Engineering Conferences International
ECI Digital Archives

Vaccine Technology VI Proceedings

6-12-2016

Conference Program (Vaccine Technology VI)

Laura A. Palomares
UNAM, Mexico

Tarit Mukhopadhyay
University College London, UK

Manon Cox
Protein Sciences Corporation, USA

Nathalie Garçon
BIOASTER Technology Research Institute, France

Program

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)

Engineering Conferences International
32 Broadway, Suite 314 - New York, NY 10004, USA
Phone: 1 - 212 - 514 – 6760
www.engconfintl.org – info@engconfintl.org

Grande Real Santa Eulalia Resort & Hotel Spa

Praia de Santa Eulalia

(Secondary road from Albufeira town to Olhos D ‘ Agua village)

8200-916 Albufeira

Algarve / Portugal

Telephone +351 289 598 020

Engineering Conferences International (ECI) is a not-for-profit global engineering conferences program, originally established in 1962, that provides opportunities for the exploration of problems and issues of concern to engineers and scientists from many disciplines.

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, UABarcelona

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

Vaccine Technology© Conferences History

An ECI Conference Series

Vaccine Technology I (2006)
Barry C. Buckland, John G. Aunins, Emilio A. Emini, and Jerald C. Sadoff
Puerto Vallarta, Mexico

Vaccine Technology II (2008)
Barry C. Buckland, John G. Aunins, Paula Marques Alves, and Kathrin Jansen
Albufeira, Algarve, Portugal

Vaccine Technology III (2010)
Barry C. Buckland, John G. Aunins, Paula Marques Alves, and Kathrin Jansen
Nuevo Vallarta, Mexico

Vaccine Technology IV (2012)
Barry C. Buckland, John G. Aunins, Paula Marques Alves, and Kathrin Jansen
Albufeira, Algarve, Portugal

Vaccine Technology V (2014)
Laura Palomares, Manon Cox, John Aunins and Kathrin Jansen
Playa del Carmen, Mexico

Conference Sponsors

Adams Family Foundation Inc.

Applikon Biotechnology B.V.

Bill & Melinda Gates Foundation

BIOASTER

CureVac AG

EpiVax, Inc.

GE Healthcare

Laboratorios Liomont

Medimmune

Merck

Merial, Inc.

Nanoimaging Services, Inc.

Pall

Pfizer

Sanofi Pasteur

Vaccine Journal (Elsevier)

Time	Sunday June 12	Monday June 13	Tuesday June 14	Wed June 15	Thurs June 16	Fri June 17
7:30		Breakfast	Breakfast	Breakfast	Breakfast	Breakfast
8:30		Session 1 Break through developments	Session 4 TherapeuticvVaccines	Session 5 Going to market	Session 6 Vaccine characterization and analytics	
9:00						
9:30						
10:00						
10:30		Coffee break	Coffee break	Coffee break	Coffee break	
11:00		Session 2 Issues and case studies	Keynote lecture Ian Frazer	Keynote Lecture Johan van Hoof	Session 7 One world one health	
11:30						
12:00			Workshop II Industry-Academy	Networking		
12:30						
13:00		Lunch		Lunch	Poster session I Grazing lunch	
13:30			Boxed lunch Boat excursion			
14:00	Registration	Workshop I Regulatory hurdles		Workshop III Vaccine design	Poster session II	
14:30						
15:00					Networking	
15:30		Networking		Networking		
16:00		Session 3 Fomulating and delivering vaccines			Session 8 New challenges New technologies	
16:30						
17:00				Session 2 (cont)		
17:30					Cofee break	
18:00		Dinner		Dinner	Session 8 (cont)	
18:30	Opening keynote Michael Kurilla					
19:00					Closing keynote Katey Owen	
19:30	Dinner		Dinner on your own			
20:00		Poster session I		Poster session II	Banquet	
20:30						
21:00						
21:30						

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

NOTES

- Technical Sessions will be held in Sala Grande Real.
- Poster Sessions will be held in Grande Real Foyer.
- Most meals will be in the Restaurante do Real. Changes will be announced.
- The conference banquet on Thursday will be held in the Restaurante Santa Eulalia.
- Audiotaping, videotaping and photography of presentations are prohibited.
- Speakers – Please leave at least 5 minutes for questions and discussion.
- Please do not smoke at any conference functions.
- Turn your cellular telephones to vibrate or off during technical sessions.
- After the conference, ECI will send an updated participant list to all participants. Please check your listing now and if it needs updating, you may correct it at any time by logging into your ECI account.
- Please do not smoke at any conference functions.
- Please write your name in the front of this program booklet so it can be returned if misplaced.

Monday, June 13, 2016

07:30 - 08:30	Breakfast buffet
08:30 – 10:30	***Session I: Break Through Developments in Vaccinology*** Chairs: Florian Krammer, The Mount Sinai Hospital, USA, and Hari Pujar, Moderna Therapeutics, USA
08:30 – 09:00	**A universal influenza virus vaccine candidate confers protection against pandemic H1N1 infection in ferrets** Raffael Nachbagauer, Icahn School of Medicine at Mount Sinai, USA
09:00 – 09:30	**Single-cell analysis of Influenza A virus-infected cells for the optimization of cell culture-based vaccine production** Sascha Young Kupke, Max Planck Institute for Dynamics of Complex Technical Systems, Germany
09:30 – 10:00	**Development of Typhax, a *Salmonella* Typhi Vi polysaccharide protein capsular matrix vaccine** Kevin P. Killeen, Matrivax R&D Corp, USA
10:00 – 10:30	**Quantitative, molecular-level analysis of the serum antibody repertoire reveals unanticipated features of the response to seasonal influenza vaccination** Jiwon Lee, The University of Texas at Austin, USA
10:30 - 11:00	Coffee break (*Sponsored by Applikon Biotechnology B.V.)*
11:00 – 13:00	***Session II: Issues and Case Studies in Process Development*** Chairs: Udo Reichl, Max Planck, Germany and Charles Lutsch, Shantha Biologics, India
11:00 – 11:24	**Upstream and downstream process development of a Vero cell-based yellow fever vaccine** Leda R. Castilho, Federal University of Rio de Janeiro (UFRJ), Brazil
11:24 – 11:48	**Fast-track lentiviral vector upstream process development: Leveraging high-throughput process monitoring, single-use bioreactor scalability** Nicolas Sève, Sanofi Pasteur, France
11:48 – 12:12	**Hollow fiber-based high-cell-density and two-stage bioreactor continuous cultivation: Options and limits towards process intensification for virus production** Yvonne Genzel, Max Planck Institute for Dynamics of Complex Technical Systems, Germany
12:12 – 12:36	**A live attenuated RSV vaccine, process development studies** Yvonne E. Thomassen, Intravacc, Netherlands
12:36 – 13:00	**Genetic engineering of vaccine manufacturing cell lines enhances poliovirus and enterovirus 71 production** Jon M. Karpilow, Proventus Bio, USA
13:00 - 14:00	Lunch

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
08:30 – 10:30	***Session IV: Therapeutic Vaccines*** Chairs: Jean Boyer, Inovio, USA, and Tarit Mukhopadhyay, University College London, United Kingdom
08:30 – 09:00	**Current technologies for advancing HIV vaccines** Vadim Tsvetnitsky, IAVI, USA
09:00 – 09:30	**Applications of DNA vaccine technology towards difficult immune targets** David Weiner, University of Pennsylvania, USA (*Lecture sponsored by Vaccine Journal (Elsevier))*
09:30 – 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 (*Sponsored by GE Healthcare*)
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	Dinner on your own

Wednesday, June 15, 2016

07:30 - 08:30	Breakfast buffet
08:30 - 10:30	***Session V: Getting Vaccines to the Market: Case studies*** Chair: Rebecca Sheets, Grimalkin Partners, USA and Danilo Casimiro, Aeras, USA
08:30 – 09:00	**RSV vaccines for the young and the old** Albert E. Price, MedImmune, USA
09:00 – 09:30	**Development, manufacturing, and supply of MSD's Ebola vaccine** Jeffrey T. Blue, Merck Sharp & Dohme Corp., 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** Scot Shepard, Takeda Vaccines, USA
10:30 - 11:00	Coffee break (*Sponsored by Medimmune*)
11:00 - 12:00	***Keynote Lecture*** **How is vaccine R&D pipeline strategy going to evolve for pharm industry…?** Johan Van Hoof, Janssen Research and Development, Belgium
12:00 - 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 (continued)*** 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., Pennsylvania, 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

Wednesday, June 15, 2016 (continued)

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
08:30 – 10:30	***Session VI: Vaccine Characterization and Analytics*** Chairs: Linda Lua, University of Queensland, Australia, and Indresh Srivastava, Protein Sciences, USA
08:30 – 09:00	**Analytical characterization of human Cytomegalovirus vaccine and vaccine induced humoral responses** Sha Ha, Merck & Co., Inc., Pennsylvania, USA
09:00 – 09:30	**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
09:30 – 10:00	**Correlations of antibody response phenotype to genotype revealed by molecular amplification fingerprinting** Sai Reddy, ETH Zurich, Switzerland
10:00 – 10:30	**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
10:30 - 11:00	Coffee break (*Sponsored by Pfizer*)
11:00 – 13:00	***Session VII: 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, France
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 VIII: New Challenges and Technologies in Vaccine Development*** Chairs: Albert Price, MedImmune, USA and Odile Leroy, European Vaccine Initiative, Germany
16:00 – 16:25	**Systems biology and single cell approaches to study human immune responses to vaccination** John Tsang, NIAID, USA
16:25 – 16:50	**Structure-based Vaccine Design: Lessons from RSV F** Jason McLellan, Geisel School of Medicine at Dartmouth, USA
16:50 – 17:15	**Induction of antigen-specific immune tolerance with synthetic nanoparticle vaccines** Petr Ilynskii, Selecta Biosciences, USA
17:15 – 17:45	**Universal and in-process analytical tool for Influenza quantification using a label-free technology** Sofia Carvalho, iBET/ITQB, Portugal
17:45 - 18:10	Coffee break
18:10 – 18:35	**Applications of high-throughput single B-cell sequencing to accelerate rational vaccine design** Brandon J. DeKosky, Vaccine Research Center / NIAID, USA
18:35 – 19:00	**Plant-based technologies to enable rapid response to Ebola outbreak** Jerzy Karczewski & Vidadi Yusibov, Fraunhofer USA, USA
19:00 - 20:00	***Closing Keynote*** Katey Owen, Deputy Director, Vaccines Development CMC, The Bill & Melinda Gates Foundation, USA
20:00 - 22:00	Conference Banquet

Friday, June 17, 2016

07:30 - 09:00	Breakfast Buffet
	Departures

Poster Presentation List

1. **Influenza vaccine production using cell culture with microcarriers**
   Alex Xenopoulos, EMD Millipore, USA

2. **Evaluation and scale-up of single-use bioreactors for the production and harvesting of a hepatitis C vaccine candidate**
   Alex Xenopoulos, EMD Millipore, USA

3. **Computational fluid dynamics modeling for HPV fermentation bioreactors**
   Tracie Spangler, Merck, USA

4. **Development of a stabilized trimer pre-fusion RSV F recombinant viral glycoprotein vaccine**
   Richard M. Schwartz, NIAID, NIH, USA

5. **Optimization of sulfated cellulose membrane adsorbers for the purification of influenza virus**
   A. Raquel Fortuna, Max-Planck Institute for Dynamics of Complex Technical Systems, Germany

6. **Purification of cell culture-derived influenza virus via continuous chromatography**
   Laura M. Fischer, Max Planck Institute for Dynamics of Complex Technical Systems, Germany

7. **Optimization and scale-up of cell culture and purification processes for production of an adenovirus-vectored tuberculosis vaccine candidate**
   Aziza Manceur, National Research Council, Canada

8. **Pan-HA antibodies for influenza detection and quantification**
   Aziza Manceur, National Research Council, Canada

9. **High titer production of HIV-1 virus-like particles by CAP-T cells**
   Sonia Gutiérrez-Granados, Universitat Autònoma de Barcelona, Spain

10. **Characterization of HA and NA-containing VLPs produced in suspension cultures of HEK 293 cells.**
    Amine Kamen, McGill University, Canada

11. **Novel avian DuckCeltTM-T17 cell line for production of viral vaccines : application to influenza viruses production.**
    Emma Petiot, Université Claude Bernard Lyon 1 - CIRI, France

12. **Pseudo-affinity purification and formulation of a cell-culture derived whole influenza virus vaccine using magnetic sulfated cellulose particles**
    Michael Martin Pieler, Max Planck Institute for Dynamics of Complex Technical Systems, Germany

13. **Trumenba: A case study for development of a drug substance manufacturing process through commercialization**
    Khurram Sunasara, Pfizer, USA

14. **A stabilized subunit vaccine for ebola virus**
    Keith Chappell, University of Queenslandcular Bioscience, Australia

15. **Improved seed train strategy applied to PER.C6® cells for manufacturing readiness in vaccines production**
Piergiuseppe Nestola, Janssen Vaccines AG, Switzerland

16. **History and development of a liquid formulation for adenoviral vaccines**
Lara Babich, Janssen Infectious Diseases & Vaccines, Netherlands

17. **Tetraspanins displayed in retrovirus-derived virus-like particles and their impact in vaccine development**
Hugo R. Soares, iBET, Portugal

18. **A modular approach for efficient production of multi-HA Influenza VLP-based vaccines**
António Roldão, Instituto de Biologia Experimental e Tecnológica (iBet), Portugal

19. **Improving downstream processing of enveloped virus-like particles with multi-column chromatography**
Ricardo Silva, iBET, Portugal

20. **A click chemistry strategy to specifically monitor and improve purification of Influenza virus-like particles**
Sofia Carvalho, iBET/ITQB, Portugal

21. **Enveloped virus-like particles purification using an all-filtration technology platform**
Sofia Carvalho, IBET/ITQB-UNL, Portugal

22. **The papaya mosaic virus (PapMV) nanoparticles; a promising tool in vaccine development.**
Denis Leclerc, U Laval, Canada

23. **Novel pulsatile-release microparticles for single-injection vaccination**
Stephany Y. Tzeng, Massachusetts Institute of Technology, USA

24. **Structurally confined influenza subunit vaccines in the prefusion conformation elicit a potent neutralizing antibody response**
Daniel Watterson, University of Queensland, Australia

25. **Vaccination with recombinant neuraminidase protects against influenza virus infection in mice**
Teddy John Wohlbold, Icahn School of Medicine at Mount Sinai, USA

26. **Residual DNA analysis in influenza vaccine processing**
Camilla Estmer Nilsson, GE Healthcare, Sweden

27. **Study of rabies VLPs expression in BHK-21 cell line for vaccine applications**
Claudio Prieto, Universidad Nacional Del Litoral, Argentina

28. **Expression of rabies VLPs in adherence and suspension conditions: a flexible platform for rabies vaccine production**
Diego Fontana, Universidad Nacional Del Litoral, Argentina

29. **Process economy effects of modernizations in vaccine purification**
Mia Bennemo, GE Healthcare Life Sciences, Sweden

30. **Propagation of influenza and MVA virus in cascades of continuous stirred tank bioreactors: challenging the "Von Magnus effect"**
Felipe Tapia, Max Planck Institute Magdeburg, Germany

31. **Intensification of MVA and influenza virus production through high-cell-density cultivation approaches**
Daniel Vazquez, Max Planck Institute, Magdeburg, Germany

32. **Production of a Nanoplasmid™ with a large gene insert using the HyperGRO™ fermentation process**
Aaron Carnes, Nature Technology Corporation, USA

33. **Virus-like particles adsorption in anion exchange chromatography media**
Patricia Pereira Aguilar, University of Natural Resources and Life Sciences Vienna (BOKU), Austria

34. **Ready to use gamma irradiated microcarriers for virus production in single use bioreactor systems**
Gustaf Ahlén, GE Healthcare Biosciences, Sweden

35. **Development of a versatile vaccination platform based on papaya mosaic virus (PapMV) nanoparticles**
Ariane Therien, Université Laval, Canada

36. **Evaluation of producer cell lines for yellow fever virus production in up to 1 L bioreactor scale**
Alexander Nikolay, Max Planck Institute for Dynamics of Complex Technical Systems, Germany

37. **Propagation of Brazilian Zika virus strains in static, microcarrier-based and suspension cultures using BHK and Vero cells**
Alexander Nikolay, Max Planck Institute for Dynamics of Complex Technical Systems, Germany

38. **Electron microscopy as an emerging analytical tool for characterizing vaccines**
Anette Schneemann, NanoImaging Services Inc, USA

39. **Optimizing scale-up of Vero cells cultured on microcarriers in serum-free medium for vaccine production**
Anna-Barbara Hachmann, Thermo Fisher Scientific, USA

40. **Custom open polyethersulfone ultrafiltration membranes for vaccines**
Clifton Ngan, MilliporeSigma, USA

41. **Highly cross-conserved burkholderia T cell epitopes generate effector T cell responses in vitro**
Annie De Groot, EpiVax.Inc; University of Rhode Island, USA

42. **Predicting tolerance in vaccine antigens: Application to influenza, HCV and HIV**
Annie De Groot, EpiVax, Inc; University of Rhode Island, USA

43. **In vivo validation of predicted and conserved T cell epitopes in a swine influenza model**
Anne De Groot, EpiVax.Inc., USA

44. **Development of insect cell platforms for fast production of pseudo-typed VLPs for drug and vaccine development**
João Vidigal, iBET, Portugal

45. **Safe and green, the hyperbar inactivation**
Fabien Lux, Sanofi Pasteur, France

46. **Influenza A virus propagation in MDCK: Intracellular virus replication, virus release and cell-cycle preferential infection analysis**
Lilí E. Gallo, Max Planck Institute for Dynamics of Complex Technical Systems, Germany

47. **VP2 potentiates the proteccion induced by VP6 against the rotavirus infection in a DNA vaccine model**
Vanessa D. López-Guerrero, UAEM, Mexico

48. **Differential antibody response against conformational and linear epitopes of the L1 protein from human papillomavirus types 16/18 is generated in vaccinated woman or with different exposures to the virus**
Lourdes Gutierrez-Xicotencatl, National Institute of Public Health, Mexico

49. **N-Glycosylation affects humoral immune response of Her1 cancer vaccine**
Adolfo Castillo Vitlloch, Center of Molecular Immunology, Cuba

50. **IL-17A and *Streptococcus pneumoniae* respiratory infection: Prospects for the development of new immunotherapies**
Analía Rial, Universidad de la República, Uruguay

51. **Transferring methods for vaccine release between the industry, academy and a regulatory agency: Lessons learned**
Elizabeth Carrasco, Instituto de Biotecnología-UNAM, Mexico

52. **Unmasking stem-specific broadly neutralizing epitopes by abolishing N-linked glycosylation sites for vaccine design**
Suh-Chin Wu, National Tsing Hua University, Taiwan

53. **Improved diagnostics and surveillance identify novel reassortant swine influenza A viruses in Chile**
Rafael A. Medina, Pontificia Universidad Católica de Chile, Chile

54. **First characterization of immunogenic conjugates of vi negative salmonella typhi O-specific polysaccharides with rEPA protein for vaccine development**
Muhammad Salman, AWKUM, Pakistan

55. **Development of a production process for a recombinant protein pneumococcal vaccine**
Ana Maria Pereira dos Santos, Bio-Manguinhos, Brazil

56. **Development of a high yield purification process for the production of influenza virus vaccines**
Hyung-Jin Jeon, Green Cross Corporation, South Korea

57. **Simple and robust downstream purification process for cell-derived influenza vaccines**
Yu-Fen Tseng, National Health Research Institutes, Taiwan

58. **SynGEM: An intranasal prefusion-like RSV F subunit vaccine**
Maarten L. van Roosmalen, Mucosis, Netherlands

59. **Challenges in the construction of a multi-product vaccine facility**
Rachel Appetiti, Sanofi Pasteur, France

60. **Longitudinal landscapes of serum antibody repertoires after influenza infection and vaccination**
Jiwon Lee, The University of Texas at Austin, USA

61. **Microcarrier-based production of dengue virus in animal-free medium**
Mark Szczypka, Pall Corporation, USA

62. **Increasing process productivity for an antibody-based cancer vaccine**
Ernesto Chico, Center of Molecular Immunology, Cuba

63. **Pathogen genetic diversity a challenge for vaccine development: Looking for the pathogen's Achilles' heel**
Ousmane A. Koita, University of Science, Techniques and Technologies of Bamako, Mali

64. **Finding the missing link in single use fermentation line : Evaluation of single use bioreactors for aerobic bacteria**
Marie Izac, Sanofi Pasteur, France

65. **Metabolic drivers of IC-BEVS productivity: Tackling the production of enveloped viral particles**
João Vidigal, iBET, Portugal

66. **Immunization with surface immunogenic protein induces a decrease of vaginal colonization by group B Streptococcus in an experimental mouse model**
Jorge A. Soto, Instituto De Salud Publica DeChile, Chile