



Program

8th

International Conference on



Vaccines Research & Development™

 **November 6-8, 2023**

 **Hilton Baltimore BWI Airport Hotel, Baltimore, MD**

Bronze Sponsor

Fina B10
Fina Biosolutions LLC



06-Nov-23

Day-1

Meeting Room: Concourse C & D

07:30**Registrations****@ Foyer****Keynote Session****Chair: Andrew Lees****08:30****Arturo Casadevall, M.D.***Bloomberg Distinguished Professor, Alfred & Jill Sommer Professor and Chair, Johns Hopkins School of Medicine*Antibody-mediated Catalysis Against Microbial Agents – from *Cryptococcus neoformans* to SARS-CoV-2**09:00****Tonya Villafana, Ph.D.***Vice President, Global Franchise Head, Infection, AstraZeneca*

Innovations in Infectious Diseases: the Role of Prevention in Creating Sustainable and Resilient Healthcare Systems

09:30**Rituparna Das, M.D., Ph.D.***Therapeutic Area Head, Respiratory Vaccines, Moderna*

mRNA Vaccines: Using SARS-CoV-2 as a Proof of Concept to Expand Vaccine Development to Other Viruses

10:00**Peter Marks, M.D., Ph.D.***Director, Center for Biologics Evaluation and Research (CBER), Food and Drug Administration (FDA)*

Advancing Vaccine Development in Support of Public Health

10.45 - Break**@ Foyer****11:05****Diane Griffin, M.D., Ph.D.***Vice President, National Academy of Sciences, University Distinguished Service Professor, Johns Hopkins Bloomberg School of Public Health*

Understanding Measles Vaccine Attenuation and Efficacy

11:35**Ofer Levy, M.D., Ph.D.***Director, Precision Vaccines Program, Boston Children's Hospital*

Precision Vaccines: Bringing Precision Medicine to Vaccinology

12:05**Amy Finan***Chief Executive Officer, Sabin Vaccine Institute*

A Non-profit Perspective on Vaccine R & D

12:35**Stephen L. Hoffman, Ph.D.***Chief Executive and Scientific Officer, Sanaria, Inc.*

Preventing the Devastation of Malaria in Pregnancy, A First Indication for Sanaria® PfSPZ-LARC2 Vaccine

13.05 - Lunch**@ Flight Deck****14:00****Karin Bok, M.S., Ph.D.***Acting Deputy Director, Director of Pandemic Preparedness and Emergency Response, Vaccine Research Center, NIAID, NIH*

NIAID Pandemic Preparedness and Emergency Response: Looking at the Past to Shape our Future

Technology & Delivery Platforms - I**Chair: Yang Xu****14:30****Mark Emalfarb, Ph.D.***Chief Executive Officer, Dyadic International, Inc.*

Next-gen Vaccines without the Right Platform Limit Pandemic Effectiveness C1, Protective, Rapid, High Yield, Low-cost Global Solution

14:50**Minoru S. H. Ko, M.D., Ph.D.***Chief Scientific Officer, Elixirgen Therapeutics, Inc.*

Controllable Self-replicating RNA: A New Platform for T Cell-inducing Vaccines

15:10**Richard Anthony, Ph.D.***Founder and President, Vacunax, Inc.*

The Potential of Novel Host Restricted Live Attenuated Vaccines (HR-LAV) Technology for Mosquito-borne Alphaviruses and Flaviviruses Control

- 15:30** **Paolo Lusso, M.D., Ph.D.** A VLP-forming mRNA Vaccine for HIV-1
*Chief, Section of Viral Pathogenesis,
Laboratory of Immunoregulation, NIAID, NIH*
- 15:50** **Andrew Lees, Ph.D.** Production of Low-cost Carrier Proteins, Vaccine Antigens, and Biotherapeutics
CEO/CSO, Fina Biosolutions

16.10 - Break**@ Foyer****Respiratory - I (COVID)****Chair: Denise L. Faustman**

- 16:30** **Yongjun Sui, Ph.D.** Head-to-head Comparison of COVID-19 Booster Vaccines on SARS-CoV-2 Onward Transmission: An Adjuvanted Subunit Mucosal Vaccine Versus a mRNA Systemic Vaccine in Hamsters
*Associate Scientist, Vaccine Branch,
Center for Cancer Research, NCI, NIH*
- 16:50** **Narayan Nair, M.D.** Safety Monitoring of the COVID-19 Vaccines
*Director, Division of Pharmacovigilance,
Office of Biostatistics and Pharmacovigilance,
CDER, FDA*
- 17:10** **Pi-Hui Liang, Ph.D.** Development of Saponin-based Adjuvant for Coronavirus Vaccines
*Professor at the School of Pharmacy, National
Taiwan University, Taiwan*
- 17:30** **Chijioke Bennett, M.D.** Phase 3 Comparison of Ancestral and Updated Protein Subunit COVID-19 Vaccines
*Senior Director, Clinical Development
Novavax*
- 17:50** **Clarisa Beatriz Palatnik-de Sousa, Ph.D.** A Novel Vaccine Based on SARS-CoV-2 CD4+ and CD8+ T Cell Conserved Epitopes from Variants Alpha to Omicron
*Federal University of Rio de Janeiro,
Brazil*

18.10 - Posters, Networking and Drinks**@ Foyer****Posters****@ Foyer**

- VRD-P1** **Jorge Armero Gimenez, Ph.D.** Rapid Screening and Scaled Manufacture of Immunogenic Virus-like Particles in ALiCE®, a Tobacco BY-2 Cell-free Protein Synthesis System
*Technology Center LenioBio GmbH,
Germany*
- VRD-P2** **Arthur Declercq** MS²Rescore Enables Immunopeptidomics Open Modification Eearches
*VIB-UGent Center for Medical Biotechnology,
VIB, Belgium*
- VRD-P3** **Clarisa Beatriz Palatnik-de Sousa, Ph.D.** Novel Vaccines Against Human Visceral Leishmaniasis Based on Predicted T Cell Epitopes of the *Leishmania (L.) donovani* Nucleoside Hydrolase (NH36)
*Federal University of Rio de Janeiro,
Brazil*
- VRD-P4** **Mark Emalfarb, Ph.D.** C1 Gene Expression Platform: Rapid, High Yield and Lower Cost Way to Develop & Manufacture Biologics
*Chief Executive Officer,
Dyadic International, Inc.*
- VRD-P5** **Victor Bronshtein, Ph.D.** Thermostable Potent Radiation Inactivated Vaccines
*Founder and CSO, Universal Stabilization
Technologies, Inc.*

07-Nov-23

Day-2

Meeting Room: Concourse C & D

Respiratory - II (RSV, Influenza)

Chair: Chime Nnadi

08:00	Mark Boaz, Ph.D. <i>Vice President, Group Lead for Vaccine Development Management, Vaccines R&D, Pfizer</i>	Development of a Maternal and Older Adult RSV Vaccine
08:20	Sonia Stoszek, Ph.D. <i>Executive Director, Program Leader, Infectious Disease, RSV Older Adult Vaccine, Moderna</i>	Clinical Development of mRNA-1345, Moderna's Investigational mRNA Vaccine Against Respiratory Syncytial Virus
08:40	Martin Moore, Ph.D. <i>CSO, Meissa Vaccines, Inc.</i>	Safety and Immunogenicity of a Rationally Designed Live Attenuated RSV Vaccine in Seronegative Infants
09:00	Trudy G. Morrison, Ph.D. <i>Professor, UMass Chan Medical School</i>	The Respiratory Syncytial Virus G Protein Enhances the Immune Responses to the RSV F Protein in an Enveloped Virus-like Particle Vaccine Candidate
09:20	Changkeun "David" Lee, Ph.D. <i>Director, Head of Protein Biochemistry, CSL Seqirus</i>	RSV Vaccine Development by Platform Technologies
09:40	Chime Nnadi, M.D., Ph.D. <i>Associate Vice President, Vaccine Development and Lifecycle Management, Sanofi</i>	A Lifespan Approach to RSV Prevention

10.00 - Discussion

10.10 - Break

@ Foyer

10:30	Steffen Mueller, Ph.D. <i>Chief Scientific Officer, Codagenix, Inc.</i>	Live Attenuated Influenza Vaccine by the Intramuscular Route - A Paradigm Shift
10:50	Masaru Kanekiyo, Ph.D. <i>Chief, Molecular Immunoengineering Section, Vaccine Research Center, NIAID, NIH</i>	Influenza Neuraminidase: Re-emerging Target for Vaccine and Antibody Discovery
11:10	Robert Daniels, Ph.D. <i>Principal Investigator and CMC Reviewer, Division of Viral Products, CBER, FDA</i>	Benefits, Barriers, and Approaches for Generating Influenza Vaccines that Elicit NA Antibodies
11:30	Xinyuan Chen, Ph.D. <i>Associate Professor, Biomedical and Pharmaceutical Sciences, College of Pharmacy, University of Rhode Island</i>	High-density Flagellin-displayed Virus-like Particle for Universal Influenza Vaccine Development
11:50	Masfique Mehedi, Ph.D. <i>Assistant Professor, Dept. of Biomedical Sciences, School of Medicine & Health Sciences, University of North Dakota</i>	The Difference in Cell Tropism Reveals Why SARS-CoV-2 & RSV Cause Different Pathophysiology
12:10	Weizhong Li, Ph.D. <i>Assistant Research Professor, Department of Veterinary Medicine, University of Maryland</i>	FcRn-mediated Mucosal Vaccinations Against Respiratory Infections
12:30	Sanda Ravlic, Ph.D. <i>Centre for Research and Knowledge Transfer in Biotechnology, University of Zagreb, Croatia</i>	What can Neutralizing Antibodies Tell Us About the Quality of Immunity in COVID-19 Convalescents and Vaccinees?

12.40 - Lunch

@ Flight Deck

Technology & Delivery Platforms - II

Chair: Richard Anthony

- 13:30** **Stephen Angeloni, Ph.D.**
Sr. Field Application Scientist, Luminex Corporation
Custom Multiplex Assays to Support Vaccine Development Using xMAP Technology
- 13:50** **Venigalla B. Rao, Ph.D.**
Director, Bacteriophage Medical Research Center, Professor, The Catholic University of America
Bacteriophage T4 as a Protein-based, Mucosal Vaccine Design Platform
- 14:10** **Susan R. Trammell, Ph.D.**
Professor, University of North Carolina at Charlotte
Development of Light-assisted Drying Technology to Thermally Stabilize Biologics
- 14:30** **Sylvain Baize, Ph.D.**
Virales Emergentes, Institut Pasteur, France
MOPEVAC, a Vaccine Platform Against Viral Hemorrhagic Fevers Induced by Old and New-world Arenaviruses
- 14:50** **Justin D. Radolf, Ph.D.**
Professor of Medicine and Pediatrics, UConn Health; Director of Research, UConn Health Department of Medicine; Senior Scientific Advisor, Connecticut Children's and Connecticut Children's Research Institute
Towards mRNA Vaccines for Syphilis Targeting Extracellular Loops of *Treponema pallidum* Outer Membrane Proteins
- 15:10** **M. Amin Khan, Ph.D.**
Chief Science Advisor, Afrigen Biologics and Vaccines, South Africa
A Report from the South Africa mRNA Hub Program: Status and Progress on the Creation of an End-to-end mRNA Vaccine Development and Manufacturing Platform Accessible to LMIC Partners
- 15:30** **Yang Xu, Ph.D.**
Principal Scientist, NanoPharma Group Lead, Luna Labs
Short Carbon Nanotube-based Delivery for HIV-1 Vaccine

15:50 - Break

@ Foyer

Immune Characterization

Chair: Daniel J. J. Carr

- 16:10** **Denise L. Faustman, M.D., Ph.D.**
Director of Immunobiology, Massachusetts General Hospital, Associate Professor of Medicine, Harvard Medical School
Randomized Double Blinded Phase II and Phase III Testing of the BCG Vaccine for COVID-19 and Platform Infectious Disease Protection in the United States
- 16:30** **Darrell R. Galloway, Ph.D.**
Research Professor, University of Utah
Vaccination Strategies to Enhance the Magnitude of the Germinal Center B Cell and T Follicular Helper Cell Responses to Drive Long-lasting Antibody Titers and Immunological Memory
- 16:50** **Aaron Esser-Kahn, Ph.D.**
Professor, Pritzker School of Molecular Engineering, William Eckhardt Research Center, The University of Chicago
The Challenge of Making Every Vaccine More Tolerable and Effective: Creating Signal Processing in Innate Immunity
- 17:10** **W. John Martin, M.D., Ph.D.**
Medical Director, Institute of Progressive Medicine
The Alternative Cellular Energy (ACE) Pathway in Comparison to the Immune System in the Defense Against Infectious Diseases
- 17:30** **Yoshihiro Watanabe, Ph.D.**
Professor & Division Director, Innovative Clinical Research Center, Kanazawa University, Japan
Identification of Neutralizing Ab-epitopes in SARS-CoV-2 S Antigen and Their Utilization
- 17:50** **Matthew Ollerton, Ph.D.**
Postdoctoral Research Associate, University of Arizona
Humanized DRAGA Mice Develop Antigen-specific Antibodies Despite Abnormal Lymphoid Tissue Organization: Implications for Vaccine Studies
- 18:10** **Jorge Armero Gimenez, Ph.D.**
Technology Center LenioBio GmbH, Germany
Rapid Screening and Scaled Manufacture of Immunogenic Virus-like Particles in ALiCE®, a Tobacco BY-2 Cell-free Protein Synthesis System

8-Nov-23

Day-3

Meeting Room: Concourse C & D

New and Emerging

Chair: Karen Anderson

08:00	M. Javad Aman, M.D. <i>President and CSO, AbVacc, Inc.</i>	Targeting <i>Staphylococcus aureus</i> Virulence for Vaccination and Immunotherapy
08:20	Jyothi Rengarajan, Ph.D. <i>Professor of Medicine, Emory University School of Medicine</i>	Challenges in Tuberculosis Vaccine Development
08:40	Marco Pravetoni, Ph.D. <i>Rick L. Seaver Endowed Professor in Brain Health, University of Washington School of Medicine</i>	Vaccines and Monoclonal Antibodies to Treat and Prevent Opioid Use Disorders and Overdose
09:00	Hong Xin, M.D., Ph.D. <i>Associate Professor, Microbiology and Immunology, Louisiana State University Health Sciences Center</i>	Vaccines and Monoclonal Antibodies to Combat Invasive Fungal Infections
09:20	Courtney L. Finch, Ph.D. <i>Director of Pre-Clinical, Research & Development, Sabin Vaccine Institute</i>	Dose Ranging and Rapid Onset of Protection of a ChAd3-vectored Marburg Virus Vaccine
09:40	Nathan Krump, Ph.D. <i>Project Leader and Research Scientist, Integral Molecular</i>	Assays Using Non-replicative Viral Models to Combat Influenza and Emerging Diseases
10:00	Sreenivas Gannavaram, Ph.D. <i>Biologist, Division of Emerging and Transfusion Transmitted Diseases, CBER, FDA</i>	Metabolomic Immune Regulation in Parasitic Vaccines

10.20 - Break

@ Foyer

Viral

Chair: Courtney L. Finch

10:40	Daniel J. J. Carr, Ph.D. <i>Professor, The University of Oklahoma Health Sciences Center</i>	Live Attenuated Prophylactic Vaccine Against Ocular HSV-1 Infection
11:00	Uday Saxena, Ph.D. <i>Co-Founder, Reagene Innovations Pvt. Ltd.</i>	Robust Acidic pH and Digestive Enzyme Stability of Anti-SARS-CoV-2 IgY Antibodies: Implications for Treatment of Viral Transmission Through Gastrointestinal, Ocular, Nasal and Skin Tissues
11:20	Heather Friberg, Ph.D. <i>Chief, Department of Virus-Host Interactions, Viral Diseases Branch, Walter Reed Army Institute of Research</i>	The Dengue Human Infection Model (DHIM): A Critical Tool Informing Clinical Development of Candidate Dengue Countermeasures

Novel Approaches for Vaccine Development

Chair: Yoshihiro Watanabe

11:40	Marie-Claire Gauduin, Ph.D. <i>Professor, Disease Intervention and Prevention, Texas Biomedical Research Institute</i>	Durable HIV Vaccine Targeting Mucosal Epithelium
12:00	Karen Anderson, Ph.D. <i>Professor and Associate Dean, Biodesign Institute, Arizona State University</i>	T Cell Epitope Prediction: Broadening HLA Diversity for Vaccine Design

12:20	Cara Fiore, Ph.D. <i>Senior Regulator Reviewer, Office of Vaccines Research and Review, Center for Biologics Evaluation and Research, US Food and Drug Administration</i>	Inclusion of Maternal Health Data in Vaccine Package Inserts: Regulatory Considerations
12:40	Ralf Gabriels, Ph.D. <i>VIB-UGent Center for Medical Biotechnology and Dept of Biomolecular Medicine, Ghent University, Belgium</i>	Machine Learning-powered Immunopeptidomics Drives Novel Antibacterial and Anti-cancer mRNA Vaccines
12:50 - Lunch & Departures		@ Flight Deck
13.00 - Virtual		
13:00	Nicole Skinner, M.D., Ph.D. <i>Principal Investigator, Center for Vaccines and Immunity, Nationwide Children's Hospital</i>	Defining Common Features of Broadly Neutralizing Antibodies in Hepatitis C Virus Infection
13:20	S. Indu Rupassara, Ph.D., MBA <i>Co-Founder/President/CEO, FruitVaccine, Inc.</i>	The Use of Tomatine, Inherent to Tomatoes, as a Natural Adjuvant in FruitVax Products
13:40	Farshad Guirakhoo, Ph.D. <i>CSO, Expres2ion Biotechnology</i>	Preclinical Proof of Concept for a Novel VLP-based Vaccine Candidate for Treatment of HER2+ Breast Cancers
14:00	Reza Nejat, M.D. <i>Anesthesiology and Critical Care Dept., Laleh Hospital, Iran</i>	A Homeostatic Approach to COVID-19; Preserving Physiological Boundaries of RAS
14:20	Helen M. Chun and Kyle Milligan <i>Medical Officer, Division of Global HIV/TB, Global Health Center, CDC</i>	A Systematic Review of COVID-19 Vaccine Antibody Responses in People with HIV
14:40	Xingmin Sun, Ph.D. <i>Associate Professor, Dept. of Molecular Medicine, University of South Florida</i>	Mucosal Vaccine Strategies Against <i>Clostridioides difficile</i> Infection
15:00	Liang Huang, Ph.D. <i>Founder & CEO, Coderna.ai, Associate Professor, Oregon State University</i>	AI-designed mRNA Vaccines Substantially Improve Stability and Immunogenicity
15:20	Kin-Hang Kok, Ph.D. <i>Associate Professor, University of Hong Kong, Hong Kong</i>	A Nasal NanoComplex Vaccine Against Respiratory Tract Infections
15:40	Joy-Yan Lam <i>Department of Microbiology, University of Hong Kong, Hong Kong</i>	NanoComplex: The Novel Self-adjuvanted Protein-RNA Nasal Vaccine



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