

## April 2020 Her Story ENewsletter Healthcare Heroines

As all of us around the world focus on keeping ourselves healthy and not overwhelming the healthcare system, we remember two women whose pioneering efforts helped in earlier health crises: Gladys Dick and Florence Seibert.



In earlier times, scarlet fever was a feared disease; it killed 25% of the children who got it, and of those who lived, many had severe and crippling complications. **Gladys Dick** and her husband successfully isolated the bacteria that caused scarlet fever. They also developed a test to determine who was vulnerable to the disease, and they devised ways to prevent the disease. Dick and her husband patented the way their scarlet fever toxin and antitoxin were prepared, in order to preserve its purity. Dick graduated in 1900 from the University of Nebraska but could not persuade her mother to agree to her desire to pursue a medical degree. After Dick taught high school biology for several years, her mother finally relented, and Dick graduated from the Johns Hopkins University School of Medicine in 1907. After postgraduate work in Berlin, she moved to Chicago to pursue medical research. In Chicago, she met her husband.

In 1923, the Dicks published papers proving that scarlet fever was caused by the *hemolytic streptococcus*. Their work brought the disease under control. A test, which eventually came to be known as the Dick test, was announced in 1924. It was a simple skin test that demonstrated whether the patient was susceptible or immune to scarlet fever. Their toxin and antitoxin were 'state-of-the-art' until antibiotics were discovered during World War II.



Biochemist **Florence Seibert** contracted polio as a child; this caused her to limp for the rest of her life. As she read biographies of scientists as a teenager, her interest was sparked in pursuing a scientific career. She did pursue a scientific education and received her undergraduate degree from Goucher College and, in 1923, her Ph.D. in biochemistry from Yale University.

Seibert identified the impurities introduced into intravenous injections and developed a new spray-catching trap to prevent contamination during the distillation process. This process was subsequently adopted by the Food and Drug Administration, the National Institutes of Health and pharmaceutical firms. Seibert is best known for her work in identifying a pure form of tuberculin; her first paper published on this topic was presented in 1934. Her work enabled the development and use of a reliable tuberculosis

skin test that became the national and international standard for tuberculin tests in the 1940s. The recipient of many awards for her groundbreaking work, Seibert has been inducted into the National Women's Hall of Fame.

Gladys Dick and Florence Seibert are among the more than 850 women profiled in our bookHer Story: A *Timeline of the Women Who Changed America*. Women's accomplishments continue to inspire and encourage us all. Continue to help us tell women's stories! Tell young women especially, that their dreams in any field of endeavor or interest, can become a reality.

Charlotte Waisman and Jill Tietjen

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