**MONDAY, APRIL 8**
Arrival and Registration

**TUESDAY, APRIL 9**
Welcome and Keynote Address
Sarah Catherine Gilbert, University of Oxford, UK
Preparing to Vaccinate Against the Next Pandemic

Pathogenesis I - Viral Emergence
Stefan Pöhlmann, Deutsches Primatenzentrum GmbH, Germany
Principles of Coronavirus Infections
Geoffrey L. Smith, University of Oxford, UK
Host:Virus Interactions with Monkeypox
Jérémy Dufloo, Universitat de València, Spain
Short Talk: Viral Entry is a Weak Barrier to Zoonosis
Paige Fletcher, NIAID, NIH, USA
Short Talk: Tai Forest Virus: The Virus Sequence Determines the Pathogenic Potential
Max Josef Kellner, IMBA, Austria
Short Talk: Bat Organoids: Understanding Emerging Virus Infections through the Lens of Reservoir Species

Poster Session 1

Career Roundtable

**WEDNESDAY, APRIL 10**
Common Lessons in Prevention
Lynda M. Stuart, Institute for Protein Design, University of Washington, USA
mRNA Vaccines and Impact beyond SARS-CoV-2
Penny L. Moore, University of the Witwatersrand and National Institute for Communicable Diseases, South Africa
Antibody Responses in People Living with HIV
Olivier Schwartz, Institut Pasteur, France
Entry and Replication of Human Seasonal Coronaviruses and Recent SARS-CoV-2 Variants
Joel N. Blankson, Johns Hopkins School of Medicine, USA
Natural Immunity to HIV
Daniel Lingwood, Harvard Medical School, USA
Short Talk: Eliciting a Single Amino Acid Change by Vaccination Enables Cross-Group Protective Influenza Antibodies

Matthew Sutton, National Institutes of Health, USA
Short Talk: Evaluating Mechanisms of Protection by Broadly Reactive Anti-Alphavirus Antibodies

Poster Session 2

Workshop 1
Ulrike Lange, Leibniz Institute of Virology, Germany
Transcriptional Activity of Proviral Sequences as Driver for Clonal Expansion in Chronic HIV Infection
Dania Figueroa Acosta, Icahn School of Medicine at Mount Sinai, USA
Endocytic Recycling-Dependent Env Antigenic States Affect Neutralization of Cell-Free and Cell-Cell Infection by Broadly Neutralizing Antibodies
Uwem Etap George, Redeemer's University, Nigeria
Whole Genome Sequencing Reveals Cryptic Circulation of Dengue Virus in the Rainforest Region of Nigeria, West Africa
Shlomi Ilan, Ragon Institute of Mass General, MIT and Harvard, USA
Functional Antibody Signatures Following Combined Active and Passive Therapeutic Immunization of SHIV-infected Rhesus Macaques
Nell Saunders, Institut Pasteur, France
TMPRSS2 is a Functional Receptor for Human Coronavirus HKU1
Afrah Khairallah†, AHRI, South Africa
Identification of Genes Associated with Low SARS-CoV-2 Neutralization and Disease Severity in South Africa
Taha Y. Taha, Gladstone Institutes/UCSF, USA
Spike-Independent Evolution of Recent SARS-CoV-2 Omicron Subvariants Enhances Viral RNA Replication via NSP6 Mutations
Florian Kabinger, Max Planck Institute for Multidisciplinary Sciences, Germany
Uncovering the Mechanism of Small Molecule Inhibitors Against the RNA Polymerase of SARS-CoV-2

Drivers of Viral Evolution
Alex Sigal, Africa Health Research Institute, South Africa
SARS-CoV-2 Evolution and Pathogenesis in PLWH
Ravindra K. Gupta, University of Cambridge, UK
SARS-CoV-2 Spike Evolution – Balancing Infectivity with Immune Evasion
Emma Hodcroft, University of Basel, Switzerland
Evolution of HIV and Other Viruses
Ann-Kathrin Reuschl, University College London, UK
Short Talk: SARS-CoV-2 Evolution of Innate Immune Antagonism

**THURSDAY, APRIL 11**
Pushing the Boundaries on Viral Therapeutics
George Painter, Emory University School of Medicine, USA
Development of Pan-Antiviral Treatments
Priti Kumar, Yale School of Medicine, USA
With Gene Therapy Against HIV
Galit Alter, Moderna, Inc., USA
Antibodies Therapeutics in HIV, SARS, Flu, and RSV
Michael Z. Lin, Stanford University School of Medicine, USA
Short Talk: Design of Oral Antiviral Drugs for Broad-Spectrum Activity Against Coronaviruses

Vijayakumar Velu, Emory University, USA
Short Talk: IL-15/IL-15Ra Cytokine Therapy Leads to Control of Viral Rebound in SIV Infected Macaques

Tomas Raul Wiche Salinas, Emory University, USA
Short Talk: Persistent Reduction of SIV Reservoir Through Short-Term BCL-2 Inhibition at ART Initiation in Rhesus Macaques

Hands-On Computer Workshop on Los Alamos HIV Sequence and Immunology Databases and Tools (HIV.lanl.gov)
Brian T. Foley, Los Alamos National Lab, USA
Jennifer Mamrosh, Los Alamos National Lab, USA

Workshop 2
Maria Carmen Hesselman, University of Zurich, Switzerland
Distinct V2 Apex Broadly Neutralizing Antibody Modalities in Subtype B HIV-1 Infection

Doan C. Nguyen, Emory University, USA
The Majority of SARS-CoV-2 Plasma Cells are Excluded from the Bone Marrow Long-Lived Compartment 33 Months after mRNA Vaccination

Sharidan Brown, The Scripps Research, USA
Anti-Immune Complex Antibodies are Elicited During Repeated immunization with HIV Env Immunogens

Enrico Bravo†, King’s College London, UK
IFNα2 Autoantibodies Post SARS-CoV-2 Wave 1 in India Are Associated with Lower Omicron Symptomology

Julia Hitschfel, Ragon Institute of MGH, MIT and Harvard, USA
Transcriptional Profiling of HIV-Specific CD8 T Cell Responses From Lymph Nodes and Blood of Natural Controllers

Nicholas Provine, University of Oxford, UK
Immune Signatures Associated with Failure to Seroconvert in individuals Immunized with MVA-BN as a Vaccine Against MPOX

Wilfredo F. Garcia-Beltran, Ragon Institute of MGH, MIT and Harvard, USA
Evasion of NKG2D-Mediated Cytotoxic Immunity by Sarbecoviruses

Adam Zuiani, BioNTech US, USA
A Multivalent mRNA Monkeypox Virus Vaccine (BNT166) Protects Mice and Macaques From Orthopoxvirus Disease

Post-Acute Sequelae of Viral Infections
Nadia R. Roan, University of California, San Francisco, USA
Post-Acute Sequelae of COVID-19

Gabriella Worwa, NIH/NIAID/IRF-Frederick, USA
Modeling Post-Acute Sequelae of Ebola Virus Disease

Irini Sereti, NIAID, National Institutes of Health, USA
HIV and Chronic Immune Activation

Till Omansen, Bernhard Nocht Institute for Tropical Medicine, Germany
Short Talk: Lassa Fever is Hallmarked by Inflammation and Kidney Injury or Neurological Disease: Results from the Lassa Fever PATHOGENESIS Study

Meeting Wrap-Up: Outcomes and Future Directions (Organizers)