Preliminary Program
(May 16, 2016)

Vaccine Technology VI

June 12-17, 2016

Grande Real Santa Eulalia Hotel
Albufeira, Portugal

Conference Co-Chairs

Laura A. Palomares
(UNAM, Mexico)

Tarit Mukhopadhyay
(University College London, UK)

Manon Cox
(Protein Sciences Corporation, USA)

Nathalie Garçon
(BIOASTER Technology Research Institute, France)
Organizing Committee

Paula Alves, IBET
Rick Bright, BARDA
Barry Buckland, BiologicB
Fred Cassels, NIAID
Jose A. Chabelgoity, Instituto de Higiene
Annie de Groot, EpiVax
Monica Dias Figuereido, Merial
Francesc Godia, UABcelona
Johan Van Hoof, Janssen (J&J)
Amine Kamen, McGill University
Florian Krammer, Icahn School of Medicine at Mount Sinai
Linda Lua, University of Queensland
Charles Lutsch, Sanofi/Shanta
Bob Nordgren, Merial
Al Price, Medimmune
Hari Pujar, Moderna Therapeutics
Udo Reichl, Max Planck Institute
Guus Rimmelzwaan, Rotterdam University
Steve Rockman, CSL
Ingrid Scully, Pfizer
Rebecca Sheets, Grimalkin Partners
Sergio Valentinotti, Liomont
Vidadi Yusibov, Fraunhofer
Sunday, June 12, 2016

16:00 - 18:30  Conference check-in

18:30 - 19:30  **Opening Keynote**

*Vaccines: Reaching for higher branches after the low hanging fruit has been picked*
Michael Kurilla, National Institute of Allergy and Infectious Diseases (NIAID), USA

19:30 - 21:00  Dinner
### Monday, June 13, 2016

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>07:30 - 08:30</td>
<td>Breakfast buffet</td>
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<tr>
<td>08:30 – 10:30</td>
<td><strong>Session I: Break Through Developments in Vaccinology</strong></td>
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<td><strong>Chair</strong>: Florian Krammer, The Mount Sinai Hospital, USA, and Hari Pujar, Moderna Therapeutics, USA</td>
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<tr>
<td>8:30 – 9:00</td>
<td>A universal influenza virus vaccine candidate confers protection against pandemic H1N1 infection in ferrets</td>
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<td>9:00 – 9:30</td>
<td>Single-cell analysis of Influenza A virus-infected cells for the optimization of cell culture-based vaccine production</td>
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<td>9:30 – 10:00</td>
<td>Development of Typhax, a <em>Salmonella</em> Typhi Vi polysaccharide protein capsular matrix vaccine</td>
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<td>10:00 – 10:30</td>
<td>Quantitative, molecular-level analysis of the serum antibody repertoire reveals unanticipated features of the response to seasonal influenza vaccination</td>
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<td>10:30 - 11:00</td>
<td>Coffee break</td>
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<td>11:00 – 13:00</td>
<td><strong>Session II: Issues and Case Studies in Process Development</strong></td>
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<td><strong>Chair</strong>: Udo Reichl, Max Planck, Germany and Charles Lutsch, Shantha Biologics, India</td>
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<tr>
<td>11:00 – 11:24</td>
<td>Upstream and downstream process development of a Vero cell-based yellow fever vaccine</td>
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<td>11:24 – 11:48</td>
<td>Fast-track lentiviral vector upstream process development: leveraging high-throughput process monitoring, single-use bioreactor scalability</td>
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<td>11:48 – 12:12</td>
<td>Hollow fiber-based high-cell-density and two-stage bioreactor continuous cultivation: Options and limits towards process intensification for virus production</td>
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<td>12:12 – 12:36</td>
<td>A live attenuated RSV vaccine, process development studies</td>
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<td>12:36 – 13:00</td>
<td>Genetic engineering of vaccine manufacturing cell lines enhances poliovirus and enterovirus 71 production</td>
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<td>13:00 - 14:00</td>
<td>Lunch</td>
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Monday, June 13, 2016 (continued)

14:00 - 15:30  
**Workshop I: Are regulatory hurdles limiting vaccine manufacturing innovation?**
Facilitators: Katey Owen, The Bill and Melinda Gates Foundation, USA and David Robinson, Robinson Vaccines and Biologics LLC, USA

15:30 - 16:00  
*Ad hoc* discussions/networking time

16:00 - 18:00  
**Session III: Formulating and Delivering Vaccines**
Chair: David Volkin, University of Kansas, USA

16:00 – 16:30  
**Adjuvants in preclinical and clinical development: the do and don’t**
Nathalie Garçon, BIOASTER Technology Research Institute, France

16:30 – 17:00  
**Combining DOE with an empirical approach to improve vaccine formulation development**
Jill Livengood, Takeda, USA

17:00 – 17:30  
**Development of a thermostable ID93 + GLA-SE vaccine using a design of experiments (DOE) approach**
Ryan M. Kramer, Infectious Disease Research Institute (non-profit), USA

17:30 – 18:00  
**Controlled, pulsatile release of thermostabilized inactivated polio vaccine from PLGA-based microspheres**
Stephany Y. Tzeng, Massachusetts Institute of Technology, USA

18:00 - 20:00  
Dinner

20:00 - 22:00  
**Poster Session I with Social Hour**
Chairs: Valerie Mermall, Protein Sciences, USA, Ruth Pastor, UNAM, Mexico, Antonio Roldao, IBET, Portugal
Tuesday, June 14, 2016

07:30 - 08:30  Breakfast buffet

8:30 – 10:30  **Session V: Therapeutic Vaccines**  
Chairs: Jean Boyer, Inovio, USA, and Tarit Mukhopadhyay, University College London, UK

8:30 – 9:00  **Current technologies for advancing HIV vaccines**  
Vadim Tsvetnitsky, IAVI, USA

9:00 – 9:30  **Applications of DNA Vaccine Technology Towards Difficult Immune Targets**  
David Wiener, University of Pennsylvania, USA

9:30 – 10:00  **Advancing the mRNA therapeutics platforms for vaccines**  
Hari Pujar, Moderna Therapeutics, USA

10:00 – 10:30  **Vaccine based immunotherapy regimen (VBIR) for the treatment of prostate cancer**  
Helen Cho, Pfizer, USA

10:30 - 11:00  Coffee break

11:00 - 12:00  **Keynote lecture**  
Development of immunotherapeutic immunizations for virus infections and cancer  
Ian Frazer, University of Queensland, Australia

12:00 - 13:30  **Workshop II. Academy-Industry Interactions for Advancing in Vaccine Development**  
Facilitators: Alex Xenopoulos, EMD Millipore, USA and Manuel JT Carrondo, IBET, Portugal

14:00 - 19:30  Pick up boxed lunch  
Boat excursion and guided tour of Faro

19:30 - onwards  Dinner on your own
Wednesday, June 15, 2016

07:30 - 08:30  Breakfast buffet

8:30 - 10:30  **Session VI: Getting Vaccines to the Market: Case studies**
Chair: Rebecca Sheets, Grimalkin Partners, USA and Danilo Casimiro, Aeras, USA

8:30 – 9:00  **RSV vaccines for the young and the old**
Albert E. Price, MedImmune, USA

9:00 – 9:30  Development, manufacturing, and supply of Merck’s Ebola vaccine
Jeffrey T. Blue, Merck & Co. Inc., USA

9:30 – 10:00  Third generation vaccine for world eradication of poliomyelitis
Emilie Rodrigues, Intravacc, Netherlands

10:00 – 10:30  Improving Global Human Health through Norovirus Virus-like Particle Manufacturing
Scott Shepard, Takeda Vaccines, USA

10:30 – 11:00  Coffee break

11:00 - 12:30  **Keynote Lecture**
How is vaccine R&D pipeline strategy going to evolve for pharm industry…?
Johan Van Hoof, Janssen Research and Development, Belgium

12:30 – 13:00  Ad hoc discussions / networking

13:00 – 14:00  Lunch

14:00 – 15:30  **Workshop III. Vaccine Design and Evaluation - The iVAX Toolkit**
Facilitator: Frances Terry, EpiVax, USA

15:30 – 17:00  Ad hoc discussions / networking

17:00 – 18:00  **Session II: Issues and Case Studies in Process Development**
Chair: Udo Reichl, Max Planck, Germany and Charles Lutsch, Shantha Biologics, India

17:00 – 17:20  Challenges in the development and scale-up of a purification process for an attenuated live virus vaccine candidate
Matthew Woodling, Merck & Co., Inc., USA

17:20 – 17:40  Insect Cells Platforms for Fast Production of Pseudo-Typed VLPs for Drug and Vaccine Development
Antonio Roldao, IBET, Portugal

17:40 – 18:00  Determining whether adsorption state is a critical attribute in aluminum adjuvanted vaccines
Garry Morefield, VaxForm, USA

18:00 – 20:00  Dinner

20:00 – 22:00  **Poster session II and Social Hour**
Chairs: Valerie Mermall, Protein Sciences, USA, Ruth Pastor, UNAM, Mexico, Antonio Roldao, IBET, Portugal
Thursday, June 16, 2016

07:30 - 08:30  Breakfast buffet

8:30 – 10:30  **Session IV: Vaccine Characterization and Analytics**
   Chairs: Linda Lua, University of Queensland, Australia, and Indresh Srivastava, Protein Sciences, USA

8:30 – 8:58  Analytical characterization of human Cytomegalovirus vaccine and vaccine induced humoral responses
   Sha Ha, Merck, USA

8:58 – 9:22  Multi-tasking an inactivated influenza vaccine to provide rapid innate immune-system mediated protection and subsequent long-term adaptive immunity against influenza and secondary pneumococcal infections
   Brendon Y. Chua, The University of Melbourne, Australia

9:22 – 9:46  How does the addition of surface protein antigens to a potential vaccine for *Staphylococcus aureus* affect the immune response it induces?
   Christopher D. Dupont, Massachusetts Institute of Technology, USA

9:46 – 10:10  Correlations of antibody response phenotype to genotype revealed by molecular amplification fingerprinting
   Sai Reddy, ETH Zurich, Switzerland

10:10 – 10:30  Universal and in-process analytical tool for Influenza quantification using a label-free technology
   Sofia Carvalho, iBET/ITQB, Portugal

10:30 - 11:00  Coffee break

11:00 – 13:00  **Session VIII. One World, One Health**
   Chairs: Jean-Christophe Audonnet, Merial, France, Juan Garza, UNAM, Ab Osterhaus, University of Veterinary Medicine Hannover, Germany.

11:00 – 11:30  Vaccination as a tool to reduce antimicrobial resistance worldwide
   Bernard Vallat, OIE

11:30 – 11:55  Structural-based designed modular capsomere comprising HA1 as low-cost poultry influenza vaccine
   Jarurin Waneesorn, The University of Queensland, Australia

11:55 – 12:20  Development of a vaccine based on recombinant subunit proteins to protect humans and animals against filovirus disease
   Axel T. Lehrer, University of Hawaii, USA

12:20 – 12:40  How to deliver new vaccines under very short timelines: The ZAPI project
   Jean Christophe Audonnet, Merial, France

12:40 – 13:00  From virus discovery to intervention
   Ab Osterhaus, University of Veterinary Medicine Hannover, Germany.

13:00 - 14:00  **Poster session I with Grazing Lunch**
   Chairs: Valerie Mermall, Protein Sciences Corporation, USA, Ruth Pastor, UNAM, Mexico, Antonio Roldao, IBET, Portugal
Thursday, June 16, 2016 (continued)

14:00 - 15:00  **Poster session II with Grazing Lunch**  
Chairs: Valerie Mermall, Protein Sciences Corporation, USA, Ruth Pastor, UNAM, Mexico, Antonio Roldao, IBET, Portugal

15:00 - 16:00  Ad hoc discussions / Networking

16:00 - 19:00  **Session VII: New Challenges and Technologies in Vaccine Development**  
Chairs: Albert Price, MedImmune, USA and Odile Leroy, European Vaccine Initiative

16:00 – 16:23  Systems biology and single cell approaches to study human immune responses to vaccination  
John Tsang, NIAID, USA

16:23 – 16:45  **Structure-based Vaccine Design: Lessons from RSV F**  
Jason McLellan, Geisel School of Medicine at Dartmouth, USA

16:45 – 17:07  **Induction of antigen-specific immune tolerance with synthetic nanoparticle vaccines**  
Petr Ilynskii, Selecta Biosciences, USA

17:07 – 17:30  **Immune engineering enhances H7N9 vaccine immunogenicity by regulatory T cell epitope deletion in hemagglutinin**  
Annie De Groot, EpiVax, Inc., Institute for Immunology and Informatics, University of Rhode Island, USA

17:30 - 18:00  Coffee break

18:00 – 18:30  **Applications of high-throughput single B-cell sequencing to accelerate rational vaccine design**  
Brandon J. DeKosky, Vaccine Research Center / NIAID, USA

18:30 – 19:00  **Plant-based technologies to enable rapid response to Ebola outbreak**  
Jerzy Karczewski & Vidadi Yusibov, Fraunhofer USA.

19:00 - 20:00  **Closing keynote**  
Katey Owen, Deputy Director, Vaccines Development CMC, The Bill and Melinda Gates Foundation

20:00 - 22:00  Conference Banquet
07:30 - 09:00  Breakfast Buffet

Departures