SWARTHMORE COLLEGE • DEPARTMENT OF MATHEMATICS AND STATISTICS •

Dresden Memorial Lecture Series SUSAN ELLENBERG

> Tuesday, April 26

My Life as a Statistician: An Accidental (but very rewarding) Career

When I started college I had no idea of what statisticians did; I certainly had never thought about statistics as a career. Some unexpected circumstances led me to this career path, which has offered me many opportunities for interesting and challenging work, and to make contributions to medical research and public health. In this talk I will discuss a few of the opportunities and challenges that arose during my years working at the National Institutes of Health, at the Food and Drug Administration, and, more recently, as a faculty member at the University of Pennsylvania.



Emeritus Professor CE of Biostatistics and Epidemiology University of Pennsylvania

> Wednesday, April 27

The Challenges of Evaluating New Vaccines During Disease Outbreaks

The development and testing of new vaccines has typically been a long process. Since vaccines are intended to prevent, rather than treat, disease, they are given to large populations of healthy people; therefore, safety is a paramount consideration. Vaccine scientists have been extremely successful in developing vaccines that have eliminated or greatly reduced the incidence of diseases such as smallpox, polio, whooping cough and measles. These and most other vaccines were developed to prevent diseases that were endemic at relatively low levels in global populations, facilitating the conduct of clinical trials. The 2014-15 outbreak of Ebola in West Africa, and the ongoing coronavirus pandemic, presented new challenges for vaccine trials and led to some creative solutions.

Refreshments: 4:00 p.m. Lecture: 4:30–5:30 p.m. Science Center 101 (Chang Hou Hall)

