

## **The Howe Medal: Its History and Significance**

**Daniel M Albert MD, delivered May 17, 2008**

### *Who was Lucien Howe?*

Lucien Howe was born in 1848 in the home of his grandfather, Dr. Ebenezer Howe, in Standish, Maine, and graduated from Bowdoin College in 1870. He studied medicine at Harvard, when Oliver Wendell Holmes was teaching anatomy there, continued his medical studies at Long Island College Hospital, and received his medical degree from Bellevue in 1872. On completing his medical studies, one of his mentors said to him, “There is a man in Edinburgh named Lister who thinks that fevers are caused by some sort of germ. I think there may be something in it. I advise you to go over and see.” Howe studied under Lister and then worked in various clinics in France, Austria, and Germany, finally spending time as a student under Hemholtz. In 1874, Howe became a pioneer ophthalmologist in Buffalo, New York, then a comparatively small but growing city, where he practiced eye, ear, nose, and throat. Two years later, he founded the Buffalo Eye and Ear Infirmary and in 1879 became professor of ophthalmology at the University of Buffalo. Fifty years later, when Howe left Buffalo for Boston, he had treated 100,000 patients at the Buffalo Eye and Ear Infirmary. His monumental contribution to combating eye disease, for which he mobilized the AOS to give support, was for passage of the “Howe Bill” in the New York State legislature and subsequently in other state legislatures, which required prophylaxis for ophthalmia neonatorum. In addition, he wrote a monumental two-volume monograph, published between the years 1906 and

1908, entitled *Muscles of the Eye*, which remained the leading English text on that subject for the next quarter of a century.

With a great capacity for leadership, Howe rose to become chair or president of each of the major medical or ophthalmic societies he belonged to. He was convinced of the fact that, “Medals and prizes for original work in medicine tend to promote healthy rivalry and to advance our science.” In addition, he was convinced of the fact that while young physicians coveted cash prizes, “Gold medals are more appreciated by investigators ripe in years and experience as lasting evidence of distinguished professional service.”

Accordingly, on becoming president of the New York State Medical Society in 1906, president of the AOS in 1919, chair of the section on ophthalmology of the American Medical Association in 1924, he gave each of these organizations a gift of \$1,500, to stimulate and reward original investigation of some phase of ophthalmology or allied sciences or allied branches of surgery; or for the discovery of some new method of examining or treating the eyes. Each of these medals eventually became known as the Howe Medal, as did a fourth medal established by the University of Buffalo and the Buffalo Ophthalmological Society in 1928, following Howe’s death that year, to honor his memory. The Howe Medal of the AOS became the most celebrated of these awards. Howe himself chaired the first committee on the prize medals (1919) and served on the committee that proposed the initial awards (1922-1924). He oversaw the investment of his gift in 4.5% Liberty bonds, and with the medal costing in the neighborhood of \$25 throughout the 1920s and 1930s, Howe envisioned that the income of the fund might eventually provide a cash prize as well as the medal.

A loyal alumnus of Harvard Medical School, in 1926 Howe funded the laboratories of ophthalmology at that university with a gift of \$250,000, and additionally he left several hundred thousand more dollars in his will. Howe became the first director of the laboratory and was active in its organization at the time of his death in 1928.

***What is the medal intended to recognize?***

By the time the first medal was awarded in 1922, the criteria had been broadened. The medal could be given for one or more of the three following reasons: “a) an appreciation of discoveries so notable as to advance suddenly the progress of ophthalmology in all parts of the world. b) in recognition of less brilliant but still conspicuous service as a writer or teacher, during long years of devotion to our science. c) to encourage investigation among the younger ophthalmologists, in order that this recognition of their efforts may promote them to a higher and well-recognized place among their fellows, the reason for such an award being usually based on the result of research. The award may be made to any ophthalmologist in any country.”

Lucien Howe envisioned that, in keeping with the academic awards in the late 18<sup>th</sup> and early 19<sup>th</sup> centuries, the medal would promote a healthy rivalry among the members of the AOS, and candidates would submit an essay and reprints to the committee selecting the Howe medalist as a basis for the award. Frank Newell, in his 1989 history of the AOS, notes: “The committee selecting the Howe medalist carefully considers the

conditions established by Lucien Howe. Whether a medal or a prize promotes a healthy rivalry and advances ophthalmic science, as suggested by Howe, is open to debate. As far as can be determined, an essay has neither been submitted nor considered as the basis for the award. No one has ever sent reprints to the chairman of the committee on prizes for consideration...There have been few discoveries since Koller 'so notable as to advance suddenly the progress in all parts of the world.' An award has never been made 'to encourage investigation among younger ophthalmologists'...Thus most awards have been made in recognition of 'less brilliant but still conspicuous service as a researcher or teacher, during long years of devotion to our science.'"

### **The Awardees**

Since 1922, 73 ophthalmologists have received the Howe Medal of the AOS. The first, in 1922, was Karl Koller, who had been a member of the AOS since 1889. While serving as an intern and house surgeon at the Allgemeine Krankenhaus in Vienna, in 1884 he was the first to report the local anesthetic action of cocaine in the eye, which essentially marked the inception of anesthetic eye surgery. In 1892, Koller described to the Society the use of subconjunctival cocaine in ophthalmic surgery. Newell states that the Howe Medal in 1922, in Koller's 65<sup>th</sup> year, was the first recognition he received for his momentous contribution. In fact, Derek Vail, Sr., in his biography of Howe, speculated that Howe may have established the medal specifically to honor Koller. The second awardee of the Howe Medal was Alexander Duane, remembered today for his classification of motor anomalies affecting the eye. Ernst Fuchs, professor at the Second

Eye Clinic of the University of Vienna, became the third Howe medalist. Fuchs was the first at the University of Vienna to provide graduate instruction in English, and more than 700 North American physicians attended his courses. Following Fuchs, Edward Jackson, Priestly Smith, Theodor Axenfeld, Frederick Verhoeff, George de Schweinitz, Sir John Herbert Parsons, and Arnold Knapp were the subsequent awardees. Newell notes, “In the first 25 years of the Howe Medal, between 1922 when awarded to Karl Koller and 1946 when awarded to Sir Stewart Duke-Elder, there were 13 recipients. Of these, one was from Austria, one from Germany, and three from England. Of the remaining eight recipients, all but Karl Koller had served as president of the Society.

“After 1946, the medal has been awarded every year, and the recipients include but one ophthalmologist, Ida Mann, from outside the United States.” And here for your rapid perusal [show slide] is a list of the recipients of the Howe Medal to the present and here are the faces of recipients I think you will recognize who have received the award during the time Ralph Eagle has been taking pictures.

***What is the significance of the Howe Medal?***

The Howe Medal denotes distinguished service to ophthalmology, and the medal is gratefully received and proudly worn by the recipient. It is viewed as a meaningful honor and generally the individuals who have received it have done credit to the AOS and to the award. There is a considerable subjective element to the selection of the medalist, although in my experience and in that of others who have served on the committee, the committee strives conscientiously to make the best choice it can.

Although Lucien Howe intended the medal to promote a healthy rivalry, to my mind the most beautiful aspect of the award is the pleasure and good feeling the membership take in seeing one of their own so honored.