

DETAILED SCHEDULE (with invited and short oral speakers)

MONDAY, MARCH 21

11:15 AM – 11:45 AM: Speed Networking (Via Virtual Platform)

Join us for this 30-minute session where you will be randomly matched with a small group of attendees for FIVE minutes for a video chat. When time is up, you will be randomly matched with a new group of individuals, giving you the chance to meet people you have never met before, and to make some new lasting connections! Do not miss this interesting opportunity to mix things up in your social world.

12:00 PM – 1:45 PM: Women in Science Roundtable Discussion (In-person Event) – Madison Ballroom

Chaired by Rhonda Cardin

This is an in-person event only and will not be live-streamed or recorded.

2:00 PM – 4:15 PM: Opening Session and Plenary Speakers – Courtyard Ballroom

Chaired by Kara Carter and Kathie Seley-Radtke

001. *What Role Can Foundations Play in Driving Innovation Globally in Antiviral Development?*

Ken Duncan, Bill & Melinda Gates Foundation

002. *Drug Development for Viruses of Pandemic Potential, Where Are We Now and Where Are We Going?*

Carl W. Dieffenbach, National Institute of Allergy and Infectious Diseases, National Institutes of Health

4:15 PM – 4:30 PM: Break

4:30 PM – 5:30 PM: Gertrude Elion Memorial Award Lecture – Courtyard Ballroom

Chaired by Kara Carter and Kathie Seley-Radtke

003. *Developing an Oral Antiviral Agent in a Pandemic: The Evolution of Molnupiravir (EIDD-2801, MK-4482) as a Treatment for COVID-19*

George Painter, Emory University School of Medicine, Emory Institute of Drug Development, and Drug Innovation Ventures at Emory

2022 Gertrude Elion Memorial Award Recipient

5:30 PM – 6:30 PM: Opening Reception (In-person Event) – Madison Ballroom

TUESDAY, MARCH 22

8:30 AM – 9:15 AM: Antonín Holý Memorial Award Lecture – Courtyard Ballroom

Chaired by Kathie Seley-Radtke and Andrea Brancale

004. *Structure-guided Antiviral Drug Discovery – A Tale of Two Viruses*

Mark von Itzstein, Institute for Glycomics at Griffith University

2022 Antonín Holý Award Recipient

9:15 AM – 11:00 AM: Non-coronavirus Respiratory Viruses – Courtyard Ballroom

Chaired by Kathie Seley-Radtke and Mark von Itzstein

005. *Inhibiting Entry of Human Paramyxoviruses*

Anne Moscona, Columbia University Vagelos College of Physicians & Surgeons

006. *Inducing Phase Transition in Viral Condensates. A Novel Antiviral Strategy*

Ralf Altmeyer, Medusa Therapeutics Limited

008. *Treatment of EV-D68 Respiratory and Neurological Disease in AG129 Mice with a Monoclonal Antibody, EV68-228*

Brett Hurst, Utah State University

009. *Impact of PA E23G/K Substitutions on Influenza A Virus Fitness and Baloxavir Susceptibility*

Jeremy Jones, St. Jude Children's Research Hospital

10:15 AM – 10:30 AM: Break

11:00 AM – 12:00 PM: PechaKucha Competition – Courtyard Ballroom

Chaired by *Kathie Seley-Radtke*

1:30 PM – 2:15 PM: William Prusoff Memorial Award Lecture – Courtyard Ballroom

Chaired by *Kara Carter and Kathie Seley-Radtke*

010. *Targeted Protein Degradation as an Antiviral Strategy*

Priscilla Yang, Stanford University School of Medicine

2022 William Prusoff Memorial Award Recipient

2:15 PM – 5:00 PM: Retroviruses and Other Viruses – Courtyard Ballroom

Chaired by *Chris Meier and Brian Gentry*

011. *Cell-to-Cell Transmission by Emerging Viruses: Mechanisms of Action and Evasion of Host Immunity*

Shan-Lu Liu, The Ohio State University

012. *Lenacapavir: The First Clinically Active Long-Acting Inhibitor of HIV Capsid*

Christian Callebaut, Gilead Sciences

013. *Antiviral Therapy for Lassa Fever*

Lisa Oestereich, Bernhard-Nocht-Institut for Tropical Medicine

014. *Prophylactic Treatment with a Defective Interfering Particle-Based Therapeutic Protects Hamsters from Lethal Nipah Virus Disease Primarily by Direct Inhibition Mechanisms*

Stephen Welch, Centers for Disease Control and Prevention

015. *Small Molecule Antivirals Inhibit HuNoV GI.4 in Human Intestinal Enteroids*

Nanci Santos-Ferreira, KU Leuven, Rega Institute

007V. *Monoclonal Antibodies Against Both Flu and RSV*

George F. Gao, Institute of Microbiology, Chinese Academy of Sciences

3:45 PM – 4:00 PM: Break

5:00 PM – 7:00 PM: Poster Session 1 (In-person Event) – Compass Room (3rd floor)

5:00 – 6:00 PM: **ODD** numbered poster presentations

6:00 – 7:00 PM: **EVEN** numbered poster presentations

WEDNESDAY, MARCH 23

8:30 AM – 9:15 AM: Antonín Holý Memorial Award Lecture – Courtyard Ballroom

Chaired by *Kara Carter and Chris Meier*

016. *Fleximers – A Strategic Approach to Broad-Spectrum Antiviral Therapeutics*

Kathie Seley-Radtke, University of Maryland Baltimore County (UMBC)

2020 Antonín Holý Award Recipient

9:15 AM – 12:15 PM: Broad Spectrum Antiviral Drugs and Pandemic Preparedness – Courtyard Ballroom

Chaired by *John Bilello and Priscilla Yang*

017. *Out of the Box: 20 Years of Targeting Virus Infections Unconventionally*

Marco Vignuzzi, Infectious Diseases Labs ID Labs, A*Star

018V. *The SARS-CoV-2 Main Protease: New Inhibitors, Crystal Structures, and Mutations*

Rolf Hilgenfeld, University of Lübeck, Institute of Molecular Medicine

019. *Host-Targeting Broad-Spectrum Antivirals for Pandemic Preparedness*

Jeffrey Glenn, Stanford University School of Medicine

020. *Efficient Incorporation and Template-Dependent Polymerase Inhibition are Major Determinants for the Broad-Spectrum Antiviral Activity of Remdesivir*

Calvin Gordon, University of Alberta

021. *Countering Pathogenic New World Mammarenavirus Infections Through Receptor-Targeted Disruption of Virus Entry*
Brian Gowen, Utah State University

022. *Development of Small Molecule Entry Inhibitors as Potential Filoviral Therapeutics*
Laura Cooper, University of Illinois at Chicago

023. *A Photoactivable Chlorophyll-Derived Product with Broad Antiviral Activity against Enveloped Viruses Including Highly Pathogenic Coronaviruses*
Karin Seron, Center for Infection and Immunity of Lille

024. *A Broad-Spectrum Ribonucleoside Analog, EIDD-2749, Provides Protection Against Enterovirus D68 and 71 Infections in Mouse Models*
E. Bart Tarbet, Utah State University

025. *Antiviral Activity of Geneticin Against SARS-CoV-2*
Gregory Mathez, University Hospital of Lausanne and University of Lausanne

026. *Automated Brightfield Microscopy and AI to Develop Rapid High Throughput Infectivity Assays for Screening Antiviral Drugs and Monitoring Vaccine Effectiveness against Emerging Variants*
Ilya Goldberg, ViQi Inc.

10:15 AM – 10:30 AM: Break

12:15 PM – 1:00 PM: Late-breaking Oral Presentations – Courtyard Ballroom

Chaired by Luis Schang and Jerome Deval

New this year! This session will feature high quality presentations containing the most recent data with cutting edge implications and impact.

060. *Intermittent Therapy with Helicase-Primase Drug Candidate IM-250 Reduces Reactivation Competency of Latent Neural Herpes Simplex Virus Infections*
Gerald Kleymann, Innovative Molecules GmbH

061. *A Bifunctional Immune Modulator Exhibits Potent Antiviral Activity in HBV Infection Models*
Antoine Alam, Evotec

062. *The Nucleoside Analog Antiviral CMX521 Inhibits SARS-CoV-2 in Human Airway Epithelial Cell Cultures and Exhibits Prophylactic and Therapeutic Efficacy Against Respiratory Disease in a Mouse Model of SARS-CoV-2 Infection*
Randall Lanier, Chimerix

063. *Structural and Mechanistic Characterization of Non-Neutralizing Antibodies Targeting Crimean-Congo Hemorrhagic Fever*
Ian Durie, University of Georgia

1:00 PM – 3:00 PM: Poster Session 1 (In-person Event) – Compass Room (3rd floor)

1:00 – 2:00 PM: **EVEN** numbered poster presentations

2:00 – 3:00 PM: **ODD** numbered poster presentations

THURSDAY, MARCH 24

8:30 AM – 9:15 AM: Women in Science Award Lecture – Courtyard Ballroom

Chaired by Rhonda Cardin and Jennifer Moffat

027. *Fighting Viral Hemorrhagic Fevers: From the Benches to the Trenches*
Christina Spiropoulou, US Centers for Disease Control and Prevention
2022 Women in Science Speaker Award Recipient

9:15 AM – 12:00 PM: Arboviruses – Courtyard Ballroom

Chaired by Andrea Brancale and Justin Julander

028. *Antiviral Strategies for Arboviruses: A 'Buzzing' Role for the Mosquito Vector?*
Leen Delang, KU Leuven

029. *New Insights into Cellular Infection by the Mosquito-Transmitted Rift Valley Fever Virus*
Amy Hartman, University of Pittsburgh Graduate School of Public Health

030. *NITD-688, a Pan-Serotype Inhibitor of the Dengue Virus NS4B Protein, Shows Favorable Pharmacokinetics and Efficacy in Preclinical Animal Models*
Feng Gu, Novartis Institute for Tropical Diseases

031. *AI-Derived Antibody Discovery – Humanoids for Global Good*
Randal Ketchem, Just - Evotec Biologics

032. *Dengue Virus Infection and Dissemination in Aedes Mosquitoes is Significantly Reduced Upon Exposure to JNJ-A07, A Potent DENV Inhibitor, In The Blood Meal*
Ana Rosales Rosas, Rega Institute for Medical Research, KU Leuven

033. *AT-752, A Double Prodrug of a Guanosine Nucleotide Analog, is Effective Against Yellow Fever Virus in a Hamster Model*
Abbie Weight, Institute for Antiviral Research, Utah State University

034. *Guanine Quadruplexes in the RNA Genome of the Tick-borne Encephalitis Virus: A New Antiviral Target*
Ludek Eyer, Veterinary Research Institute

10:15 AM – 10:30 AM: Break

12:00 PM – 12:15 PM: ISAR Annual Business Meeting – Courtyard Ballroom

PRESIDENT: Kara Carter
TREASURER: Brian Gowen
SECRETARY: Jinhong Chang

2:00 PM – 2:45 PM: Diversity Speaker Award Lecture – Courtyard Ballroom

Chaired by Craig Cameron and Kara Carter

036. *The COVID-19 Pandemic: A View from the Bench*
J. Victor Garcia-Martinez, University of North Carolina, Chapel Hill
2022 Diversity Speaker Award Recipient

2:45 PM – 5:45 PM: Coronaviruses – Courtyard Ballroom

Chaired by Craig Cameron and Kara Carter

037. *Pyrimidine Inhibitors Synergize with Nucleoside Analogues to Block SARS-CoV-2*
Sara Cherry, University of Pennsylvania

038V. *Mechanochemistry and Drug Targeting of the SARS-CoV-2 Replication-Transcription Complex from a Single Molecule Perspective*
David Dulin, Vrije Universiteit Amsterdam, Faculty of Sciences/Division of Physics and Astronomy

039. *Profile of PBI-0451 an Orally Administered 3CL Protease Inhibitor of SARS-CoV-2 for COVID-19*
Uri Lopitan, Parnes Biosciences

040. *Strategies to Interfere with Nucleotide Excision by the 3'-to-5' Exoribonuclease from SARS-CoV-2*
Jamie Arnold, The University of North Carolina at Chapel Hill

041. *Efficacy in a SARS-CoV-2 African Green Monkey Model Validates a Prodrug Approach for Oral Delivery of Remdesivir Parent Nucleoside GS-441524*
John Bilello, Gilead Sciences Inc.

042. *A Dual Mechanism of Action of AT-527 Against SARS-CoV-2 Polymerase*
Ashleigh Shannon, AFMB and CNRS, Aix Marseille Université

043. *Dual Inhibition of SARS-CoV-2 and Human Rhinovirus with Protease Inhibitors in Clinical Development*
Jerome Deval, Aligos Therapeutics

044. *In Vitro Selection and Characterization of a SARS-CoV-2 Isolate Resistant to Remdesivir*
Dirk Jochmans, KU Leuven - Rega Institute

045. *Oral Inhibitors of the SARS-CoV-2 Main Protease for the Treatment of COVID-19*
Rhonda Cardin, Pfizer Worldwide Research Development and Medicine

046. *Picomolar Covalent Reversible Inhibitors of CoVs Main Proteases Effectively Inhibit SARS-CoV-2 Replication: Design, Synthesis, Biological Evaluation, and X-Ray Structural Characterization*
Vincenzo Summa, University of Naples Federico II

3:45 PM – 4:00 PM: Break

7:00 PM – 10:00 PM: Closing Dinner Event (In-person Event)

Columbia Towers, 701 5th Avenue (2 blocks from hotel)

RSVP required

FRIDAY, MARCH 25

8:30 AM – 9:30 AM: Special Event: Career Development Interactive Workshop – Courtyard Ballroom

Chaired by *Leen Delang and Brian Gowen*

Harmit Malik, Fred Hutchinson Cancer Research Center
The Power of Mentoring

9:30 AM – 12:00 PM: Hepatitis and Herpes Viruses – Courtyard Ballroom

Chaired by *Jerome Deval and Roger Ptak*

047V. *Clinical Update on Viral RNA Targeting Agents for Chronic Hepatitis B*
Fabien Zoulim, Hospices Civils de Lyon, INSERM Unit 1052

048. *Discovery and Development of HBV Core Inhibitors for the Treatment of Chronic Hepatitis B Infection*
William Delaney, Assembly Bio

049. *Explore Viral Infection to Probe Roles of Protein Deamidation*
Pinghui Feng, University of Southern California, Herman Ostrow School of Dentistry

050. *LAVR-289, a New Broadly Active Acyclonucleoside Phosphonate Prodrug is Highly Effective in the SCID-Hu Mouse Model of Varicella Zoster Virus Replication*
Jennifer Moffat, SUNY Upstate Medical University

052. *Characterization of the N-hydroxypyridinediones (HPD) and the N-hydroxynaphthyridinones (HNO) as HBV RNase H inhibitors*
Molly Woodson, Saint Louis University School of Medicine

053. *Resistance Analysis in a Phase 2 Clinical Trial with the Helicase-Primase Inhibitor Pritelivir in Immunocompromised Adults with Acyclovir Resistant Herpes Simplex Virus (HSV) Infection*
Alexander Birkmann, AiCuris Anti-Infective Cures AG

10:15 AM – 10:30 AM: Break

12:00 PM – 12:30 PM: Shotgun Presentations and Closing Remarks – Courtyard Ballroom