Geoffrey Sutherland
legacy of an innovative surgeon
Geoffrey Sutherland was born 1916 at Wedderburn Victoria and trained at RVEEH and Moorfields Hospital. He developed a keen interest in mechanical, electrical and optical devices while serving in the RAAF 1943.

Collaborating with Professor Gerard Crock and Tom Cotter the photographer at RVEEH, he modified many existing optical instruments and invented a series of innovative and advanced instruments that were ergonomic and often employed composite metallurgy.
In 1970, Vitrectomy was being developed at RVEEH. Sutherland’s fine gauge rotating scissors and forceps were a valuable addition allowing intraocular manipulation and were also applied to newer techniques in the surgery of congenital cataract. His association with neurosurgery allowed modification and development of new instruments. Many patents were taken out through the University of Melbourne for the micro instruments and diamond knives which were manufactured by Greishaber in Switzerland and Micra in England. Much of his work was done in a beautifully equipped workshop at home. Tragically, he died of complications following an endoscopy in 1980.
Sutherland modified clinical biomicroscope
C.A.Buckley collection
Binocular indirect ophthalmoscope modified after Schepens 1960
C.A. Buckley collection
The Sutherland collection includes many of his diagnostic and surgical instruments. He took a fresh look at existing instruments coincident with the introduction of the operating microscope. He refined and developed radical models that were an invaluable adjunct to the development of vitrectomy.
Many of his instruments were modifications of conventional tools with improved angulation for access.
224C Storz  Neuro long handled scissors
240C. Sutherland modified Inami knife
224C  Sutherland synechia stripper
Sutherland's instruments embraced ergonomics and solved the difficulties in positioning for intraocular manipulation by incorporating irrigation and rotation in the design.
Sutherland prototype irrigating forceps
261C Sutherland Retinal tack introducer
224C    Sutherland micro snares
21gauge designed to hold fine non-magnetic foreign bodies
• The final production models by Grieshaber complemented the introduction of posterior vitrectomy

Rotating side gripping forceps

D Kaufman collection
Evolution of endoscopic surgery

- Until 1970 techniques to excise pupillary membranes were open sky or discission and were unsatisfactory.
- Sutherland microscissors and forceps with anterior chamber infusion allowed improved control.
• Early production heads

• Manipulation required incorporating a rotating head and 21g access
• Pars plana and limbal approaches were used
prototype
titanium
diamond knife

239C Sutherland Micra diamond knife
Prototype diamond knife
Sutherland motorized rust remover 1960
Sutherland head for electric Erisophake for intracapsular cataract surgery
Surgical instruments used by G. Sutherland C1960