. The Commerce Commission was then left with two options — to proceed with the hearing under the original terms, which it did, or to take the case further to the Privy Council.

For some it appeared to be a political beat-up against the professions. The Commerce Commission, in the author's view, is a political body which wanted to exhibit its power to control the professions as well as the commercial world. The medical profession was the one chosen to give a high profile, and ophthalmologists, having in the recent past been publicly criticised for their supposedly expensive cataract surgery and excessive incomes, had little public sympathy.

The unfortunate judgment resulted in the OSNZ, and its office holders as well as the other defendants all being found guilty of acting to reduce competition. Perhaps the saddest aspect is that all the five defendant ophthalmologists supported and worked in the public hospital system. Indeed, two of the defendants were full-time public hospital specialists with no private practice at all! Their roles were to care for public hospital patients, and to teach and carry out research.

In the judgment, the legal principles were defended by comparisons with previous cases, all from the commercial sphere. This again shows, in the author's view, a lack of appreciation of the greater importance of the duty of care in the medical profession, as compared to the commercial world.

Seven years after the beginning, a penalty hearing was held in the High Court in Wellington in May 2004, during the Annual Scientific Meeting of the New Zealand Branch in Napier, with Kevin Taylor as chairman, and also president of the OSNZ, which was soon to be dissolved. He was obliged to leave the meeting to attend the hearing. Office holders of the OSNZ continued to be represented by barrister Brendon Brown QC and Gaeine Phipps, instructed by the Medical Protection Society. During the hearing the judge asked the value of the assets of the OSNZ, and was advised the assets were $95,448.89. The judge
awarded a fine of $96,000 which included costs to the Commerce Commission. This rubbed salt into the wound as the OSNZ had nothing left to pay for the costs incurred by its own defence counsel. Two defendants were individually fined lesser amounts. The other defendants received no monetary penalty. The outcome leaves one to contemplate the public reaction at that time if the surgery by the visiting Australian had gone ahead and had been followed by a series of complications. New Zealand's eye surgeons and their society would have been severely criticised for allowing it to take place without speaking out about the pitfalls of itinerant surgery, pitfalls which may be acceptable in developing nations where there are no alternatives, but not acceptable by New Zealanders.

Everyone assumed the affair was finished. Unbelievably, two years after payment of the penalty and dissolution of the OSNZ, an affidavit arrived on the desk of the New Zealand Branch of RANZCO chairman, Kevin Taylor, demanding the OSNZ president's chain of office be handed over to the Commerce Commission as part of the penalty. However, it had some while before been donated to the New Zealand Branch of the RANZCO, and held in the museum of the college's headquarters in Sydney. The chairman at the time had to ensure and document that the real reason for it being donated was an honest and sincere desire that its history be preserved. Any less honourable motive would have risked the chain remaining within the Commerce Commission's reach, with a melted down metal value of only around $3000, but with immeasurable historic value.

So ended an unfortunate and undeserved episode at the end of the life of the OSNZ.

Since its founding in 1946, the role of the OSNZ rapidly evolved to promote the standard of eye care in New Zealand by arranging scientific meetings, visits of overseas experts, encouraging research, and upholding the ethics of medical care. The society's functions in these areas contributed very much to the high standard of eye surgery in New Zealand. It was not a political body, and the only times it was involved with outside agencies was when asked for its advice on ophthalmic matters, such as prevention of eye injuries and new therapeutic agents. All its members were ophthalmic surgeons.

Good medical care demands a standard of ethical practice, the importance of which is not well understood by the business world and bodies involved in controlling it. Conversely, many members of the Ophthalmological Society were naive in regard to the modus operandi of the business and legal worlds. Being accused by the Commerce Commission of illegal collusion and being taken to court was personally very traumatic for the ophthalmologists involved, and for their families.
THE NEW ZEALAND BRANCH OF THE ROYAL AUSTRALIAN AND NEW ZEALAND COLLEGE OF OPHTHALMOLOGISTS

The Royal Australian College of Ophthalmologists changed its name to the Royal Australian and New Zealand College of Ophthalmologists in 2000, and the first annual scientific congress of the newly named college was held in 2001 in Adelaide.

The last annual general meeting of the OSNZ was held at Napier on May 22, 2004. At this meeting the society agreed to pay the Commerce Commission’s $96,000 fine to the consolidated government account. Legal costs incurred were generously met by the Medical Protection Society, which was not a legal obligation as the OSNZ itself was not a member of the society, although the majority of its members were. The OSNZ was wound up and its name removed from the list of registered societies. Its bank accounts were closed with the residual sum of 64 cents.

Establishment of the New Zealand Branch of the RANZCO was not simple. The branch had to be registered with the New Zealand Companies Office as part of an overseas company operating in New Zealand, and the college was required to send its annual financial returns to the New Zealand Companies Office. As mentioned above, there were issues with the new coat of arms. With the college changing its name to the RANZCO, there was some correspondence necessary before confirmation that the royal appellation could be retained.

At around the same time, the college decided that its annual subscription
would be raised to include registration at its annual scientific congress. This generated angst from the New Zealand Branch members to the extent that a poll was undertaken which resulted in 86 per cent of the members who responded being against combining the congress registration with the annual college subscription. However, only half the members responded, and chairman Kevin Taylor astutely recalled that back in 2001 all the New Zealand Branch members were asked for their comment on the proposed move, and very few responded.

In all these negotiations the college’s CEO Bob Guest was most supportive.

Mr Bob Guest, CEO (1999–2009), RANZCO, ROYAL AUSTRALIAN AND NEW ZEALAND COLLEGE OF OPHTHALMOLOGISTS.

Just months after taking office as the New Zealand Branch’s first chairman in 1999, Ken Tarr was confronted with a virulent and public political attack. There had been articles in the daily newspapers and in Consumer magazine criticising the cost of cataract surgery in New Zealand. A television programme called Assignment was also critical of New Zealand ophthalmologists overcharging, depicting them as fat cats, and questioning why surgery could not be done as cheaply as it was by the Fred Hollows Foundation. Eye surgeons were being blamed also for deliberately maintaining long waiting lists in the public hospitals in order to enhance their private practices, and of deliberately blocking the entry of overseas-trained ophthalmologists.

The criticisms were so baseless and overt that the New Zealand Branch, under Tarr’s chairmanship, took the unprecedented step of placing an advertisement in the daily press in the four main centres refuting the misinformation and explaining the realities. In particular, the advertisement stated that eye surgeons had no control over public hospital waiting lists and that in some centres they had offered to do more public surgery but had been refused by hospital managers because of limited funds; and that New Zealand was not short of eye surgeons and the limit on the number of operations was caused by a lack of funds rather than a lack of surgeons. It explained that
Cataract surgery was good value and that the cost was less than in Australia. There was an explanation of the high standard and complexity of the procedure which refuted the misinformation in Consumer magazine, which stated — totally inaccurately — that there was no difference between cataract surgery as done in New Zealand and in developing countries.

The issue simmered on for many months. Fortunately, it was temporarily put to rest in 2002 by some good publicity from Auckland. Professor Charles McGhee successfully convinced the Auckland Hospital managers that more funding was required. He then organised extra cataract operations, including on Saturday mornings, which significantly reduced waiting lists (see page 181).

Nevertheless, the availability and cost of cataract surgery is an ongoing topic for public criticism, fuelled mainly by invalid comparisons with the cost of cataract surgery as done in developing countries. Unfortunately, a few ophthalmologists themselves stoke the criticism by trivialising the operation, saying how quick and simple it is, when in fact it is a substantial intra-ocular procedure, with vision-threatening complications possible, but fortunately nowadays very uncommon.

Also debated in the early 2000s was the ongoing issue of optometrical prescribing and shared care with optometrists, especially glaucoma care. Predictably, the majority were initially against optometrical prescribing of ophthalmic drugs and of any sort of shared patient management of either glaucoma patients or post-operative patients.

In hindsight such opposition was doomed to failure. A Certificate in Therapeutics for optometrists was established at the University of Auckland which could be taken by existing optometrists. Optometrists who graduated from the university after 2004 were automatically eligible for prescribing rights. Sharing the monitoring of glaucoma patients has since become commonplace, and to a limited extent so also has post-operative care, especially for patients living at a distance from the operating surgeon. This applies particularly to refractive surgery, which is practised in only four centres in the North Island, and in only Christchurch in the South.

During 2001 a record number of new ophthalmologists joined the New Zealand Branch. They included Dean Corbett, Helen Danesh-Meyer, Mark Donaldson, Stephen Guest, Richard Holmes, Malcolm McKellar, Stephen Ng and Mylan Van Newkirk. Also that year, Roy Holmes and Jim Macdiarmid were elected honorary life members of the New Zealand Branch. In 2002 Hylton Le Grice was elected an honorary life member.

No branches of the college had scientific meetings in 2002, because of the large International Congress in Ophthalmology being held in Sydney that
April. During the international meeting, New Zealand Branch chairman Philip Polkinghorne organised a brief annual general meeting of the branch at the college’s head office in Sydney. At that meeting Kevin Taylor was elected the next chairman and was to be the branch’s first two-year chairman.*

At the college’s annual scientific congress in Canberra in October 2002, Bruce Hadden was the first New Zealander to be elected college president, and the annual scientific congress was held in Auckland in 2003. Professor Charles McGhee was the congress chairman. McGhee was also chairman of the ongoing conference scientific programme committee, a post he held for six years. This standing committee recommends and invites visiting speakers and organises the scientific programme every year.

* At the sixth annual general meeting of the New Zealand branch of the college in May 2003 at the Grand Chateau, Tongariro National Park, a motion was passed that the chairman of the branch should hold office for one or two years instead of only one year. However, the second year was not automatic and the incumbent chairman was required to be nominated at the AGM. The reason for this change was to provide improved continuity, and followed a similar move by the college itself with its president.
In 2006, under Jim Stewart’s chairmanship, there was growing awareness that the branch’s views were not being heard in Wellington by the Ministry of Health and other government agencies, in contrast to the well-organised and effective New Zealand Association of Optometrists. As a result, arrangements were made with the New Zealand Medical Association to provide the branch with space within the association’s Wellington office, together with secretarial services, and access to all the contacts and resources of the association. This partnership has been beneficial, and has helped facilitate the branch’s involvement in the political and departmental evolution of government policy in various eye-health areas. The branch’s representation was greatly strengthened in 2010 when Cameron McIvor, recently retired CEO of the New Zealand Medical Association, was appointed by the college to oversee its affairs in New Zealand.

New Zealand ophthalmology and ophthalmologists have thrived since amalgamation. Fears of loss of independence quickly vanished. The increased subscription has been accepted, partly offset by including the registration fee...
to the annual scientific meeting of the college. New Zealanders feel included, largely because they are more than pulling their weight in college affairs, with representatives on the college boards of examiners, and on various college committees. McGhee of Auckland has contributed hugely, as chairman of the annual scientific program committee, and as editor-in-chief of the college’s journal, *Clinical and Experimental Ophthalmology*. The quality, readership and impact factor* of the journal have all risen under his editorship. The college president, censor-in-chief, chief executive and director of education have all made a point of attending the annual New Zealand Branch meetings. It has been a successful trans-Tasman marriage.

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*Impact factor is the average number of times each paper in a scientific journal is referred to or quoted by another author, over the two preceding years. It is used as a measure of the relative importance of the journal.*
The beginnings

Being a British colony in the nineteenth century, New Zealand’s early ophthalmologists came fully trained from there. Sir Henry Lindo Ferguson was trained in Dublin, and his remarkable contributions to ophthalmology and medicine in general in both Australia and New Zealand have already been detailed (see Chapter 2). Ring stated that the first ophthalmic clinical teaching in Australasia was by Ferguson to four medical students in 1884. One of the four was Louis Barnett, later Sir Louis, who became professor of surgery at the Otago Medical School and a founder of the Royal Australasian College of Surgeons.

For decades, New Zealand medical graduates wishing to specialise in ophthalmology worked for one or two years as a house surgeon in a New Zealand hospital, after which they travelled abroad to train in ophthalmology, invariably in the United Kingdom. There, the premier destination was Moorfields Eye Hospital in London, although many received sound training at other British centres.

From the time of World War Two, some of those interested in ophthalmology spent one or two years as an ophthalmology registrar in New Zealand before travelling overseas. Early eye registrars were Dr Calvin Ring in Auckland in 1939–40, before he served in World War Two in Egypt and Italy, then undertook post-graduate ophthalmology training at Moorfields, and Dr Gair Macdonald in Dunedin in 1945, before post-graduate training in Edinburgh and Bristol. A few, especially those aiming for provincial centres, trained in Australia, usually
in Melbourne, where there had been a Diploma in Ophthalmology course since 1930. The last diploma awarded by the University of Melbourne was in 1979, after which the qualification was eclipsed by the more prestigious fellowship examination in ophthalmology of the Royal Australasian College of Surgeons, and subsequently of the RANZCO.

Dr Rowland Wilson was appointed to the first academic post in ophthalmology in New Zealand in 1946, not by the University of Otago, which had New Zealand’s only medical school, but by the Otago Hospital Board. Wilson, a New Zealander trained in Edinburgh, came to Dunedin from Cairo where since 1926 he had been director of the Giza Memorial Ophthalmic Laboratory and senior surgeon at the adjoining Fuad First Eye Hospital. He was the first full-time ophthalmologist in the country: full time in the two senses of eyes without ENT, and no private practice.

The university was never unfriendly but, as with other hospital staff, acknowledged his teaching service with only a token stipend. In fact, the university did not accept primary responsibility for academic ophthalmology until 1977, when John Parr was transferred from hospital to university employment.

Wilson was promoted from senior lecturer to associate professor in 1954, and laid the foundations of academic ophthalmology in New Zealand. He influenced several students to pursue ophthalmology, not least of whom was Professor Barrie Jones, and began the training of registrars, his first being Gair Macdonald.

Early specialist training in New Zealand

As previously noted, Dr Ian Elliott was the first New Zealander to take the final fellowship examination of the Royal Australasian College of Surgeons in ophthalmology after full registrar training in New Zealand. Elliott won the Gordon Taylor Prize, awarded to the top candidate in Australasia for the general primary examination of the Royal Australasian College of Surgeons. He spent three years as an ophthalmology registrar in Dunedin under Professor John Parr, and then a further year as a senior registrar in Auckland when Calvin Ring was at his peak. He passed the final fellowship in ophthalmology in 1971.

Elliott then became the first New Zealander to do a formal post-graduate fellowship in the United States. Parr’s influence helped Elliott win the prestigious Hearst Fellowship to study neuro-ophthalmology under Professor William Hoyt in San Francisco. Elliott then returned to practise in Auckland, firstly as the full-time tutor specialist for two years, and subsequently in both private and hospital practice. He was the first sub-specialist neuro-ophthalmologist in Auckland.

A year later, Dr John McKinnon trained to fellowship level in Dunedin,
and a year after him there was Tom Ellingham in Dunedin and Bruce Hadden in Auckland, both of whom passed the fellowship in 1973.

Courses and teaching
With New Zealanders beginning to train to fellowship level in their own country from the late 1960s, the obligation of teaching arose. At the time, New Zealand’s only full-time academic ophthalmologist was Professor John Parr in Dunedin. In 1982 Parr established the Dunedin annual ophthalmic basic sciences course, which was the most comprehensive and popular course in Australasia for candidates seeking to pass the part one examination of the RANZCO, which by then had replaced the primary examination of the Royal Australasian College of Surgeons. It was a four-week residential course, and each year Australian students outnumbered New Zealanders. With his research interests in the basic sciences, and in particular ocular physiology, Parr was well placed to teach those attempting the part one ophthalmic basic sciences examination.

Gordon Sanderson, an academic optometrist, joined the Dunedin department in 1972, and has contributed tremendously to the teaching of optics ever since. Anatomy was more than adequately catered for by the Otago Medical School Department of Anatomy headed at the time by Professor W.E. (Bill) Adams. Dr Leonard Robinson had a special interest in neuro-anatomy. He was known affectionately as ‘the dancing dendrite’ because of his bouncy enthusiasm, slight build and neuro-anatomy interest. After Parr’s retirement, the Dunedin basic sciences course continued to be organised by Professor Anthony Molteno and Gordon Sanderson.

No such academic facilities existed in Auckland. In 1969 Dr Ron Tingey was the first northerner to pass the recently introduced modified ophthalmic primary examination of the Royal Australasian College of Surgeons, followed by Bruce Hadden in 1970. Tingey already held a diploma in ophthalmology, and had a well-established practice in Tauranga. To his credit, he passed the modified primary examination, and subsequently the final fellowship examination, all while maintaining his private and hospital practices.

The Auckland and Hamilton ophthalmologists, all with busy private practices, very generously organised a small but valued course in basic sciences. It would have taken considerable effort for them to prepare topics which were not directly related to clinical practice, and special mention must be made of Dr Lindo Ferguson, who gave a complete course on optics, and also Drs Harold Coop, Hylton Le Grice and Calvin Ring. Dr Jim Macdiarmid travelled from Hamilton to help teach optics. They all put effort into this voluntary teaching of basic sciences for several years.
Credit must also be given to pathologists who assisted in teaching and examining, usually in their own time. In Dunedin was Dr Alex Dempster, who is well known for his prominent role as an expert witness in the two David Bain* murder trials. In Christchurch, Associate Professor Mark Elder is chairman of examiners in pathology for the RANZCO. In Wellington, Dr Diane Kenwright and Professor Dame Linda Holdaway both contributed. Dame Linda subsequently moved to Dunedin to become dean of the Otago Medical School. In Auckland, Dr George Hitchcock (1922–2010) contributed very generously, not only to ophthalmic pathology, but also to general surgical pathology. His contributions were acknowledged by his being granted not only honorary membership of the OSNZ, but more prestigiously honorary fellowship of the Royal Australasian College of Surgeons, as mentioned in Chapter 9.

Clinical teaching for part two candidates likewise became a new responsibility for practising ophthalmologists in New Zealand. In Auckland, thanks to Dr Calvin Ring, the position of full-time ophthalmic tutor specialist was established in 1971. Dr William (Bill) Taylor was the first to hold this post and he was followed by others who took it up for either one or two years after returning from overseas training. The post was ideally suited for each newly

* David Bain featured in one of New Zealand's most publicised murder trials. He was convicted in 1995 of the murders of his parents and siblings in Dunedin, but was acquitted when retried on the same charges 14 years later.
trained ophthalmologist to transfer his or her recently gleaned sub-specialty expertise to both registrars and senior colleagues.

Over the years, the post has contributed significantly to the continuing high standard of ophthalmic practice in New Zealand. It also gave its incumbents the opportunity to practise their sub-specialties in a hospital setting and to disseminate their new knowledge at the annual scientific meetings of the OSNZ.

In Wellington, Colin Fenton and Peter Wellings did more than their share of clinical teaching, and both were also on the college's board of examiners. Their efforts were boosted by the arrival of Thiers Halliwell in 1974, who meritoriously served Wellington as a full-time hospital specialist until his retirement from that post in 2002.

In Christchurch, early clinical teachers included Drs Roy Holmes and Rod Suckling. Richard Clemett arrived as Christchurch's first full-time academic ophthalmologist in 1972, and became associate professor in 1978. More recently, Ken Tarr has been a sterling teacher in Christchurch (see above), and Mark Elder was appointed to a full-time academic post in 1990, becoming associate professor in 2000. These academic posts were of the University of Otago; the University of Canterbury has not been involved, apart from some research projects.

Part-time visiting ophthalmologists in New Zealand have excelled in their contributions to clinical teaching. In 2006 the college established annual awards for teachers, called the College Award for Excellence in Training. Ten or 11 awards are made each year, from 200 to 300 trainers throughout Australasia, based on nominations by trainees. They are presented by the college president or censor-in-chief at the college's annual conferences. Ken Tarr of Christchurch received the award in both 2006 and 2007, and is one of only two ophthalmologists to have received the award twice, the other being Dr Tim Henderson of Alice Springs. Several other New Zealanders have won the award more recently.

A two-week residential course in Dunedin for part two candidates was started in 1998. This course is overseen by Gordon Sanderson, and is contributed to by ophthalmologists from around the country. To this day it remains very popular and is always full.

Dr Peter Ring, son of Dr Calvin Ring, was the last New Zealander to train in the traditional way of one year as a registrar in New Zealand followed by travel to London to wait in the wings to get ‘on the house’ at Moorfields. Ring returned to the tutor specialist post in Auckland in 1980.

Today, most trainees do four years as a registrar in New Zealand, pass the ophthalmic basic sciences and final fellowship examinations, then seek an overseas post for one to three years to acquire sub-specialty expertise. Fortunately
New Zealand ophthalmologists recognise that our population of just over four million is too small for comprehensive post-graduate sub-specialty training, which has been instrumental in maintaining our high standard of ophthalmic medical and surgical practice. The high regard in which most of our trainees have been held by overseas institutions has kept many doors open for future trainees, nowadays mainly for post-graduate sub-specialty fellowships. Moorfields in London, Wills Eye Hospital in Philadelphia and the Bascom Palmer Eye Institute in Miami are three notable centres at which New Zealanders have trained and taken fellowships, and maintained an entrée for successors.

Examiners and examinations

In the 1950s, it became desirable for ophthalmologists to become fellows of the Royal Australasian College of Surgeons in order to be appointed as consultants at metropolitan New Zealand public hospitals. If one held an overseas fellowship, such as that of the Royal College of Surgeons of England, it was necessary to take only a written paper and an oral examination, and later only an oral examination. The RACS delegated this rather perfunctory examining to New Zealand ophthalmologists, the earliest being Drs Walter Hope-Robertson and Graeme Talbot.

In 1966, the RACS established a modified primary examination for ophthalmology, which was about 25 years before the Royal Colleges in the United Kingdom took the same enlightened step. Instead of trainee ophthalmologists learning the whole of gross anatomy, general physiology and general pathology, anatomy was restricted to the head and neck, with more detail expected on the eye and orbit, and on neuro-anatomy related to vision. General pathology was retained, as was physiology, with the addition of detailed ocular physiology, but without gastro-intestinal and reproductive physiology. In addition, there was a separate examination in ophthalmic optics.

This logical but for those times bold initiative by the RACS was spearheaded by the vice-presidents at the time, Drs B.K. Rank and Alan Lendon, and the RACS censor-in-chief Dr S.F. Reid. Ophthalmological Society of Australia representatives involved were Drs Max Moore, E.V. Waddy Pockley, Hugh Ryan, Ronald Lowe and Kenneth Howsam. Dr Howsam later became the first censor-in-chief of the RACO, and the medal for the top candidate in the final examinations is named in his honour. The first to take the modified primary examination from New Zealand were Drs John McKinnon and, as mentioned above, Dr Ron Tingey.

In the late 1950s, Victorian ophthalmologists James Foster and Geoffrey Harley proposed that the Ophthalmological Society of Australia be superseded
by the Australian College of Ophthalmologists. A strong reason for this move was to give Australians a single qualification in ophthalmology provided by their own college. Also, increasingly, the RACS was not meeting the needs of the increasingly complex and specialised field of ophthalmology.

The Australian College of Ophthalmologists was established in May 1969, and gained its Royal Charter in 1977. From 1980 the RACO took over ophthalmic training and examinations. The modified primary of the RACS became part one of the RACO. The examiners were all fellows of the RACO without necessarily being fellows of the RACS.

The role of the RACS in the examinations was then reduced to having a representative at the final examiners' meeting, who usually was not even an ophthalmologist. He must have felt redundant, as indeed he was!

This joint examination system allowed Australian candidates to obtain the fellowship of both colleges, but New Zealanders were eligible only for the fellowship of the RACS. That meant if the RACS were to completely opt out of ophthalmology examinations, which it later did, New Zealanders would be left without a qualification.

Largely due to Dr Lindo Ferguson and Dr Roy Holmes, successful negotiations in 1981 allowed New Zealanders to take the examinations of the RACO and to be granted the RACO fellowship. They were known as New Zealand Fellows, the difference from their Australian counterparts being that they had no voting rights and were not eligible to hold office in the college. Nevertheless, New Zealanders had an internationally recognised qualification, but they had to wait until 1997 to become equal fellows of the college, when full amalgamation occurred and the college was renamed the Royal Australian and New Zealand College of Ophthalmologists.

The full part two fellowship examination of the RACS was first held in New Zealand for New Zealanders in 1970, on which occasion the examiners were Professor John Parr, Dr Calvin Ring and Dr Reuben Hertzberg of Sydney, and the candidate was Dr Ian Elliott. At the same time, the examination was held twice a year in Australia, so that unlike Australians, New Zealanders had the luxury of sitting in either country.

Successful New Zealand candidates after 1981 had the privilege of being granted the fellowship of both colleges, merely by paying a second subscription. In 2000 the RACS pulled out altogether, so that candidates from both countries have since been eligible for only the fellowship of the RANZCO.

Each year, a New Zealand examiner was invited by the RACS and subsequently the RACO to examine in Australia. Over the years they included Sir Randal Elliott, George de Lacy Fenwick, Lindo Ferguson, Rod Suckling, Jim Macdiarmid, Colin Fenton, Peter Wellings and Bruce Hadden.
Holding an examination in New Zealand for only one or two candidates was both uneconomic for the college and difficult for the examiners to ensure even standards. The last New Zealand fellowship examination expressly for New Zealanders was in 1991 in Hamilton, when the clinical examiners were Macdiarmid, Wellings and Hadden from New Zealand, and Associate Professor Ian Favilla from Melbourne. Since then, examinations have been held twice a year for candidates from both countries, with the examination being held once every two years in New Zealand, meaning that many Australians come to New Zealand to take the examination.

The first full examination in New Zealand for candidates from both countries was held in Auckland in 1993, when the chairman of examiners was Alan Hilton of Brisbane. Subsequently, the Australasian examination was held in Wellington in 1995 and Christchurch in 1997, with Alan Hilton as chairman, and in Auckland in 1999 with Bruce Hadden as chairman. In August 2003 the winter examination was held in Christchurch with Malcolm Capon as chairman,
another New Zealander now domiciled in Sydney.

Similarly, the part one examination was held in New Zealand only for New Zealand candidates. In 1996 Dr Philip Polkinghorne (see page 203) was elected chairman of the part one board of the whole college, and since that time the part one has been held in Auckland in rotation with Sydney and Melbourne.

The last part one examination was held in Melbourne in March 2002. From 2004 the ophthalmic basic sciences were incorporated into the

Members of the part two board of examiners, gathered with successful candidates in the part two examinations in Auckland, 1999.
Front row, left to right: Drs Henry Newland, Peter O’Connor, Graham Wilson, Bruce Hadden, Steven Mackey and Nick Mantell.
Second row, left to right: Drs Kai Goh, Peter Macken, Fred Weschler, Brian Sloan, Penny McKelvie and Michael Rosenbilds.
Third row, left to right: Drs John Harrison, Catherine Green, Rajiv Shah, Anthony Stubbs, Peter Ring, Bill Nardi and Mark Daniell.
Back row, left to right: Drs Stephanie Watson, Son Chau-Vo, Farokh Irani, Celelia Ling and Kristen Wells. ROYAL AUSTRALIAN AND NEW ZEALAND COLLEGE OF OPHTHALMOLOGISTS.
vocational training programme and examined as modules. The examinations in anatomy, physiology and optics were supplemented with modules in genetics, ophthalmic pharmacology, microbiology and epidemiology. In addition, an objective, structured clinical examination called the OBCK (Ophthalmic Basic Competencies and Knowledge) was established to test basic clinical skills.

New Zealanders have contributed more than their share to the college examinations. Several New Zealanders have always been on the part one and part two examination boards, and Philip Polkinghorne and Bruce Hadden have served as the part one and part two board chairmen respectively. In addition, in 2002 Polkinghorne was elected college director of continuing professional development.

Entry into the vocational training scheme

The previous part one examination in anatomy, physiology and optics served as a barrier for entry into ophthalmology. Competition for posts was such that the examination had to be passed before there was any chance of being accepted into the vocational training scheme. Some would take six to 12 months off work to study for the examination. Then, with ophthalmology becoming even more popular, a worse situation arose, in that even those who had passed the examination could not be certain of a post. Some would have spent considerable time and effort to no avail, and at such an advanced stage find the only option was to try another branch of medicine.

Dr Ivan Goldberg (see page 178) of Sydney, who was the college’s censor-in-chief from 1997 to 2001, when he became its president, recognised this injustice. In the face of considerable opposition, he drove through a complete revamp.

Since the end of the part one examination in 2004, candidates have been chosen by a searching interview combined with medical school and house officer records, and other experience. Once accepted, the candidate is then in the college training scheme, and will become an ophthalmologist subject to satisfactorily completing the examinations and clinical training. The basic science modules need to be passed during the first two years in the vocational training programme. If not, the trainee must leave. All the while the trainee is under the wing of the college, with its support and mentoring systems. The scheme aligns the college with other medical specialties, which have discarded a so-called primary examination as an entry requirement to their training programmes. At the same time the vocational training period was extended from four to five years.

Critics of the new scheme say that an interview system is a less rigorous way to select trainees than a pass in the competitive part one examination. Also, during the first two years, while candidates are taking the basic science
modules, their loyalties are divided between studying to pass the modules and conscientiously carrying out their clinical duties.

An issue identified recently is that in Australia the average age of entrants into the vocational training programme is 32.5 years, which everyone agrees is older than desirable. Part of the reason is that many undertake a period of research, sometimes even a PhD degree, in order to improve their chance of being accepted at the interview. Otherwise the new system has been functioning satisfactorily.

Training posts
Vocational training centres are based in Auckland, Wellington, Christchurch and Dunedin. There are six accredited training posts in Auckland, with each registrar doing a one-year rotation through the two posts at Waikato. Rotorua and Whangarei were recently added for short-term rotations. This Northern Regional Training Scheme has been strengthened by the strong academic department at the University of Auckland headed by Professor Charles McGhee.

There are three accredited posts in Wellington, which included a short-lived rotation through Palmerston North until the ophthalmologists there resigned from the public system.

In the Southern Regional Training Scheme there are three trainees in Christchurch and two in Dunedin. The trainees in Christchurch and Dunedin rotate during their training so that each spends one year away from their ‘home’ training scheme.

Inspection of training centres across the two countries began in 1988 when Dr Kenneth Howsam, the college’s first censor-in-chief, visited the four training centres in New Zealand. Inspections were formalised when Dr Frank Taylor of Sydney was appointed the college’s first inspector of training posts in the 1990s. These inspections take place every three years, and are aimed at ensuring each department accredited for vocational training has adequate expertise and facilities.

The present chief inspector is Dr Peter O’Connor of Brisbane, and the senior inspectors are Associate Professor Glen Gole of Brisbane, and Associate Professor Mark Elder and Dr Brian Sloan of New Zealand. In 2004 Keith Small of Wellington took on the new position as New Zealand director of training.

Sub-specialty fellowships
A further milestone in ophthalmic training in New Zealand occurred in 2000, when the first post-graduate clinical sub-specialty fellowship was established in
Auckland by Professor Charles McGhee and oculoplastic surgeons Paul Rosser and Brian Sloan. Since then, vitreo-retinal, glaucoma and corneal fellowships have also been established. There is also a post-graduate glaucoma fellowship available in Dunedin.

Strong academic ophthalmology with ongoing research programmes, and training to post-graduate sub-specialty fellowship level, mark the maturation of ophthalmology in New Zealand.
Chapter 12

OPHTHALMIC SURGERY AND MEDICINE IN NEW ZEALAND

To the credit of New Zealand ophthalmologists from the nineteenth century to the present, ophthalmic practice in New Zealand has kept pace with advances made in the western world, in particular Britain, Europe, and the United States. This is largely because most New Zealand ophthalmologists have completed their post-graduate training overseas and worked under leaders in a sub-specialty, many of whom have later been invited to New Zealand as visiting speakers. These liaisons and friendships have frequently enhanced the value of overseas trips made by New Zealanders to refresher courses and conferences, and have facilitated private visits to observe leading ophthalmologists first hand, especially in Britain and the United States. New Zealanders frequently experience enviable warmth and attention from overseas hosts.

As mentioned earlier, New Zealand’s population is too low to fully train in ophthalmology, let alone in a sub-specialty. Colleagues returning from their training, or returning from conferences, courses and professional visits overseas, have kept New Zealand ophthalmology invigorated. Without this, the specialty in our small country would become incestuous.

In 1884 Karl Koller, a pupil of Sigmund Freud, discovered the local anaesthetic properties of cocaine. This was a breakthrough in ophthalmic anaesthesia, and just a year later it was being used in New Zealand, even by the peripatetic Drs Wilkins, Schwarzbach, Grant and Professor Wallenburg. Prior to cocaine eye drops, ocular anaesthesia was a problem. Chloroform and ether were available, but general anaesthesia was in its infancy.

In that period — indeed until the 1950s — cataract operations were done
using the Graefe knife and extra-capsular extraction. In 1857 von Graefe described three types of glaucoma and the value of iridectomy in narrow angle glaucoma. Strabismus procedures were being done, but usually not on children. This was the gamut of surgery on the eye itself in the late nineteenth century. Glaucoma drainage procedures did not come until 1903 when Herbert described iridencleisis.

In 1887 Knapp reported on a consecutive series of 1000 cataract operations performed with different variations of the extra-capsular technique. The outcomes were described as good in 85.4 per cent, moderate in 8.3 per cent, and poor in 6.3 per cent. Failure occurred because of suppuration (infection), now known as endophthalmitis, in 4.2 per cent.

In 1900, Finlay reported a series of 100 cataract operations. He found that vitreous loss occurred in 24 per cent and iris prolapse in 17 per cent. Prolapse was common because no sutures were used. The surgical instruments were cleaned and boiled in water or in a 2 per cent solution of carbolic acid, but not autoclaved. More significantly, many operations were done in surgeons’ offices, in hotel rooms or in patients’ homes on their kitchen tables. Hospital operating theatres were only beginning to be built at that time.

On the medical side, in the late 1880s atropine was available to dilate the pupil for surgery and for iritis. Pilocarpine and eserine were available for glaucoma. Visual fields using the Bjerrum screen were introduced in the 1880s. Tonometry did not arrive until the Schiotz tonometer in 1905. Phenol was used effectively into the 1960s for corneal dendritic ulcers, now known to be caused by the herpes simplex virus.

New Zealander Howard Coverdale wrote in 1968 on the state of ophthalmic surgery in London in the late 1920s. He reiterated that general anaesthesia was avoided if possible and emphasised that speed in surgery was highly desirable even under local anaesthetic. Patients were kept in bed with both eyes covered for 12 days after cataract surgery, and this was not relaxed until the introduction of sutures fine enough to be used for cataract incisions in the 1950s.

When Coverdale was training in London in the 1920s a Gullstrand slit-lamp was available for microscopic examination of the eye, but was seldom used.

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* Graefe knife cataract extraction preceded the use of sutures. A large incision was made with the Graefe knife, to permit extraction of the nucleus of the lens. Some of the lens cortex was irrigated out, while the rest was left to naturally absorb over the following days or weeks. Because no sutures were available, the eye was very delicate until the wound healed. Patients were often immobilised in bed with their head between sand bags for up to three weeks.

† Tonometry is used to measure the pressure in the eye, and is important in the management of glaucoma.
Uveitis was thought to be caused by some tissue sensitivity and to be associated with syphilis, gonorrhoea, tuberculosis or distant focal infections such as dental infections and prostatitis. Although we now have steroids for controlling uveitis, we are unfortunately little further ahead regarding its underlying causes.

From 1935–37 there was a flurry of excitement regarding surgery for retinal detachment. Walter Hope-Robertson was the first in New Zealand to publish success with surgery based on the principles of Gonin, in particular the importance of sealing the retinal breaks. In 1930 Gonin published a series of 221 retinal detachment operations, with an unprecedented success rate of 53 per cent. Hope-Robertson’s paper in the *New Zealand Medical Journal* in 1935 reported his first successful case, carried out in 1933. The patient was a 19-year-old university student who had myopia of -6 dioptres. He had a large infero-temporal detachment in the left eye. Larsson’s diathermy operation was performed and post-operatively the patient was kept lying on his back as still as possible for four weeks. The pre-operative vision corrected to 6/36, suggesting the detachment had spread just to the fovea. The post-operative vision corrected to 6/5.

Hope-Robertson’s paper described three techniques used to apply Gonin’s surgical principles. Larsson’s procedure involved making a series of diathermy scars on the sclera directly over the detachment. Over the centre of the detachment a trephine opening is made from which the sub-retinal fluid escapes. Guist’s detachment operation involved multiple trephining over the region of the detachment and the application of caustic to trephine openings in the sclera to create inflammation, which would lead to adhesions between the choroid and retina. Safar’s method consisted of applying a diathermy current to the sclera by means of a series of pointed studs, which actually perforated the sclera. The detachment was completely encircled by a series of these studs, through which the sub-retinal fluid could drain.

Hope-Robertson’s second article in 1937 reported on cases he had operated using the techniques of Larsson and Safar. In this article he more clearly described the necessity for searching for a hole or tear in the retina and suggested that if a hole or holes could not be found then the patient should be put to bed for a few days, which would sometimes reveal a hole or tear. He also described his method of using traction sutures to gain access to the more posterior sclera, and of using diathermy in the area of the hole. Hope-Robertson said that with case selection, a 45 to 50 per cent success rate could be expected.

Dr Ian Rutherford of Dunedin complimented Hope-Robertson’s article on the Safar operation and its good results. However, he felt Hope-Robertson underestimated the importance of finding the retinal hole and disagreed with the results being about as good whether or not a retinal hole could be found.

Rutherford made four further astute observations. The first was that he had
always thought of a detachment in terms of the hole and did not attach importance
to its extent except in so far as it may affect the macula. Also, although a field
would be taken, he did not think its interpretation ever influenced the treatment,
although the finding of a retinal hole certainly did. Thirdly, he mentioned that
in one case the hole was a small dis-insertion (retinal dialysis), and that it was
seen by applying external pressure in the region of the ora serrata, bringing it
into better view. Fourthly, he said it was important to find the hole and have it
accurately marked, using this as a centre around which to work, rather than to
subject to trauma almost the whole area beneath the detachment, which seemed
the alternative to not finding and localising a hole. He mentioned the technique
of Weve, which was to begin by localising the hole and putting a guiding puncture
over it before proceeding further. Weve claimed a 90 per cent success rate in his
more recent cases, which he attributed to the care taken in sealing off the tear.

Cecil Pittar reported on two successful cases of detached retina at the
Auckland Clinical Society meeting of September 1936, and two years later
William C. Burns reported on another successful case. Burns preferred the
Safar needle to drain the sub-retinal fluid after applying diathermy as this was
a single point of puncture, which he rightly said caused less haemorrhage than
the trephine. His article included a drawing of the retinal detachment and the
corresponding visual field defect.

In 1968 Suckling and Hay reported on 100 consecutive operated retinal
detachments. Their surgical technique was surface diathermy and scleral
resection. Seventy per cent were reattached after a minimum follow-up of one
year.

The techniques have now been improved by the use of scleral buckles and
cryotherapy from the 1960s, laser from the 1970s and, most recently, vitrectomy
techniques from the 1980s.

However, the principles so clearly enunciated by Rutherford, which
were probably not given their due importance when he wrote them, remain
fundamental to successful reattachment of the retina. He missed only one other
principle: the release of vitreous traction, which is managed by scleral buckling,
vitrectomy, internal tamponade or all three.

Advances in retinal surgery from the late 1960s have enormously reduced
blindness from retinal detachment, and the proliferative retinopathies, especially
that associated with diabetes. Philip Polkinghorne has written many articles
on retinal surgery and in particular on the history of retinal surgery in New
Zealand. His history concentrates on progress from the 1950s, since when the
major developments have occurred, rather than from the 1930s, when surgeons

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* The ora serrata is the peripheral or anterior edge of the retina, near which many retinal
holes are located.
began treating retinal breaks with diathermy and draining sub-retinal fluid, but not relieving vitreous traction with scleral buckling. He rightly credits Dr Hylton Le Grice for introducing binocular indirect ophthalmoscopy in 1967. He has also written an important and original thesis on retinal detachment, which earned a Doctor of Medicine (MD) degree from the University of Auckland.

Bill Taylor of Auckland co-authored a landmark paper in the *British Journal of Ophthalmology* in 1972, which was the first to describe the definite association between a retinal break and pigment cells in the vitreous.\(^{17}\)

Major advances in ophthalmic surgery came in the 1950s, with the introduction of antibiotics, corticosteroids and sutures fine enough to be used in the cornea. Cataract incisions began to be sutured, and corneal transplant surgery became viable. In the 1960s there were swaged needles, and operating microscopes were being introduced.

By the 1970s sutures were always used in cataract surgery, and because of the stronger sutured incision, the hospital stay came down from three weeks on bed rest and the head between sandbags to 10 days, then five days, and finally to overnight in the 1980s. Cataract day-surgery arrived in the 1990s, a little after the United States and a little before it was popular in Britain.

Surgeons active in the 1960s to 1990s were challenged by changing techniques. In the 1960s there was the transition from extra-capsular cataract extraction to intra-capsular extraction.\(^*\) In the 1980s it was back to a more refined extra-capsular technique to allow a posterior chamber intra-ocular lens to be supported by the lens capsule. In the 1990s came the further challenge of mastering phaco-emulsification, which was for many the most difficult skill to acquire. Philip Boulton of Palmerston North was the first in New Zealand to practise this technique (see Chapter 7).

In the 1960s and '70s intra-ocular lenses were being tentatively used by a few surgeons including Grant Johnston of Hamilton,\(^{18}\) and John Croke, David Warnock and John Henderson of Palmerston North. Most were iris or angle-supported intra-ocular lenses after intra-capsular cataract surgery. However it was Calvin Ring who introduced modern extra-capsular cataract surgery

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*In the original extra-capsular cataract operation, the central nucleus of the lens was removed through a moderately large incision of about 140 arc degrees. The surrounding lens cortex was simply irrigated out, usually leaving a lot behind to spontaneously absorb. In intra-capsular surgery, the whole lens is removed, including its capsule, which requires an even larger incision of almost 180 degrees. Modern extra-capsular surgery utilises phaco-emulsification, in which the lens nucleus is emulsified within the eye, which permits a very small incision of around 1.5 millimetres which does not require sutures, and all the lens cortex is thoroughly aspirated out.*
combined with a posterior chamber intra-ocular lens.\textsuperscript{19}

Ring visited Cornelius Binkhorst in Holland, then Norman Jaffe in Miami in 1975. He presented the results of this operation at the OSNZ meeting in 1982 and was criticised widely, most vociferously by Christchurch ophthalmologists Roy Holmes and Rod Suckling. However, Ring’s careful surgery and outstanding results spoke for themselves.

Ring was an early user of the operating microscope from around 1970, and his facility with microsurgery greatly enhanced the quality of his operations. Intra-ocular lenses were not used by Christchurch ophthalmologists until the late 1980s, not long before they would have been criticised for not using them. As mentioned before, the opposition to intra-ocular lenses was largely a result of many ophthalmologists in London in that era observing cataract surgery being done with unsuitable implants, most notably by Peter Choyce at St Thomas’s Hospital, ‘with questionable judgement and even more questionable results’.\textsuperscript{20} Several New Zealand surgeons at that time saw the complications, and indeed themselves removed many intra-ocular lenses because of complications during their training in England. For this and other reasons, the renowned Moorfields Eye Hospital lagged seriously behind other centres of excellence in adopting successful intra-ocular lens surgery.\textsuperscript{21} Ring had the perspicacity to see this, and went to Holland and the United States to learn the evolving art and science of cataract surgery.

New Zealand’s true pioneer of successful corneal transplant surgery was Cecil Pittar. Pittar wrote of his first three cases in the \textit{Transactions of the Ophthalmological Society of New Zealand} in 1949.\textsuperscript{22} One was a case of interstitial keratitis, the second a central vascularised leucoma, and the third scarring and vascularisation of both corneae since infancy. In 1951 he reported three corneal transplants done for keratoconus, two of which resulted in marked visual improvement.\textsuperscript{23}

Dr Hylton Le Grice was an early microsurgeon using the Keeler operating microscope. He trained in London under Dermot Pierse, who was a world pioneer in ophthalmic microsurgery. Le Grice also was an early user of the binocular indirect ophthalmoscope for retinal detachment, which was a major advance for detecting retinal holes and facilitating accurate placement of cryotherapy and scleral buckles at surgery.

Dr Harold Coop returned in 1969 after training at Moorfields with Lorimer Fison and further developed modern retinal surgery in New Zealand. Coop also used the xenon-arc photocoagulator to treat proliferative retinal disease.\textsuperscript{24} He was the first in New Zealand to recognise that diffuse retinal photocoagulation was effective in dissipating neovascularisation, even in areas not directly treated (see Chapter 5). Coop was also the first to inject silicone oil into the vitreous
in treating retinal detachments complicated by retinal traction. Dr Bill Taylor, Coop and others began using the argon laser instead of the xenon-arc for retinal photocoagulation from 1976.

Vitrectomy was introduced by Bruce Hadden in 1976, following his training with Robert Machemer at the Bascom Palmer Eye Institute in Miami. Dr John Bowbyes in Dunedin started vitreous surgery the same year. The operating microscope was upgraded with motorised foot-controlled focusing, zoom and X-Y movement, refinements initially considered necessary only for vitrectomy but which soon became used in all ophthalmic microsurgery. Philip Polkinghorne introduced the more modern, advanced techniques in vitreous surgery from the early 1990s. In the South Island, Jim Borthwick was the only vitreo-retinal sub-specialist for many years, and carried a heavy caseload.

Refractive surgery was first practised in New Zealand by Peter Ring, who introduced radial keratotomy in 1985, shortly followed by Antony Morris and Peter Bannister in Hawke’s Bay. In 1992 Morris, Ring and Hadden imported New Zealand’s first excimer laser, amid considerable opprobrium and publicity, as mentioned previously (see Chapter 5).

Glaucoma procedures were usually iridencleisis, cyclodialysis, corneoscleral trephine or the Scheie guarded thermal sclerostomy, until Bill Taylor popularised trabeculectomy in New Zealand in 1972 soon after it had been described by Cairns. Anthony Molteno arrived in Dunedin in 1974 from South Africa, where he had developed the world’s first successful glaucoma drainage valve. The original Molteno implant has had several modifications, and is still a leading glaucoma drainage valve globally.

Challenging advances were simultaneously occurring in other branches of ophthalmic surgery. It was a combination of these surgical challenges as well as the knowledge explosion which drove sub-specialisation.

Eye operations — numbers and mix
It is not possible to gather comprehensive information on the numbers and types of ophthalmic operations done in New Zealand over the decades. In earlier days, some operations were done in doctors’ offices and in patients’ homes, and many operations are still done in private surgical hospitals from which records are not necessarily obtainable. However, it has been possible to obtain figures from some public hospitals (see Table 3, page 219).

McAdam published a list of the eye operations performed at Dunedin Hospital in 1893, and Meller published details of those done in Christchurch in 1912. In both these years, as in 1928 at Waikato Hospital, the proportion of enucleations (eye removals) was high, being 12 per cent, 40 per cent and 8 per cent of all eye operations in each of the years. Fortunately, removal of the
eye was only 1.1 per cent of all operations in 2004–05. At Waikato Hospital in 1928, only three cataract operations were carried out, and a total of only 25 operations for the whole year. The low figures suggest that many were carried out in private facilities and possibly others were done in Auckland.

Overall, the rate of eye operations increased from 59 per 100,000 population in Dunedin in 1893, to 79 per 100,000 in Christchurch in 1912, to 179 per 100,000 in Auckland in 2004. This was mainly because of vastly improved surgical and anaesthetic techniques permitting many more conditions to be treated, and to a lesser extent because of the increased average age of the population.

By far the most informative figures are from Auckland, both because of the larger numbers and because of figures being obtainable for two 12-month periods, separated by 30 years (1974, and 2004–05). A comparison of Auckland Public Hospital operating theatre records for the two periods highlights more recent advances (see Table 1, page 218). This table selects five operations for which there have been significant changes in numbers over the 30 years. Both the absolute number and the number per population of enucleations or eviscerations (removals) of the eye decreased from 9 to 2.3 per 100,000 population per year. This pleasing trend can, in large part, be explained by fewer penetrating eye injuries because of the use of seat belts, laminated windscreens and airbags in vehicles, improved structural design of cars, and tougher drink-drive laws. This is despite the increased number of vehicles per person over the same period. Also, over those 30 years there were advancements in the management of ocular tumours, and also in conditions which may lead to neovascular glaucoma, in particular diabetic retinopathy and retinal vein occlusion. The number of glaucoma drainage operations declined because of improved glaucoma medications and increased use of laser trabeculoplasty.

Other operations vanished because of technological advances. Iridectomy was replaced by neodymium-YAG iridotomy, and needling and discission of the posterior lens capsule was largely replaced by neodymium-YAG posterior capsulotomy.

Totally new operations which appeared during the 30-year period include vitrectomy, which has been a major advance in the repair of retinal detachment as well as in managing other retinal conditions, and excimer laser refractive surgery.

Operations which increased in number included cataract and corneal transplants. Cataract increased because of the increasing proportion of elderly in the population and because of cataracts being done at an earlier stage, thanks to advanced surgical techniques making the operation safer and giving a better quality visual outcome. The number of corneal transplants increased for the same reasons, although it did not increase to the same extent partly because of
the lesser number of transplants required for aphakic or pseudophakic bullous keratopathy resulting from complications during cataract surgery. This is despite the huge increase in the number of cataract operations.

The increased success of retinal detachment surgery has been a major advance over the 30-year period, but unfortunately the available figures do not allow valid comparisons. In Auckland in 1974 there were 72 scleral buckle operations, which was the standard method of operating on retinal detachments at that time. By 2004 many retinal detachment operations involved vitrectomy, sometimes alone and sometimes combined with the scleral buckle procedure. However, the operating theatre records do not distinguish vitrectomy operations for managing retinal detachment and those for other reasons such as vitreous haemorrhage, macular hole and epiretinal membrane.

The move from local anaesthesia to general anaesthesia and then back to local anaesthesia is most obvious for cataract surgery (see Table 2, page 218). Local anaesthetic with cocaine became available from 1884, and for cataract surgery was the preferred anaesthetic until the 1950s. Then general anaesthesia became more accepted. But despite continuing improvements in general anaesthesia from the 1970s to the 2000s, there was a trend back to local anaesthesia. This was driven from the United States, where local anaesthesia was and still is used more than in the United Kingdom and Europe. The reasons include safety, cost and throughput. Ophthalmologists in New Zealand have followed the American trend more than the British and European and have become more skilled at local anaesthetic techniques, and nowadays patients and surgeons alike would not return to general anaesthesia for routine cataracts except in specific circumstances, for example, mental infirmity.

In retrospect, ophthalmologists partially lost the skills of giving local anaesthetics in the 1950s when improvements in general anaesthesia made it the preferred option. General anaesthesia is still often preferred for some procedures, in particular corneal transplants, because of the delicacy and longer time of the procedure; scleral buckles for retinal detachments because of the manipulation required; enucleation or evisceration (removal of the eye) because of patient preference; and strabismus (squint surgery) because most patients are children.

Over the past 100 years, and especially over the past 30, ophthalmology has become a much more surgically orientated specialty, able to offer treatments unimaginable in earlier times. Lasers entered ophthalmology in the 1970s. Now they are used to treat retinal neovascularisation, retinal detachment, some types of macular degeneration, glaucoma and, most well known of all, to recurve the cornea to treat refractive errors. Soon the femtosecond laser may have a role in cataract surgery.
Medical ophthalmology

For many decades, effective medications were limited to atropine, pilocarpine, eserine (physostigmine), astringents and lubricants. Kendall wrote on atropine in ophthalmology in the *New Zealand Medical Journal* in 1900.\(^{33}\)

In 1949 a sub-committee of the OSNZ produced an updated ophthalmic section for inclusion in the New Zealand Formulary. This had a short life, being supplanted by the British National Formulary, and more recently by *New Ethicals*, MIMS, and the New Zealand Pharmaceutical Schedule.

Perusal of the ophthalmic medications available in 1949 illustrates the huge pharmaceutical advances in the past 60 years. In 1949 the only anti-bacterial agents were sulphacetamide and penicillin, and the only pressure-lowering agents were pilocarpine and eserine. There were neither anti-viral agents nor steroids. The ‘Latinisation’ of the names is quaint.

Medical ophthalmology was relatively static until the early 1950s, when antibiotics and corticosteroids became available. They not only revolutionised the management of infections and inflammations of the eye, but also improved the outcomes of eye surgery.

Later, the increased range of pressure-lowering medications reduced the need for glaucoma drainage procedures. And most recently, the introduction of anti-VEGF (vascular endothelial growth factor) injectable solutions is in the process of revolutionising the treatment of some forms of macular degeneration.
Table 1

**Eye surgery patterns over 30 years — significant changes in Auckland**

<table>
<thead>
<tr>
<th>Operation type</th>
<th>Operations per 100,000 population per year</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1974 (12 month period)</td>
</tr>
<tr>
<td></td>
<td>2004–05 (12 month period)</td>
</tr>
<tr>
<td>Enucleation/Evisceration</td>
<td>9.0</td>
</tr>
<tr>
<td>Penetrating eye injury</td>
<td>7.6</td>
</tr>
<tr>
<td>Glaucoma drainage</td>
<td>3.6</td>
</tr>
<tr>
<td>Cataract</td>
<td>34.0</td>
</tr>
<tr>
<td>Corneal transplant</td>
<td>1.8</td>
</tr>
<tr>
<td><strong>All eye operations per 100,000 population per year</strong></td>
<td><strong>98</strong></td>
</tr>
<tr>
<td></td>
<td><strong>179</strong></td>
</tr>
</tbody>
</table>

Table 2

**Local and general anaesthesia in cataract surgery**

<table>
<thead>
<tr>
<th>Year</th>
<th>1935</th>
<th>1974</th>
<th>2004</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of cataract operations</td>
<td>16</td>
<td>242</td>
<td>1616</td>
</tr>
<tr>
<td>Under local anaesthesia</td>
<td>16 (100%)</td>
<td>32 (12%)</td>
<td>1581 (98%)</td>
</tr>
<tr>
<td>Under general anaesthesia</td>
<td>0 (0%)</td>
<td>210 (88%)</td>
<td>35 (2%)</td>
</tr>
</tbody>
</table>

Table 3 (opposite)

**Eye operations per year**

Eye surgery in different decades at Dunedin, Christchurch, Waikato, Wellington, and Auckland Hospitals

* Figure spuriously low because many retinal laser procedures are done in the clinic, and therefore are not included in operating theatre records. Surgery figures for Waikato, Wellington and Auckland extracted from available public hospital operating theatre records. Surgery figures for Dunedin and Christchurch are from McAdam and Meller respectively. Population figures from Statistics New Zealand, at the nearest census.
<table>
<thead>
<tr>
<th></th>
<th></th>
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<th></th>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td></td>
<td>No.</td>
<td>No.</td>
<td>GA</td>
<td>LA</td>
<td>No.</td>
<td>GA</td>
</tr>
<tr>
<td>Cataract</td>
<td>28</td>
<td>26</td>
<td>3</td>
<td>0</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Secondary procedure from cataract</td>
<td>4</td>
<td>16</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>18</td>
</tr>
<tr>
<td>Iridectomy</td>
<td>10</td>
<td>11</td>
<td>6</td>
<td>0</td>
<td>6</td>
<td>10</td>
</tr>
<tr>
<td>Glaucoma drainage</td>
<td>4</td>
<td>0</td>
<td>4</td>
<td>0</td>
<td>4</td>
<td>24</td>
</tr>
<tr>
<td>Strabismus</td>
<td>7</td>
<td></td>
<td>8</td>
<td>0</td>
<td>8</td>
<td>97</td>
</tr>
<tr>
<td>Corneal transplant</td>
<td></td>
<td></td>
<td>13</td>
<td>13</td>
<td>0</td>
<td>53</td>
</tr>
<tr>
<td>Retinal detachment: Diathermy alone</td>
<td></td>
<td></td>
<td>5</td>
<td>0</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Scleral buckle</td>
<td></td>
<td></td>
<td>72</td>
<td>72</td>
<td>0</td>
<td>33</td>
</tr>
<tr>
<td>Vitrectomy &amp; buckle</td>
<td></td>
<td></td>
<td>14</td>
<td>14</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Vitrectomy</td>
<td></td>
<td></td>
<td>272</td>
<td>123</td>
<td>149</td>
<td></td>
</tr>
<tr>
<td>Photocoagulation retina</td>
<td></td>
<td></td>
<td>65</td>
<td>18</td>
<td>47</td>
<td>39*</td>
</tr>
<tr>
<td>Lacrimal: Dacryocystectomy</td>
<td></td>
<td></td>
<td>5</td>
<td>2</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Dacryocystorhinostomy</td>
<td></td>
<td></td>
<td>2</td>
<td>2</td>
<td>0</td>
<td>40</td>
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<td><strong>69</strong></td>
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Proposed ophthalmic section for the New Zealand Formulary, 1949

**Collyria**


Collyrium Acidi Borici et Zinci. Sig: Mix with equal quantities of warm boiled water before use. (This gives 1½% acid boric and 1/8% of zinc sulph.)

Collyrium Hydrarg. Oxycyanid. (1:4000). Sig: Mix with equal parts of warm boiled water before use.

**Guttae Ophthalmicae**

Not more than 4 drams to be prescribed unless otherwise necessary.

**Antiseptics and Astringents**

Guttae Acriflavinae (1:500.)
Guttae Sod. Sulphacetamid. 5–20%
Guttae Penicillini. Crystalline penicillin G should be prescribed for these drops. (1000 units per 1 cc.)
Guttae Merthiolat. (1:5000)

**Mydriatics**

Guttae Homatropinae. Homatropin. Hydrobrom.gr. 2, Chlorbutol.gr. 1, Aq. dest.ad drams 4
Guttae Atropinae. Atropin. Sulphat.gr. 2, Chlorbutol gr. 1, Aq. dest.ad drams 4
Guttae Hyosciniae. Hyoscin. hydrobrom.gr. ½, Chlorbutol gr. 1, Aq. dest.ad drams 4

**Miotics**

Guttae Physostigminae. (Synonym: Guttae Eserinae). Eserin. sulph. gr. ½, Chlorbutolgr. 1, Aq. dest.ad drams 4.
Guttae Pilocarpinae. Pilocarpin. Nitrat.gr. 2, Chlorbutolgr. 1, Aq. dest.ad drams 4
Guttae Prostigmin. Prostigmin.gr. 6, Chlorbutol gr. 1, Aq. dest.ad drams 4

**Other Drops**

Guttae Ethylmorphinae. Dionin.gr. 4, Chlorbutolgr. 1, Aq. dest.ad drams 4
Guttae Fluoresceinae (B.P.C.). 2%
Guttae amethocainae hydrochloridum (Decicain). 1/4%
**Oculenta**

60 grs. Preferably in collapsible tubes to be dispensed unless otherwise directed.

Oculentum Atropinae. 1%

Oculentum Eserinae cum Pilocarpinae. Eserin. Sulph. gr. 1/8 Pilocarp. nit. gr. ½, oculent. simplices ad gr. 60.

Oculentum Acidi Borici. (B.P.)

Oculentum Hydrarg. ox. flav. (B.P.)

Oculentum Penicillini (B.P.) 1948.

(Crystalline penicillin G should always be prescribed for the oculentum and cremor.)

Cremor Penicillini (B.P.) 1948

Oculentum Sulphacetamid. 10%

**Lamellae**

Lamellae homatropinae gr. 1/100 . Lamellae eserinae gr. 1/1000

Lamellae cocainaegr. 1/50

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**Glossary**

Collyrium: Eye lotion or eye wash.

Gutta: A drop.

Oculentum: An eye ointment.

Lamella: A medicated disk or wafer placed under the eyelid to release a drug.

Cremor: A substance resembling cream.

Dram is a unit of fluid volume, 1/8 of a fluid ounce or 3.56 millilitres.

Grain (gr) is a small troy or avoirdupois unit of weight, equal to 0.0648 grams.

B.P. British Pharmacopoeia.
Chapter 13

ACADEMIC OPHTHALMOLOGY 
AND OPHTHALMOLOGISTS

A cademic ophthalmology encompasses teaching, clinical research and 
基本 science research. New Zealand's first academic ophthalmologist, 
Sir Lindo Ferguson, was appointed in 1884 as lecturer in ophthalmology 
at the University of Otago. As previously noted, the first formal ophthalmology 
teaching in Australasia began with Ferguson's four students in 1884.¹

One of those first four students was Louis Barnett, later Sir Louis, professor 
of surgery in Dunedin. In 1920, Barnett proposed to a meeting of the New 
Zealand Branch of the British Medical Association that an association should 
be founded to raise surgical standards in Australia and New Zealand. This led to 
the founding of the Royal Australasian College of Surgeons. Sir Lindo Ferguson 
was also involved in the founding of this college, and travelled with a party of 
Australasian surgeons to the meeting of the American College of Surgeons in 
New York in 1925. Another in the group of eight was Sir James Elliott, father of 
Sir Randal Elliott. Their trip followed a visit to Melbourne the previous year by 
a group of American surgeons, who were very supportive of the formation of an 
Australasian college. That American group included Dr Will Mayo.²

Ferguson was created professor of ophthalmology at the University of Otago 
in 1909. This was 54 years before Australia's first professor of ophthalmology, 
Professor Gerard Crock, was appointed to the University of Melbourne in 1963. 
However, unlike Crock, Ferguson never established an academic department 
of ophthalmology, as in 1914 he was appointed dean of the medical school and 
concentrated, very effectively, on that role for the remainder of his outstanding 
professional career.

New Zealand's first academic ophthalmology department began in 1946 in 
Dunedin with the appointment of Dr Rowland Wilson, who was promoted to
associate professor in 1954. He was succeeded by John Parr, who was honoured with a personal chair in 1977. Anthony Molteno succeeded Parr in the role of associate professor. In Christchurch, Richard Clemett was appointed senior lecturer in 1973 and associate professor in 1978.

In Auckland, Dr Gillian Clover became the Sir William and Lady Stevenson senior lecturer in ophthalmology in 1983 and head of the section of ophthalmology. She was promoted to associate professor in 2000. In Christchurch, Dr Mark Elder was appointed clinical associate professor in 2001.

Although Ferguson and Parr were both highly successful academics awarded the title of professor of ophthalmology, it was nearly 100 years after the first appointment that the first full chair in ophthalmology, i.e. an enduring chair not limited to the tenure of one individual, was created in New Zealand, at the University of Auckland in 1999. Professor Charles McGhee was headhunted from the chair of ophthalmology at the University of Dundee, Scotland, and appointed the foundation Maurice Paykel Professor and Chair of Ophthalmology with a complement of academic staff and an expanded facility.

Associate Professor Anthony Molteno was awarded a personal chair in ophthalmology in 2000. Dr Helen Danesh-Meyer succeeded Gillian Clover in Auckland as the Sir William and Lady Stevenson Associate Professor in 2002 and awarded a personal chair in 2009. In 2005 Colin Green DSc was appointed to the W. & B. Hadden Chair in Ophthalmology and Translational Vision Research at the University of Auckland (see Chapter 13), thus making a total of six professors since 1909.

In Wellington in 2008 there was an attempt to establish a research institute, to be named the Lions Eye Institute of New Zealand. The Lions Clubs are strong supporters of ophthalmology worldwide, and are perhaps best known for the Lions Eye Institute in Perth, Western Australia, and for many Lions Eye Banks, especially in the United States. Lions New Zealand intended to support this ambitious venture in Wellington, although at the date of writing this institute has not eventuated. Understandably, there is some academic reservation elsewhere in New Zealand on the basis it would duplicate demand on scarce ophthalmology and vision science resources in our small country of just over four million people, and that it is probably more efficient to concentrate both resources and expertise in one facility.

From the beginning and throughout the country, part-time and the few full-time ophthalmologists in the public system have voluntarily done formal, informal and bedside teaching for the benefit of nurses, house surgeons and, in the larger centres, ophthalmic registrars. This is an ongoing contribution to ophthalmic education which is often taken for granted.

More recently, in Auckland, Christchurch and Dunedin, the academic
ophthalmologists have provided most of the formal undergraduate teaching and contributed to the post-graduate teaching. In Auckland the academic department also contributes substantially to the teaching of optometry students and to those taking the optometrical certificate in therapeutics.

Academic ophthalmology in Dunedin
John Parr was the first in New Zealand to undertake significant ophthalmic basic science research, on his return from Britain in 1961. Blood circulation in the retina and optic nerve was his main area of interest, on which he wrote 13 papers. This translated to his initiating diabetic retinal screening and laser treatment of diabetic retinopathy. Parr’s major contributions to ophthalmic education were the annual residential course for the college’s basic science examination and his book *Introduction to Ophthalmology*, which still enjoys worldwide readership (see also Chapter 2).

When Anthony Molteno arrived in 1978, he broadened eye research in Dunedin. He continued his pioneering work on glaucoma and especially glaucoma drainage devices. His glaucoma drainage valve is now used worldwide.) He established a post-graduate fellowship training programme in glaucoma and developed the Otago photoscreener for detecting strabismus and refractive errors in infants. Molteno also has special interest and expertise in ophthalmic optics and instruments. One of his more recent contributions was a novel way of measuring the performance of intra-ocular lenses. Molteno’s research is covered in more detail in Chapter 2.

Numerous clinical research projects have been carried out by practising ophthalmologists for many years. Perhaps the most notable was the early work on conjunctivitis by Rowland Wilson, begun in Egypt and continued in Dunedin.

Many clinical projects have been published in the *Transactions of the Ophthalmological Society of New Zealand* from its beginning in 1947. It was the first medical specialist publication in the country, and is a written record of which New Zealand ophthalmologists can be proud.

Academic ophthalmology in Auckland
The University of Auckland School of Medicine opened in 1968, 99 years after New Zealand’s first medical school in Otago. Dr Hylton Le Grice was appointed senior lecturer in ophthalmology in 1971. He was subsequently promoted to clinical reader in ophthalmology and held this position until 1983.

Le Grice was well qualified to be Auckland’s first teacher in undergraduate
ophthalmology. As mentioned earlier, in his final year at Otago Medical School he won both the T.W. Johnson Memorial prize in medicine and the Sir Carrick Robertson Memorial prize in surgery, and at the end of his ophthalmology training he became the Senior Resident at Moorfields Eye Hospital in London.

Le Grice was a masterly public speaker and had strong right-wing political ideals. The latter would have revealed refreshingly different perspectives to many young medical students. Le Grice tells the story of his many encounters with the professor of surgery Eric Nanson, who was given ophthalmology to administer as part of the Department of Surgery. Nanson regarded ophthalmology as a minor discipline, no more significant than the size of the eye itself, and much to Le Grice’s protestations said that in his opinion ophthalmology would always be a small sub-specialty. If only Nanson could see the scene 35 years later, with the Department of Ophthalmology and its New Zealand National Eye Centre not only larger than the Department of Surgery, but the largest department in the University of Auckland School of Medical and Health Sciences!

Drs Calvin Ring and Lindo Ferguson were particularly keen to see a university academic department in ophthalmology established in Auckland. For some years they had been trustees of the Eye Research and Education Trust, which they had founded to accept donations for education in ophthalmology. Brochures requesting donations to the trust were placed in ophthalmologists’ waiting rooms and in the post-operative packs of patients leaving hospital, and private canvassing occurred. The trust provided several travelling grants for nurses and registrars.

In 1976 Ring and Dr Bill Taylor negotiated a full-time senior lecturer post in ophthalmology, and Bruce Hadden was invited to apply. Before any appointment was made, Ring had managed to persuade his personal friend Sir William Stevenson, prominent in Auckland’s construction industry, to endow a chair in ophthalmology. The senior lecturer position was dropped. Hadden entered full-time private practice and six months later was appointed as a part-time visiting ophthalmologist at Auckland Hospital.

Unfortunately no one suitable applied for the newly created chair, so after some time it was decided to advertise for a Sir William and Lady Stevenson Senior Lecturer in Ophthalmology.

Dr Gillian Clover was an Auckland-trained ophthalmologist who had been in London since 1978, carrying out research on diabetic retinopathy with Professor Norman Ashton at the Institute of Ophthalmology and at Hammersmith Hospital. Clover was persuaded to accept the position and she returned to Auckland in 1984 to establish the university academic Division of Ophthalmology within the Department of Surgery. Clover worked extremely hard to build up academic ophthalmology, which was not adequately appreciated
by the ophthalmological community at the time.

In 1987 she also became the clinical director of the Eye Department at Auckland Hospital, so carried a huge and sometimes oppressive load of both teaching and administration. This left her with insufficient time for research, let alone to plan expansion. Nevertheless, Clover undertook basic science corneal research and clinical research on diabetic eye disease.

Despite the prevailing conditions, Clover to her great credit also successfully established the New Zealand National Eye Bank. This put the collection of corneae and their testing and storage on a sound and internationally accepted scientific basis. The New Zealand National Eye Bank quickly began to provide tissue for the whole of the country except Christchurch, which continued to collect its own corneae until some years later.

In 1998 Dr Trevor Sherwin PhD, a research scientist from Manchester, England, was appointed for one year as the Eye Bank’s scientist. When Professor Charles McGhee became the head of department in 1999, he appointed Sherwin to the Department of Ophthalmology as a lecturer and corneal research scientist. He is now associate professor and deputy head of the department.

In 1993 an Ophthalmology Chair Establishment Committee was formed consisting of Drs Lindo Ferguson, Harold Coop and Bruce Hadden. The committee met with Geoffrey Gibbs, CEO of the Royal New Zealand Foundation of the Blind, who was supportive of establishing a chair and approached his board. This resulted in the foundation pledging $10,000 per year for seven years. Ring and Ferguson suggested that their Eye Research and Education Trust would put its capital, valued at around $300,000, into the chair should it become established.

In 1994 Hadden approached the university's dean, Professor (now Sir) Peter Gluckman, who advised that an endowment that earned an income of $110,000 per year would be the minimum required to support a full chair in ophthalmology. This meant that over a million dollars would need to be raised.

The establishment committee approached many potential donors, both individuals and companies, and also wrote to every ophthalmologist in New Zealand. They spoke of the project at the annual meetings of the OSNZ, and suggested that ophthalmologists consider donating $2000 per year for three years. Twenty-six ophthalmologists contributed, including many South Islanders.

Once again Ring approached another of his close friends, Maurice Paykel, co-founder with Sir Woolf Fisher of Fisher and Paykel Ltd. The Maurice and Phyllis Paykel Trust pledged $500,000 in December 1995.

By the end of 1995 over $1.5 million had been raised, the principal donors being the Maurice and Phyllis Paykel Trust, Drs Bruce and Wendy Hadden, and the Eye Research and Education Trust. Major donors were the Royal
New Zealand Foundation for the Blind, the OSNZ, Eye Institute (formerly Remuera Eye Clinic), the Sir John Logan Campbell Residuary Estate, and the Lion Foundation. Lindo Ferguson was pivotal in obtaining the Sir John Logan Campbell Residuary Estate donation, having been chairman of the estate for many years.

A further significant donation was made by the Brian and Sue Picot Charitable Trust. Brian Picot had established Foodtown, New Zealand’s first grocery supermarket chain. His career in the grocery trade started in the 1950s when the Picot family acquired the wholesale grocery and merchants business Ellingham and Company from its owner, who was perchance Dr Hylton Le Grice’s father.

Dr James v. Hodge is a New Zealand physician and prominent researcher in cardiovascular disease, who has also contributed extensively to ophthalmology. Hodge was involved in pioneering work on fluorescein angiography of the retina. Later he became chairman of the Maurice and Phyllis Paykel Trust. Hodge was also chairman of the Medical Research Council, now the Health Research Council of New Zealand.

The chair of ophthalmology was now an exciting probability and at the end of December 1995, Gluckman suggested that a search committee be established. However the euphoria was short-lived, as more delays and disappointments were to come.

Dr Creig Hoyt of San Francisco, a very academic paediatric ophthalmologist, expressed an interest in the position. He was a keen outdoors person, especially interested in cycling, and New Zealand’s lifestyle appealed. He visited twice and was entertained royally, including a dinner party at the large and gracious home of Hylton Le Grice, which was memorable for its elegance and antics in the swimming pool. Despite every encouragement, he eventually declined the position.

The position was re-advertised in late 1996. Several suitable individuals were also directly approached, including two eminent Sydney ophthalmologists, Ivan Goldberg and Peter McCluskey. They were both tempted but decided to remain in Sydney where they were both very successful.

Eventually the position was offered to Dr Michael Wagoner, an American who at the time was medical director of the King Khaled Specialist Hospital in Riyadh, Saudi Arabia. His sub-specialty was external eye disease and he came with excellent credentials. Wagoner was genuinely very interested and visited New Zealand twice, once at his own expense, but eventually in February 1998 he too declined.

In May 1998 in an attempt to reach potential international applicants the position was more seriously and widely advertised, and was also promulgated
to many Australian, American and British academic departments. Also by this time the total raised to support the foundation chair had risen to $1.4 million, in addition to the professorial salary which the university agreed to pay independently. This greatly increased the attractiveness of the position, giving the foundation professor a significant sum with which to establish the department with the necessities of secretarial and technical assistance and research equipment.

Following this international search, four applicants were seriously considered. In March 1999 Professor Charles McGhee, head of ophthalmology in Dundee, Scotland, came out to New Zealand with his wife Jane. It was presumed that it was Jane who should be credited for Charles’s initial interest as she was a Western Australian and the thought of living in the Antipodes once more appealed to her. The McGhees visited again in July the same year, this time also with Jennifer Craig PhD, McGhee’s research assistant.

McGhee was clearly an extremely strong candidate for the foundation chair, with notable achievements already behind him at the age of 39. Before graduating in medicine, he completed a BSc with first class honours in ocular pathology, which included time with Professor Daniel Albert at the Howe Laboratory at Harvard University, Boston. His ophthalmology training in Glasgow also included a post-graduate fellowship in corneal diseases at the Lions Eye Institute, Perth, Australia. At the age of 34 he was appointed professor of oculare therapeutics at the University of Sunderland, England, and at 36 the foundation professor and head of department at the University of Dundee, Scotland. He had published over 100 scientific papers, and written book chapters on ocular pathology, ocular pharmacology, excimer laser surgery and corneal topography. His honorary appointments included chairman of the Royal College of Ophthalmologists Committee for excimer laser guidelines, examiner for the Royal College of Ophthalmologists, Privy Council elected member of the General Optical Council, editor of two textbooks, and referee for several peer-reviewed ophthalmic journals.

After the formal interview he was offered the position without hesitation. In encouraging McGhee to accept, the dean asked what infrastructure he would like. McGhee produced a long and detailed staff and equipment list. Fortunately the dean was able to say yes to all the important requests, after which he said to McGhee, ‘You haven’t mentioned your salary.’ That too was successfully negotiated. Having completed the formalities, Professor Gluckman and key members of the interview panel celebrated the successful conclusion with McGhee over a ‘wee dram’, when the dean produced a fine malt whisky and six glasses from under the negotiating table!

After an extended campaign which began in 1976 and lasted a quarter
of a century, Professor Charles McGhee arrived in New Zealand on September 9 1999 to become the Maurice Paykel Foundation Professor of Ophthalmology.

In McGhee’s first three years, his remarkable ability and energy resulted in building up a modest sub-section of surgery to an independent department of ophthalmology with 30 staff and students, from which over 100 papers were published in peer-reviewed journals, an achievement unmatched by any other medical school department.

McGhee also took on the position of clinical director of the Eye Department at Auckland Hospital. He quickly took the reins and made several major changes in both the hospital and university Eye Departments, not all of which Gillian Clover agreed with. However, McGhee lobbied for Clover's promotion to associate professor. This promotion was richly deserved, as Clover had in her time established the fledgling department, carried a huge clinical and administrative workload and notably had established the New Zealand National Eye Bank. As mentioned above, Clover had also carried out clinical research on diabetic retinopathy, doing much arduous clinical work on this condition in South Auckland, and later in Fiji.

Clover retired in 2003. She frequently lamented, with justification, that her colleagues failed to show appreciation of her efforts and achievements. Since retirement, she has continued valuable work in Fiji on diabetic eye disease, for which she was honoured by the Lions. In 2008 Clover was honoured with the medal of the RANZCO.

Academic ophthalmology in Auckland has flourished beyond anybody’s predictions under the Foundation Chair of Ophthalmology. McGhee’s personal strengths became rapidly appreciated throughout Australia and New Zealand. In 2000 he was admitted as a Fellow of the RANZCO. He succeeded Mark Gillies as editor-in-chief of the RANZCO’s journal Clinical and Experimental Ophthalmology. The journal's impact factor has risen to 1.75, and is now ranked 23rd out of 49 ophthalmic journals. McGhee also became chairman of the scientific programme committee of the college for annual conferences. The Calvin Ring Prize was instituted in 1996, to be awarded annually to the top
student in ophthalmology in the final year of undergraduate medical training. The first recipient was Alexandra Wallace, in December 1996. In 2000 the first post-graduate clinical sub-specialty fellowship was established in Auckland by McGhee. Since then, oculoplastic, medical retina, vitreo-retinal, paediatric and glaucoma fellowships have been established.

*Dr Calvin Ring with Alexandra Wallace, the first recipient of the Calvin Ring Prize, 1996. NEW ZEALAND OPTICS, MARYANNE DRANSFIELD.*

New Zealand’s first permanent ophthalmic microsurgical teaching facility was opened in the Department of Ophthalmology in 2002, and appropriately named the Calvin Ring Microsurgery Teaching Laboratory. Its equipment includes six operating microscopes, six phaco-emulsification machines, a vitreo-retinal console, a YAG laser and a corneal topographer, together with surgical instruments.

McGhee rapidly recognised the need to build laboratory science into the newly established department with a ‘benchside to bedside’ research translation focus. This would bring in research funding and strengthen the post-graduate student base in the department. With substantial support from Drs Wendy and Bruce Hadden, and bequests from the Sidney James Taylor and Helen Cadman estates, the W. & B. Hadden Chair in Ophthalmology and Translational Vision Research was funded. The somewhat clumsy title is now widely used to describe research which is aimed at clinical applications. After an international search three candidates were interviewed, but a local candidate, Professor Colin Green PhD DSc, was head and shoulders above the others and appointed to this full chair in 2005.

Green had worked overseas for 12 years in France, England and the United States, and had been a Royal Society University Research Fellow at University College London for seven years prior to returning to New Zealand in 1993. Green had won international awards for his research and published extensively in top journals including *Nature* and *Science*. He was the founding director of
the University of Auckland’s Biomedical Imaging Research Unit and had gained a personal chair in anatomy in 2004.

To date Green’s principal focus has been ocular surface healing. He is also working on antisense delivery to the eye, and on age-related macular degeneration using human tissue and rat model studies. Green co-founded CoDaTherapeutics (NZ) Ltd in 2003, and in late 2005 CoDa Therapeutics, Inc. (USA). At the time of writing, this latter company has raised more than $US 40 million and completed United States Federal Drug Administration (FDA) phase two clinical trials using novel wound-healing technology developed by Green and a colleague in London.

His appointment indeed contributed to a large increase in post-graduate research student enrolments and successful research funding applications in ophthalmology. The model established by McGhee in creating this position is held up as an exemplar for the Faculty of Medicine and Health Sciences at the university.

Dr Helen Danesh-Meyer was appointed to the academic staff in 2000, and became associate professor in 2002. Danesh-Meyer has had a remarkable academic career, and was deservedly promoted to full professor by the University of Auckland in 2008. She is a section editor of the journal Survey of Ophthalmology, teaches, supervises PhD and MD candidates, and enthusiastically pursues her own research interests, presently on the optic nerve. She also works with Green on optic nerve injury, glaucoma models and retinal ischaemia. In 2010 Professor Danesh-Meyer was also made an honorary professor of the University of Melbourne, in recognition of her collaborative research.

By 2009, 10 years after the appointment of the Maurice Paykel Foundation Chair of Ophthalmology, the department had grown to no fewer than three professors, one associate professor, two honorary clinical associate professors, five senior lecturers and a cohort of more than 40 staff and students. Since 1999
the department has published close to 500 ophthalmic scientific papers in peer-reviewed journals, and raised over $11 million in research funding. Many higher degrees have been completed and three PhD theses from the department have been awarded the accolade of the best PhD thesis throughout all faculties of the University of Auckland.

In 2007 the University of Auckland conferred an honorary Doctor of Laws degree on Bruce Hadden for his contributions to ophthalmology in New Zealand, and in recognition of his role in establishing the academic department — an honour which would not have been given if the foundation professor had not been so successful — and he was made a Companion of the New Zealand Order of Merit (CNZM) in the 2012 New Year's honours.

The New Zealand National Eye Centre (NZ-NEC)
In 2008 the NZ-NEC was launched, led by Professor Charles McGhee and Professor Michael Kalloniatis (Optometry and Vision Science). It was the culmination of more than 10 years of collaboration and planning between many
researchers in the fields of ophthalmology, optometry and the visual sciences at the University of Auckland.

The NZ-NEC is composed of the Department of Ophthalmology and the Department of Optometry and Vision Science, incorporating the Molecular Vision Laboratory. The NZ-NEC has a combined staff of more than 100 clinicians, clinical scientists and vision scientists, including honorary appointments.

The scientific output of NZ-NEC members over the past eight years has been several hundred scientific publications, several text books and a number of international research patents. The research groups have raised over $20 million in research grants. The higher profile of the large NZ-NEC umbrella enhances national and international collaborations, to the benefit of visual science and clinical research at the University of Auckland.

During its first year, the NZ-NEC's research was carried out in 14 separate but inter-related teams. The Cornea and Anterior Research Group in the Department of Ophthalmology is a group of 15 to 20 clinicians, scientists and research fellows. The group is led by Professor Charles McGhee, in conjunction with Dr Sue Ormonde, Associate Professors Trevor Sherwin and Dipika Patel, and Professor Colin Green. Research is concentrated on keratoconus, corneal dystrophies, corneal transplantation, corneal in vivo confocal microscopy, computerised corneal topography, and ocular healing with novel therapeutics. These interests have led already to three textbooks and over 100 peer-reviewed research papers in the past 10 years.

The Anterior Segment Clinical Research Team carried out the Auckland Cataract Study. This frequently cited study analysed 500 consecutive cataract patients over the two years before their surgery, and their outcomes two years after.

The Ocular Surface Investigation Laboratory in the Department of Optometry is led by Dr Jennifer Craig, who concentrates on the evaluation of the tear film in ocular surface diseases, drug delivery systems, and a novel therapy for Meibomian gland dysfunction and tear film lipid deficiency.

The Cornea Laboratory Group in the Department of Ophthalmology is led by Associate Professor Trevor Sherwin, cell biologist. The group's present interests are pathogenesis of corneal dystrophies and the role of stem cells in corneal wound healing, and it is working towards therapeutic treatments for corneal repair.

The Molecular Vision Laboratory within the Department of Optometry and Vision Science, led by Professor Paul Donaldson (now head of the Department of Optometry and Vision Science) and Dr Julie Lim, has been highly successful at conducting research on the lens and cataract for many years.

The Optic Nerve and Glaucoma Team within the Department of
Ophthalmology has both clinical and basic science arms. The clinical arm is led by Professor Helen Danesh-Meyer, who collaborates extensively with leading units overseas including the Wills Eye Hospital in Philadelphia, Johns Hopkins University in Baltimore and the University of Melbourne. The team’s research in the area of brain tumours that cause blindness has been internationally recognised.

The basic science arm is led by Professors Helen Danesh-Meyer and Colin Green, and works with the Connexion Biology Group. It is studying optic nerve ischaemia, the role of the inflammatory response in strokes of the optic nerve, and the use of a gel to decrease inflammation and scar formation after glaucoma filtration surgery.

The Connexion Biology Group in the Department of Ophthalmology is led by Green and is focused on corneal wound healing, but also extends to research on spinal nerve and optic nerve repair, glaucoma filtration surgery and brain studies in epilepsy. This group has published 20 papers in the past year, and earned a high profile at the International Gap Junction Conference in Arizona in 2009, with special interest being taken in the compassionate use in non-healing eye cases of gap junction antisense (Nexagon™).

The Retinal Networks Laboratory in the Department of Optometry and Visual Science was led by Professor Michael Kalloniatis, before his relocation to Sydney, and Dr Monica Acosta, and is studying the neurochemistry of the vertebrate retina. The Retinal Diseases Synergy Group in the Department of Ophthalmology is a collaborative team of clinicians and scientists working on aspects of retinal diseases both medical and surgical. The Retinal Cell and Molecular Biology Laboratory in the Department of Optometry and Vision Science centres on understanding biochemical and molecular functions in the retina.

The Clinical Research Group in the Department of Optometry and Vision Science is involved in clinical research on computer modelling of the contact lens correction of keratoconus, and the prevalence of refractive error in school children.

A Visual Neuroscience Group was established in 2008 by Dr Ben Thompson. Its research is in amblyopia, including neural changes following loss of sensory input, and non-invasive brain stimulation.

More esoteric is the Ecology of Colour Vision Laboratory in the Department of Optometry and Vision Science, which is studying the relationship between colour vision systems and the visible environment. It seeks to understand the ecological significance of the diversity of photo-receptor designs in many animals. In collaboration with several universities overseas it is studying signalling in birds and fiddler crabs, colour vision and colours in reef fish, colour
vision in butterflies, and the ecology of colour vision in primates.

The Myopia Laboratory in the Department of Optometry and Vision Science addresses the underlying causes of myopia, its progression and how myopia might be inhibited.

Finally, the Genetic Eye Disease Investigation Unit in the Department of Ophthalmology is led by Dr Andrea Vincent, a paediatric ophthalmologist who sub-specialises in ocular genetics. This unit is in the process of establishing a New Zealand registry for inherited retinal disease. Research is also underway in the molecular characterisation of corneal dystrophies including keratoconus, blepharophimosis syndrome, inherited eye movement disorders and juvenile Paget's disease.

Affiliated with the NEC-NZ is the School of Pharmacy's Ophthalmic Drug Delivery Group. This group is working on strategies to deliver drugs to the ocular surface and to the anterior and posterior segments of the eye.
Chapter 14

OPHTHALMIC PUBLICATIONS
BY NEW ZEALANDERS

New Zealand scientific journals available for publication of ophthalmic articles include the first series of the *New Zealand Medical Journal* from 1887 to 1896, volumes one to nine, then the second series of the *New Zealand Medical Journal* from volume one, 1900, to the present. The *Transactions of the Ophthalmological Society of New Zealand* started in 1947 with the founding of the OSNZ, and thereafter most ophthalmic articles were published in the *Transactions* rather than in the *New Zealand Medical Journal*. In 1985 the *Transactions* was replaced by the *Australian and New Zealand Journal of Ophthalmology*, which in 2000 was renamed *Clinical and Experimental Ophthalmology*.

New Zealand ophthalmologists have been good supporters of all these publications. Contributions of individuals have been mentioned in preceding chapters, but it is worthwhile, at the expense of some repetition, to bring together the more seminal articles that have been produced by New Zealand ophthalmologists.

Predictably, Henry Lindo Ferguson published an article in volume one of the first series of the *New Zealand Medical Journal*, 1887. It was on two cases of distension of the frontal sinus causing exophthalmos.\(^1\) In this first series of the *New Zealand Medical Journal* there were many further contributions by Ferguson and other ophthalmologists from throughout New Zealand. Kendall’s article on atropine in ophthalmology\(^2\) was in the first volume of the second series of the *New Zealand Medical Journal* in 1900. The *New Zealand Medical Journal* published many ophthalmology articles from 1901 to 1946, when the *Transactions* began. As already mentioned (see Chapter 12) there was a flurry
of excitement in 1935 to 1937 with five publications on the surgical management of retinal detachment.

An interesting editorial in the April 1889 issue of the *New Zealand Medical Journal* was entitled ‘Election at Christchurch Hospital’. It read:

> The result of the recent election of ophthalmic surgeon for the Christchurch Hospital is only one more example of that perverseness which usually characterises the decisions of hospital boards as a class. Put not your faith in princes is proverbial; but put not your faith in hospital boards would be quite as applicable.

> It would naturally be anticipated that the guiding principle in such elections should be the promotion of the best interests of the institution, and so an ordinary ratepayer believes, so long as he remains an ordinary ratepayer; but immediately he is elevated in to the proud possession of a hospital committeeman, other considerations seem at once to become more important.

> We have no intention or desire to disparage the qualifications of the gentleman who has been appointed to the position of ophthalmic surgeon to the Christchurch Hospital. He may be everything that is desirable; but we will ask, can the public believe that the best interests of that institution have been consulted when their representatives on the hospital board, overlooking the long, faithful, and satisfying services of the late surgeon, appoint a gentleman recently arrived, and just fresh from his college career? Or, can it be right that the latter before he has been tested, should be placed in successful competition with a gentleman who has already proved himself competent in all ways for the position? We venture to answer both questions in the negative, and can only say, truly wondrous are the ways of hospital boards!

This is the first recorded altercation between a hospital board and the medical profession, unfortunately to be followed by many more over the ensuing 120 years!

Singling out notable articles in the New Zealand literature over the decades risks invidiousness, but the risk must be taken to highlight important developments in eye surgery in New Zealand. Not to be forgotten are significant contributions by New Zealanders which have been published in overseas journals, of which many have been cited in association with their authors.
Transactions of the Ophthalmological Society of New Zealand

The first article in the first issue of the Transactions was by the society’s first president, William Fairclough, and was entitled ‘Industrial Lighting’. The second was by Cecil Pittar, entitled ‘Intra-capsular cataract extraction’ — a seminal article because he was a New Zealand pioneer in intra-capsular cataract extraction, practising that technique from 1946 instead of the then favoured extra-capsular technique. Its advantages over the primitive extra-capsular technique were the certainty of a clear pupil and the relative absence of iritis, but its disadvantage was a higher risk of vitreous loss.*

Pittar was also a New Zealand pioneer in corneal transplantation and in the Transactions of 1949 he reviewed three procedures, one for interstitial keratitis and two for corneal ulcers. In 1951 he reported his first three cases of keratoconus treated with penetrating corneal transplants.

The presidential address by Rowland Wilson in 1948 was an important contribution, Wilson being a world authority on conjunctivitis and in particular trachoma, on which he did clinical research in Egypt (see Chapter 2).

In 1952 Drs Walter Hope-Robertson and Graeme Talbot contributed to a discussion on the clinical use of cortisone eye drops. In 1959 Randal Elliott wrote on the use of the radioactive strontium-90 ophthalmic applicator to deliver beta-irradiation at the time of pterygium excision. (Strontium-90 was used to reduce the rate of recurrence of pterygium until the 1990s, when it was replaced by conjunctival grafting.) Elliott also mentioned the use of strontium-90 for superficial tumours and vascularisation of the cornea, uses which were never widely employed.

In 1966 Pittar wrote on the use of the cryoprobe in intra-capsular cataract extraction, instead of capsule forceps or the erysiphake, with a report on 13 cases. He concluded that the cryoprobe was a more complicated procedure than forceps extraction and that he was not prepared to continue it routinely. However later, when the cryoprobe was made thinner, it became the preferred method for intra-capsular extraction.

The 1968 issue contained three notable papers. ‘Traumatic hyphaema: a preliminary report on two hundred cases’, by Ferguson and Poole, had the distinction of being cited in Duke-Elder’s System of Ophthalmology. Suckling and Hay’s regional survey of retinal detachment in New Zealand was the first attempt at this topic, which was not addressed again until Polkinghorne’s work.

* Vitreous loss has always been a complication of cataract surgery, but its rate of occurrence is now down to around three per cent or less. The vitreous gel comes forwards into the anterior chamber or out the incision. When it occurs, there is a higher probability of many post-operative complications. However, with expert management most eyes still achieve a good outcome.
in 2004. The article on fluorescence appearance times in retinal and choroidal vessels by Parr, Hodge, Clemett and Knight is significant because Dollery, Hodge and Scott, the latter two being New Zealanders, were world pioneers in fluorescein angiography of the retina. (Hodge's several contributions to ophthalmology are noted in Chapter 13.)

Photocoagulation for proliferative diabetic retinopathy was first addressed by Harold Coop in 1971, when he alluded to the possibility that pan-retinal photocoagulation may cause an overall regression of neovascularisation in all areas, not only those treated, a finding which was later confirmed. In the same issue Coop addressed the basic techniques of retinal detachment surgery using scleral buckling by exoplants, with cryotherapy to retinal breaks.

Pars plana vitrectomy was introduced by Bruce Hadden in 1976 with an article on seven cases of vitreous opacity treated with vitrectomy, and by Bowbyes, who wrote on six cases. A series of intra-ocular lens implants, a milestone paper, was published by Calvin Ring in 1978. He reported a series of 50 consecutive intra-ocular lens implantations using Binkhorst type lenses, which were inserted after extra-capsular cataract extraction. In 46 cases he used extra-capsular cataract extraction with an irido-capsular fixation procedure, and in four intra-capsular cataract surgery with iris-clip lenses. Ninety-two per cent of cases achieved corrected vision of 6/12 or better. Ring followed this up with an article in 1982 comparing the results of 200 intra-ocular lens cases with 200 routine cataract operations without intra-ocular lenses over a six-year period, still using Binkhorst-style lenses but all after extra-capsular extraction. Ninety per cent of intra-ocular lens cases achieved best corrected vision of 6/12 or better after an average follow-up of 33 months. In 1984 he further reported on 59 bilateral, but not at the same session, intra-ocular lens implants, including 22 eyes which received posterior chamber intra-ocular lenses.

In 1979 Anthony Molteno wrote about glaucoma drainage implants. He had developed the world-first Molteno glaucoma implant in 1969 when in South Africa, before emigrating to New Zealand. New models of the Molteno implant are still widely used throughout the world.

Australian and New Zealand Journal of Ophthalmology
The last volume of the Transactions of the Ophthalmological Society of New Zealand was in 1985, after which it was amalgamated with the Australian Journal of Ophthalmology, which changed its name to the Australian and New Zealand Journal of Ophthalmology. As the official journal of both the RACO and the OSNZ, the creation of the Australian and New Zealand Journal
of Ophthalmology was another step towards closer relationships between Australian and New Zealand ophthalmology and ophthalmologists. The joint editors-in-chief were Associate Professors Frank Martin of Sydney and Richard Clement of Christchurch.

Associate Professor Richard Clemett in his editorial in the first issue under the new name said that selected manuscripts from the annual meetings of the RACO and the OSNZ would be published. Whereas most presentations at New Zealand meetings had been published in the Transactions, only a small number of selected papers presented at the annual meetings in New Zealand were published in the new journal. As a result many more presentations are now lost to posterity, but the gain was a journal of higher quality. The Australian and New Zealand Journal of Ophthalmology continued to print the annual presidential addresses of the RACO and the OSNZ.

In 1985, the first year of the Australian and New Zealand Journal of Ophthalmology, only two papers originating from New Zealand were published, both by Professor Molteno. One was on the clinical experience with the Otago photoscreener, and the other on the visual outcome in cases of neovascular glaucoma. The Otago photoscreener was designed at the Department of Ophthalmology in Dunedin as an instrument for the mass screening of infants with strabismus and/or amblyopia who do not fix and focus binocularly.

The first editor of the Australian (later Australian and New Zealand) Journal of Ophthalmology was Dr Reuben Hertzberg in 1963, and the second was Dr Frank Martin AM. Martin resigned in 1987 after 11 years as editor, and his successor was Dr Ian Francis. From 1988 Francis and Clemett were the joint chief editors.

In 1991 Francis resigned as the Australian editor to be replaced by Dr Alan McNab. Clemett continued as the joint editor from New Zealand. At the end of 1995 Dr Mark Gillies took over from McNab. But despite having a New Zealand joint editor there were still only two to four papers each year from this country.

The year 1987 marked 25 years of the Australian and New Zealand Journal of Ophthalmology. Gillies and Clemett remarked in their editorial of the importance of having a strong regional journal but at the same time noted that pressure from funding bodies for researchers to publish in high-impact overseas journals meant that most of the best material from Australia and New Zealand was sent to North American journals.

Clemett resigned as editor in 1998, with Gillies continuing as the sole editor.

In 2000 the name of the journal was changed to Clinical & Experimental Ophthalmology but as with the change from the Australian Journal of Ophthal-
mology to the *Australian and New Zealand Journal of Ophthalmology*, the sequence of volumes was a continuum.

In 2003 Professor Charles McGhee took over the onerous and responsible position of editor-in-chief from Gillies.28 At that time the journal’s impact factor had risen to number 30 of 43 peer-reviewed ophthalmic and vision science journals listed in the Institute for Scientific Information Journal Citation reports.

McGhee quickly recruited new members to the editorial board and increased the base of reviewers. He successfully built on the solid foundation left by the previous editors-in-chief, and continued to develop the journal and raise its impact factor. By 2010 its impact factor had risen to 1.75, placing it in the top half of ophthalmic journals, 23rd out of 49. Among other innovations, McGhee instituted the occasional issue devoted to a single topic, one of the most successful being ‘Imaging in Ophthalmology’, which appeared in 2009.

In 2010 McGhee retired as editor-in-chief after a very successful eight years. Victoria Cartwright, in the Department of Ophthalmology at the University of Auckland, continues as managing editor. The journal’s future is assured.
Chapter 15

PUBLIC AND PRIVATE OPHTHALMOLOGY IN NEW ZEALAND

In 1846 the government of New Zealand agreed to grant money for the erection of hospitals in Auckland, Wellington, Wanganui and Taranaki for the free treatment of all Maori and of destitute Europeans. Wellington was the first to take effective action, and Auckland's first hospital was opened in 1847. European patients were charged if they had means.

Public institutions continued to charge fees to a variable extent until the Labour government's Social Security Act came in in 1938. In the early 1990s there was a brief and unsuccessful return to charging New Zealand citizens for outpatient visits and inpatient care. The scheme was generally unpopular and costly to administer, and there were so many exceptions and bad debts that it was soon abandoned and quickly forgotten.

Many ophthalmologists in private practice took honorary positions in the public hospitals. Their motivation was a combination of wishing to help the less affluent, managing a wider variety of diseases and trauma, training young doctors and nurses, and working alongside colleagues, in contrast to the relative isolation of private practice. The first such ophthalmologist was Dr Llewellyn Powell in Christchurch in 1864, followed by William George Kemp in Wellington in 1883. The first in Auckland were Drs C. Humphry Haines and Arthur Challinor Purchas, both of whom took up honorary appointments in 1886. Honorary appointments to public hospitals came later in provincial centres.1

Most New Zealand public hospitals thus relied on honorary medical staff,
who earned their living from private practice. However, by 1928 most honorary appointments had been replaced by full-time salaried specialists or paid part-time or visiting specialists. Honorary appointments persisted in the four main centres, but most had gone by the 1940s.

The Waikato Hospital Board from the outset rejected honorary medical appointments and part-time paid appointments, preferring full-time paid hospital specialists. Exceptions were Drs A.W. Beveridge, eye specialist, S.L. Green, ENT specialist, and later Duncan Macdiarmid, eye specialist, who were paid an annual retainer for part-time work, presumably because the hospital had little choice. Waikato was thus called a ‘closed hospital’. This policy disadvantaged Waikato, as it excluded many talented specialists. Indeed, the Otago Medical School advised its graduates that they would receive better training in an ‘open hospital’. The closed policy at Waikato was lifted in 1950.

The majority of trauma surgery is now carried out in the public system throughout the country. In Auckland, more elective ophthalmic surgery is done in the private than in the public system, but the proportion of surgery in the private sector tends to reduce as one goes south. The contracting-out of elective surgery to the private sector as a means of reducing public hospital waiting lists has been discussed in Chapter 5.

Private ophthalmology in New Zealand

The first private surgical hospitals were the Mater Misericordiae Hospital in Epsom, Auckland, and the Prospect Hospital in St David Street, Dunedin. The Mater Misericordiae Hospital was established by the Sisters of Mercy. It is now called the Mercy Hospital, and is part of the Ascot group.

Prospect Hospital was opened by an enterprising nurse from Dunedin Hospital, Annie Tombe. Its opening was described in the *Otago Daily Times* of April 14 1900:

*There are 14 rooms in the hospital. Six of these are wards, four being upstairs and two on the ground floor, the furnishing of which is marked with every possible comfort and good taste. The operating theatre has had special efforts bestowed upon it. It has two large windows and is painted white, which gives the best light and every appliance is provided that is required in a room of the kind. A balcony 20 feet long, a smoking room, and a handsome drawing room are evidences that the comfort of patients is assured in the convalescent stage, while we also find a capital dining room, nurses’ rooms, servants’ rooms, bathrooms, and, in fact, all the*
Sir Lindo Ferguson operated at Prospect. The Mater Misericordiae Hospital (now Mercy Hospital) in Dunedin opened in 1936.

Southern Cross Healthcare

Undoubtedly private surgery in New Zealand owes its present health and growth to Southern Cross Healthcare. The first Labour government’s Social Security Act in 1938 created a widely heralded ‘free’ health service, which surgeons feared might lead to them all becoming full-time public servants. However, a dual system was finally arrived at, which allowed people to continue having the choice of private surgical care.

Nevertheless, in around 1960, with private hospital costs escalating, the future of private surgery seemed perilous. In Peter Smith’s book *The Private Prescription* we read the recollections recorded of that time by Dr Kevin McNamara, leading general surgeon, who was chief of staff at the Mater Misericordiae Hospital in Auckland:

> Private surgery seemed to be in a precarious position at this time, and even in those days private hospital costs appeared to be getting out of reach of everyone except an élite, but really this country did not have a large affluent sector and I think if there was no health insurance there would be very few people who could afford private surgery — I suppose only five percent of the population. Perhaps there was a mixture of self-interest and philanthropy in starting Southern Cross. We didn’t want to see the private sector run by the politician or the economist. We felt that if we could arrange some private form of health insurance we could keep the private sector going. And we thought it was important in the interests of the New Zealand health service that people should have a choice. If you don’t have a choice you have a monopoly. Here it would not be a private monopoly, it would have been even worse — a public monopoly.\(^3\)

So started Southern Cross Healthcare, driven in particular by McNamara and Drs Warwick Macky, Jefcoate Harbutt and Edward Gibbs (Wellington), and accountant Don Carnachan.

To this day Southern Cross Healthcare, a ‘not for profit’ organisation owned
by its members, has remained by far the largest private health insurer in New Zealand. However, it has always battled between coping with higher surgical volumes and expenses and maintaining affordable premiums. Surgical costs have risen dramatically because of the increasing average age of the population and a greater number of procedures being done on a given number of patients both because of age and because of new technology.

And the new technologies are often expensive, further raising the costs of surgery. In one three-year period the cost of an ordinary appendicectomy rose by 50 per cent. Ophthalmic surgery has added more than its share to increasing costs. Laser refractive surgery, introduced in 1992, was initially covered by health insurance. However, the quickly increasing number of claims drove Southern Cross to look at the viability of continuing coverage. Southern Cross determined that laser refractive surgery was a lifestyle or ‘cosmetic’ procedure, and announced it would cease reimbursement in December 1997. Also, the 1990s saw the beginning of a huge rise in the number of cataract procedures carried out, again because of the ageing population but also because of new technologies and skills leading to improved visual outcomes and fewer complications.

In 1987 Southern Cross Healthcare reached a million members. That figure was slightly higher in 1991 but thereafter there was a gradual loss of members to below 900,000 because of the necessary hike in premiums to cover increased medical costs.

Ophthalmologist Dr Hylton Le Grice was appointed to the board of Southern Cross in 1984 and was elected chairman in 1995. He brought new drive and openness to the board. In 1996 Le Grice moved the annual general meeting to the Ellerslie Function Centre and arranged for every member to be personally invited to vote either in person or by proxy. This changed the previous small meetings to totally democratic meetings; in 1999, 64,000 proxies were received in favour of the chairman.

Before Le Grice joined the board, he had been the OSNZ’s nominee to petition Southern Cross Healthcare when it annually reassessed reimbursements for surgical procedures. Le Grice was always a strong advocate for increasing reimbursements for ophthalmic operations on the basis of inflation as well as on what he termed medical inflation, which was in that time considerably higher than the consumer price index because of the devaluing dollar and the increasing costs of surgical supplies. He was very successful in keeping reimbursements high but realistic, sometimes to the chagrin of other specialties. Of course when elected to the board of Southern Cross he had to relinquish this task because of his conflict of interest, and Bruce Hadden took over for several years until finally Southern Cross no longer encouraged input from surgeons on reimbursements.

By 1996 Southern Cross membership had dipped to around 850,000,
which drove consideration of ways to control reimbursements. This resulted in the Affiliated Provider Programme. Providers usually sign a one- to three-year contract, with an agreed fee for each procedure. Southern Cross's commitment to the holders of most policies was an 80 per cent refund, and for Ultra-Care policies 100 per cent, so the affiliated scheme gave Southern Cross more control over expenses. An advantage to the surgeon was that Southern Cross undertook to recommend their affiliated providers in that field. The advantage to patients was that they did not have to obtain prior approval, and the surgeons' offices did all the paperwork, leaving the patient to pay only the excess. Patients also knew exactly what the excess would be. This scheme began with cataract surgery and over the years has spread to other procedures across the surgical spectrum.

Initially there was no compulsion on the part of cataract surgeons or any other surgeons to be an affiliated provider, and many remained outside the scheme. However, in 2010 Southern Cross advised that it would reimburse its clients for cataract surgery only if it had been carried out by one of its affiliated providers, a move that was driven by the relentlessly increasing number of operations. Southern Cross also advised that it would not reimburse patients whose vision best corrected with glasses was 6/7.5 or better, unless there were other extenuating conditions such as glare. This move was largely to distinguish between true cataracts and the removal of clear or almost clear lenses primarily for refractive purposes, meaning less dependence on glasses for clear vision.

Criticism
Over the years ophthalmologists in private practice have frequently been publicly criticised, usually more so than those in other specialties. Criticism has been driven by long waiting lists for cataract operations in public hospitals, and by the perceived affluence of private ophthalmologists.

For decades there has also been criticism of specialists who work part-time in private practice and part-time in public hospitals. They have been accused of somehow being able to manipulate waiting lists in public hospitals to enhance their private practices. What is not mentioned is that if they chose to work only in private they would earn considerably more than the public health service salary. Those who choose to work part time in the public system do so, as already mentioned, to see a wider range of conditions, to share ideas with colleagues, to teach the next generation, and to provide care for the less affluent. For several reasons, a growing number of specialists are unfortunately opting out of the public system entirely, which is to everyone's loss.

Public outcry reached a climax in 1998, initiated by publicity that the Fred Hollows Foundation was able to do cataract operations as cheaply as $25 each
while at the same time cataract operations in New Zealand in the private sector were costing $3500. The reasons for the vast difference were never publicised, but they included surgeons, nurses and others working gratis for the Fred Hollows Foundation, the use of intra-ocular lenses made cheaply in Eritrea, and hugely lower overheads such as rent and wages in the developing world.

Many joined the media witch-hunt. Associate Minister of Health Tuariki Delamere said in the *New Zealand Herald* on April 17 1998 that he was ‘going to buy a fight from the ophthalmologists’. False statements flew. Cataract surgery in Australia was said to cost only $800, but no one mentioned that the Australian government through its Medicare scheme picked up the rest of the tab and in fact the total cost was over $4000, which was significantly higher than in New Zealand!

At the same time the Commerce Commission investigation of the Southland cataract affair was brewing (see Chapter 9). An episode of the *Assignment* television programme featured long public waiting lists for eye surgery, ophthalmologists’ ‘excessive’ fees, and wrongly portrayed ophthalmologists as being responsible for few overseas trained specialists being registered in New Zealand, implying that they were deliberately keeping them out. Bill English, Minister of Health, suggested in November 1998 in a letter to Ken Tarr, chairman of the RANZCO New Zealand Branch, that cataract patients ‘may prefer to have slightly lower quality services (say 1% risk) and more of them’. Tarr’s reply was ‘How would you yourself like to be the one in a hundred who had a poor outcome, and would the politicians take the responsibility?’

The main front-page headline in the *New Zealand Herald* on April 29 1998 was ‘PM gunning for medical price-fixers’, the Prime Minister at the time being Jenny Shipley. It was indeed an ‘annis horribilis’, and resulted in the New Zealand Branch of the RANZCO placing an advertisement in all major newspapers correcting the unfair accusations. It was a most trying year in particular for Tarr and the others who supported him, including Dr Harold Coop. They could not have done better than they did to publicly refute the misinformation and the inflammatory statements from politicians.
International fame

Although many travelled overseas and found success, at least six New Zealand ophthalmologists are widely accepted to have achieved worldwide recognition in their sub-specialties while working primarily in the antipodes.

Rowland Wilson of Dunedin developed ground-breaking research on trachoma in Egypt in the 1940s which led to the identification of the causative organism by Tang (see Chapter 2).

Professor John Parr’s ground-breaking book *Introduction to Ophthalmology* has been published in many versions and is used worldwide. His successor at the University of Otago, Professor Anthony Molteno, developed the Molteno valve implant for complex glaucoma when he was in South Africa, and after emigrating to New Zealand has pursued its refinement and related world-class research over three decades.

Professor Barrie R. Jones (1921–2009) initially completed a year as an eye registrar in Wellington. He then travelled to London with the intention, like many New Zealanders before him, to undertake post-graduate training at Moorfields Eye Hospital and then return home. In the event he did not return until he retired to Tauranga in 2001! Jones’s contribution to Moorfields and to external eye diseases was so significant that Dr Peter Leaver dedicated his book *The History of Moorfields Eye Hospital, Volume 3, Forty Years On* to Jones.¹

After Jones completed his Moorfields training ‘on the house’ in 1956,
he joined the staff of the Institute of Ophthalmology in London and began his studies in clinical microbiology with special reference to viral infections and trachoma, while maintaining his surgical skills with appointments as a senior registrar at the London Hospital and a clinical assistant at Moorfields. His interest in trachoma originated with his early association with Rowland Wilson. Professor Doug Coster wrote an excellent history of these two remarkable New Zealand-born ophthalmologists.2

In 1963 Jones was appointed to the newly created Professorial Chair of Clinical Ophthalmology at Moorfields. To quote Leaver:

...It had been Barrie Jones’s original intention to take advantage of the educational opportunities that London had to offer, prepare a PhD thesis in microbiology and, after getting his higher degree, return to the Antipodes most probably to take up a role in Rowland Wilson’s department at his alma mater, the University of Otago. He also felt bound to repay a debt of some six hundred pounds borrowed from his grandfather’s estate, to enable him to come to the UK in the first place.

All thought of the former disappeared in a whirlwind of research and clinical activity, his unquenchable enthusiasm and boundless capacity for hard work taking him relentlessly along paths he had not sought or been prepared to tread. [Sir Stewart] Duke-Elder, in particular encouraged him to set up his own laboratory, with funds from an oil company, which he had at his disposal. An invitation to apply for the newly created professorial chair in Melbourne, which could well have de-railed him, seemed attractive, until the job specification of the post changed at the last minute, when unacceptable conditions were imposed. So it was that Barrie Jones remained in London, was appointed Professor of
Professor Fred Hollows AC (1929–1993) was born in Dunedin. His family moved to Palmerston North when he was seven, and after his schooling he completed a Bachelor of Arts degree at Victoria University. He then studied at the Mosgiel Seminary, but soon decided against being a Catholic priest.

He qualified from the Otago Medical School, studied ophthalmology at Moorfields, then took an associate professor post at the University of New South Wales in Sydney. Hollows worked tirelessly for Australian Aboriginal people in remote areas. His energy and organisational ability resulted in the establishment of new medical services for remote Aboriginal people, and in the National Trachoma Eye Health Program of the RANZCO. In Eritrea, Nepal and Vietnam he trained local people to do eye operations, and in the first two countries he established factories to manufacture intra-ocular lenses at cost, which was about $A11. Hollows was awarded many honours, including Australian of the Year in 1990.

*Clinical Ophthalmology in 1963, and went on to change, forever, the face of British ophthalmology.*

*Dr Fred Hollows AC (1929–1993), holding an intra-ocular lens.*

FRED HOLLOWS FOUNDATION AUSTRALIA/NEW ZEALAND OPTICS, MARYANNE DRANSFIELD.
Year in 1990. The final great tribute was an Australian State Funeral at St Mary’s Cathedral in Sydney.

The Fred Hollows Foundation was launched in 1992 and continues his work. Over one million people have had their sight preserved or restored through his initiatives. The present chairman of the Fred Hollows Foundation in New Zealand is Rob Fenwick, son of the late George de Lacy Fenwick, an Auckland ophthalmologist.

Another New Zealander, scientist Ray Avery, worked with Hollows in devising the technology to mass-produce intra-ocular lenses cheaply in underdeveloped countries. For this and other achievements, Avery was voted the first New Zealander of the Year in February 2010, and knighted (GNZM) in 2011.

Dr Howard Harper was born in Te Kuiti in 1930 and pursued an extraordinary life serving the people of Afghanistan. He had just two years of secondary education, at Auckland Grammar School, after which he followed a building apprenticeship. At the age of 23 he and a friend embarked on an intrepid trip to central Asia, where he was inspired by the possibility of helping so many impoverished people. He headed to England where he trained in ophthalmology and studied Urdu and Islamic law at the school of Oriental and African Studies.

Most of the rest of his life was devoted to building hospitals and schools and practising ophthalmology in Afghanistan. He loved the people and was fluent in their language. He worked for shorter periods in Mongolia and Iraq. He became CEO of Vision International. In 2010 Auckland Grammar School honoured Howard with its Augusta Award. His adventures and medical work are related in a recently published book.

In the twenty-first century Professors Charles McGhee and Helen Danesh-Meyer have together published almost 400 papers in scientific peer-reviewed journals. They are both in demand as international speakers and research collaborators — McGhee on external eye disease and anterior segment surgery, and Danesh-Meyer on neuro-ophthalmology and glaucoma. In 2010 Danesh-Meyer was made an honorary professor of the University of Melbourne for her research collaboration.

New Zealand ophthalmologists in the World Wars
Many New Zealand ophthalmologists served in the World Wars and in other conflicts, and many achieved high ranks and were decorated. Many served with distinction, and these contributions are mentioned in individual profiles. However, two should be mentioned here because of their special interest.

Dr Cecil Pittar was in the naval reserve before World War Two. In 1939
he was called up with two hours’ notice to sail on HMS *Achilles*, headed for what became known as the Battle of the River Plate. This well-known naval encounter resulted in the scuttling of the German pocket battleship *Graf Spee*. Almost immediately after returning home, Pittar went overseas to serve in the Royal Navy as an eye surgeon for the remainder of the war.

Dr Howard Coverdale gave extensive service in World War Two as an eye surgeon, mainly at Helwan Hospital in Egypt. Sir Duncan Stout devoted a chapter to ophthalmology in his comprehensive book *War Surgery and Medicine*, and Coverdale himself wrote an account of the contributions of New Zealand ophthalmologists in World War Two, including a useful bibliography. Ophthalmic work was concentrated at Helwan, which served the New Zealand base as well as the Royal Air Force and British troops. By the end of 1943 Coverdale had dealt with 8772 ophthalmic cases. Stout notes that due to inadequate screening in New Zealand before departure, refractive errors were common in the earlier years, and spectacle lenses were in short supply. He also commented on the visual problems associated with psychoneurosis, upon which Coverdale also wrote.

Blepharitis and conjunctivitis were common in the dry, dusty conditions in Egypt. However, trachoma was found in only the Maori Battalion, and 11 Maori were repatriated for that. Interestingly, Coverdale saw only one case of sympathetic ophthalmia. This condition had been much more common in the South African (Boer) War and World War One, but by the time of World War Two it was recognised that if an injured eye which had little or no visual potential was removed within 10 days, the likelihood of sympathetic ophthalmia was greatly diminished.

In Egypt and Italy combined, 618 men had major battle or accidental injuries to the eye. Seven men were totally blinded, and 89 lost the vision in one eye. Sixty-five had one eye removed, and two had both eyes removed.

As previously mentioned, two ophthalmologists were killed on active service, Dr Terras Bell in World War One (see page 48) and Dr Eustatius William Barton (Peter) Griffiths in World War Two (see page 143).

New Zealand ophthalmologists in the Pacific*

New Zealand ophthalmologists have made a significant contribution to eye care in the small island countries of the western Pacific over the last 50 years. Prior to regular air travel, the only access was by sea, which was extremely time consuming.

The first known New Zealand ophthalmologist to work in the Pacific was

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* Dr David Murdoch contributed greatly to the writing of this section.*
Dr Walter Hope-Robertson, who visited Fiji in the 1950s. His cataract technique was intra-capsular extraction, preferring the *erysipahake* for mature lenses. He used five 6-0 gauge silk corneo-scleral sutures, which were removed after 15 days.

During World War Two there was only one ophthalmologist resident in Fiji, a Dr Williams, and in 1944 he thought there was an outbreak of trachoma in the New Zealand Forces. Dr Charles Swanston, whose MB ChB thesis in 1940 was on trachoma in Maori, was with the Royal New Zealand Air Force in Espiritu Santo in the north of Vanuatu. In early 1945 he was flown by Catalina flying boat to Fiji to investigate. He was given a Jeep and a laboratory with a microscope to hunt for inclusion bodies.

Over seven months he discovered two or three inclusion bodies and concluded that while a mild form of trachoma existed in the Fijians there was none in the New Zealand troops. He wrote up his work and it was accepted for publication in the *New Zealand Medical Journal* and also as a thesis for a Doctor of Medicine degree (MD). However, Swanston decided not to sit the MD papers.

While Swanston was returning to New Zealand by Sunderland flying boat, the Americans dropped the atomic bomb on Nagasaki and the war was over by the time he got home. He could be demobilised only if he had a career option in view, so he and his wife Margaret caught the first available ship to England and arrived in time to start his ophthalmology training at the Royal Westminster Hospital, High Holborn. In 1967 Swanston went to Qui Nhon in Vietnam with the New Zealand Surgical Unit for six months, but the work was mainly general surgery, including Caesarean sections.

Early visits to the Pacific were largely individual initiatives. In the 1960s Sir Randal Elliott visited most years, encouraged by his sense of adventure and keen academic interest. His work on pterygia was the basis for fellowship examination questions over the next decade!

Commercially, Tasman Empire Airways Limited (TEAL), forerunner of Air New Zealand, flying boats flew to Fiji on the Coral Route which went from Auckland to Fiji, Aitutaki in the Cook Islands, and Tahiti. As Elliott was an active member of the Royal New Zealand Air Force Reserve, he could sometimes hitch a lift with an Air Force plane. Further travel to the Cook Islands, the Tokelaus or Niue depended on boats, which Elliott remembers as ‘highly hazardous’, with incompetent skippers.

In 1959 Elliott went to Samoa for a month and found pterygia to be the

*An instrument devised by Barraquer for removing the whole lens in its capsule by suction.*
major eye pathology, with a prevalence of 29 per cent. In 1960, working for the Medical Research Council, he studied pterygia on Aitutaki. He found a high incidence — 50 per cent in those over 50 years of age — and he related it to ultraviolet exposure and the drying effect of constant wind. In 1963 in the Tokelau Islands he examined 98.2 per cent of the total population of 1862 and again found pterygia the major pathological condition of the eye, with over half affected by the age of 50.

In 1965 Elliott went to Malaya and Borneo for three months as part of the Royal New Zealand Air Force ophthalmic team. New Zealand forces were involved in the Malayan jungle against the communists, and later in the Borneo confrontation with Indonesia. One of the purposes of the ophthalmic team was to demonstrate the technique and feasibility of corneal transplantation in the region. Corneae were supplied from Wellington Hospital, stored in serum and placed in an ice-filled vacuum flask with the help of Dr David Sturman. At times, the corneae were used in Asia just 40 hours after the death of the donor in Wellington.

Elliott continued his study on pterygia in Malaysian aborigines living in dimly lit jungles, and in Borneo he compared the incidence of pterygium in Land Dyaks and Sea Dyaks. The latter had a higher rate, as might be expected because of less shade and the reflection of ultraviolet light off the sea.

Dr Grant Johnston of Hamilton began his ophthalmic career in the Pacific Islands, as a medical officer to Niue from 1953 to 1956. Niue’s only link with the outside world at that time was the monthly visit by the ship MV Tofua.

Three months into his stay Johnston was involved in the only political assassination to take place in New Zealand or its territories. Hector Larsen, the unpopular Resident Commissioner, was hacked to death by three aggrieved prisoners using bush knives. Grant arrived within half an hour of the attack to hear Larsen’s last words.

Towards the end of Johnston’s term, the World Health Organization sent an Austrian ophthalmologist to Niue for a month. Johnston assembled 20 cataracts for him to operate on, but by the time the Austrian was ready to leave on the Tofua only half had been done. Johnston asked to be instructed, and completed the rest after the Austrian had left. This aroused his interest in ophthalmology, and he went on to train in Southampton with E.C. Zorab. Interestingly, Zorab did not subscribe to the insertion of intra-ocular lenses but others taught Johnston the current technique. Johnston returned to Hamilton in 1960 to perform New Zealand’s first intra-ocular lens implants, with mixed results. During his career he visited Niue several more times.

Dr David Warnock of Palmerston North spent a month in Tonga and Niue
in 1968, working with the first of the early local eye specialists, Sam Taumoepeau, in Tonga and with Harry Nemaia in Niue. Warnock received detailed post-operative notes including refractions for many years from Nemaia, Niue's principal medical officer. For the next 30 years Nemaia provided an excellent refraction service to Niue and made the task easy for visiting eye teams with his superb organisation.

The Cook Islands were annexed to New Zealand in 1901 and Niue in 1905, so naturally New Zealand has had its closest ties with these islands. Elliott provided the early ophthalmic visits and then handed the task on to Dr Bernard Bowden from Whangarei, who visited from 1973 to 1979, often with his wife Dr Katharine Bowden. They made many boat journeys to the outer islands.

The Cook Islands had a Scottish doctor, Archie Guinea, who was the resident refractionist and aided the New Zealand teams. Dr Harold Coop took over the annual visits to the Cook Islands from 1980 for 10 years. He operated on Aitutaki and was backed up by optometrists Neil Ritchie and John Veale, who often preceded him to seek out cases.

Coop initially did intra-capsular cataract operations, using the Alcon Cryoceps pencil. Ritchie found a Zeiss OpMi 1, an early model operating microscope, in the Microbiology Department of the University of Auckland and appropriated it for Pacific Islands work. It is now permanently at Labasa Hospital in Fiji. With it Coop did the first intra-ocular lenses in the Pacific Islands in the mid-1980s.

Following Coop, Dr Paul Rosser has visited the Cook Islands regularly since 1991, initially once every two years, then every year for the last 10. On the earlier visits he travelled with Veale and Ritchie. The team has now expanded to include specialist ophthalmic nurse Olga Brochner, and Drs Alison Pereira and Jo Sims, who manage diabetic retinopathy. Unfortunately, diabetic retinopathy is as common and severe in the Cooks as it is among New Zealand Maori.

Typically, on each trip the team would screen 200 diabetics and perform

Dr Paul Rosser in the Cook Islands with a grateful patient. The operating bed had collapsed during the cataract surgery, but ‘all’s well that ends well’. Dr Paul Rosser
70 cataracts with intra-ocular lenses, and the optometrists would assess many more. To date, Rosser has completed almost 1000 extra-capsular cataract operations with intra-ocular lenses in the Cook Islands.

John Beaumont of Hastings accompanied Fred Hollows’s team to Thursday Island in 1986, when they inserted intra-ocular lenses, publishing the results as a model for third-world eye care. Beaumont also visited Tonga, where he took a strontium-90 eye applicator for pterygia in his private airline baggage, before the days of security checks!

Volunteer Ophthalmic Services Overseas Charitable Trust (VOSO)
In 1980 four optometrists, Neil Ritchie, John Veale, John Wilson and Mike Webber, visited Tonga and travelled through the islands with Sam Taumoepeau, 12 years after Dr Warnock’s visit. They realised that as well as refractive needs there were still widespread surgical needs which were not being met. They formed VOSO, a registered charitable trust run by optometrists but including two medical trustees, presently Drs David Pendergrast and Andrew Riley.

VOSO organises New Zealand eye teams of optometrists and ophthalmologists to visit the Pacific. It has also helped foster the good relationship that exists between the two professions in New Zealand.

The VOSO trip to Tonga in 1981 was with Dr Lindsay (Jiggs) Poole as surgeon. As well as his surgical expertise, Poole liked to show he could out-refract his optometrist friends. He did a number of trips with VOSO including several to Vanuatu over the following five years.

VOSO acquired several pressure cookers for instrument sterilisation, at Ndui Ndui on Aoba in Vanuatu, Poole’s instruments were boiled up in a kerosene tin over a Primus. Nowadays, it is rare to operate in the Pacific in theatres without autoclaves and air-conditioning.

Ten years ago, while Dr Ken Tarr was a trustee, VOSO acquired a ScanOptics operating microscope. Dr Rod Keillor organised the surgical instruments, many of which were discards from private practices. These have gradually improved, although high-tech colleagues can still despair of them.

VOSO has always operated on a financial knife-edge, depending on grants from the Ministry of Foreign Affairs and Trade as well as on donations from service clubs. Initially team members contributed $500 a trip, which was sometimes refunded after a good year.

In 2002 VOSO sent away eight teams, who saw 7200 patients and performed 550 operations including 450 cataract operations. Five thousand eight hundred pairs of glasses were prescribed and 80 retinal lasers performed. This would be the equivalent of the annual work of a provincial eye department.
Labasa in Fiji, Tonga, and Western Samoa are visited annually to support and help the local eye practitioners who are now of a good standard but professionally isolated. They are expected to provide care on impossibly low budgets.

Labasa has been of long-term interest to VOSO. Its largely Indian population is not of great interest to the Fijian Health Service but its local Lions Club supports the New Zealand teams and makes the visits memorable, though hard work. Drs Keith Maslin and Malcolm McKellar have both visited many times. Others who have been part of VOSO teams in Labasa include Dr Tony Lee, who went as surgeon on earlier visits, and Dr John Davison.

Davison has led the most recent two visits to Tokelau, which, like Niue, has only a small population, of about 1400, and requires only occasional visits. In 1989, as a reminder of differences between New Zealand and theatres far removed, John Chapman-Smith had fowl stroll through the theatre while he was operating in Tokelau!

Melanesia has until recently seen less New Zealand involvement than the Polynesian islands. Vanuatu had three visits from Drs David and Rosemary Murdoch in the early 1980s, and Dr Lindsay Poole also visited. More recently, Dr Marc Gimblett of Rotorua has visited regularly with the Australian Pacific Islands Project Team.

Dr Eric Lawton of Hamilton spent two years after his retirement with the Christian Blind Foundation in Goroko, Papua New Guinea, and helped write the basic textbook for eye nurses in that area. In 2001 VOSO was invited to send the first specialist team to visit the island of Bougainville after the Crisis in which 15,000 people lost their lives. Drs David and Rosemary Murdoch have visited Bougainville for the past 10 years. Bougainville’s eye service is about to stand on its own feet, which is the ideal outcome from regular visits.

In 2002 Drs Thiers Halliwell, Paula Vivili and David Murdoch visited the Solomon Islands to help the Australian teams which had visited twice a year since the ethnic tensions began and the two local ophthalmologists fled. Dr Dick Galbraith OBE of Melbourne paid many visits to the Solomon Islands and superbly organised ophthalmic services. The Solomons now have an excellent nursing infrastructure, which is a model for other small Pacific nations.

In Polynesia the epidemic of diabetes which affects 20 per cent of those over 40 years of age poses an immense health problem, including eye health. Fortunately Samoa and Tonga have argon retinal lasers provided by AustAid. The Pacific Eye trust, established by Dr George de Lacy Fenwick in the 1980s, opened an eye clinic in Lautoka, Fiji under the guidance of Associate Professor Gillian Clover, and with the financial support of the Lions Clubs in New Zealand and Fijian businessman Y.P. Reddy.
Clover has been very active in the Western District of Fiji, especially with managing diabetic retinopathy by training local personnel in photo-monitoring and laser treatment. She also established several outpatient clinics. Clover was honoured by the Lions for this work.

Clover also encouraged ophthalmology training in New Zealand for Pacific colleagues, and facilitated the training of Ernest Oo (Fiji) in Auckland. Following this success she explored other options to bring young surgeons to Auckland for appropriate clinical and surgical training — particularly the management of diabetes. In the last decade, under the leadership of Professor Charles McGhee, the University of Auckland has provided the opportunity for Dr Louise Dansford (Fiji) and Dr Paula Vivilli (Tonga) to undertake two- and one-year fellowships respectively in Auckland. Subsequently the department has recently facilitated a one-year ophthalmology fellowship for Salofi Laititti (American Samoa) and also entered into discussions with the Fred Hollows Foundation about research and training opportunities in the Pacific.

In Sir Randal Elliott’s day the Pacific was peaceful. Now with frequent coups in Fiji, the Bougainville crisis, riots in Nukualofa, and ethnic tensions in the Solomon Islands, peace cannot be taken for granted. Dysfunctional
governments, corruption, growing ethnic unrest, failed economies and over-
dependence on aid mean most of these nations are in poverty which seems to
worsen year by year. Oil shocks which may distress those in the developed world
are disastrous for small nations whose electricity comes from diesel.

Despite these trials, eye services are slowly improving in the Pacific. Microscopes, slit-lamps and lasers are the norm in most places. The Fred Hollows Foundation is training Pacific Island doctors and nurses in eye care and surgery under Dr John Szeto at the Pacific Eye Institute, which is attached to the Fiji Medical School. They will be the future of eye care in the Pacific but New Zealand ophthalmologists and optometrists will still have a part to play in helping them.

The ultimate aim of Pacific aid, as indeed aid elsewhere, is to develop local services and make a New Zealand presence unnecessary. The Pacific Eye Trust now works closely with the Fred Hollows Foundation. VOSO has learned over the years what is practical to be done in the Pacific and how to source supplies most economically.

Some New Zealand ophthalmologists have pursued voluntary work in other developing countries. Russell Lienert of Christchurch spent eight years as a medical missionary doing eye work in Afghanistan, and more recently five years in Central Asia. Dr Neil Murray of Rotorua spent four years in West Africa, where he developed an eye hospital in Togo. Dr David Sabiston has done work in Cambodia for five years with Rose Charities New Zealand. He helped build an eye clinic there, and with RANZCO colleagues set up a programme to train local eye surgeons.
New Zealand Society for the Prevention of Blindness and the Save Sight Society

This society was founded in 1960 by Drs Calvin Ring and Lindo Ferguson, its first president and secretary respectively. The society’s activities included producing large coloured pamphlets on eye safety which were distributed to New Zealand schools. In the 1980s it worked with Beverley Pentland, ‘the fireworks lady’, to limit the sale of fireworks to just before Guy Fawkes Day and to ban the more dangerous fireworks. It also had input into the adoption of laminated car windscreens.

In 2001 the executive of the New Zealand Society for the Prevention of Blindness decided that it should accept the role of being the New Zealand Branch of the Ophthalmic Research Institute of Australia (ORIA). However, issues about donations from New Zealanders not being tax deductible when given to an Australian charitable body was part of the reason that the society, instead of joining ORIA, had a complete name change to the Save Sight Society. Research grant applications continued to be ranked by ORIA, which has three or four New Zealand representatives on its review board, but New Zealand grant applications which were successful were funded from subscriptions from local members.

Associate Professor Gillian Clover was the first chairman of the newly named society, and the second was Dr Paul Herrick. ORIA provided a set-up grant of $A20,000 and the RANZCO agreed to assist with its administration costs, as it already did for ORIA. One New Zealand fellow on the New Zealand Research Committee is funded to attend ORIA Research Committee meetings.

New Zealand ophthalmologists are not eligible to apply to ORIA for research funds, and need to apply to the Save Sight Society. As well as funding research, the society remains involved in preventative activities related to saving
sight including pre-school vision screening, provision of spectacles for school children and diabetic screening.

The Save Sight Society's honorary treasurer and a tireless supporter was Dr Heather Macintosh, until her sudden and premature death in 2009.

The New Zealand National Eye Bank

At the first conference of the OSNZ in 1947, a sub-committee was appointed to consider the establishment of an eye bank for corneae for transplantation. In 1948 Dr Cecil Pittar submitted a scheme for an eye bank in Auckland to the Ophthalmological Society, and was asked to be the bank's registrar.

By 1952, around 30 corneal transplants had been done in Auckland, most by Pittar. Nothing came of the eye bank, and corneae continued to be collected independently as required, by the surgeon or, more likely, by his registrar or house surgeon. The corneae were not examined pre-operatively and they needed to be used within 24 to 48 hours because they were not separated from the eyeball nor stored in an appropriate medium.

A proper, scientifically conducted eye bank did not eventuate for 40 years after the initial concept was floated, until the New Zealand National Eye Bank was founded by Dr Gillian Clover in 1989. The eye bank introduced international standards for the collection, examination and distribution of corneae. It supplies donor tissue mainly for corneal transplantation but also corneae and sclerae for tectonic procedures and research, and lenses for cataract research. It provides approximately 250 corneae for transplantation each year.

The eye bank is a member of the Australian Eye Bank Association. It has a comprehensive national registry and has published several key papers on aspects of corneal transplantation in peer-reviewed journals.

Of particular interest are the specific, somewhat unique indications for corneal transplantation in New Zealand, where the percentage of transplants performed for keratoconus is extremely high at 45.6 per cent, compared with a range in studies elsewhere of 7 to 24 per cent. The Eye Bank Association of America reported 12.3 per cent. It is recognised that keratoconus is more common in Maori and Pacific Island people, but this is not the whole explanation for its high incidence in New Zealand, where environmental and other factors may be implicated.

The eye bank is funded mainly by charges to surgeons and hospitals for provision of tissue. The charge to public hospitals for tissue provided for public cases is approximately half the charge for private cases due to a modest bi-annual subsidy from the Department of Health. The eye bank also benefits from small donations from individuals and companies.
Currently, its chairman is Associate Professor Gordon Sanderson, Dr David Pendergrast is clinical director and Professor Charles McGhee is the scientific director. The eye bank has been staffed for several years by Nigel Brookes, Helen Twohill and Louise Moffatt, its manager. In 2009 Moffatt received an Excellence in Leadership Award from the Vice-Chancellor of the University of Auckland in recognition of major developments and improvements in providing this national service, which is based within the university.

It is anticipated the demand for corneal transplant tissue will exceed 300 corneae in 2011.

Glaucoma New Zealand

Glaucoma New Zealand (GNZ) is a non-government-funded registered charitable trust, and its mission is to eliminate blindness from glaucoma. GNZ advances its mission by enhancing public awareness, by supporting and informing people with glaucoma, by participating in the education of health professionals involved in glaucoma care, and by supporting research into glaucoma in New Zealand.

GNZ is governed by a board of trustees from around New Zealand which includes ophthalmologists, optometrists and individuals with commercial expertise. Its offices are based, like those of the New Zealand National Eye Bank, within the Department of Ophthalmology at the University of Auckland.

Dr Ken Tarr of Christchurch was GNZ’s founding chairman in 2002, and the foundation board comprised Dr Ken Tarr, Professor Helen Danesh-Meyer, Dr Mike O’Rourke and Associate Professor Gordon Sanderson. They were soon joined by Dr Mark Donaldson. Professor Helen Danesh-Meyer succeeded Tarr as chairperson in 2008; Sanderson continues as deputy chairman, and Harold Titter has since joined the board. GNZ has three staff: executive manager Helen Mawn, education and promotions executive Ginny Harwood and administrative assistant Karon Farmer.

GNZ organises nationwide public meetings which are addressed by ophthalmologists, with around 14 held every year. In 2004 GNZ commenced its on-line education programme for optometrists, called GNZ Professional Package. Participation earns continuing professional development points accredited by the New Zealand Association of Optometrists.

Glaucoma New Zealand also publishes Eyelights, a 12-page glossy newsletter, three times a year which includes articles on glaucoma and its management. It also has leaflets in pharmacies and publishes fact sheets which can be accessed from its website.

There is an annual, nationwide, month-long initiative to raise awareness of glaucoma and to raise funds. This includes GNZ donation boxes with lens-cleaning
cloths which are placed in the offices of ophthalmologists and optometrists and in some pharmacies. GNZ also runs an 0800 advisory and support line.

Presently the GNZ database has over 8000 people, most of whom are people with glaucoma, their families and friends, but also general practitioners, pharmacies, community groups and sponsors. Patients newly diagnosed with glaucoma are advised to join GNZ for support and to take advantage of the informative materials and meetings.

Retina New Zealand
Retina New Zealand developed from the Retinitis Pigmentosa Society of New Zealand. Retina New Zealand is a consumer group of the Royal New Zealand Foundation of the Blind and provides support and information for people with retinal problems.

Although research into retinal disorders is one of its roles, its main function at present is limited to providing telephone support for people with retinal diseases. Each supporter is a trained volunteer who is available to provide the caller with sources of further assistance and information. Retina New Zealand’s president is Fraser Alexander.

Macular Degeneration New Zealand
With the advent of effective treatment for some cases of wet macular degeneration with intravitreal injection of anti-VEGF agents, it became important to raise public awareness of macular degeneration. This spurred Dr Dianne Sharp to establish Macular Degeneration New Zealand (MDNZ). It was launched in April 2010 by the then mayor of Auckland, John Banks.

The aim of MDNZ is to reduce the incidence and impact of macular degeneration in New Zealand. It is a charitable trust with a board of trustees which includes ophthalmologists Dianne Sharp and Associate Professor Philip Polkinghorne, along with representatives of the New Zealand Association of Optometrists, the Royal New Zealand Foundation of the Blind, the macular degeneration community and the business world. It also has a Medical Advisory Board, and a number of high-profile New Zealanders as ambassadors.

After the launch, a Vision Van toured the country and representatives gave 20 educational seminars in 13 centres from Whangarei to Invercargill. Future plans involve more educational seminars to promote early detection and disseminate information about risk factors, including diet and smoking.

MDNZ aims to facilitate access to support and low-vision services throughout New Zealand. It also advocates for availability of the most effective
treatment and management of macular degeneration, the main barrier being the high cost of intravitreal anti-VEGF injections.

Ophthalmic nursing

Thirty years ago nurses were directed by the hospital matron to work in the eye ward. Ophthalmology was regarded as a peripheral specialty, and often those nurses were the ones less suited to mainstream jobs. Very few registered nurses stayed in ophthalmology long term. Those who did were taught to carry out several specialist tasks such as measuring pressures and giving sub-conjunctival injections. This ‘see one, do one’ method of attaining skills became unacceptable in the 1990s, when the role of nurses temporarily became more limited, until the later development of specialist nursing.

In Auckland, the first course in ophthalmic nursing was in 1980. Three more were held in subsequent years, but they did not lead to a recognised qualification. The Auckland Technical Institute, now the Auckland University of Technology (AUT), ran a course from the mid-1980s. There were four papers, one of which was on ophthalmology and the other three on topics such as anatomy and science, aligned to ophthalmology. This resulted in a diploma.

In 2000 the University of Auckland established a Master of Health Sciences
which could be obtained in nursing. In 2002 the New Zealand Nursing Council recognised nurse practitioners. To become a nurse practitioner requires a clinically focused master's degree, and four years post-graduate clinical experience. (Nurse practitioners work autonomously and have prescribing rights, whereas nurse specialists are not autonomous and do not prescribe.) Nurses from throughout New Zealand attend this University of Auckland course.

For many years the ophthalmic nurses in New Zealand had a meeting at the same time and place as the annual meeting of the OSNZ, and subsequently the annual branch meeting of the RANZCO. At the annual scientific conference of the whole of the RANZCO in Auckland in 2003, Professor Charles McGhee, as chairman of both the meeting and the scientific programme, organised the nursing and orthoptics meetings to be integrated into the ophthalmology scientific programme.

Ophthalmic nursing has evolved and expanded with changes in ophthalmic practice. In the days when cataract surgery required large incisions with no sutures, post-operative patients remained in hospital for up to three weeks on total bed rest, with their head between sandbags. This extreme care became less necessary as sutures began to be used and incisions became smaller.

Many patients with eye injuries stayed in hospital for similar reasons. Patients with an hyphaema were confined to bed with both eyes covered. The nursing was necessarily caring and traditional.

Now with new surgical techniques such as micro-incision, sutureless phaco-emulsification cataract surgery and small-incision vitreo-retinal surgery, most procedures are completed as day cases, although some patients need hospitalisation overnight to recover from anaesthetic, or for 24-hour treatments.

The huge advances in ophthalmic technology have opened up new technological roles for ophthalmic nurses. These include fluorescein angiography, intra-ocular lens power measurements and optical coherence tomography. Ophthalmic nurse practitioners now do pre-operative cataract assessments and post-operative checks, and minor surgical lists such as meibomian cysts. They also conduct selected autonomous clinics such as glaucoma follow-up.

Specialist ophthalmic nurses are an integral part of the professional team in modern eye clinics. Ophthalmic theatre nurses are likewise now involved with much more technology such as phaco-emulsification machines for cataract surgery and complex vitreo-retinal equipment, all on top of the increasingly demanding standards of care and asepsis of surgical instruments and the surgical environment.

Ophthalmic nurses are still caring, and are more than ever an essential part of the team, being very involved in the technologies associated with ophthalmic examination and investigations.
Optometry and the New Zealand Association of Optometrists

In New Zealand we are fortunate to have had more cordial relations between the two professions of optometry and ophthalmology than in Australia and the United States. It appears that relationships are worst in places with the most ophthalmologists per capita. This is because many problems have resulted from optometrists moving into territory traditionally the province of ophthalmologists and other medical practitioners.

In Australia, the RANZCO for years held on to the idea that general medical practitioners should be the primary eye-care providers, when it had been clear to unblinking eyes that optometrists had been largely fulfilling that role for years and were well trained and equipped for it. The long-standing acrimony between the two professions in Australia can be gauged by the multiple references in Wright’s *History of Australian Optometry.*

Prescribing of therapeutic pharmaceutical agents by optometrists was opposed by ophthalmologists and their college for many years, but is now accepted in both countries. Optometrists who wish to prescribe are required in both countries to pass a post-graduate diploma in ocular therapeutics if they have not already completed similar educational requirements as part of their undergraduate optometry degree. The first optometrists completed the post-graduate programme in ocular therapeutics for optometrists at the University of Auckland in 2004.

In New Zealand the Optometrists and Dispensing Opticians Board is the government regulatory body for optometrists, and until recently there was a statutory requirement for an ophthalmologist to be on the board. This was a bone of contention for optometry, but the requirement has now been removed. Dr Ross McKay was the last ophthalmologist on the board.

Optometry training advanced from an apprenticeship system to a full-time university course at the University of Auckland in 1965. Initially it was three years with an additional clinical year run by the registration board, after which candidates would gain a diploma. Now the course totals five years, and students graduate with a Bachelor of Clinical Optometry degree. Optometry students complete an initial year which comprises courses common to medicine and pharmacy, then enter the four-year Bachelor of Optometry programme.

At the University of Auckland there is increasing communication between the heads of ophthalmology and optometry, and there have been joint research programmes. This cooperation became cemented in 2008 with the formation of the New Zealand National Eye Centre, an initiative of Professor Charles McGhee with the head of the Department of Optometry and Vision Science, Professor Michael Kalloniatis, and the Molecular Vision Laboratory of the Department of Physiology, headed by Professor Paul Donaldson. This integration of eye
research within a centre will raise its profile, improve its chances of attracting grants and allow funds to be utilised more effectively (see Chapter 13).

Joint initiatives between the OSNZ and its successor the New Zealand Branch of the RANZCO and the New Zealand Association of Optometrists have been few but fruitful. In the 1980s the two organisations together petitioned the government to limit the sale of fireworks, with leadership from the ‘fireworks lady’, the late Beverley Pentland. In 1993 the two organisations jointly published a book, *Visual Standards for Occupations*. For many years, members of both professions have been members of the Corneal and Contact Lens Society, and the presidency of that society alternates between an ophthalmologist and an optometrist.

The co-management of patients with optometrists has been controversial. In 2002 the executive of the RANZCO agreed on the following policy:

*The College is opposed to any payments by a surgeon to any party who refers them a patient. The fundamental principle is that the patient should always be paying for the particular service that he/she receives from the attending practitioner in a direct fashion.*

However, largely because of refractive surgery and the growth of co-management, especially with glaucoma, that policy was unenforceable and was changed to the following:

*Where co-management occurs between an ophthalmologist and a non-ophthalmologist all of the following must apply:*

1. *The co-managing practitioner and the surgeon must communicate with each other at every encounter between the patient and the co-managing practitioner.*

2. *The surgeon is satisfied that the co-managing practitioner has competence appropriate to the tasks involved.*

3. *The College is opposed to payments that might be construed as an inducement to referral. All fees associated with the delivery of surgical services including peri-operative care must be open, capable of audit, and transparent to the patient. Any fees paid to other practitioners must be clearly identified, together with their purpose.*
In New Zealand the two professions now work in relative harmony, which is to the benefit of all, especially the patients. Ophthalmologists have recognised that optometry is a mature, independent profession. Optometrists refer medical and surgical eye problems to ophthalmologists, while most ophthalmologists now refer refractions to optometrists. When in the patient’s interests, management may be shared between the ophthalmologist and the optometrist.

Cornea and Contact Lens Society of New Zealand

This society was founded by optometrists in 1958 as the New Zealand Contact Lens Society. Its founding councillors were Ray Bridgeman as chairman, John Fairmaid, Peter Heginbothan and Neil Pennington.

From the outset its constitution allowed ophthalmologists to be eligible for membership. Drs David Sabiston and Murray Ashbridge were the first two ophthalmologists to become members, and in 1966 Sabiston spoke at the society’s meeting. At that time meetings which included both optometrists and ophthalmologists were forbidden in Australia and strongly disapproved of in New Zealand. Hostile communications were received from ophthalmologists in New Zealand and Australia, including from officers of the Australian College of Ophthalmologists. There was still a lot of opposition to this fraternisation in 1969 when Sabiston became the first ophthalmologist to be president of the society.

The society, now called the Cornea and Contact Lens Society of New Zealand, has matured into a valuable educational society for both optometrists and ophthalmologists. It can also take credit for its part in improving relations between the two professions, a trend of benefit to both professions and to their patients. Nonetheless, even today there remains some conservative ophthalmological opposition to combined meetings, especially in Australia.

The Cornea and Contract Lens Society’s conferences now embrace both professions. The 2009 conference in Rotorua included overseas guest speakers from both optometry and ophthalmology. The international ophthalmology speaker was Dr Perry Binder, a leading refractive surgeon from California. Eight ophthalmologists have served as its president — Drs Sabiston, Antony Morris, Nigel Warden, Tony Lee, John Beaumont, Trevor Gray and Malcolm McKellar. Sabiston has written an excellent, comprehensive history of the society.¹
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### Chapter 6


### Chapter 7

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### Chapter 8


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4. Dr John McKinnon, personal communication.

5. Ibid.


10. Dr Kevin Taylor, personal communication.

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12. Hollows, F., *Fred Hollows, an
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13. Dr Muriel Nielsen, personal
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14. Ibid.

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history of the Royal Australian College
of Ophthalmologists*, The Royal
Australian College of Ophthalmologists,
2. Williams, D., ‘Eyes, surgeons, and
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4. Dr Calvin Ring, personal communication.
5. Interview with Dr Roy Holmes,
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6. Fairclough, W., ‘Industrial lighting’,
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7. Wilson, R., Presidential address, ‘Some
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11. Lister, A., Hope-Robertson, W., Talbot,
G.G., ‘Discussion on cortisone’,
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Society of New Zealand*, 1952: 45.
13. Section 27 of the Commerce Act 1986:
Contracts, arrangements, or
understandings substantially lessening
competition prohibited
(1) No person shall enter into a contract
or arrangement, or arrive at an
understanding, containing a provision
that has the purpose, or has or is likely
to have the effect, of substantially
lessening competition in a market.
(2) No person shall give effect to a
provision of a contract, arrangement,
or understanding that has the purpose,
or has or is likely to have the effect, of
substantially lessening competition in a
market.
(3) Subsection (2) of this section applies
in respect of a contract or arrangement
entered into, or an understanding
arrived at, whether before or after the
commencement of this Act.
(4) No provision of a contract, whether
made before or after the commencement
of this Act, that has the purpose, or
has or is likely to have the effect, of
substantially lessening competition in a
market is enforceable.

14. Section 30 of the Commerce Act 1986: Certain provisions of contracts, etc, with respect to prices deemed to substantially lessen competition

(1) Without limiting the generality of section 27 of this Act, a provision of a contract, arrangement, or understanding shall be deemed for the purposes of that section to have the purpose, or to have or to be likely to have the effect, of substantially lessening competition in a market if the provision has the purpose, or has or is likely to have the effect of fixing, controlling, or maintaining, or providing for the fixing, controlling, or maintaining, of the price for goods or services, or any discount, allowance, rebate, or credit in relation to goods or services, that are—

(a) Supplied or acquired by the parties to the contract, arrangement, or understanding, or by any of them, or by any bodies corporate that are interconnected with any of them, in competition with each other; . . . )


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**Chapter 14**


Chapter 15


3. McNamara, in Smith, P.A., as above, 17.

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Chapter 16

3. Leaver, P., as above, 227.

Chapter 17

APPENDIX 1
The Ophthalmological Society of New Zealand

Presidents

1947–48 William A. Fairclough
1948–49 Rowland P. Wilson
1949–50 William H. Simpson
1950–51 Leonard S. Talbot
1951–52 E.L. Marchant
1952–53 Howard V. Coverdale
1953–54 William E. Carswell
1954–55 William E. Carswell
1954–55 Jack S. Monro
1955–56 Walter J. Hope-Robertson
1956–57 Duncan C. Macdiarmind
1957–58 Cecil A. Pittar
1958–59 R. Gair Macdonald
1959–60 William L.B. Burns
1960–61 Roderick G.S. Ferguson
1962–63 Graeme G. Talbot OBE
1963–64 John C. Parr
1964–65 A.L. Sutherland
1965–66 Lenn G. Bell
1966–67 C. Calvin Ring
1967–68 Kenneth J. Talbot
1968–69 Ernest J. Velvin
1969–70 Harry Jenner Wales
1970–71 Sir Randal F. Elliott
1971–72 George de L. Fenwick
1972–73 Arthur N. Talbot
1973–74 Bernard J. Bowden
1974–75 Anthony C. Sandston
1975–76 R. John Croke
1976–77 Charles Swanston OBE
1977–78 Murray R. Ashbridge
1978–79 Colin R. Fenton
1979–80 R.H. Lindo Ferguson CBE
1980–81 Garth G. Powell
1981–82 Roderick D. Suckling
1982–83 James D.C. Macdiarmind
1983–84 W. Roy Holmes
1984–85 Dorothy F. Potter CBE
1985–86 Hylton Le Grice OBE, CNZM
1986–87 David W. Sabiston MNZM
1987–88 David Sturman
1988–89 Richard S. Clemett
1989–90 David C. Warnock
1990–91 Harold V. Coop
1991–92 David G. Wilson
1992–93 Peter C. Wellings
1993–94 Anthony C.B. Molteno ONZM
1994–95 O. Bruce Hadden CNZM
1995–96 S. Douglas Cox
1996–97 Philip E. Boulton
1997–98 C. Peter Ring

Chairmen, New Zealand Branch, Royal Australian and New Zealand College of Ophthalmologists

1998–99 Kenneth H. Tarr
1999–2000 Thomas R. Ellingham
2000–01 Paul C. Herrick
2001–02 Philip J. Polkinghorne
2002–04 Kevin Taylor (first two-year chairman)
2004–05 Rod Keillor
2005–07 Stephen Best
2007–09 James Stewart
2009–11 Michael O’Rourke
The first five listed above, holding posts from 1988–2004, were also presidents of the OSNZ, until its dissolution in 2004.

**Honorary Secretary-Treasurers**

1947–55 Walter J. Hope-Robertson
1956–57 Rowland P. Wilson MBE
1957–60 C. Calvin Ring
1961–63 Sir Randal F. Elliott
1963–64 W. Roy Holmes
1964–67 Sir Randal F. Elliott
1967–70 Colin R. Fenton
1971–78 James D.C. Macdiarmid
1978–82 Peter C. Wellings

1982–86 Thiers J. Halliwell
1986–89 C. Peter Ring
1989–95 Peter J. Haddad (of OSNZ, then NZ Branch RANZCO)
2001–03 Allan Simpson
2003–06 Andrew Logan
2006– Mary Jane Sime (née Houliston)

**Editors of the Transactions of the Ophthalmological Society of New Zealand**

1947–55 Howard V. Coverdale
1956–60 Rowland P. Wilson MBE

1961–80 John C. Parr
1981–85 Richard S. Clemett

**Editors of the Australian and New Zealand Journal of Ophthalmology**

1986–88 Frank J. Martin AM & Richard S. Clemett
1988–91 Ian C. Francis & Richard S. Clemett

1992–95 Alan A. McNab & Richard S. Clemett
1996 Mark Gillies & Richard S. Clemett
1997–2000 Mark Gillies

**Editors-in-Chief, Clinical and Experimental Ophthalmology**

2000–01 Mark Gillies
2001–10 Professor Charles McGhee
2010– Associate Professor Robert Casson and Dr Salmaan Qureshi (joint)

**Chairmen, Qualification and Education Committee**

1975–82 Professor John C. Parr
1982–90 Colin R. Fenton
1990–97 Peter C. Wellings
1997 Doug Cox
1998–2004 Associate Professor Mark Elder
2004–10 Brian Sloan
2010– Ainsley Morris
Ophthalmologists who were presidents of the New Zealand Medical Association

New Zealand Medical Association
1896 Henry Lindo Ferguson
British Medical Association New Zealand Branch
1920 Henry Lindo Ferguson
Medical Association of New Zealand
1969 Graeme Gibson Talbot OBE
1970 Kenneth J. Talbot
New Zealand Medical Association
1977 Sir Randal Elliott
1980 Bernard Bowden
2000 Roy Holmes

APPENDIX 2
The Ophthalmological Society of New Zealand and the New Zealand branch of the Royal Australian and New Zealand College of Ophthalmologists: annual conferences and annual visiting professors

Annual Conferences of the OSNZ and of RANZCO NZ Branch (Year, Place and Overseas Guest Speakers)
1947 Auckland (Auckland Hospital), no overseas speakers
1948 Dunedin, Dr J. Bruce Hamilton, Hobart, Tasmania
1949 Wellington (Nurses’ preliminary training school), None
1950 Christchurch, J. Bruce Hamilton, Hobart (President of the Ophthalmological Society of Australia)
1952 Auckland, Algernon Reese, New York, John Foster, England
1953 Dunedin, Professor Weve, Holland, Mr A. Seymour Philps, London, England
1954 No conference
1955 Christchurch, no overseas guest speakers
1956 Wellington, Professor Jules Francois, Belgium, W. John Holmes, Hawaii, United States
1959  Palmerston North, Ian Lederman (radiotherapist)
1960  Christchurch, Dr Paul Chandler, Boston, Massachusetts, Dr John D. Ragan, Vancouver, Canada
1962  Surfers Paradise, Queensland, conjoint conference with the Ophthalmological Society of Australia
1963  Auckland, A.B. Nutt, Miss Joyce Mein, Sheffield, England
1964  Dunedin, Professor Gerard W. Crock, Melbourne
1966  Rotorua, conjoint conference with the Ophthalmological Society of Australia
1968  Queenstown, Redmond Smith, London, J.E.K. Galbraith, Melbourne
1969  Melbourne, combined with the inaugural meeting of the Australian College of Ophthalmologists
1971  Wairakei, Professor R. Witmer, Zurich, Switzerland
1972  Auckland with the 4th congress of the Asia Pacific Academy of Ophthalmology
1973  Dunedin, P.O. Bishop, Canberra, H. Whaley Brown, New York, Arthur Jampolsky, San Francisco
1974  Christchurch, Stephen Drance, Vancouver, J. Hetherington, San Francisco
1975  Sydney, conjoint conference with the Australian College of Ophthalmologists
1976  Palmerston North, Gholam Peyman, Chicago, Professor Alan Bird, London
1977  Auckland, Professor Victor Curtin, Miami, J.E.K. Galbraith, Melbourne
1978  Rotorua, Professor Frank Billson, Sydney, Ronald Smith, Los Angeles
1979  Wellington, Professor Wallace Foulds, Glasgow, Arnall Patz, Baltimore
1980  Christchurch, conjoint conference with the Royal Australian College of Ophthalmologists Paul Henkind, New York, J. Donald M. Gass, Miami, Y. Kitazawa, Japan, David Knox, Baltimore
1981  Professor Doug Coster, Adelaide, Dr John Wright, London, Dr Norman Jaffe, Miami
1982 Christchurch, Professor Desmond Archer, Belfast, Peter Wright, London, Professor Alan Bird, London
1983 Hamilton, Professor Fritz Fraunfelder, Portland, Oregon, Ronald Green, Iowa
1984 Sydney, conjoint conference with the Royal Australian College of Ophthalmologists
1985 Masterton, Steven Podos, New York, Richard O’Connor, San Francisco, John Pearce, Bromsgrove, England
1987 Rotorua, Peter Watson, Cambridge, Dunbar Hoskins, San Francisco, Shaye Bartholomew, Edinburgh, Janet Cheetham, California, USA
1988 Wellington
1991 Auckland, Robert Sinskey, Santa Monica, California.
1992 Blenheim, Laurie Hirst, Brisbane, Richard Lindstrom, Minneapolis, Minnesota,
1994 Dunedin, Professor Albert Alm, Uppsal, Sweden, Gordon Douglas, Vancouver, David Easty, Bristol, Adele Green, Brisbane, Lea Hyvarinen, Oulu, Finland, Professor Paul Mitchell, Sydney
1997 Palmerston North, Howard Gimbel, Calgary, Canada, Barry Seibel, Los Angeles, Peter Raus, Belgium, Hugh Williams, London
1998 Auckland, Professor Douglas Coster, Adelaide, Stephen Obstbaum, New York, Henry Edelhauser PhD, Atlanta, Elliot Finkelstein, USA
1999 Christchurch, Donald D’Amico, Boston, Thomas Johnson, Miami, Geoffrey Crawford, Perth, Australia
2000 Palmerston North, Tim Stout, Los Angeles
2001 Wellington, Paul Kaufman, David Papermaster
2002 No NZ meeting
2003  Chateau Tongariro, Professor Peter Savino, Philadelphia
2004  Napier, Professor James Rosenbaum, Portland, Oregon
2006  Auckland, Rick Wilson, Philadelphia, Professor Jamie Craig, Adelaide
2007  Tauranga, Professor Timothy Murray, Miami
2008  Christchurch, Professor David Taylor, London
2009  Nelson, Jane Dickson, Newcastle upon Tyne, John Sparrow, Bristol

Annual Visiting Professors

1980  Creig Hoyt, paediatric and neuro-ophthalmology, San Francisco
1981  Paul Henkind, glaucoma, New York
1982  William E. Scott, paediatric ophthalmology, Iowa
1983  Fritz Fraunfelder, ocular pharmacology, Portland, Oregon
1985  Norman Schatz, neuro-ophthalmology, Wills Eye Hospital, Philadelphia
1986  Peter Watson, glaucoma, Cambridge, England
1987  Herbert Kaufman, cornea, New Orleans
1988–1992 No information available
1993  Susan Lightman, uveitis, London
1995  Dennis Robertson, retina, Mayo Clinic
1996  David Guyton, paediatrics, Wilmer Eye Institute
1998  Joe Capriole, glaucoma, Yale University
1999  Nancy Newman, neuro-ophthalmology, Atlanta
2000  Paul Mitchell, diabetes, Sydney
2001  Alex Levin, paediatric ophthalmology, Toronto
2002  Larry Benjamin, cataract and refractive surgery, Buckinghamshire, England
2003  John Dart, cornea, London
2004  Brian Leatherbarrow, oculoplastics, Manchester, England
2005  Peter Netland, glaucoma, University of Tennessee Health Science Center, Memphis, Tennessee
2006  Peter McCluskey, uveitis, Sydney
2007  Dennis Han, retina, Wisconsin
2008  Justin O’Day, medical retina, Melbourne
2009  Carlos Parvesio, uveitis, Moorfields, London
2010  Brian Little, cataract surgery, Moorfields, London
2011  Professor Ivan Goldberg AM, glaucoma, Sydney
APPENDIX 3

The Ophthalmological Society of New Zealand:
Attendees at the First Conference, Auckland,
February 19 1947

Officers
Patron: Sir Lindo Ferguson
President: W.A. Fairclough
Vice-President: L.A. Lewis
Executive: H. Coverdale, E.L. Marchant, R.P. Wilson
Secretary-Treasurer: W.J. Hope-Robertson
Secretary of Conference: C.A. Pittar
Editor of Transactions: H. Coverdale

Members
Hamilton: Dr. D.C. Macdiarmid
New Plymouth: Drs R.C. Brewster and A.N. Talbot
Wanganui: Drs J.B. Baird and G.W. Harty
Palmerston North: Drs W.S.V. Bransgrove and J.S. Monro
Wellington: Drs J. Alex. Doctor, W.J. Hope-Robertson, E.L. Marchant, H.W. Simpson
Christchurch: Drs Lindsay Burns, L.A. Lewis, A.B. O’Brien, C.M. Stenhouse, Harry Wales, H.J. Wales
Timaru: Drs W.C. Burns, K.J. Talbot, L.S. Talbot
Dunedin: Sir H. Lindo Ferguson, Drs S.L. Geerin, I.M. Rutherford, R.P. Wilson
Invercargill: Drs J.G. Macdonald and Geoffrey Orbell
Associate members: Drs G.B. Campbell and H.G. Rice

APPENDIX 4

Our First President of the Ophthalmological Society of New Zealand, William A Fairclough

A presentation given at the Annual Scientific Conference of the Society, November 1995, by Dr C. Calvin Ring
As we meet here today for the forty-ninth time, it is opportune for us to pause a minute
to reflect upon how these scientific meetings of the Ophthalmological Society of New Zealand came about nearly 50 years ago and immediately following the upheavals of World War Two.

The venerable Ophthalmological Society of the United Kingdom had its first meeting in 1880, but from small acorns great trees grow, and in 1947 the small acorn of the Ophthalmological Society of New Zealand was nurtured by a small New Zealand group of great enthusiastic ophthalmologists being led by the President, Dr W.A. Fairclough, and the Secretary/Treasurer, Dr Hope-Robertson.

The Patron of this fledgling Society, Sir Lindo Ferguson, was unable to be present but the other officers were Vice President L.A. Lewis, and an executive of Howard V. Coverdale, Ernest S. Marchant and Rowland Wilson. Cecil Pittar was conference Secretary and the conference was held in Auckland. There was a membership of 33 and I think there are now only two survivors, Drs A.N. Talbot of New Plymouth and Dr Lindsay Burns, Christchurch — so the flame was lit.

During the period 1939–40 I spent over a year as the first eye registrar at Auckland Hospital and was soon influenced by the personality of W.A. Fairclough. He instilled into me a reverence for ophthalmology which even during overseas war services never abated, so this small memoir is a personal tribute. In his initial address to this Society he said: ‘This first conference is probably more important than we appreciate at present. The infant Society will grow to maturity and possibly in years to come it may be possible to hold an international congress.’ This in fact came about in 1972 when the Asia-Pacific Academy held its congress here. To continue with an excerpt from his inaugural address: ‘The development of our Society is of course in the hands of its members and the attendance here from all parts of the Dominion is a sure sign of virility. I would enter a plea to each of you to prepare at least one paper or communication a year so that in future we may have ample material for meetings.’

Leading by example he immediately presented quite a learned treatise on industrial lighting involving physics, physiology and symptomatology. The following year, in Dunedin, he presented two papers: cataract in dystrophia myotonica, and contact lenses.

He was a person of wide and diverse scholarship who could converse on a multiplicity of subjects. His life spanned the years 1881–1968. He graduated from the Otago Medical School in 1905 and amongst his papers I discovered a commendation signed 1904 from H.L. Ferguson, Lecturer in Ophthalmology, later Sir Lindo Ferguson of international fame, stating that W.A. Fairclough did the work of the class to his satisfaction and a first class pass. He then journeyed to London where he worked for five years, attending London Hospital, particularly in the eye department, then at the Royal Westminster Ophthalmic Hospital where he was a contemporary of Sir Richard Cruise, later oculist to the Royal Household.

He graduated FRCSE in ophthalmology in 1909, returning to Auckland to practise in 1910. In 1928 he became a foundation Fellow of the Royal Australasian College of
Surgeons. He served 28 years as Honorary Ophthalmic Surgeon to the Auckland Hospital, to the Mater Misericordiae Hospital, and also as Lecturer for the Otago Medical Faculty. He gave freely of his services as an honorary adviser to the New Zealand Foundation for the Blind, the Plunket Society, and the Crippled Children Society. His wide ranging interests can be reflected in appointments to President, Auckland Division of BMA; President, Auckland Institute and Museum; President, Auckland Zoological Society; Inspector, Scenic Reserves; Member, Illuminating and Engineering Society for whom he published a paper on hydro-electric developments in New Zealand. Locally he published papers on the evolution of vision, birds and vision, and the eye in golf.

War service in World War One involved commissions on two hospital ships, and appointment to hospitals in the Middle East and Salonika. In World War Two he was Honorary Consultant to the New Zealand Naval Services. He had a tall commanding presence, slightly florid hawk-like features, a rather impatient personality, even more so following an air crash in 1938. When, following a trip to Utrecht to see Weve, the KLM plane crashed outside Amsterdam, killing six people. He seemed to have suffered only slight injuries but on return to Auckland he was found to have suffered compression fractures to four vertebrae and had lost one and a half inches in height. He had to wear a brace which made him rather irascible and during an arduous outpatient clinic I once heard him murmur that we would never have heard of Job if he had been an ophthalmologist!

He was a meticulous surgeon, operating without gloves, and demanding absolute silence in the operating theatre. At the Mater he required the house surgeon to stand by in case a general anaesthetic was required; the next day the house surgeon would receive a princely cheque for not giving an anaesthetic. He performed his surgery at 2 pm when all other surgery in adjacent theatres had finished and all the surgeons had gone. There was strict postoperative care, sand-bags around the head, and the patient fed for a week. He was fastidious about the quality of surgical instruments and was quite prepared to sharpen his own Graefe knives. He was self-disciplined to a degree and a manifestation of this occurred one evening when I was called up to remove a foreign body from his cornea — to be firmly told ‘No local anaesthetic drops [cocaine] as I am going to attend the opera.’ Fortunately it was very superficial and honour was saved.

Patient management was a strength which he could always fulfil, sometimes very directly, but always in the best interests of the patient. A further accomplishment was home movie making with 16mm film — he photographed scenes from his air crash and was arrested for filming anti-Jewish riots in Munich. A further film, still in existence, was taken of Sir Carrick Robertson performing a thyroidectomy.

As you can imagine, his sobriquet was ‘Fairy’ and his general manner was rather the antithesis of such a being — a colleague once ventured to call him by this title to be brusquely told: ‘I am called Fairy only by my friends and you are not one of them.’ He was essentially a very practical and do-it-yourselfer, developing a lovely retreat at Lake
Rotoiti where trout were plentiful. He was called upon at times to treat local Maori — one youth was in extremis following an impacted foreign body in his throat. Dr Fairclough performed a tracheotomy on the roadside with a pocket knife to save the lad’s life. The result was one husky but live Maori. He always drove an up-to-date car and in the early days had a BSA with a sleeve valve engine — he carried a stethoscope in the car to determine which valve was sticking.

King Edward VII, not long after his enthronement, established the ‘Entente Cordiale’ with a view to bringing the English and French nations into more friendly contact. In furthering this object a number of rugby teams were sent over to play France. It is interesting, at present, to reflect on how history is repeating itself. W.A.F. played a fine game of rugby and in 1906–7–8 he played for London Hospital which included a large number of New Zealanders, to be one of the strongest teams in England; playing in Paris, Bordeaux, Toulouse, Lyons, and were never beaten. They received bounteous hospitality (Garonne Riverside cellars) and on one occasion he took part in a mounted fox hunt, the fox being doped to get the hunt over quickly! He notes, perhaps wrongly, that these teams helped to teach France rugby. He also played cricket whilst in London and his main claim to distinction in this sport was to be caught out by the incomparable W.G. Grace.

In the war years and troubled between-war years, because of his all-round abilities, strength of character and common sense, he was easily able to walk among his peers in the general community, and with the giants of his profession. He ensured that the concept of an ophthalmologist being a physician, who cared for the visual system, within the whole body, was kept alive. Fifty-five years ago, for me, he was an icon of professionalism.

**APPENDIX 5**

**FAMILIES IN OPHTHALMOLOGY IN NEW ZEALAND**

Sir Lindo Ferguson of Dunedin and grandson Richard Henry Lindo Ferguson CBE of Auckland (retired in Mangonui, Northland).

Dr Leonard S. Talbot of Timaru and two sons, Kenneth L. Talbot of Timaru and Arthur N. Talbot of New Plymouth.

Dr William C. Burns of Timaru and son Lindsay Burns of Christchurch.

Dr John G. Macdonald of Invercargill and son Gair Macdonald of Dunedin (later Geraldine).

Dr A.L. Talbot of Auckland and son Graeme G. Talbot of Auckland.

Dr George E.O. Fenwick of Auckland and son Dr George de Lacy Fenwick of Auckland.

Dr Harry Wales of Christchurch and son H. Jenner Wales, also of Christchurch.
APPENDIX 6

ITEMS FROM THE MINUTES OF THE OPHTHALMOLOGICAL SOCIETY OF NEW ZEALAND ANNUAL GENERAL MEETINGS RELATING TO AMALGAMATION WITH THE ROYAL AUSTRALASIAN COLLEGE OF OPHTHALMLOGISTS

(Extracted by Dr Allan Simpson, Honorary Secretary-Treasurer)

30/10/93, Wellington

General Business

Moved Hadden/Cox that the Executive explore the advantages of changing the name of the Royal Australian College of Ophthalmologists to the Royal Australasian College of Ophthalmologists. Carried.

20/10/94, Dunedin

Notice of Motion

Moved Hadden/Best that the Executive explore amalgamation of the OSNZ and the RACO. Carried unanimously.

17/11/95, Auckland

Results of opinion poll presented: 63 per cent return rate; 29 (60 per cent) in favour of amalgamation, 18 (38 per cent) against, 1 (2 per cent) undecided.

Executive motion to AGM that the Executive of the OSNZ directs the Amalgamation Committee to prepare and circulate a detailed document on the proposal of full amalgamation with the RACO and its consequent implications, with a view to then holding a referendum. The chairman clarified the course of action to the AGM, explaining that a letter be presented to the members for discussion, followed by a referendum at the next AGM. Motion put (Cox/Haddad) and carried by vote.
20/10/96, Taupo

Moved Hadden/Cox that the Ophthalmological Society of New Zealand, both formally and fully amalgamate with the Royal Australian College of Ophthalmologists. Voted by secret ballot: 51 for, 1 against, 2 invalid.

Notice of Rule Change

That an additional final sentence be added to Rule 32, to read: If the Society is wound up because of amalgamation with the Royal Australian College of Ophthalmologists, then the surplus assets of the Society shall be paid to the New Zealand Branch, or division or similar title, of that amalgamated body. (Hadden/Cox) Passed unanimously.

Moved Kevin Taylor/Polkinghorne:

a) that if and when the OSNZ amalgamates with the RACO, the OSNZ appoints Mr Aiwyn Burr, the auditor, as official liquidator of all OSNZ funds and assets,
b) that the OSNZ directs the liquidator to transfer all OSNZ funds and assets to the New Zealand Branch (division or similar title) of the RACO, if and when this branch is formed.

The motion was carried unanimously.

A further two motions were presented to the meeting regarding managing of OSNZ’s ‘successor’ during the interim before formal rules and procedures can be put in place at the next AGM.

Moved Polkinghorne/Boulton: After the formation of the branch (or division or similar title) of the RACO, there shall be an interim period until the next AGM during which:

1) the elected Executive shall continue to function.
2) the rules of the OSNZ shall remain in force, where applicable. Passed with one dissension.
3) that the present elected Executive investigates, draws up and circulates to all members, prior to the next AGM, a proposal for a new set of branch rules and other related matters.

There was further discussion about whether the OSNZ be kept as a separate entity but accepting a new title as ‘New Zealand branch division or other’. Dr Hadden spoke to this stating that from the Australian point of view the OSNZ title and identity would have to disappear. Dr Coop then asked that some New Zealand identity be preserved while negotiating this amalgamation, either in the form of the coat of arms or in the title, or some other way.

Other speakers discussed the possibility of negotiating with the Australians to retain our crest or part thereof in identifying the new environment of joint relations. The options
discussed were: retaining the crest, incorporating some New Zealand icons into the crest, or keeping the OSNZ as a sleeping title.

Moved Coop/Hadden that the meeting leaves to the Executive to present to the RACO, when negotiating amalgamation, the opinions of our members regarding the retention of some New Zealand identity in the final name or crest. Motion passed unanimously.

Moved Hadden/Haddad that in the event of the RACO council passing a motion accepting amalgamation with the OSNZ, but subject to additional conditions, this meeting gives the OSNZ Executive the power to either:
1) accept the new conditions and thereby confirm full amalgamation.
2) withhold acceptance of amalgamation until the opinion of OSNZ members has been sought, either by a) referendum or b) an extraordinary general meeting. Motion passed unanimously.

8/5/97, Palmerston North

It was presented to the meeting that the preferred amalgamated title is RANZCO or ANZCO, but in the interim, while we are awaiting the royal appellation, the present title be ‘RACO incorporating OSNZ’. Dr Frank Martin (Australia) spoke to this issue explaining that an extraordinary meeting of the RACO will be required to pass this into their articles. Furthermore, later in the year a nationwide constitutional summit will be held regarding Australia becoming a republic, possibly followed by a referendum. This means the final amalgamation with name change may be delayed further into 1998, or even later.

Moved Kevin Taylor/Cox that the Secretary/Treasurer shall notify the RACO of all such financial arrangements once satisfactorily completed and that he notifies in writing to all members at the time when full and final amalgamation and final name change has in fact occurred. Motion passed.

The secretary clarified that the reference to financial arrangements being satisfactorily completed referred to a motion passed at the previous AGM, which authorised the Secretary/Treasurer to liquidate the OSNZ funds upon/until amalgamation of RACO and that these funds be invested and assigned into legal ownership of the New Zealand Branch.

Moved Kevin Taylor/Cox that the New Zealand Branch Rules shall be accepted and adopted and that the said Branch Rules shall come into immediate force at the passing of this motion. Passed unanimously.

Moved Kevin Taylor/Cox that the meeting accepts in principle that there exists two sets of rules and that each set of rules is hereby judged to be in force, fully and equally applicable,
during the interim period of ‘RACO incorporating OSNZ’ being in existence. Passed unanimously.

Moved K.Taylor/Cox that wherever matters of conflict arise between these two sets of rules, the members delegate to the Executive the powers of interpretation, negotiation and resolution of those differences. Passed unanimously.

The Secretary then pointed out to the meeting that obviously once the name change occurs to ‘ANZCO’ or ‘RANZCO’ that the OSNZ rules would no longer apply.
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