

PROTECT Researcher Symposium 2022

Thursday 5 – Friday 6 May 2022
Holiday Inn Regent's Park - London
Oxford Suite, Ground Floor



Symposium Programme

Day 1 – Thursday 5th May

12:00-13:00 **Registration and Buffet lunch**

13:00-14:00 **Plenary 1: Making PROTECT Count for Our Stakeholders**

Chair: *Professor Andrew Curran, Chief Scientific Adviser, Health and Safety Executive*

Securing our legacy: PROTECT's final year and the transition to a longer-term solution for UK research capacity on respiratory disease transmission

Professor Andrew Curran, Chief Scientific Adviser, Health and Safety Executive

Stakeholder perspectives

Seizing the opportunity for long term change

Dr Alexandra Smyth, Senior Policy Adviser, Royal Academy of Engineering

[Access a PDF: Seizing the opportunity for long term change](#)

Where have all the lifeboats gone? Learning from lockdown.

Steve Sylvester, Acting Head of Public Protection, Lancaster City Council

[Access a PDF: Where have all the lifeboats gone?](#)

HSE: How Science Supported Policy and Regulation during the Pandemic

Dr John Rowe, Acting Head of Operational Strategy Branch, Engagement & Policy Division, Health and Safety Executive

[Access a PDF: HSE: How Science Supported Policy and Regulation during the Pandemic](#)

Responding to stakeholder needs: Understanding of the role of ventilation

Professor Cath Noakes, University of Leeds

14:00-15:15 **Plenary 2: PROTECT in Context: The National Core Studies Programme**

Chair: *Professor Andrew Curran, Chief Scientific Adviser, Health and Safety Executive*

Reflections on the National Core Studies (NCS) programme

Sir Patrick Vallance, Chief Scientific Adviser, UK Government

Data and Connectivity NCS

Dr Steven Kerr, Senior Research Fellow, University of Edinburgh

Matt Thakur, Programme Manager, Health Data Research UK

[Access a PDF: Data and Connectivity NCS](#)

Epidemiology and Surveillance NCS

Dr Tristan Pett, Covid-19 Infection Survey, Analytical Development Lead, ONS

Dr Katie Cunliffe, Covid-19 Infection Survey, Senior Research Officer, ONS

[Access a PDF: Epidemiology and Surveillance NCS](#)

Longitudinal Health and Wellbeing NCS

Dr Chloe Park, Senior Communications Manager, University College London

Dr Ellen Thompson, Postdoctoral Research Associate, King's College London

Dr Milla Kibble, Research Facilitator, University of Cambridge

[Access a PDF: Longitudinal Health and Wellbeing NCS](#)

15:15-15:45 Refreshments and Networking

Poster presentations

15:45-16:45 Parallel sessions: PROTECT Research Lightning Talks (Lightning talks grouped by session - see page 3)

Session A Chair: David Fishwick <i>Cambridge & Oxford Suite</i>	Session B Chair: Martie Van Tongeren <i>Somerville Suite</i>	Session C Chair: Alan Bennett <i>Trinity Suite</i>
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Day 2 – Friday 6th May

09:00-09:30 Refreshments and Networking

Poster presentations

09:30-11:00 Parallel Session 2.1: Cross-disciplinary Collaboration Workshops

Workshop A: Strategies to evaluate and improve ventilation

Lead: *Professor Cath Noakes, University of Leeds*

Workshop B: Understanding viral emission rates and dose-response at the micro-level

Lead: *Mr Allan Bennett, UK Health Security Agency & Dr Simon Parker, Defence Science and Technology Laboratory*

11:00-11:30 Refreshments and Networking

Poster presentations

11:30-13:00 Parallel Session 2.2: Cross-disciplinary Collaboration Workshops

Workshop C: Deep-dive into Covid-19 transmission risk and mitigations in nuclear power stations in the UK

Lead: *Professor Martie Van Tongeren, University of Manchester*

Workshop D: Looking at Mitigations, taking results from modelling for application to real World

Lead: *Professor Cath Noakes, University of Leeds, & Dr Yiqun Chen, HSE*

13:00-14:00 Buffet Lunch, soft drinks, tea and coffee

14:00-15:00 Plenary Session 3: CPD/skills Talks

Chair: *Professor Andrew Curran, Chief Scientific Adviser, Health and Safety Executive*

Securing funding for COVID-19 and other respiratory virus transmission research

Dr Jennifer Anderson, Head of Training and Careers, UKRI, Medical Research Council

[Access a PDF: Securing funding for COVID-19 and other respiratory virus transmission research](#)

Accessing Data via the ONS Secure Research Service

Dr Beth Routley, Senior Researcher, Secure Research Service, ONS

15:00-15:30 Closing Plenary

Wrap-up and reflections; announcement and presentation of award for best poster presentation (as voted for by fellow PROTECT researchers during the event)

Professor Andrew Curran, Chief Scientific Adviser, Health and Safety Executive

Lightning Talks - Groupings by Session

Session A: Modelling/Transmission	
Chair: David Fishwick	
Transmission of SARS-CoV-2 in real world setting and experimental models. Access a pdf: Transmission of SARS-CoV-2 in real world setting and experimental models.	Jie Zhou (Jay) Imperial College London
Asymptomatic/mild SARS-CoV-2 Skin-Skin & Bio-aerosols Transmission Access a pdf: Asymptomatic/mild SARS-CoV-2 Skin-Skin & Bio-aerosols Transmission	Amanda Seekings APHA
Modelling SARS-CoV-2 transmission risk on a construction site	Clara Cheung University of Manchester
Talk 1 Simplified Within Host and Dose-response Models of SARS-CoV-2 Infection	Jingsi Xu University of Manchester
Talk 2 Using in-host models to advise on social care asymptomatic testing strategies Access a pdf: Using in-host models to advise on social care asymptomatic testing strategies	Ian Hall University of Manchester
AI-assisted observation of micro-activities to estimate microbial exposure Access a pdf: AI-assisted observation of micro-activities to estimate microbial exposure	Tom Komar Urban Observatory at Newcastle University
Changes In Ventilation of Schools when monitoring CO2 (CIVOS) Access a pdf: Changes In Ventilation of Schools when monitoring CO2 (CIVOS)	Natalie Williams UK Health Security Agency

Session B: COVID-19 Prevalence & More	
Chair: Martie Van Tongeren	
Re-imagining construction project delivery in a post-pandemic economy Access a pdf: Re-imagining construction project delivery in a post-pandemic economy	Richard Kirkham University of Manchester
Areas of enduring COVID-19 prevalence Access a pdf: Areas of enduring COVID-19 prevalence	Cath Lewis University of Manchester
Understanding community level influences on COVID-19 prevalence in England Access a pdf: Understanding community level influences on COVID-19 prevalence in England	Chaitanya Joshi Data Sciences Campus, Office for National Statistics UK
Identifying targets for interventions to increase the wearing of face coverings	Chris Armitage, University of Manchester
Using WGS-enriched contact tracing data at national scale to understand SARS-CoV-2 transmission Access a pdf: Using WGS-enriched contact tracing data at national scale to understand SARS-CoV-2 transmission	Charlie Turner, Contact Tracing Data Team, UK Health Security Agency

Methodology for the Spatial Clustering of CTAS data to identify high risk workplace settings Access a pdf: Methodology for the Spatial Clustering of CTAS data to identify high risk workplace settings	Rachel Abbey UK Health Security Agency
Keeping the UK Building Safely (KUBS) Access a pdf: Keeping the UK Building Safely (KUBS)	Sheena Johnson University of Manchester
Mitigating transmission in a shared meeting room scenario Access a pdf: Mitigating transmission in a shared meeting room scenario	Daniel Miller dstl

Session C: Experimental/ Measurements

Chair: Allan Bennett

Flow in and around face masks Access a pdf: Flow in and around face masks	Caroline Marshall University of Leeds
Imaging aerosol deposition and filtration with advanced x-ray microscopies Access a pdf: Imaging aerosol deposition and filtration with advanced x-ray microscopies	David Eastwood University of Manchester
Talk 1 Bacterial signals captured from aerosols vary between different breathing activities, different sampling matrices and different microbial identities inform development of face mask sampling. Access a pdf: Talk 1 Bacterial signals captured from aerosols vary between different breathing activities, different sampling matrices and different microbial identities inform development of face mask sampling.	Mohamad Abdulwhhab University of Leicester
Talk 2 The utilisation of facemask sampling for the detection of SARS-CoV-2	Jonathan Decker University of Leicester
Validation of environmental sampling materials and sample storage conditions Access a pdf: Evaluation of SARS-CoV-2 environmental surface sampling protocols	Antony Spencer UK Health Security Agency
Validation of viability qPCR	Ian Nicholls UK Health Security Agency
Investigation of Aerosol Stability of SARS-CoV-2 Alpha, Beta and Delta Variants of Concern at Low, Medium and High Relative Humidity (RH) Access a pdf: Investigation of Aerosol Stability of SARS-CoV-2 Alpha, Beta and Delta Variants of Concern at Low, Medium and High Relative Humidity (RH)	Okechukwu Onianwa UK Health Security Agency
Lockup layer in displacement ventilation: exhaust mechanism	Rajesh Kumar Bhagat

Poster Presentations

Addressing COVID-19 Workplace Transmission

James Lewis, Bryony Cook, Rachel Abbey, Matt Ricketts

Agility and vulnerability: the UK logistics sector in the face of the COVID-19 pandemic

Hua Wei, Sarah Daniels, Carl A. Whitfield, Yang Han, David W. Denning, Ian Hall, Martyn Regan, Arpana Verma and Martie van Tongeren

[Access a PDF of the poster: Agility and vulnerability: the UK logistics sector in the face of the COVID-19 pandemic](#)

Bacterial signals captured from aerosols vary between different sampling matrices and different identities inform development of face mask sampling

Mohamad Abdulwhhab, Baber Saleem, Natalie Garton & Mike Barer

[Access a PDF image of the poster: Bacterial signals captured from aerosols vary between different sampling matrices and different identities inform development of face mask sampling](#)

CFD and ventilation modelling for COVID-19

P. Salinas, S. Dargaville, A. Joshi, L. Mottet, C.C. Pain

[Access a PDF image of the poster: CFD and ventilation modelling for COVID-19](#)

Changes In Ventilation Of Schools when monitoring CO2 – CIVOS

Stavros Bontitsopoulos, Christopher Brown, Henry Burridge, Holly Carter, Catherine Noakes, Katherine Roberts, Carolanne Vouriot, Dale

Weston, Mark Mon-Williams and Natalie Williams

[Access a PDF image of the poster: Changes In Ventilation Of Schools when monitoring CO2 – CIVOS](#)

COVID-19 Food for thought: A ‘deep dive’ into transmission risk and mitigation practices with food sector experts

Rebecca Canham, Alice Smith, Paniz Hosseini, Miranda Loh, Tony Fletcher

[Access a PDF image of the poster: COVID-19 Food for thought: A ‘deep dive’ into transmission risk and mitigation practices with food sector experts](#)

COVID-OUT surface sampling work

Ian Nicholls

Face coverings: attitudes and practices within close contact retail services

R. Canham, A. Smith, K. Clabon, H. Cowie K. Galea, K. Dixon

[Access a PDF image of the poster: Face coverings: attitudes and practices within close contact retail services](#)

Flow In and Around Rapid Manufacture Face Masks

C Marshall, P Culmer, D M Hodgson, N Kapur, G Keevil, J B McQuaid, C Noakes

[Access a PDF image of the poster: Flow In and Around Rapid Manufacture Face Masks](#)

Omicron breakthrough infections in previously infected or vaccinated hamsters

Jie Zhou, Ksenia Sukhova, Thomas P. Peacock, Jonathan C. Brown, Paul F. McKay, Maya Moshe, Ruthiran Kugasathan, Robin J. Shattock, Katie Doores, Wendy S. Barclay

[Access a PDF image of the poster: Omicron breakthrough infections in previously infected or vaccinated hamsters](#)

Perceptions of COVID-19 risk on public transport: Reporting on a phased Deep Dive

Nicola Gartland, Anna Coleman, David Fishwick, Sheena Johnson, Martie van Tongeren

[Access a PDF image of the poster: Perceptions of COVID-19 risk on public transport: Reporting on a phased Deep Dive](#)

Reimagining construction project delivery in a post-pandemic economy

Richard Kirkham, William Collinge and Amanda Howells

[Access a PDF image of the poster: Reimagining construction project delivery in a post-pandemic economy](#)

Technical and Behavioural Barriers to Good Ventilation in Hospitality Venues

Abigail Hathway, Zhangjie Peng, Sophie Pott, Vinh Vu, Alisha Suhag, Edward Murphy and Chantelle Wood

[Access a PDF of the poster: Technical and Behavioural Barriers to Good Ventilation in Hospitality Venues](#)

The Dynamics of SARS-CoV-2 Infectivity with Changes in Aerosol Microenvironment

Allen Haddrell

Transmission Risk Modelling for a Multi-Space Office Environment

H Gallagher, D Miller, ST Parker

[Access a PDF image of the poster: Transmission Risk Modelling for a Multi-Space Office Environment](#)

Use of respiratory tract bacteria to assess aerosol and droplet dispersal: impact of respiratory activity

Patricia Barkoci, Ginny Moore and Allan Bennett

[Access a PDF image of the poster: Use of respiratory tract bacteria to assess aerosol and droplet dispersal: impact of respiratory activity](#)