



## Retina Timeline

1583 Felix Platter proposed that the lens was “the looking glass” of the eye and that the retina was the true photoreceptor

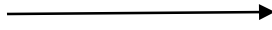
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1604 Johannes Kepler described the image formed on the retina

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1850 **Herman von Helmholtz (1821-1894)** demonstrated the ophthalmoscope

Replica of Helmholtz ophthalmoscope



1853 Frans Cornelis Donders (1818-1889) described pigmentary retinopathy

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Ernst Adolph Coccius (1825-1890) described retinal detachment

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1878 Willy Kuhne (1837-1900) demonstrated that visual pigments regenerate in the dark, the first clue to how the visual cycle works

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1920



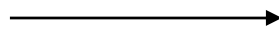
Jules Gonin, MD (1870-1935) introduced cautery for scleral resection

Electro cautery unit, c1920



1928 Marc Amsler (1891-1968) introduced the Amsler grid for detection of macular degeneration

Amsler Recording Chart, from the office of  
Marshall M. Parks, MD



1937

A. Jess, MD described scleral buckle for the treatment of retinal detachment

1946 **Charles Schepens, MD** (1912-2006) demonstrated binocular stereoscopic indirect ophthalmoscopy with scleral depression

Charles L. Schepens, MD



Gerd Meyer-Schwickerath, MD (1920-1992 ) began to experiment with **light photocoagulation**

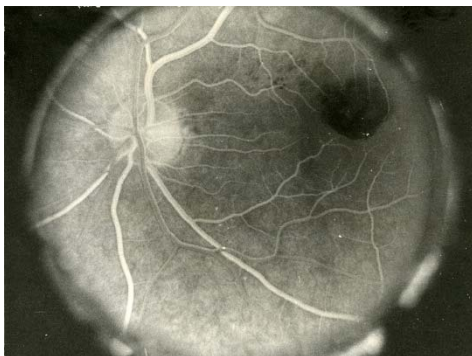
German Ophthalmological Society Meeting, 1983

1949 Ernst Custodis, MD (1898-1990) reported on the successful use of the segmented sclera buckle while Henricus J.M. Weve demonstrated the sclera stitch

Ernst Custodis, MD



1960



Harold Novotny and David Alvis produced the first **fluorescein angiogram**

Dr. David Alvis, early venous phase, angiogram

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1964 Drs. **Harvey Lincoff** and John McLean describe cryosurgery for the treatment of retinal detachment

Lincoff cryosurgical probe, 1964



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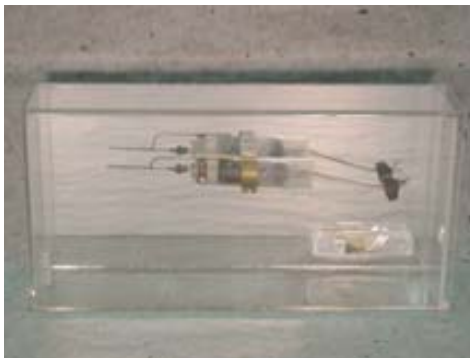
1965 Cibis demonstrates the injection of silicone oil for the treatment of retinal detachment

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1967 Ragnar Granit (1900-1991), Haldan Hartline (1903-1983) and George Wald (1906-1997) were awarded the Nobel Prize in Physiology or Medicine for demonstrating the primary neural organization of the retina and the role of vitamin A

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1970



**Robert Machemer, MD (1933-2009)** demonstrated the first practical suction vitrectomy instrument for the treatment of retinal detachment (VISC I)

VISC I created by Dr. Robert Machemer



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1972 First commercial VISC instrument with fiber optics for illumination developed by Robert Machemer, MD (VISC VII), manufactured by Klein

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