Challenges in the Development & Delivery of Vaccines

July 8, 2015
New Mexico State University

RISE STARTUP SUMMER 2015 SYMPOSIUM SERIES

2:00 p.m. Introduction **Dr. Kathryn Hanley, Associate Professor, NMSU Biology**

2:05 p.m. Vaccine Development: Historical Burdens, Scientific Opportunities, & Ethical Dilemmas **Dr. Susan E. Lederer, Robert Turell Professor of Medical History and Bioethics; Chair Department of Medical History and Bioethics, University of Wisconsin Medical School**

Progress in understanding, treating, and especially preventing disease has come through laboratory experimentation and clinical research involving animals and humans. The history of medicine is studded with episodes in which men, women, and children were deliberately infected with disease in the hope of learning how to better treat or prevent disease development. This talk explores some of the challenges that vaccine developers encountered developing methods to avert diseases, the use of vulnerable populations to test the safety and establish the efficacy of such methods, and the ethical dilemmas that continue to occur in the creation of such vital interventions.

3:05 p.m. Building a Better Alphavirus Vaccine

Dr. Shannan Rossi, Institute for Human Infections and Immunity, Center for Tropical Diseases, and Department of Pathology, University of Texas Medical Branch, Galveston

Alphaviruses are a group of mosquito-transmitted viruses found worldwide that cause a spectrum of human disease, ranging from mild flu-like illness to arthritis to encephalitis. Unfortunately, there are no licensed vaccines available for the majority them. A number of factors are considered when designing vaccines, including the intended recipient; the acceptable balance between immunogenicity and safety; whether the vaccine can be transmitted in nature; and the ease of producing the vaccine. Our platform to develop safe and efficacious alphavirus vaccines will be used as an example of the basic process for developing a viral vaccine.

4:05 p.m. Coffee with the speakers

4:30 p.m. Interventions for Reducing Parental Vaccine Refusal and Vaccine Hesitancy

Dr. Saad Omer, Associate Professor Emory Vaccine Center & Global Health and Epidemiology, Rollins School of Public Health, Emory University; Investigator, Emory Center for AIDS Research

Vaccines are among the most efficacious and cost effective prevention tools. However, the success of an immunization program depends on high acceptance and coverage. There is evidence of an increase in vaccine refusal in the United States and of geographical clustering of vaccine refusers resulting in outbreaks. Vaccine hesitant parents have less trust in the government and the health care system, and they perceive lower susceptibility to and severity of vaccine preventable diseases. Potential interventions include: effective provider-parent communication tools, rational administrative requirements for granting exemptions, and informed declination.

5:30 - 6:00 p.m. Coffee with the speakers

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