



#### Editorial Series: Frontiers of Medicine in Korea

# The First Fellow of American College of Surgeons to Come to Korea: Dr. Alfred Irving Ludlow

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Dr. Alfred Irving Ludlow (1875–1961) dedicated himself to his work as a professor of surgery at Severance Union Medical College. During his travels with L. H. Severance to Korea in 1907 (Fig. 1), Dr. Ludlow attended the meeting of the 15th Presbyterian Council and the First Presbytery of the Presbyterian in Korea and decided to become a medical missionary at the age of 37. By 1912, he had devoted his life to Severance Hospital and its medical school.

Alfred Ludlow was raised in a devout Christian family who worshiped together every day. He graduated from Case Western Reserve University School of Medicine in Ohio in 1901 and completed his internship at the university's Lakeside Hospital in 4 years beginning in July 1901. As a resident, he studied under Dr. Dudley P. Allen, head of the Department of Surgery. Thereafter, he studied for 1 year at the Department of Surgery and Pathology of Rudolph Virchow in Berlin University, Germany. He began his professional career in 1907 as a professor of pathology at Case Western Reserve University School of Dentistry and as a professor of surgery and pathology with the university's medical school. After just 4 years, he would volunteer as a missionary doctor for the Northern Presbyterian Church of the United States after realizing the urgency and value of medical missionary work during his travels to Korea in 1907.1

Arriving in Seoul on January 13, 1912, Dr. Ludlow began his medical missionary work as head of the Jeryung Presbyterian Hospital for 6 months, treating and performing surgery on many patients. During this time, however, his wife acquired

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acute appendicitis and was transferred to Severance Hospital, where Dr. Ludlow would perform the nation's first appendectomy with the help of Dr. Oliver R. Avison. Thereafter, beginning in August 1912, he made every effort to improve medical education, care, and research as a professor of surgery at Severance Union Medical College and as head of the Departments of Surgery and Research at Severance Hospital until his retirement in 1938.2 Under Japanese occupation, Dr. Ludlow remained steadfast in the training and educating of Korean surgeons. During his time in Korea, he performed on average about 600 minor operations and 300 operations under general anesthesia every year. Prior to his arrival, surgeries throughout the nation were generally performed by medical missionaries, not specialists. At Severance, however, Dr. Ludlow would implement specialized treatments and surgeries, as well as courses on specific surgical procedures and techniques (Fig. 2).3

In 1914, Dr. Ludlow established the Department of Research at Severance Union Medical College. His research delved into the causes of relapsing fever and treatments of amebic liver abscess after aspiration. His work on treatment outcomes of amebic liver abscess was published in the December volume of the China Medical Journal in 1926,4 and presented at the Conference of Chinese Medicine Association, where he won rave reviews from British physician Sir Leonard Rogers. A follow-up editorial thereof stated, "Among the many valuable papers read at the recent China Medical Association Conference at Peking it may be doubted whether any was of more importance than that on 'Amoebic abscess of the liver' by Dr. Ludlow of Severance Hospital. While we may look forward hopefully to the time when this condition will disappear from the category of diseases, that time is not yet, nor can it be till thorough public health measures to have banished dysentery from our midst. Meanwhile it is no small thing to have it removed from the category of fatal diseases and this is what Dr. Ludlow has practically accomplished. To Sir Leonard Rogers, in the first place, we owe the basis of treat-

www.eymj.org 1171



ment with emetin salts. To Sir Patrick Manson, we owe the principle of surgical treatment by aspiration. ...... But to men like Dr. Ludlow we owe the final demonstration of the complete success of the treatment through years of the most painstaking and careful work."

In 1926, Ludlow was granted an honorary Master of Arts Degree at the 100th anniversary of the Case Western Reserve University due to his academic contributions on amebic liver abscess and his valuable medical missionary activities. He became a fellow of the American College of Surgeons at the Congress of the American College of Surgeons in Chicago, US in October of 1921. In 1926, he also started a registry of tumors in Korea, and published a preliminary survey of carcinoma in the Korean in the *China Medical Journal*. Some cases of sarcoma were even registered with the American College of Surgeons.

While at Severance Union Medical College, Dr. Ludlow helped train 45 Korean surgeons, including Ko, Myung Woo; Lee, Yong Seol; and Ko, Byung Kan. He sent his pupils Ko,



Fig. 1. Louis H. Severance (middle), Dr. Alfred I. Ludlow (left), and Dr. Oliver R. Avison (right) in front of Severance Hospital in 1907.



Fig. 2. Dr. Ludlow performs surgery with the help of his wife as nurse Teresa Ludlow.

Myung Woo to New York University School of Medicine for 2 years of training and Lee, Yong Seol to study orthopedics at Northwestern University School of Medicine and the hospital for Ruptured and Crippled in the New York City. His efforts helped educate and enable Korean doctors who could lead Severance into the future (Fig. 3). In 1927, he recorded, "Looking back fifteen years to conditions at the time of my arrival in Korea, and thinking of the progress which has been made in surgery in a comparatively short time, so that we now have Koreans such as Dr. M.U. Koh and Dr. Y.S. Lee, who the best surgeons of any other country, give me the greatest thrill of my career as a missionary."

After returning to the US because of forced expulsion of missionaries under Japanese colonial rule, Dr. Ludlow continued to contribute greatly to the development of Severance Union Medical School and Severance Hospital. Particularly, he helped Kim, Myung Sun reestablish Severance Hospital after the Korean War by garnering support from the China Medical Board. After Peking Union Medical College became nationalized by Mao Zedong, Harold H. Loucks, M.D., head of the Rockefeller Foundation looked for other organizations to support. Dr. Loucks was well informed of the origins and spirit of Severance, as well as the destruction of Severance Hospital during the Korean War, by Dr. Ludlow, such that the China



Fig. 3. Dr. Ludlow with pupils Ko, Myung Woo (right) and Lee, Yong Seol (left).



Medical Board decided to support the rebuilding of Severance Hospital and its Medical School.

Throughout his career, Dr. Ludlow remained faithful to his duty as a missionary doctor. In addition to curing patients through surgery, Dr. Ludlow sought to cure suffering from spiritual diseases. He emphasized spiritual healing driven by Jesus Christ, and recorded as below, "The hospital offer a fine opportunity for evangelistic effort. It is a clinic of applied Christianity. We aim to keep before the staff this ideal of spiritual as well as physical salvation for every patient. Following Paul's reasoning, though we preach with eloquence to the patients and have not love we are as sounding brass. And though we delve deeply into the realms of scientific research and have unbounded faith in ourselves and have not love we are nothing. And though we treat thousands of patients and wear ourselves out in the operating room and have not love it profiteth us nothing. Paul's spectrum of love in 1 Cor. 13 Chap. has nine ingredients; patience, kindliness, generosity, humility, courtesy, unselfishness, good temper, gentleness, and sincerity.

These we covet. A task to challenge the best in one, associates fitted to share the burden, grateful patients, good health, a consciousness of Christ's presence and a desire that all our patients may share it; these are the things which more than compensate for all the difficulties and annoyances of the daily round and give us hope and joy in the work."

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