



Influenza 2018: Centenary of the 1918 Pandemic

Sunday 24th - Tuesday 26th June 2018

Francis Crick Institute, London UK

Programme

Sunday 24 June

16.00 - 16.30

Welcome

Welcome

John McCauley
Francis Crick Institute, London, UK

Welcome Address

Tedros Adhanom Ghebreyesus
Director General, WHO, Geneva, Switzerland

Welcome from ISIRV

Lance Jennings
Chair of ISIRV, University of Otago, New Zealand

"Talune"

Sani Muliaumaseali'i with Nina Thilas Mohs and the GAFA
Arts Collective (GAC)

16.30 - 18.35

Session 1

Chair

John Skehel
Francis Crick Institute, London, UK

16.30 - 17.15

Keynote Lecture
THEN AND NOW

Sally Davies
Chief Medical Officer for England, London, UK

17.15 - 17.55

**INFLUENZA PANDEMICS OF THE
LAST CENTURY**

Robert Webster
*St. Jude Children's Research Hospital,
Memphis, TN, US*

17.55 - 18.35

LESSONS FROM THE 1918 VIRUS

Jeffery Taubenberger
NIAID, Bethesda, MD, USA

18.45 - 19.45

WELCOME DRINKS RECEPTION

Central Atrium, Francis Crick Institute

Programme Monday 25 June

09.00 - 10.45 Session 2 Virus Infection/Replication

Chair

Robert Lamb
Northwestern University, Evanston, IL, USA

09.00 - 09.15

Introduction**INFLUENZA VIRUS ENTRY INTO CELLS AND ASSEMBLY: AN OVERVIEW**

Robert Lamb
Northwestern University, Evanston, IL, USA

09.15 - 09.45

IMAGING INFLUENZA VIRUS MEMBRANE FUSION

Peter Rosenthal
Francis Crick Institute, London, UK

09.45 - 10.15

CAP-SNATCHING AND HOST-VIRAL INTERACTIONS IMPACTING VIRAL RNA SYNTHESIS

Robert Krug
University of Texas, Austin, TX, USA

10.15 - 10.45

FLU-VISION: TOTAL IMAGING SYSTEMS FOR ANALYZING INFLUENZA VIRUS INFECTION

Yoshihiro Kawaoka
University of Wisconsin, Madison, WI, USA and University of Tokyo, Tokyo, Japan

10.45 - 11.15

TEA / COFFEE BREAK & VIEWING OF POSTERS

11.15 - 12.30 Session 3 Antivirals

Chair

Peter Colman
The Walter and Eliza Hall Institute of Medical Research, Melbourne, Australia

11.15 - 11.30

Introduction**DRUG DISCOVERY**

Peter Colman
The Walter and Eliza Hall Institute of Medical Research, Melbourne, Australia

11.30 - 12.00

STRUCTURE, MECHANISM AND DRUG TARGETING OF THE INFLUENZA REPLICATION MACHINE

Stephen Cusack
EMBL, Grenoble, France

12.00 - 12.30

ANTI-NEURAMINIDASE ANTIVIRALS: EVIDENCE AND DEBATE

Jonathan Van-Tam
Department of Health, London, UK

12.30 - 13.45

LUNCH BREAK & VIEWING OF POSTERS

13.45 - 15.00

Session 4 Virus Diversity

Chair John Skehel, *Francis Crick Institute, London, UK*

13.45 - 14.00

Introduction
MUTATION STRUCTURAL MAP

John Skehel
Francis Crick Institute, London, UK

14.00 - 14.30

RECEPTOR AFFINITY AND SPECIFICITY

Steven Gamblin
Francis Crick Institute, London, UK

14.30 - 15.00

**HUMAN INFLUENZA VIRUS RECEPTORS ON AIRWAY
EPITHELIAL CELLS**

James Paulson
Scripps Research Institute, La Jolla, CA, USA

15.00 - 15.30

TEA / COFFEE BREAK & VIEWING OF POSTERS

15.30 - 16.30

Session 4 Virus Diversity continued

Chair Sylvie van der Werf, *Institut Pasteur, Paris, France*

15.30 - 16.00

**ADAPTIVE CHANGES IN HA, NA AND PB1 DURING
EMERGENCE OF PANDEMIC INFLUENZA**

Mikhail Matrosovich
Phillipps University, Marburg, Germany

16.00 - 16.30

**ANIMAL ORTHOMYXOVIRUSES AND THE ORIGINS
OF INFLUENZA**

Edward Holmes
The University of Sydney, Sydney, Australia

16.30 - 18.10

Session 5 Immunity

Chair Alain Townsend, *Oxford University, Oxford, UK*

16.30 - 17.00

Introduction
PROTECTIVE B AND T CELL RESPONSES TO H7N9 VIRUSES

Alain Townsend
Oxford University, Oxford, UK

17.00 - 17.30

**ROLE OF INTERFERON-LAMBDA IN HOST DEFENCE
AGAINST INFLUENZA VIRUSES**

Peter Staeheli
University of Freiburg, Germany

17.30 - 17.50

**NOVEL ANTI-VIRAL MECHANISM OF HA STEM-SPECIFIC
ANTIBODIES**

Jon Yewdell
NIAID, Bethesda, MD, USA

17.50 - 18.10

**WHAT DOES THE HOST IMMUNE RESPONSE TELL US
ABOUT THE PATHOGENESIS OF INFLUENZA?**

Peter Openshaw, Chris Chiu and Anne O'Garra
Imperial College and Francis Crick Institute, London, UK

18.10 - 19.30

POSTER RECEPTION

Programme Tuesday 26 June

09.00 - 10.30 Session 6 Transmission

Chair

George Fu Gao
*Chinese Centre for Disease Control and Prevention,
Chinese Academy of Sciences, Beijing, China*

09.00 - 09.30

Introduction**HOST JUMP: MUCH MORE THAN WE SEE**

George Fu Gao
*Chinese Centre for Disease Control and Prevention,
Chinese Academy of Sciences, Beijing, China*

09.30 - 10.00

**DETERMINANTS OF INFLUENZA VIRUS TRANSMISSION
IN MAMMALS**

Ron Fouchier
Erasmus Medical Centre, Rotterdam, The Netherlands

10.00 - 10.30

**INTRA-HOST ADAPTATION AND THE TRANSMISSION
OF DEFECTIVE PARTICLES**

Elodie Ghedin,
New York University, New York, USA

10.30 - 11.00

TEA / COFFEE BREAK & VIEWING OF POSTERS

11.00 - 12.45 Session 7 Vaccines

Chair

John McCauley
Francis Crick Institute, London, UK

11.00 - 11.15

Introduction**SURVEILLANCE, STRAIN SELECTION AND VACCINES**

John McCauley
Francis Crick Institute, London, UK

11.15 - 11.45

**DEVELOPMENT OF NANOPARTICLE-BASED INFLUENZA
VACCINES**

John Mascola
NIAID, Bethesda, MD, USA

11.45 - 12.15

**IMMUNE HISTORY AND SEASONAL INFLUENZA VIRUS
SUSCEPTIBILITY**

Scott Hensley
University of Pennsylvania, PA, USA

12.15 - 12.45

**LIVE ATTENUATED VACCINE PROGRAMME IN THE UK:
IS IT WORKING?**

Maria Zambon
Public Health England, London, UK

12.45 - 14.00

LUNCH BREAK & VIEWING OF POSTERS

14.00 - 15.00

Session 7 Vaccines continued

Chair

Wendy Barclay
Imperial College, London, UK

14.00 - 14.30

UNIVERSAL INFLUENZA VIRUS VACCINES

Peter Palese
Icahn School of Medicine at Mount Sinai, New York, USA

14.30 - 15.00

TACKLING INFLUENZA WITH BROADLY NEUTRALIZING ANTIBODIES

Daide Corti
Humabs, Bellinzona, Switzerland

15.00 - 15.45

TEA / COFFEE BREAK

15.45 - 17.45

Session 8 The Future?

Chair

Peter Palese
Icahn School of Medicine at Mount Sinai, New York, USA

15.45 - 16.00

**Introduction
THE FUTURE?**

Peter Palese
Icahn School of Medicine at Mount Sinai, New York, USA

16.00 - 16.30

FORECASTING FLU PANDEMICS

John Edmunds
London School of Hygiene and Tropical Medicine, London, UK

16.30 - 17.00

RESPONDING TO THE NEXT PANDEMIC: ARE WE READY?

Jackie Katz
CDC, Atlanta, GA, USA

17.00 - 17.45

SUMMARY, CONCLUSIONS AND DISCUSSION

Peter Palese
Icahn School of Medicine at Mount Sinai, New York, USA

CLOSE OF MEETING