Program

Vaccine Delivery and Stabilization: Improving the Reach of Vaccines

September 8 – 10, 2013
Boston, Massachusetts, USA

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Bruce Weniger (Chiang Mai University and Associate Editor, Vaccine [Elsevier]).
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Sunday, September 8, 2013

16:00 – 18:00  Check in / Registration (Ballroom Prefunction area)
18:00 – 18:30  Welcome remarks and Introduction
18:30 – 19:30  Keynote Speaker: Vaccines of the Future: Innovating Beyond the Antigen
Dr. Julie Gerberding, President, Merck Vaccines
19:30 – 20:15  Reception
20:15 – 22:00  Dinner

NOTES

- Audiotaping, videotaping and photography of presentations are strictly prohibited.
- Please do not smoke at any conference functions.
- Turn your mobile phones to vibrate or off during technical sessions.
- Technical Sessions will be in the Grand Ballroom 1.
- Breakfasts and dinners will be in the Harborside Ballroom.
- Lunches will be outside on the Pavilion Lawn (weather permitting).
- Be sure to check your contact information on the Participant List in this program and make any corrections to your name/contact information online. A corrected copy will be sent to all participants after the conference.
- Speakers – Please leave at least 5 minutes for questions and discussion. Be available for discussion during meals and social periods.
Monday, September 9, 2013

07:30 – 08:30  Breakfast

08:30 – 09:00  Opening remarks and Conference Session kickoff

Delivery Technologies & Devices:  Session #1
Session Chair: Mark Prausnitz, Georgia Institute of Technology, USA

09:00 – 09:30  Intradermal delivery and dose-sparing: vaccine-specific issues
Julian Hickling, Working in Tandem, Ltd., United Kingdom

09:30 – 10:00  Rational design of microprojection array-mediated vaccine delivery to skin, using mathematical modelling and experimental methods
Stefano Meliga, Australian Institute for Bioengineering and Nanotechnology, Australia

10:00 – 10:30  Intradermal Vaccination Using NanoPass’s Microneedles: Current Studies and Future Opportunities
Yotam Levin, Nanopass Technologies, Israel

10:30 – 11:00 Coffee break

11:00 – 11:30  History, promise and recent trial results for cutaneous vaccination against influenza
Bruce G. Weniger, Chiang Mai University, Thailand/USA

11:30 – 12:00  Dermal polio vaccination using novel hollow microneedle technology
Wim Jiskoot, University of Leiden, Netherlands

12:00 – 13:30 Lunch

Mechanisms:  Mode of Action - Session #2
Session Chair: Bruce G. Weniger, Chiang Mai University, Thailand/USA

13:30 – 14:00  Enhanced systemic immunogenicity achieved by co-localising vaccine with nanopatch-mediated skin damage adjacent to live cells
Alexandra Depelsenaire, Australian Institute for Bioengineering and Nanotechnology, Australia

14:00 – 14:30  Non-viral delivery of self-amplifying mRNA vaccines
Andrew Geall, Novartis, USA

14:30 – 15:00  The resident memory T-cell concept and vaccination: can we manipulate the system?
David Koelle, University of Washington, USA

15:00 – 15:15 Stretch break

15:15 – 15:45  In vivo active delivery of antigens with dendritic cell-targeting bio-nanocapsules
Hidenori Matsuo, Nagoya University, Japan
Monday, September 9, 2013 (continued)

15:45 – 16:15  Stability and bioactivity effects of raw material source and structure in vaccine adjuvant formulations
Christopher B. Fox, Infectious Disease Research Institute, USA

16:15 – 16:45  Coffee break

Adjuvants: Formulations & Mechanisms: Session #3
Session Chair: Danny Casimiro, Merck & Co., USA

16:45 – 17:15  Rational Design and Development of New Adjuvants
Steve Reed, Infectious Disease Research Institute, USA

17:15 – 17:45  The next generation of vaccine adjuvants
Derek O’Hagan, Novartis, USA

17:45 – 18:15  Safety issues associated with vaccine administration
Neal Halsey, Institute for Vaccine Safety, Johns Hopkins Bloomberg School of Public Health, USA

18:15 – 18:45  Formulation, Stability and Immunogenicity of Protein-Based Vaccines in Aluminum Salt Adjuvants
S. Fernando Ausar, Sanofi Pasteur, Canada

19:00- 19:30  Reception

19:30 – 21:00  Conference Banquet
Tuesday, September 10, 2013

08:00 – 09:00  Breakfast

Novel Stabilization Approaches & Formulations: Session #4  
Session Chair: Robert Evans, Merck & Co., USA

09:00 – 09:15  Opening remarks

09:15 – 09:45  Vaccines as Well-Defined Pharmaceutical Dosage Forms:  
*Formulation and Analytical Challenges and Opportunities*  
David Volkin, University of Kansas, USA

09:45 – 10:15  The effect of protein oxidation on the formation of higher order structures  
and loss of potency for a recombinant influenza hemagglutinin  
Kathy Holtz, Protein Sciences Corporation, USA

10:15 – 10:45  High-throughput screening of microneedle formulations for influenza  
vaccine stabilization  
Matt Mistilis, Georgia Institute of Technology, USA

10:45 – 11:15  Coffee break

11:15 – 11:45  Conformational stabilization of vaccine immunogens by targeted di-tyr  
crosslinking  
Christopher Marshall, Avatar Biotechnologies, USA

11:45 – 12:15  Silk stabilization of vaccines: a new route to improving access  
Kathryn Kosuda, Vaxess Technologies, Inc., USA

12:15 – 12:45  Measles Vaccination Using A Microneedle Patch in Non-Human Primates  
Marcus Collins, Center for Disease Control, USA

12:45 – 14:15  Lunch

Innovations & New Technologies for Reaching the Developing World:  Session #5  
Session Chair: Davinder Gil, Hilleman Laboratories, India

14:15 – 14:45  A Framework to Assess Formulation and Administration Technologies for  
Vaccine Product Development  
Penny Heaton, Bill & Melinda Gates Foundation, USA

14:45 – 15:15  Developing Delivery Devices with Desirable Product Attributes for Global  
Health  
Darin Zehrung, PATH, USA

15:15 – 15:45  Optimization of Rotavirus Vaccine for Developing World  
Sachin Kale, Hilleman Laboratories, India

15:45 – 16:15  Thermostable, needle-free influenza vaccines formulated in Bioneedles  
Gideon Kersten, Institute for Translational Vaccinology, Netherlands

16:15 – 16:30  Closing remarks