

## 2022 ISV ANNUAL CONGRESS ORAL PROGRAM

### SUNDAY 18 SEPTEMBER 2022

08:00-10:00	REGISTRATION
08:00-10:00	WELCOME COFFEE <span style="float: right;">Sponsored by EuBiologics Co.</span>
10:00-10:10	ISV CONGRESS OPENING SESSION: CO-CHAIR REMARKS (5 min) Joon Haeng Rhee, <i>Chonnam National University</i> ; Manon Cox, <i>NextWaveBio</i> ; Gary Kobinger, <i>University of Texas Medical Branch (UTMB)</i> WELCOME BY ISV PRESIDENT (3 min) - Denise Doolan, <i>James Cook University</i>
10:10-11:55	KEYNOTE SESSION: HOT TOPICS IN 21 <sup>st</sup> CENTURY VACCINES SESSION CHAIRS: Manon Cox, <i>NextWaveBio</i> and Joon Haeng Rhee, <i>Chonnam National University</i>
10:10-10:45	KEYNOTE SPEAKER - Bali Pulendran, <i>Stanford University</i> Systems Vaccinology
10:45-11:20	KEYNOTE SPEAKER – Ann Ginsberg, <i>The Bill &amp; Melinda Gates Foundation</i> End-to-End TB Vaccine Development to End TB
11:20-11:55	KEYNOTE SPEAKER - Hiroshi Kiyono, <i>University of Tokyo</i> Mucosal Vaccine: Bringing the Old Wisdom to Reality
12:00-13:30	LUNCH <span style="float: right;">Sponsored by VGXI, Inc.</span>
13:30-15:20	PLENARY SESSION 1: COVID-19 VACCINES PART 1 SESSION CHAIRS: Jeffrey Ulmer, <i>TechImmune LLC</i> and Margaret Liu, <i>ProTherImmune</i>
13:30-13:55	Vectored Viral Vaccine Candidates for SARS-CoV-2 Amy Espeseth, <i>Merck</i>
13:55-14:20	Differentiation of Memory T Cells Elicited by COVID-19 Vaccines Eui-Cheol Shin, <i>Korea Advanced Institute of Science and Technology (KAIST)</i>
14:20-14:35	What Vaccine-Induced Immune Responses Control Breakthrough COVID-19? Stephen Kent, <i>University of Melbourne</i>
14:35-14:50	Next Generation Multivalent COVID-19 DNA Vaccine Makutiro Masavuli, <i>The University of Adelaide</i>
14:50-15:05	Characterization of Humoral Immune Responses to an Intranasal SARS-CoV-2 Protein Subunit Vaccine Candidate in Mice Mariam Maltseva, <i>University of Ottawa</i>
15:05-15:20	Robust Immunogenicity and Full Efficacy Against SARS-CoV-2 in Mice, Hamsters and Rhesus macaques of a COVID-19 Vaccine Candidate Based on an MVA Vector Expressing the SARS-CoV-2 S Protein Juan García-Arriaza, <i>Centro Nacional de Biotecnología</i>
Pre-Recorded	Elicitation of Long-Lived Plasma Cells Following SARS-CoV-2 Spike Vaccination Madhu Prabhakaran, <i>Vaccine Research Center, NIAID, National Institutes of Health</i>
15:30-16:00	COFFEE BREAK <span style="float: right;">Sponsored by Moderna</span>
16:00-17:50	PLENARY SESSION 2: VACCINE DESIGN AND ADJUVANT SESSION CHAIRS: David Weiner, <i>The Wistar Institute</i> and Sanjay Phogat, <i>GSK</i>
16:00-16:25	Particulate Adjuvant Strategies for Cancer Vaccines Ed Lavelle, <i>Trinity College Dublin</i>
16:25-16:50	Vaccine Adjuvant and Production Technologies and Biomanufacturing Resilience in Canada Lakshmi Krishnan, <i>National Research Council Canada</i>
16:50-17:05	A Novel Draining Lymph Node Targeting CpG Oligonucleotide, S-540956 is a Potent Adjuvant When Used with HSV-2 Glycoprotein D and Controls Recurrent Genital Herpes Sita Awasthi, <i>University of Pennsylvania</i>
17:05-17:20	Deimmunized Flagellin as a Mucosal Vaccine Adjuvant Shee Eun Lee, <i>Chonnam National University</i>
17:20-17:35	The Novel Adjuvant, ADA-1, Restores Age-Associated Defects in the Adaptive Immune Response to <i>Clostridioides Difficile</i> Infection and Vaccination in an Aging Mouse Model Michele Kutzler, <i>Drexel University</i>
17:35-17:50	In Vivo Delivery of Engineered Synthetic DNA-Encoded SARS-CoV-2 Monoclonal Antibodies and Preventative Efficacy in Non-Human Primates Ami Patel, <i>The Wistar Institute</i>
18:00-19:00	POSTER SESSION # 1
18:00-20:00	WELCOME RECEPTION <span style="float: right;">Sponsored by EpiVax</span>

## MONDAY 19 SEPTEMBER 2022

<b>08:00-08:30</b>	<b>MORNING COFFEE</b> <span style="float: right;">Sponsored by Daicel Corporation – Actranza lab</span>	
<b>08:30-09:55</b>	<b>PLENARY SESSION 3: VACCINES ON THE HORIZON</b> <span style="float: right;">Sponsored by Sanofi Pasteur</span> <b>SESSION CHAIRS:</b> Shan Lu, <i>UMASS Medical School</i> and Denise Doolan, <i>James Cook University</i>	
<b>08:30-09:00</b>	<b>Inaugural ISV Dr. Stanley A. Plotkin Keynote Lecture</b> <b>The Evolution of Vaccinology and the Utility of Human Challenges (Pre-Recorded)</b> Stanley Plotkin, <i>Vaxxconsult</i> <b>Recipient of the ISV Lifetime Achievement Award</b>	
<b>09:00-09:25</b>	<b>mRNA Vaccines (R)Evolution – Myths and Realities</b> Jean-Francois Toussaint, <i>Sanofi Pasteur, France</i>	
<b>09:25-09:40</b>	<b>Interim Analysis of a Phase 1/2 Randomized Clinical Trial on the Safety, Reactogenicity, and Immunogenicity of a Quadrivalent, mRNA-Based Seasonal Influenza Vaccine (mRNA-1010) in Healthy Adults</b> Raffael Nachbagauer, <i>Moderna, Inc.</i>	
<b>09:40 -09:55</b>	<b>Development of a Flagellin-Adjuvanted Anti-Tauopathy Vaccination Strategy Targeting Pathologic Conformation</b> Joon Haeng Rhee, <i>Chonnam National University</i>	
<b>10:00-10:30</b>	<b>COFFEE BREAK</b> <span style="float: right;">Sponsored by SK Bioscience</span>	
<b>10:30-12:20</b>	<b>CONCURRENT SESSION 1</b> <b>COVID-19 VACCINES PART 2</b> <b>SESSION CHAIRS:</b> Neil Almond, <i>NIBSC</i> Eui-Cheol Shin, <i>KAIST</i>	<b>CONCURRENT SESSION 2</b> <b>GLOBAL HEALTH AND VACCINES</b> <b>SESSION CHAIRS:</b> Stephen Kent, <i>University of Melbourne</i> Ann Ginsberg, <i>Bill &amp; Melinda Gates Foundation</i>
<b>10:30 -10:55</b>	<b>SARS-CoV-2 Biology and Countermeasure Development</b> Pei-Yong Shi, <i>University of Texas Medical Branch (UTMB)</i>	<b>The mRNA Hub Technology Transfer Programme: Creating a Sustainable Platform for Vaccine Innovation in LMICs</b> Petro Terblanche, <i>Afrigen Biologics &amp; Vaccines</i>
<b>10:55-11:20</b>	<b>Development of a SARS-CoV-2 Vaccine Candidate Using the Papaya Mosaic Virus (PapMV) Nanoparticle Vaccine Platform</b> Denis Leclerc, <i>Université Laval</i>	<b>Strategies for Industrial Production of mRNA Vaccines in South America</b> Analia Acebal, <i>Sinergium Biotech</i>
<b>11:20-11:35</b>	<b>ACM Polymersome-Based Intranasal Beta Spike Formulation as a Second Generation Covid-19 Vaccine</b> Jiang Hang Lam, <i>ACM Biolabs Pte Ltd</i>	<b>Progress of Clinical Development of a Live-Attenuated Single Shot Chikungunya Vaccine Candidate</b> Susanne Eder-Lingelbach, <i>Valneva Austria</i>
<b>11:35-11:50</b>	<b>An Exosome-Based Pan Beta Coronavirus Vaccine</b> Zhilin Chen, <i>Codiak BioSciences</i>	<b>T Cell Vaccines Against Zika Virus</b> Branka Grubor-Bauk, <i>University of Adelaide</i>
<b>11:50-12:05</b>	<b>A Protein/Peptide Vaccine UB-612 Elicits Broadly Neutralizing Antibodies Against Multiple Variants and Protects Mice and Non-Human Primates Against SARS-CoV-2</b> Shixia Wang, <i>Vaxxinity Inc.</i>	<b>Immunogenicity and Efficacy in Rodents and Non-Human Primates of a Pair of Two Live-Attenuated Flavivirus-Vectored Vaccine Candidates with Dual Rabies/Yellow Fever, or Rabies/Japanese Encephalitis Activity</b> Lorena Sanchez Felipe, <i>KU Leuven</i>
<b>12:05-12:20</b>	<b>Intranasal Administration of a Live-Attenuated Recombinant Newcastle Disease Virus Expressing the SARS-CoV-2 Spike Protein Induces High Neutralizing Antibody Levels and Protects from Experimental SARS-CoV-2 Infection in Hamsters</b> Nora Gerhards, <i>Wageningen Bioveterinary Research</i>	<b>Toward the Development of a Next-Generation Pre-Emptive SARS-CoV-2 Vaccine</b> Jeffrey Ulmer, <i>TechImmune LLC</i>
<b>12:30-13:30</b>	<b>LUNCH</b> <span style="float: right;">Sponsored by NRC Canada &amp; Merck</span>	
<b>13:30-14:00</b>	<b>MONKEYPOX ROUNDTABLE DISCUSSION (ROOM 308A)</b> Gary Kobinger, <i>UTMB</i> ; Inger Damon, <i>CDC-Retired</i> ; David Weiner, <i>The Wistar Institute</i>	
<b>14:00-15:00</b>	<b>ISV ANNUAL GENERAL MEETING (OPEN TO ALL CONGRESS ATTENDEES-ROOM 308A)</b>	

<b>14:30-15:30</b>	<b>POSTER SESSION # 2</b>
<b>15:00-15:30</b>	<b>COFFEE BREAK</b> <span style="float: right;"><b>Sponsored by BioNTech</b></span>
<b>15:30-17:35</b>	<b>PLENARY SESSION 4: VACCINE DEVELOPMENT &amp; BIOMANUFACTURING LANDSCAPE IN CANADA</b> <b>SESSION CHAIRS: Lakshmi Krishnan, NRC and Gary Kobinger, UTMB</b>
<b>15:30-15:35</b>	<b>Session Introduction</b> Lakshmi Krishnan, <i>National Research Council Canada</i>
<b>15:35-16:00</b>	<b>Development of a Plant-Based Virus-Like Particle Vaccine Against COVID-19</b> Marc-André D'Aoust, <i>Medicago</i>
<b>16:00-16:25</b>	<b>Canadian COVID-19 Vaccine Candidates and Programs - Experience of the Clinical Trials Network of the Canadian Immunization Research Network</b> Joanne Langley, <i>Dalhousie University</i>
<b>16:25-16:50</b>	<b>Elephants Can Dance: Health Canada's Regulatory Work For COVID-19 Vaccines</b> Co Pham, <i>Health Canada</i>
<b>16:50-17:05</b>	<b>A DNA Vaccine Against Hyalomma Tick Infestation Protects Sheep Against Multiple Human Tick-Borne Viruses</b> Hugues Fausther-Bovendo, <i>Global Urgent and Advanced Research and Development (GUARD)</i>
<b>17:05-17:20</b>	<b>Breast Cancer Immunopeptidomes Reveal a Large Number of Targetable Tumor Antigens</b> Eralda Kina, <i>University of Montreal</i>
<b>17:20-17:35</b>	<b>Insights from Industry Collaboration in COVID-19 Vaccine Pharmacovigilance- One Manufacturer's Experience"</b> Jamie Wilkins and Susan Mather, <i>Pfizer, Inc.</i>
<b>18:30-22:00</b>	<b>GALA DINNER</b> <span style="float: right;"><b>Sponsored by AstraZeneca</b></span> <b>*TICKETS REQUIRED*</b>

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## TUESDAY 20 SEPTEMBER 2022

<b>08:00-09:00</b>	<b>MORNING COFFEE</b>		<b>Sponsored by Pfizer</b>
<b>08:15-09:00</b>	<b>EDUCATIONAL BREAKOUT SESSION</b> <b>MODERATOR:</b> Manon Cox, <i>NextWaveBio</i> <b>PANELISTS:</b> Dan Adams, <i>NextWaveBio</i> ; Margaret Liu, <i>ProTherImmune</i> ; Peter Leonardi, <i>Omnicyte</i>		
<b>09:00-10:20</b>	<b>PLENARY SESSION 5: VACCINES AND ANIMALS</b> <b>SESSION CHAIRS:</b> Connie Schmaljohn, <i>NIAID</i> and Ed Lavelle, <i>Trinity College</i>		
<b>09:00-09:25</b>	<b>Vaccination for the Prevention and Control of Emerging Infectious Diseases in Animals</b> Mahesh Kumar, <i>Zoetis</i>		
<b>Pre-Recorded</b>	<b>100 Days Mission for Vaccines to the World: Disruptive Innovation from Molecule to Ethics</b> Ken Ishii, <i>The University of Tokyo</i>		
<b>09:50-10:05</b>	<b>Next Generation Monkeypox Vaccine Based on Development of an Efficacious T Cell-Directed Smallpox Vaccine Using a Genomes-to-Vaccine Strategy</b> Anne De Groot, <i>EpiVax, Inc.</i>		
<b>10:05-10:20</b>	<b>mRNA Vaccines Against Andes Virus: Comparison of Modified Versus Non-Modified Nucleoside-Based Platforms</b> Alexander Bukreyev, <i>University of Texas Medical Branch (UTMB)</i>		
<b>10:30-11:00</b>	<b>COFFEE BREAK</b>		<b>Sponsored by CanSino Bio</b>
<b>11:00-12:25</b>	<b>CONCURRENT SESSION 3</b> <b>HIV VACCINES</b> <b>SESSION CHAIRS:</b> Lars Frelin, <i>Karolinska Institutet</i> Petro Terblanche, <i>Afrigen Biologics &amp; Vaccines</i>	<b>CONCURRENT SESSION 4</b> <b>MANUFACTURING AND EVALUATION</b> <b>SESSION CHAIRS:</b> Amy Espeseth, <i>Merck</i> Xavier Saelens, <i>VIB-UGent</i>	
<b>11:00-11:25</b>	<b>Progress with HIV Vaccine Development</b> Shan Lu, <i>UMASS Chan Medical School</i>	<b>Advancing Vectored Vaccine Design and Manufacturing Platforms for Pandemic Preparedness</b> Amine Kamen, <i>McGill University</i>	
<b>11:25-11:40</b>	<b>Elicitation of Cross-Neutralizing Antibodies to the HIV-1 Envelope Glycoprotein</b> Richard Wyatt, <i>The Scripps Research Institute</i>	<b>Anti-NA and -HA Serum Confers Limited Inter-Lineage Cross Protection Against Recent Influenza B Vaccine Strains</b> Xavier Saelens, <i>VIB-UGent Center for Medical Biotechnology</i>	
<b>11:40-11:55</b>	<b>Assessing the Frequency of Naive B Cells Potentially Capable of Producing Broad Neutralizing Antibodies for HIV</b> Flavio Matassoli, <i>VRC, NIAID, National Institutes of Health</i>	<b>Establishing Serological Correlates of Vaccine Protection against Emerging Diseases Using WHO International Standards as Calibrants</b> Neil Almond - <i>Medicines and Healthcare Products Regulatory Agency (NIBSC)</i>	
<b>11:55-12:10</b>	<b>Novel Subunit Vaccines Engineered on an Immune-Activating Platform Technology, First SARS-CoV-2 and Next HIV</b> Peter Leonardi, <i>Omnicyte</i>	<b>Vaccine-Induced Antibodies to Four Distinct Epitopes on gC2 Correlate with Protection from Lethal HSV-2 Challenge in Mice</b> Lauren Hook, <i>University of Pennsylvania Perelman School of Medicine</i>	
<b>12:10-12:25</b>	<b>Pre-Recorded</b> <b>First-in-Human, Germline Targeting HIV Vaccine B Cell Receptor Analysis Adapting 10X Technology</b> Weiwei Wu, <i>NIAID, National Institutes of Health</i>	<b>Highly protective immunity and reduced viral shedding after intranasal vaccination with an OMV based SARS-CoV-2 vaccine</b> Dinja Oosterhoff, <i>Intravacc</i>	
<b>12:30-14:00</b>	<b>LUNCH</b>		<b>Sponsored by Medicago</b>
<b>14:00-14:20</b>	<b>ISV AWARD CEREMONY</b>		
<b>14:20-16:00</b>	<b>PLENARY SESSION 6: FUTURE OF VACCINOLOGY</b> <b>SESSION CHAIR:</b> Manon Cox, <i>Next Wave Bio</i> and Joon Haeng Rhee, <i>Chonnam National University</i>		

<b>14:20-14:45</b>	<b>ISV Paper of the Year Presentation</b> <b>Neutralizing Antibody Vaccine for Pandemic and Pre-Emergent Coronaviruses</b> Kevin Saunders, <i>Duke University</i>
<b>14:45-15:10</b>	<b>Structure-Based Design and Epitope Focusing in the Development of Vaccines Against Sequence-Diverse Pathogens like HIV-1</b> Peter Kwong, <i>Vaccine Research Center, NIAID, National Institutes of Health</i>
<b>15:10-15:35</b>	<b>Medical Imaging as a Tool for Assessing Pathogenesis in Animals</b> Connie Schmaljohn, <i>NIAID, National Institutes of Health</i>
<b>15:35-16:00</b>	<b>Contribution of T Cell Responses to Vaccine Immunogenicity</b> Jennifer Juno, <i>University of Melbourne</i>
<b>16:00-16:15</b>	<b>CLOSING SESSION &amp; INTRODUCTION TO 2023 CONGRESS</b> Denise Doolan, ISV President, <i>James Cook University</i>

**End of In-Person Program**

## 2022 ISV ANNUAL CONGRESS VIRTUAL PROGRAM

ALL PRE-RECORDINGS AVAILABLE ON THE VIRTUAL PLATFORM  
THE ROUDTABLE IN-PERSON DISCUSSION TO BE RELEASED ON VIRTUAL PLATFORM ON SEPTEMBER 19

### Virtual Session 1: Monkeypox Session Chair: Gary Kobinger, *UTMB*

#### **Monkeypox Virus: Biology, Animal Models, Vaccines and Therapeutics**

Bernie Moss, *National Institute of Allergy and Infectious Diseases, NIH*

#### **Monkeypox - Unprecedented Reemergence**

Inger Damon, *Centers for Disease Control and Prevention*

#### **Global Response to the Monkeypox Virus Emergence of 2022**

Rosamund Lewis, *World Health Organization*

### MONKEYPOX IN-PERSON ROUND TABLE DISCUSSION

Gary Kobinger, *UTMB*, Inger Damon, *CDC (retired)*, David Weiner, *The Wistar Institute*

### Virtual Session 2: Vaccine Update from Asia

Session Chairs: Shan Lu, *UMMS Chan Medical School*; Joon Haeng Rhee, *Chonnam National University*;  
Ken Ishii, *University of Tokyo*

#### **Inhaled Covid-19 Vaccine: Robust Humoral, Cellular, and Mucosal Immunologic Response with Superior Safety Profile**

Tao Zhu, *CanSino Biologics*

#### **Development of COVID-19 Subunit Vaccine, Based on Novel Nanoparticle Adjuvant Platform**

SuHi Jeon, *EuBiologics*

#### **Evolution of SARS-CoV-2**

Kei Sato, *University of Tokyo*

### Virtual Session 3: Individual Invited Speakers on Diverse Topics

#### **Emerging Zoonotic Viruses: From Bat to Shrew**

Linfa Wang, *Duke-National University of Singapore Medical School Singapore*

#### **Immune Correlates Results for the Uhambo and Imbokodo HIV Vaccine Efficacy Trials**

Peter Gilbert, *Fred Hutchinson Cancer Research Center*