

***Gernsback Award***  
***for***  
***Clinical Innovation in Telemedicine***  
**2007**

***Hugo Gernsback***, a native of Luxembourg, was born into a well-to-do family in 1884. He was fascinated with electricity from childhood on. In the 1890s, a handyman at his father's winery showed him how to hook up a battery, wire, and a bell to make the bell ring. He first wired his home with battery-powered telephone intercoms and a six-volt lighting system. Before long he was wiring door buzzers and intercoms to a number of houses in his neighborhood.

He developed another interest in his childhood—scientific speculation as it was called in the 1890s. When he was 10, he read a book called *Mars as the Abode of Life* by the American astronomer Percival Lowell. He continued to speculate about Martian civilization for the rest of his life. That speculation was responsible in part for his publishing enterprises. Gernsback founded a number of popular magazines including *Amazing Stories*, *Modern Electronics* (the precursor of *Popular Science*), and *Radio News*.

Gernsback's first US patent (Patent No. 842,950 issued in 1907) was for a high-amperage, dry-cell battery that he developed while studying electrical engineering in Germany. When he was unable to get the parts and supplies necessary to develop a portable radio transmitter, Gernsback started a business importing electrical and radio components, Electro Importing Company. As the business expanded, a catalog of the inventory was published. Gradually, articles about electricity and radio were added as the catalog morphed into *Modern Electronics* and other magazines. In 1909, the word "television" appeared in a *Modern Electronics* article entitled "Television and the Telephot"

In 1925 he created radio station WRNY and in 1928, he began sending out his own television broadcasts. The screen image, roughly the size of a postage stamp, was received by crude scanners owned by 2,000 amateur enthusiasts in the New York area.

Although he held 80 patents at the time of his death in 1967, today Gernsback is best known for his contributions to science fiction literature and a predictor of technological innovations. As the publisher of dozens of futuristic stories in his magazines, Gernsback developed a new genre of American literature. He is said to have coined the term, *science fiction*, and the name of the Annual Science Fiction Achievement Award has officially been changed to the Hugo in his honor.

In 1924, Gernsback's magazine, *Radio News*, published an article called "The Radio Doctor—*Maybe!*" The cover illustration was remarkably similar to today's telemedicine equipment. An elaborate schematic accompanied the article that described the operations of this invention. According to this description, a character named Fips demonstrated the equipment to another character variously referred to as the All Highest, the Mikado, Most High and Noble Caliph, and

High Priest. Using the All Highest as the patient, a third character distant from the first two, Dr. Hackensaw, was able to listen to the patient's heart, take his pulse, and write a prescription that was printed out for the All Highest. The demonstration went awry when the patient's temperature caused the machine to short out and the All Highest's hand was burned. Angered, he proceeded to demolish the equipment.

Although this early venture into telemedicine ended badly, the equipment and process that Gernsback imagined was innovative and at least 30 years ahead of its time. It is this spirit of innovation and imagination that we want to honor with the Hugo Gernsback Award.