Wednesday 11th December

11:00 – 11:45 Registration and Refreshments

11.45 – 13:15 Networking Lunch, Poster and Industry Exhibition
   New Researcher Network Lunch – Lowther Meeting Room

13.15 – 13:30 Conference Opening
   Gary Pitcairn, DDL Conference Chair

DDL LECTURE

13:30 – 14:15 Why we need to deliver large amounts of powder to the lungs and the concurrent challenges
   Anthony J. Hickey, Distinguished RTI Fellow and Director of UNC Catalyst for Rare Disease Drug Discovery

SESSION 1
FUTURE OF THE PLANET: Pollution and the environment

14.15 – 14.40 Implications for patient care and disease management
   Omar Usmani, National Heart and Lung Institute (NHLI), Imperial College London & Royal Brompton Hospital

14.40 – 15.05 The environmental impact of MDI propellants – what now?
   John Pritchard, Inspiring Strategies

15.05 – 16.25 Refreshment Break: Poster and Industry Exhibition
   (Manned Poster Session)

16.25 – 16.50 Sustainable Inhalers - future challenges, threats and opportunities
   Gregor Anderson, Pharmacentric Solutions Ltd

16:50 – 17.15 Inhaled microplastics: an unrecognised health issue?
   Stephanie Wright, Medical Research Council Centre for Environment and Health, King’s College London

PAT BURNELL YOUNG INVESTIGATOR AWARD – PAST WINNERS
Where are they now?


17:30 – 17:45 Dr Sumit Arora, Certara UK Limited – Winner: 2015

17:45 – 18.00 Prof. Regina Scherließ, Kiel University – Winner: 2010

18:15 – 20:00 Networking Drinks Reception

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**Thursday 12th December – AM**

08:00 – 09:00  **Registration and Refreshments**

**SESSION 2**  
**FUTURE DIRECTIONS: Prediction and Personalisation**

09:00 – 09:25  **The application of Precision Medicine and Genomics to enable new Respiratory medicines**  
*Alix Berton, AstraZeneca*

09:25 – 09:50  **The role of aerosols in preclinical drug development**  
*Otmar Schmid, Head of the Pulmonary Aerosol Delivery Group, Helmholtz Zentrum München, Germany*

09:50 – 10:05  **Experimental evidence of regional lung deposition differences effecting the systemic exposure in dog**  
*Steven Oag, AstraZeneca*

10:05 – 10:30  **Computational and modelling approaches in dry powder inhaler product design**  
*Darragh Murnane, University of Hertfordshire*

10:30 – 11:00  **Refreshment Break: Poster and Industry Exhibition**

11:30 – 11:55  **Classification of Inhaled Medicines: Development of an Inhalation based Biopharmaceutical Classification System**  
*Jayne Hastedt, JDP Pharma Consulting*

11:55 – 12:20  **Airborne transmission of influenza virus**  
*Wendy Barclay, Imperial College London*

12:20 – 12:45  **Effect of the heated humidification on the *in vitro* aerosol delivery with a pressurized-metered dose inhaler and with a vibrating mesh nebulizer in mechanical ventilation**  
*Thierry Porée, Laboratoire OptimHal-ProtecSom*

12:45 – 14:00  **Networking Lunch, Poster and Industry Exhibition**
SESSION 3
PAT BURNELL YOUNG INVESTIGATOR AWARD

14:00 - 14:15  Non-volatile Excipient effect on Inhaled Drug Product Performance
Precious Akhuemokhan, King’s College London

14:15 - 14:30  Inhalable mRNA dry powder formulation with PEGylated KL4 peptide
delivery system
Yingshan Qiu, The University of Hong Kong

14:30 - 14:45  In vitro behaviour of konjac glucomannan microparticles aimed at pulmonary
tuberculosis therapy
Filipa Guerreiro, University of Algarve

14:45 - 15:00  Can a combination of magnesium stearate and fine tune the inhalable fraction
of a mannitol carrier based interactive blend?
Nancy Hertel, Kiel University

15:00 - 15:15  Incorporating Chemotherapeutic Drug into a Personalisable Silicone Airway
Stent for the Treatment of Lung Cancer and Tracheobronchomalacia
Jesse Xu, Woolcock Institute of Medical Research

15:15 - 16:15  Refreshment Break: Poster and Industry Exhibition

16:15 - 17:00  EMERGING SCIENTIST PRESENTATION
(No Conference Paper in the Proceedings for this Presentation)

17:00 - 17:15  Training the Next Generation for Aerosol Science
Professor Jonathan Reid, School of Chemistry, University of Bristol

PLENARY

17:15 - 17:45  Inhaled Biologics for Respiratory Disorders
Professor Gary Anderson, Lung Health Research Centre,
University of Melbourne

18:00 - 24:00  30th Anniversary Celebration Dinner
Sponsored by:
Friday 13th December 2019

08:00 – 09:00  Registration and Refreshments

WHAT ON EARTH

09:00 – 09:25  How spacers prove mysterious to patients
Sarah O'Connor, Asthma Society Ireland

PLENARY

09:25 – 09:55  Eosinophils in COPD: What’s the story so far?
Professor Mona Bafadhel, Associate Professor in Respiratory Medicine,
University of Oxford

SESSION 4
FUTURE TECHNOLOGIES: Formulation and Devices

09:55 - 10:20  Development and inhalation properties of Amikacin Liposome Inhalation Suspension (ALIS) for treatment of Mycobacterium avium complex (MAC) lung infections
Zhili Li, Insmed Incorporated

10:20 - 10:35  Aerosol drug delivery through the mouth to target nasal cavities:
RETRONOSE® concept
Laurent Vecellio & Alain Regard, Nemera

10:35 - 11:30  Refreshment Break: Poster and Industry Exhibition

11:30 – 11:55  From Drug Product Characterization to Changing Patient Behaviours
Matt Bonam, AstraZeneca

11:55 – 12:10  Designing lipid nanoparticles for intranasal delivery of antidepressants
Soraia Silva, University of Coimbra

12:10 – 12:35  Towards drug vaping: assessment of new-generation high-power electronic nicotine delivery system as thermal aerosol generation device for inhaled bronchodilators
Pr Jérémie Pourchez, Mines Saint-Etienne, UMR INSERM U1059

12:35 – 12:50  A validated theoretical approach to predict the effect of ambient temperature and ethanol concentration on the event-averaged pMDI droplet size
Barzin Gavtash, 3M UK PLC

12:50 – 13:00  Closing Remarks
Gary Pitcairn, DDL Conference Chair

13:00  Conference Close