Allvar Gullstrand

Figure: Allvar Gullstrand, MD (1862-1930). Courtesy of Howe Library, Massachusetts Eye and Ear Infirmary, Boston.

Only one individual who practiced ophthalmology for a significant period has ever received a Nobel Prize, This was Allvar Gullstrand, MD (1862-1930). Today, Gullstrand is best known as the inventor of the slitlamp. When his slitlamp was combined with a microscope made by members of Zeiss Optical Works, Jena, Germany, it became the basis of the instrument that is still used in every ophthalmologist's office today. Gullstrand first demonstrated his slitlamp in 1911, the same year he received the Nobel Prize for his contributions to optics. It incorporated 2 important advances, far more intense light and sharp focus of the beam.

Gullstrand made another important contribution to ophthalmology, a reflexless ophthalmoscope. Ophthalmoscopy can be made difficult by the glare of reflexes formed from the cornea and other layers of the eye, which act like mirrors, reflecting light back at the examiner. Bright sources of illumination and small pupils are contributory factors. The solution to this problem is either to separate the systems of illumination and observation or to use polarized light. Gullstrand used the first of these 2 options.

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