

NIAID Workshop: Dengue Animal Model Development
September 18-19, 2008

Preliminary Agenda

Meeting Contact

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Meeting Sponsor

Office of Rare Diseases

**Thursday, September 18,
2008**

- 8:30 AM NIAID Welcome Address
Catherine Laughlin, Ph.D. (NIAID)
- 8:35 AM NIAID Resources and Opportunities for Dengue Research
Cristina Cassetti, Ph.D. (NIAID)
- Session I: Animal Models to Study Dengue Pathogenesis**
Chairs: Eva Harris and Rebeca Rico-Hesse
- 8:50 AM Human Pathogenesis and Mouse Models
Alan Rothman, M.D. (University of Massachusetts Medical School)
- 9:30 AM Dengue Disease and Immunity in Humanized Mice
Rebeca Rico-Hesse, Ph.D., M.P.H. (Southwest Foundation for Biomedical Research)
- 10:00 AM Dengue Viral Pathogenesis and Immune Response in Humanized (RAG-hu) Mice
Ramesh Akkina, Ph.D. (Colorado State University)
- 10:30 AM Morning Break
- 11:00 AM The AG129 Mouse Model for Dengue Virus Infection and Disease
Eva Harris, Ph.D. (University of California, Berkeley)
- 11:30 AM A Mouse Model to Investigate T-cell Response to Dengue Virus
Sujan Shresta, Ph.D. (La Jolla Institute for Allergy and Immunology)
- 12:00 AM Discussion
- 12:30 PM Lunch break
- 2:00 PM The Rhesus Macaque Model of DHF/DSS: How Close Are We to Human Disease?
Anna Durbin, M.D. (Johns Hopkins Bloomberg School of Public Health)
- 2:30 PM Passive Immunization in Monkeys Using Monoclonal Antibodies Against Dengue Virus
Ana Goncalvez, Ph.D. (Laboratory of Infectious Diseases, NIAID)
- 3:00 PM Yucatan Miniature Swine as an Immunogenicity and Infection Model for Dengue

3:00 PM Tim Burgess (Naval Medical Research Center)
 Discussion
 4:00 PM Afternoon Break
Session II: Animal Models to Evaluate Dengue Vaccines and Therapeutics
 Chairs: Anna Durbin and Stephen Whitehead
 4:30 PM Evaluation of Attenuated Viruses in Mice and Monkeys
 Stephen Whitehead, Ph.D. (Laboratory of Infectious Diseases, NIAID)
 5:00 PM Dengue Vaccine, Monkey Animal Models and Sanofi Pasteur R&D Experience
 Jean Lang, M.D., Ph.D. (Sanofi Pasteur)
 5:30 PM Discussion
 6:00 PM Adjourn

Friday, September 19, 2008

Session II, Continued: Animal Models to Evaluate Dengue Vaccines and Therapeutics
 Chairs: Anna Durbin and Steve Whitehead
 8:30 AM Evaluation of Reproductive Toxicity of a Dengue Live-attenuated Vaccine Candidate in Mice
 Sandra Giannini, Ph.D. (GlaxoSmithKline)
 9:00 AM Dengue Vaccine Candidate Characterization Using Monkeys
 Kenneth Eckels, Ph.D. (Walter Reed Army Institute of Research)
 9:30 AM Evaluation of Anti-viral Drug Candidates in Dengue Mouse Models
 Wouter Schul, Ph.D. (Novartis Institute for Tropical Diseases)
 10:00 AM FDA Perspective
 Lewis Markoff, M.D. (CBER, FDA)
 10:15 AM **Morning Break**
 Session III: Roundtable Discussion
 Chairs: Cristina Cassetti and John Roehrig
 10:45 AM Summary of Pathogenesis and Recommendations
 Scott Halstead and Alan Rothman
 11:15 AM Summary of Murine Models and Recommendations
 Eva Harris, Rebeca Rico-Hesse, and Leonard Schultz
 11:45 AM Summary of NHP Models and Recommendations
 Anna Durbin and Stephen Whitehead
 12:15 PM Pick Up Box Lunch
 12:30 PM Summary of Models for Vaccines and Recommendation
 Stephen Whitehead and Anna Durbin
 1:00 PM Summary of Models for Therapeutics and Recommendation
 Wouter Schul and Michael Diamond
 1:30 PM **Discussion**
 2:30 PM **Adjourn**