# PROGRAMME 3 MAY 2023

09:00 - 09:15

**Welcome & Opening Address** 

Michael Ison

DMID/NIAID/NIH, Rockville, MD, USA

09:15 - 10:00

**Opening Keynote** 

Chair: Michael Ison, DMID/NIAID/NIH, Rockville, MD, USA

The Development of Small Molecules for the Treatment of Respiratory Viral Illnesses: Important Lessons From A Burgeoning New Era

**Richard Whitley** 

University of Alabama, Birmingham, AL, USA

SESSION

10:00 - 11:30

PRECLINICAL - VIRAL TARGETS

Co-Chairs: Lieve Naesens, Rega Institute, Leuven, Belgium and Hui-Ling Yen, University of Hong Kong, Hong Kong SAR, China

10:05 - 10:30

Insights from Coronavirus Replication in Developing Antivirals

Mark Denison

Vanderbilt University Medical Center, Nashville, Tennessee, USA

10:30 - 10:55

A Molecularly Engineered Lectin for the Prevention and Treatment of Influenza and Coronaviruses

David Markovitz

University of Michigan, Ann Arbor, MI, USA

10:55 - 11:20

Non-nucleoside RSV Polymerase Inhibitor

Richard Plemper

Georgia State University, Atlanta, GA, USA

11:20 - 11:30

**Panel Discussion** 

11:30 - 11:45 Coffee Break

SESSION

2

PRECLINICAL – HOST-DIRECTED ANTIVIRAL THERAPEUTICS

11:45 - 13:15

Co-Chairs: Bin Cao, Capital Medical University, Beijing, China and Andres Pizzorno, International Center for Research in Infectious Diseases, Lyon, France

11:50 - 12:15

Harnessing Interferon Responses as Potential Broad Spectrum Respiratory Antiviral Treatments

**Evangelos Andreakos** 

Biomedical Research Foundation, Academy of Athens, Greece

12:15 - 12:40

Towards a Novel Host-targeted Anti-infective Strategy for COVID-19 and Other Acute Respiratory Viral Diseases

Stephan Ludwig

Westfaelische-Wilhelms-University, Münster, Germany

#### 12:40 - 13:05

# Combined Inhibition of Viral and Host Factors to Maximize Antiviral Activity

Sara Cherry

University of Pennsylvania, Philadelphia PA, USA

#### 13:05 - 13:15

**Panel Discussion** 

### 13:15 - 14:15 Lunch and Poster Viewing



14:15 - 15:45

# ORAL ABSTRACT SESSION 1 - PRECLINICAL DEVELOPMENT

Co-Chairs: Mark Denison, Vanderbilt University Medical Center, Nashville, Tennessee, USA and Rich Whitley, University of Alabama, Birmingham, AL, USA

#### 14:15 - 14:30

# Preclinical Antiviral Profile of ALG-097558, a Novel Pan-Coronavirus 3CL Protease Inhibitor (AASU0006)

Andreas Jekle

Aligos Therapeutics, South San Francisco, CA, USA

### 14:30 - 14:45

# CD388, a Novel Drug Fc-Conjugate (DFC), Demonstrates Potent, Universal Activity Against Influenza A and B (AASU0009)

James Levin

Cidara Therapeutics, San Diego, CA, USA

#### 14:45 - 15:00

# A Pseudovirus-based System for Mapping the Antigenic Effects of Thousands of Mutations in SARS-CoV-2 Spike (AASU0045)

Bernadeta Dadonaite

Fred Hutchinson Cancer Center, Seattle, WA, USA

#### 15:00 - 15:15

# Preclinical Development of Optimized DHODH Inhibitors as **Broad-Spectrum Antivirals for the Treatment of Respiratory** Virus Infections (AASU0039)

Hella Kohlhof

Immunic AG, Gräfelfing, Germany

#### 15:15 - 15:30

# Inhaled Muco-trapping Monoclonal Antibody for Effective Therapy Against Respiratory Syncytial Virus Infections in Lambs

(AASU0047)

Sam Lai

University of North Carolina, Chapel Hill, NC, USA

### 15:30 - 15:45

# Live Imaging of Airway Epithelium Reveals Mucociliary Clearance Modulates Spread of SARS-CoV-2 (AASU0034)

Mark Becker

Northwestern University, Chicago, IL, USA

#### 15:45 - 16:05 Coffee Break



16:05 - 17:45

# CLINICAL TRIAL DESIGN ISSUES/ HUMAN CHALLENGE/OMICS

Co-Chairs: Nelson Lee, University of Toronto, Toronto, Canada and Cameron Wolfe, Duke University Medical Center, NC, USA

#### 16:10 - 16:25

# Randomized, Placebo Control Trials including of EUA Drugs

John Beigel NIAID/NIH, Rockville, MD, USA

#### 16:25 - 16:40

# The RECOVERY Trial: Lessons and Legacy

Peter Horby University of Oxford, Oxford, UK

### 16:40 - 16:55

# The SARS-CoV-2 Human Challenge Model

Chris Chiu Imperial College, London, UK

#### 16:55 - 17:10

# Use of Omics Approaches in the Context of Clinical Trials: Development of Improved Influenza Iterventions

Teresa Aydillo

Icahn School of Medicine at Mount Sinai, New York, NY, USA

### 17:10 - 17:25

# **Fully Remote Trials**

Caleb Skipper University of Minnesota, Minneapolis, MN, USA

17:25 - 17:45

**Panel Discussion** 

# PROGRAMME 4 MAY 2023



5

8:30 - 10:45

# **UPDATES ON CLINICAL TRIALS**

Co-Chairs: David Hui, The Chinese University of Hong Kong, Hong Kong SAR, China and Helen Chu, University of Washington, Seattle, WA, USA

#### 08:35 - 09:05

# **Keynote Talk**

# REMAP-CAP: Preparing for the Pandemic and Translating the Network into Seasonal Threats

Srinivas Murthy

BC Children's Hospital, Vancouver, Canada

# 09:05 - 09:25

### **Clinical Trials of Severe Viral Pneumonia**

Bin Cao

China-Japan Friendship Hospital, Beijing, China

#### 09:25 - 09:45

# Monoclonal Antibodies – Current State of the Art and Future Directions

James Crowe

Vanderbilt University Medical Center, Nashville, Tennessee, USA

#### 09:45 - 10:05

# **Antiviral Respiratory Viral Therapies for Children**

Janet Englund

Seattle Children's Hospital, Seattle, WA, USA

#### 10:05 - 10:25

# **Small Molecules and Antibodies for RSV**

Angela Branche

University of Rochester Medical Center, Rochester, NY, USA

#### 10:25 - 10:45

**Panel Discussion** 

10:45 - 11:05 Coffee Break



11:05 - 12:35

# ORAL ABSTRACT SESSION 2 - ANTIVIRALS, MONOCLONAL ANTIBODIES AND COMBINATIONS

Co-Chairs: Emi Takashita, National Institute of Infectious Diseases, Tokyo, Japan and Tim Uyeki, CDC, Atlanta, GA, USA

#### 11:05 - 11:20

# First-in-Human Study of CC-42344, a Novel Broad-Spectrum Influenza A Polymerase PB2 Inhibitor (AASU0024)

Sam Lee

Cocrystal Pharma Inc., Bothell, WA, USA

#### 11:20 - 11:35

Safety and Efficacy Results from Phase 1 and 2a H1N1 Challenge Trials Using an Anti-Type A and B Influenza Immunotherapeutic that is also Synergistic with Oseltamivir in Mice (AASU0041)

Thomas Luke

SAB Biotherapeutics, Sioux Falls, SD, USA

#### 11:35 - 11:50

CD388, a Novel Drug Fc-Conjugate (DFC), Demonstrates a High Barrier to Resistance and Retains Potent Activity Against Neuraminidase Inhibitor-Resistant Influenza A and B (AASU0008)

Simon Döhrmann

Cidara Therapeutics, San Diego, CA, USA

#### 11:50 - 12:05

Exploratory Evaluation on the Effect of Ensitrelyir for Long COVID: a Post-Hoc Analysis of Phase 3 Part of Phase 2/3 in Patients with Mild-to-Moderate COVID-19 (AASU0012)

Akimasa Fukushi

Shionogi & Co., Ltd, Osaka, Japan

#### 12:05 - 12:20

Clinical Trials of Inhaled Interferon Beta-1a (SNG001) in COVID-19 Patients in the Home and Hospital Settings (AASU0014)

Phillip Monk

Synairgen Research Ltd, Southampton, Hants, UK

# **THURSDAY**

# PROGRAMME

4 MAY 2023

12:20 - 12:35

**Ensitrelvir for Symptomatic and Mild Symptoms Only:** COVID-19 Patients in Phase 2b/3 Part (AASU0010)

Genki Ichihashi

Shionogi & Co., Ltd, Osaka, Japan

12:35 - 14:15

# **SPONSORED LUNCH SEMINAR**

# **Combination Therapy to Treat Respiratory Infections: Ready for Primetime?**

12:55 - 13:00

#### Introduction

Michael Ison, DMID/NIAID/NIH, Rockville, MD, USA, and TBC Bill & Melinda Gates Foundation, Seattle, Washington, USA

13:00 - 13:20

# The Challenges of Monotherapy – a View from the Immunocompromised Host -

Michael Boeckh

Fred Hutchinson Cancer Center, Seattle, WA, USA

13:20 - 13:40

# Combination Antiviral Therapy for RVIs: Update on **Clinical Progress**

Frederick Hayden

University of Virginia School of Medicine, Charlottesville, VA, USA

13:40 - 14:00

## **Antivirals plus Immune Modulators**

John Beigel

NIAID/NIH, Rockville, MD, USA

14:00 - 14:15

**Panel Discussion** 



14:15 - 16:15



### **CLINICAL TRIAL AND REGULATORY ISSUES**

Co-Chairs: Frederick Hayden, University of Virginia School of Medicine, Charlottesville, VA, USA and Michael Ison, DMID/NIAID/NIH, Rockville, MD, USA

14:20 - 14:40

# Regulatory Framework for Moving from EUA to FDA **Approval for Antiviral Products**

Stephanie Troy

US FDA, Silver Spring, MD, USA

14:40 - 15:00

# **Clinical Trial Endpoints for Approval of Antiviral Therapeutics**

Marco Cavaleri

EMEA, Amsterdam, The Netherlands

15:00 - 15:20

### **Combination Therapy**

Mariana Baz

CHU de Québec-Université Laval, Québec, Canada



#### 15:20 - 15:40

# The Path Forward for the Treatment of Hospitalized Influenza Patients: Host-Targeted Therapeutics

Kimberley Armstrong BARDA, Washington DC, USA

# 15:40 - 15:50

### **Panel Discussion**

# 15:50 - 16:10 Coffee Break & Poster viewing



#### 16:10 - 18:10

# TREATMENT UPDATES & ORAL ABSTRACT SESSION 3

Co-Chairs: Kimberley Armstrong, Biomedical Advanced Research and Development Authority (BARDA), Washington DC, USA and Shikha Garg, CDC, Atlanta, GA, USA

#### 16:10 - 16:55

# State of the Art of COVID-19 Therapy

Cameron Wolfe

Duke University Medical Center, Durham, NC, USA

#### 16:55 - 17:10

# Comparison of the Effectiveness of Baloxavir Marboxil and Oseltamivir in Reducing Household Transmission of Influenza

(AASU0004)

Takamichi Baba

Shionogi & Co., Ltd, Osaka, Japan

### 17:10 - 17:25

# Heterogeneity of Influenza Infection Severity at Hospital Admission Significantly Confounds Analysis of Antiviral Effectiveness on Reducing Hospital Length of Stay (AASU0038)

Aleda Leis

University of Michigan, Ann Arbor, MI, USA

#### 17:25 - 17:40

# Pharmacokinetics of an Extended Half-Life Monoclonal Antibody Against COVID-19 in Hematopoietic Stem Cell Transplant Recipients (AASU0007)

Jim Boonyaratanakornkit

Fred Hutchinson Cancer Center, Seattle, WA, USA

#### 17:40 - 17:55

# Trial in Progress: a Phase I/III, Randomised Controlled Preexposure Prophylaxis Study of the Anti-SARS-CoV-2 Antibody AZD3152 (SUPERNOVA) (AASU0016)

**Taylor Cohen** 

AstraZeneca, Gaithersburg, MD, USA

#### 17:55 - 18:10

# Meta-Analysis and Validation of OMICs Data from COVID-19 Patient Samples Reveal Auranofin as a Promising Therapeutic

Agent (AASU0046)

Shashank Tripathi

Indian Institute of Science, Bengaluru, Karnataka, India

#### 18:10 - 19:10

## **Poster Reception and Poster viewing**

# **FRIDAY**

# PROGRAMME

5 MAY 2023

#### 08:30 - 08:40

# Introduction to Roberts/Tisdale Lectureship

Maria Zambon

UK Health Security Agency (UKHSA), London, UK / Chair of ISIRV

### 08:40 - 09:25

# Keynote Talk - Roberts/Tisdale Lectureship

Co-Chairs: Frederick Hayden, University of Virginia School of Medicine, Charlottesville, VA, USA and Maria Zambon, UK Health Security Agency (UKHSA), London, UK

# **Resistance to Antivirals Targeting Respiratory Viruses:** When Does it Matter?

Wendy Barclay

Imperial College, London, UK





09:25 - 10:55

# THE RIGHT DRUG FOR THE RIGHT PATIENT: **OPTIMIZING ANTIVIRAL TREATMENT**

Co-Chairs: Frederick Hayden, University of Virginia School of Medicine, Charlottesville, VA, USA and Maria Zambon, UK Health Security Agency (UKHSA), London, UK

#### 09:30 - 09:55

# Role of Genomic Surveillance in Tracking Emergence of **Resistance Over Time**

Adam Lauring

University of Michigan, Ann Arbor, MI, USA

#### 09:55 - 10:20

# **Developing Diagnostics to Optimize Antiviral Use**

Lisa Ng

A\* STAR Infectious Diseases Labs, Singapore

#### 10:20 - 10:45

# Role of Misinformation and Erosion of Social Trust in Response to Pandemics

Rachel Moran

University of Washington, Seattle, WA, USA

10:45 - 10:55

**Panel Discussion** 

10:55 - 11:15 Coffee Break



11:15 - 12:45

# ORAL ABSTRACT SESSION 4 – SURVEILLANCE & ANTIVIRAL RESISTANCE

Co-Chairs: Nelson Lee, University of Toronto, Toronto, Canada and Arnold Monto, University of Michigan, Ann Arbor, MI, USA

#### 11:15 - 11:30

Implementation of Cell Culture-Based Assay IRINA for Baloxavir Susceptibility Monitoring, 2022-23 Influenza Season (AASU0018)

Mira Patel

CDC, Atlanta, GA, USA

#### 11:30 - 11:45

ViralVar: A Web Tool for Multilevel Visualization of SARS-CoV-2

Genomes (AASU0020)

Arghavan Alisoltani

Northwestern University, Chicago, IL, USA

### 11:45 - 12:00

Utilization of Whole Genome Sequencing to Augment Traditional Contact Tracing for a University SARS-CoV-2 Outbreak (AASU0044)

Cameron Wolfe

Duke University Medical Center, Durham, NC, USA

#### 12:00 - 12:15

Whole Genome Sequencing Exploring Evolution Associated with the Combined Effect of Oseltamivir and Favipiravir on Influenza Virus

(AASU0011)

Shengrui Mu

China-Japan Friendship Hospital, Beijing, China

#### 12:15 - 12:30

Intra-host Population Dynamics of a SARS-CoV-2 Delta-Omicron Superinfection in an Immunocompromised Pediatric Patient

(AASU0021)

**Lacy Simons** 

Northwestern University, Chicago, IL, USA

## 12:30 - 12:45

Altered RSV Population Structures in Adult Populations Following COVID-19 Mitigation Strategies (AASU0036)

Estefany Rios Guzman

Northwestern University, Chicago, IL, USA

12:45 - 13:45 Lunch



13:45 - 14:50

# **ACCESS TO CARE/GLOBAL ROLLOUT**

Co-Chairs: Helen Chu, University of Washington, Seattle, WA USA and TBC

#### 13:50 - 14:15

Global Public Health Security and Justice for Vaccines and Therapeutics in the COVID-19 Pandemic

**Sylvie Briand** 

WHO, Geneva, Switzerland

#### 14:15 - 14:40

Enabling Access to Medical Countermeasures by Underserved Populations

Meghan Pennini

HHS, Washington, DC, USA

14:40 - 14:50

Panel Discussion

14:50 - 15.00

**Summary & Close**