



WINTER MEETING - ONLINE



**British
Thoracic
Society**

Full Programme

WEDNESDAY 17TH TO FRIDAY 19TH FEBRUARY 2021

Please see our website: brit-thoracic.org.uk

Better lung health **for all**

WELCOME

Dear Colleagues

I am delighted to present to you our programme of named lectures, major symposia, spoken sessions and poster discussions for the BTS Winter Scientific Meeting.

This programme was originally planned for December 2020, and we are delighted that most of the original content and the outstanding line up of speakers have remained as planned. We would like to thank all those speakers who have been able and willing to switch to the February dates.

The necessary social distancing and significant increase in workload caused by the COVID-19 pandemic worldwide has led to the cancellation of many conferences and meetings; locally, nationally and internationally. It is likely that the BTS Winter Meeting will be the first time the UK respiratory, intensive care and thoracic surgery community will be able to come together (virtually) – hopefully once we have emerged from the worst of the second wave of the pandemic, although even now we cannot be sure. The Meeting will reflect this. In addition to the symposia mentioned, we have built in sessions where we can learn from our experiences, explore the emerging science from COVID-19, discuss the most challenging cases and give a voice to the many who have cared for patients with this illness.

We have received abstract submissions from all disciplines and themes, including the basic and translational science which gives the Meeting its cutting-edge flavour, but we also have a new COVID-19 abstract category to give a forum for those with COVID-related evidence to share. We were delighted to receive so many abstract submissions and are looking forward in particular to hearing about all of the great work relating to COVID-19.

I am sure the Meeting will provide something of interest to all health professionals and scientists who are working hard to improve how we care for patients with respiratory disease. Our symposia programme contains some outstanding international speakers who, together with our own national experts, will inform delegates of the very latest advances in the clinical, translational and basic science of lung disease.

The Winter Scientific Meeting remains the highlight of our professional calendar and, although current guidelines mean that this will now be a fully virtual meeting, we have spent significant time ensuring the platform we are offering includes break out rooms and space for virtual catch-ups. This will enable those informal discussions which make the Winter Meeting so special for all of us. There will be ample opportunity to interact with clinicians, allied health professionals and scientific colleagues from within the UK and abroad in our spoken and abstract sessions and break-out spaces, all of which remain vitally important components of the Meeting.

We hope that this special meeting reflects the needs of our members and we look forward to welcoming you to the Winter Meeting in February 2021.

Yours faithfully



Professor Elizabeth Sapay
Chair, BTS Science and Research Committee



FINAL PROGRAMME

The final programme is published as a supplement to *Thorax* and will be sent to all subscribing BTS members in advance of the Winter Meeting. For ease of reference, it will also be available to all participants in advance on the BTS website: www.brit-thoracic.org.uk and on the Winter Meeting online platform.

BTS SCIENCE AND RESEARCH COMMITTEE MEMBERS – THE WINTER MEETING PLANNING COMMITTEE:

Professor Elizabeth Sapey (Chair)	Professor John Hurst	Dr Chris Scotton
Dr Nazia Chaudhuri	Dr Akhilesh Jha	Dr Aashish Vyas
Professor Jane Davies	Dr Neelam Kumar	Dr Thomas Ward
Professor Andres Floto	Dr Philip Molyneaux	
Dr Amanda Goodwin	Dr Nicola Roberts	

CONFERENCE ORGANISATION

The Winter Meeting is organised by the British Thoracic Society. For general conference queries please email: bookings@brit-thoracic.org.uk

FULLY ONLINE CONFERENCE & EXHIBITION

The February 2021 Winter Meeting will be fully online with live streaming of all major symposia, guest lectures and spoken sessions, as well as live interactive Q&A poster sessions.

There will be a virtual exhibition, which all participants are encouraged to visit for the latest information on pharmaceutical products and therapeutic equipment.

CPD Approval

Application pending for CPD approval from the Federation of the Royal Colleges of Physicians of the UK. When approved, we will automatically register all eligible delegates for CPD when they pre-register for the Meeting.

The British Thoracic Society gratefully acknowledges the financial support of the under listed companies at the Winter Meeting. None of them have had any input into the programme content or the planning of the conference. Furthermore, the Society does not allow any sponsored symposia at this event, within the programme or associated in any way with it.

Albyn Medical	Insmed	Pulmonx International
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GSK	Olympus	



#BTSWinter

FULL PROGRAMME

WEDNESDAY 17TH FEBRUARY 2021

7.45am – 8.00am

DAILY PREVIEW

8.00am – 8.30am

BTS JOURNAL CLUB

NEW INSIGHTS INTO CHRONIC COUGH

Professor Jaclyn Smith (Manchester)

Learning objectives:

By the end of the session participants will:

- 1) be able to critically appraise the published studies discussed in this session and will be able to discuss the rationale of the methodological approaches and analysis used;
- 2) develop an appreciation of how the findings from the studies discussed can be applied to clinical practice.

So that delegates may review the papers in advance, the relevant references will be available on the BTS website and Winter Meeting App.

8.30am – 10.00am

SYMPOSIUM

NEUTROPHILIC ASTHMA

Chaired by: Professor Adel Mansur (Birmingham) and Dr Aashish Vyas (Preston)

- 1) Airways microbial dysbiosis in asthma
Dr Jodie Simpson (Newcastle, Australia)
- 2) Beyond T2 asthma: what's left?
Professor Salman Siddiqui (Leicester)
- 3) How can we answer multiple research questions most efficiently in asthma? The challenges and difficulties of platform trials
Professor Louise Brown (London)

Learning objectives:

This symposium will focus on unmet needs in severe asthma research in the advent of monoclonal therapies. Areas covered will include the optimisation of biologic use in clinical care, digital innovation, the role of microbiome modification, targeting airway mucus, targeting the airway smooth muscle and the longer-term ambition of disease modification. The symposium will also explore the premise that the current drug development pathway is costly and unsustainable whilst there are many new therapies emerging that require testing in clinical trials. To improve efficiency and speed up evaluation of drugs, novel trial designs are now being increasingly used to answer multiple research questions within one overarching trial infrastructure and various design features will be presented, including experience of running novel adaptive platform trials in cancer.

8.30am – 10.30am

JOINT BTS/BALR SYMPOSIUM

DRUG RE-PURPOSING AND TARGET REFINEMENT: PART 1

Chaired by: Dr Alison John (Nottingham) and Dr Chris Scotton (Exeter)

- 1) The pharma perspective – what can academia do (and do we need any new drugs)?
Professor Maria Belvisi (London/AstraZeneca)
- 2) Therapeutic potential of statins in pneumonia
Professor Elizabeth Sapey (Birmingham)
- 3) *To be confirmed*

Learning objectives:

- 1) To gain an appreciation of how academic researchers can work with the pharmaceutical industry to progress drug development.
- 2) To receive an update on the evaluation of statin administration for lung disease and infection, with a focus on neutrophil biology.

8.45am – 10.15am

SYMPOSIUM

GENOMICS AND RESPIRATORY MEDICINE: THE 2020 UPDATE

Chaired by: Professor Dame Sue Hill (NHS England) and Professor Claire Shovlin (London)

- 1) Precision-medicine: genomics and respiratory drugs
Professor Sir Munir Pirmohamed (Liverpool)
- 2) Sorting chaff from grain: genomics and the respiratory molecular lab
Dr Deborah Morris-Rosendahl (London)
- 3) Functional genomics and genetics in studying airway disease: an industry perspective
Speaker to be confirmed

Learning objectives:

- 1) To review how genomic variants dictate the efficacy and adverse event profiles of commonly used drugs in respiratory medicine.
- 2) To discuss how complex sequence analyses are harvested and interpreted.
- 3) To obtain an industry perspective on functional genomics in airway disease.

8.45am – 10.15am

SYMPOSIUM

THE WHO, WHY AND HOW OF PULMONARY VASCULAR DISEASE

Chaired by: Dr Robin Condliffe (Sheffield) and Dr Rachel Davies (London)

- 1) Translating insights from signalling and human genetics into therapy for pulmonary arterial hypertension
Professor Paul Yu (Harvard)
- 2) Genetic associations in acute and chronic pulmonary embolism
Dr Mark Toshner (Cambridge)
- 3) Follow-up of patients after acute PE: who and how?
Dr Karen Sheares (Cambridge)

Learning objectives:

- 1) To review how translational and genetic insights are informing new therapeutic strategies for pulmonary hypertension.
- 2) To learn of genetic susceptibility to thromboembolic disease.
- 3) To discuss aftercare following thromboembolic disease.

9.00am – 10.15am

SYMPOSIUM

BTS AUDIT AND QUALITY IMPROVEMENT: MAKING AN IMPACT

Chaired by: Professor Michael Steiner (Leicester)

- 1) Introduction
Professor Michael Steiner (Leicester)

- 2) Community acquired pneumonia: variation in clinical outcomes across the UK
Dr Hannah Lawrence (Nottingham) and Professor Wei Shen Lim (Nottingham)
- 3) BTS ILD Registry: data shared to improve care
Professor Andrew Wilson (Norwich)
- 4) BTS MDRTB Clinical Advice Service: supporting clinicians and patients across the UK
Professor Onn Min Kon (London)
- 5) BTS QI: past, present and future
Professor Michael Steiner (Leicester)

Learning objectives:

Those attending this session will receive an update on work across the Society's key quality improvement activities, with an emphasis on how we can strengthen our impact. The session will outline how our data and outputs can be used to support the delivery of the most appropriate standards of care for respiratory patients.

10.30am – 12.20pm **SYMPOSIUM**
RESPIRATORY MEDICINE'S EXPERIENCE DURING AND AFTER COVID-19

Chaired by: Professor Jon Bennett (Leicester)

- 1) COVID-19: the respiratory lessons learned (the GIRFT survey)
Dr Martin Allen (Stoke on Trent)
- 2) Re-mobilising and what happened next: the BTS post-COVID-19 survey
Dr David Connell (Dundee)
- 3) The evolving response to COVID-19
Dr Susan Hopkins (London)

Learning objectives:

Respiratory healthcare professionals were often at the forefront of COVID-19 care, alongside our colleagues in critical care medicine. In this session we will compare and learn from the experiences of our specialty across the UK and the planning that was required to respond to the first wave of the pandemic.

10.45am – 12.15pm **SYMPOSIUM**
TRANSFORMING THE MANAGEMENT OF TUBERCULOSIS

Chaired by: Dr Rizwan Ahmed (Bolton) and Dr Hazel Morrison (Bristol)

- 1) Diagnostic performance of whole genome sequencing for predicting drug resistance in *Mycobacterium tuberculosis*
Dr Francesc Coll (London)
- 2) New drugs for a pan-TB treatment
Dr David Barros-Aguirre (GSK)
- 3) Vaccination against tuberculosis
Professor Robert Wilkinson (London/Cape Town)

Learning objectives:

- 1) Understand how cutting edge-technology is being applied to clinical practice and the management of TB.
- 2) Gain insight about the new drugs and new approaches to treatment of TB.
- 3) Be updated on new, relevant information regarding immunisation to prevent TB.

11.00am – 12.30pm **SYMPOSIUM**
HOT TOPICS IN OCCUPATIONAL LUNG DISEASE: FROM BENCH TO BEDSIDE AND BEYOND

Chaired by: Dr Chris Barber (Sheffield) and Dr Hayley Mainman (Newcastle upon Tyne)

- 1) The future of diagnostic tests in occupational lung disease – in vitro or in vivo?
Dr Johanna Feary (London)
- 2) Preventing future outbreaks of artificial stone silicosis – the importance of ultrafines and cytokines
Professor Elizabeth Fireman (Tel Aviv)
- 3) Understanding the toxicity of nano-particles – past, present and future risks
Dr Rodger Duffin (Edinburgh)

Learning objectives:

- 1) To review the evidence-base relating to new and emerging diagnostic techniques in allergic occupational lung disease, both in vitro and in vivo, focussing on how basic science might improve diagnostic accuracy and assist in confirming causation.
- 2) To increase awareness of the latest translational research in this new and emerging global health problem – artificial stone silicosis. This research has led to better understanding of the relationship between particle size, cytokine responses and clinical outcomes in artificial stone workers, aiming to prevent this disease in the future.
- 3) To better understand how “bench side” research can be used to predict the potential toxicity of occupational and environmental nanoparticle exposures.

11.00am - 12.35pm
SPOKEN SESSION
New insights in asthma care

11.00am – 1.00pm **JOINT BTS/BALR SYMPOSIUM**
DRUG RE-PURPOSING AND TARGET REFINEMENT: PART 2

Chaired by: Dr Bettina Schock (Belfast) and Dr Karl Staples (Southampton)

- 1) CAR T-cell immunotherapy for malignant pleural mesothelioma
Dr John Maher (London)
- 2) From psoriasis to asthma: patient endotyping highlights the potential of targeting IL-17
Professor Ratko Djukanovic (Southampton)
- 3) Targeting metabolism in IPF using metformin
Professor Victor Thannickal (Alabama)

Learning objectives:

- 1) To discover the latest advances in CAR T-cell development as a precisely-targeted immunotherapy for solid organ tumours, including mesothelioma.
- 2) To discuss the benefits of patient endotyping for a personalised medicine approach in asthma.
- 3) To understand how fundamental research on metabolic processes in IPF led to repurposing of the commonly used diabetes drug, metformin.

1.00pm – 1.45pm **THE BTS CLINICAL LECTURE**
HEALTH DATA SCIENCE: WHAT CAN IT DO FOR PATIENT CARE?

Professor Andrew Morris CBE (Director, Health Data Research UK)

Learning objectives:

There is an increasing appreciation that real world data may enable us to better understand real patient disease and design, test and implement better services for patients. HDR-UK has been established to help unlock the potential of NHS data and in this talk, delegates will gain insights into the potential benefits, challenges and current progress in this journey to learn more using NHS data.

2.00pm - 3.20pm

SPOKEN SESSION

Understanding lung infection: back to basics

2.00pm – 3.30pm **JOINT BTS/BPRS SYMPOSIUM**
PERSISTENT WET COUGH: WHAT'S NEW WITH DIAGNOSTICS?

Chaired by: Professor Jane Lucas (Southampton) and Dr Anirban Maitra (Birmingham)

- 1) ERS Chronic Cough Guidelines
Dr Angela Zacharasiewicz (Vienna)
- 2) Artificial intelligence in PCD diagnosis – all it's cracked up to be?
Dr Claire Hogg (London)
- 3) Sputum induction for lower airway infection: what can we learn from cystic fibrosis?
Dr Julian Forton (Cardiff)

Learning objectives:

- 1) To revise when and how to investigate children with chronic wet cough.
- 2) To gain an appreciation of advances in complex diagnostics, using PCD and imaging techniques as an exemplar.
- 3) To learn from the field of CF, how the microbiology of children with chronic wet cough might best be investigated non-invasively.

2.00pm – 3.30pm **PRIZE SYMPOSIUM**
BTS/BALR/BLF EARLY CAREER INVESTIGATOR AWARDS

This symposium will showcase the very best original research submitted to the Winter Meeting by UK scientists and clinicians in the early part of their research career, as they compete for prestigious prizes from the BTS, BALR and BLF.

2.00pm - 3.35pm

SPOKEN SESSION

The secret life of CPETs

2.15pm – 3.45pm **SYMPOSIUM**
PANDEMICS: FROM FIRST CASE TO FINDING A CURE

Chaired by: Dr David Connell (Dundee) and Dr Anika Singanayagam (London)

- 1) Modelling a pandemic – lessons from COVID-19
Professor Peter Openshaw (London)
- 2) Host-genetic variation and disease severity
Professor Lisa Gralinski (North Carolina)
- 3) The realities of setting up and running clinical trials in midst of outbreaks
Professor Calum Semple (Liverpool)

Learning objectives:

- 1) To understand how we can predict the impact and spread of a pandemic to aid with plans for containment and testing.
- 2) To understand why the impact of the illness can vary between individuals and how we might predict host response.
- 3) To gain insight into how clinical trials can be designed, set up and recruited at pace during outbreaks such as COVID-19.

3.45pm - 5.20pm

SPOKEN SESSION

Predicting and stratifying COVID-19 using real world data

3.45pm - 5.20pm

SPOKEN SESSION

Predicting longer term outcomes in children

3.45pm - 5.20pm

SPOKEN SESSION

What's new in COPD?

3.45pm - 5.20pm

SPOKEN SESSION

A cut above ... update in thoracic surgery

4.00pm - 5.35pm

SPOKEN SESSION

Late breaking abstracts

5.30pm – 6.00pm **SYMPOSIUM**

TWILIGHT HIGHLIGHTS

6.00pm - 7.00pm

POSTER DISCUSSION

Lessons from COVID-19

6.00pm - 7.00pm

POSTER DISCUSSION

Lung cancer: treatment options and care pathways

6.00pm - 7.00pm

POSTER DISCUSSION

COPD: clinical science

6.00pm - 7.00pm

POSTER DISCUSSION

Primary care and paediatric asthma

6.00pm - 7.00pm

POSTER DISCUSSION

Virtually systematic: current interventions and digital delivery in pulmonary rehabilitation

THURSDAY 18TH FEBRUARY 2021

7.45am – 8.00am

DAILY PREVIEW

8.00am – 8.30am

BTS JOURNAL CLUB

THE EVIDENCE FOR AND AGAINST LOW EMISSION ZONES

Dr Ian Mudway (London)

Learning objectives:

By the end of the session participants will be able to critically appraise the published studies discussed in this session and will be able to discuss the rationale of the methodological approaches and analysis used.

So that delegates may review the papers in advance, the relevant references will be available on the BTS website and Winter Meeting App.

8.00am - 9.00am

POSTER DISCUSSION

Service innovation for lung health during COVID-19

8.00am - 9.00am

POSTER DISCUSSION

Emerging evidence on the use of biological agents in severe asthma

8.00am - 9.00am

POSTER DISCUSSION

Chronic suppurative lung disease in adults and children

8.00am - 9.00am

POSTER DISCUSSION

Tools to improve delivery of respiratory care

8.45am - 10.05am

SPOKEN SESSION

Basic science in ILD: what drives progression?

9.00am – 11.00am

SYMPOSIUM

THE DESIGN AND DELIVERY OF CLINICAL TRIALS FOR COVID-19 DURING COVID-19

Chaired by: Dr Nazia Chaudhuri (Manchester)

- 1) RECOVERY
Professor Martin Landray (Oxford)
- 2) STOP-COVID
Professor James Chalmers (Dundee)
- 3) Trials of inhaled interferon-beta
Professor Tom Wilkinson (Southampton)
- 4) The co-ordinated delivery of early phase platform trials
Dr Frances Hall (Cambridge)

Learning objectives:

With no proven treatments for COVID-19 and a devastating mortality rate in hospitalised patients, the clinical and research community of the UK came together with the rapid design of innovative studies, delivered at pace and scale during the first wave. In this session, participants will learn about the process of designing and delivering studies at this time, how targets were chosen, and the initial results for early read outs.

9.15am - 10.35am

SPOKEN SESSION

Respiratory science: state of the art

9.15am - 10.50am

SPOKEN SESSION

Trials and new concepts in pleural disease

9.15am - 10.50am

SPOKEN SESSION

An update in lung cancer patient stratification: from screening to pre-treatment assessments

11.00am – 12.45pm

SYMPOSIUM

PLENARY SCIENTIFIC

Chaired by: Professor Elizabeth Sapey (Birmingham) and Dr Chris Scotton (Exeter)

- 1) Respiratory infections and the microbiota
Professor Debby Bogaert (Edinburgh)
- 2) Mechanisms controlling stem cell behaviour in the lungs
Dr Emma Rawlins (Cambridge)
- 3) Pathology and treatment of cardiovascular and pulmonary vascular diseases
Dr Alex Rothman (Sheffield)
- 4) Interactions between neutrophils, ILC2 function and asthma
Dr Dhiren Patel (London)

Learning objectives:

This cutting-edge science symposium will highlight some of the most exciting respiratory science within the UK. This symposium takes us from stem cells in the lung and how their behaviour influences lung health and disease; intercellular interactions in obstructive airways disease, how the lung microbiota impacts on our susceptibility and presentation of respiratory disease and the latest understanding of the respiratory implications of cardiovascular and pulmonary vascular disease.

11.15am - 12.20pm

SPOKEN SESSION

Challenges in pulmonary embolism

11.15am - 12.50pm **SPOKEN SESSION**
Therapeutic advances in CF: today and tomorrow

11.00am – 1.00pm **SYMPOSIUM**
RAPID RE-ORGANISATION: LEARNINGS FROM THE SERVICE RESPONSE OF COVID-19

Chaired by: Rachael Moses (London) and Professor Alex Richter (Birmingham)

- 1) The intensive care response and learnings during the first wave
Dr Brijesh Patel (London)
- 2) Building capacity: The Nightingale in London
Dr Alastair Proudfoot (London)
- 3) Caring for COVID patients and setting up the Nightingale in London: the AHP view
Rachael Moses (London)
- 4) Staff testing: from design to delivery
Professor Alex Richter (Birmingham)

Learning objectives:

The first wave of the COVID-19 pandemic required a rapid reorganisation of health services in an attempt to avoid the healthcare crises seen in other European countries. New hospitals were built and staffed, intensive care units were expanded and NHS Staff Testing was developed and implemented from scratch. In this session, participants will have the opportunity to learn about these processes from speakers at the frontline of these new services.

1.15pm - 2.00pm
THE BTS PRESIDENT'S ADDRESS
Dr Graham Burns (Newcastle upon Tyne)

2.00pm – 3.30pm **SYMPOSIUM**
ALPHA ONE ANTITRYPSIN DEFICIENCY: A FOOTPRINT FOR COPD RESEARCH

Chaired by: Professor Bibek Gooptu (Leicester) and Professor Alice Turner (Birmingham)

- 1) A pan European perspective: the EARCO Registry
Professor Marc Miravittles (Barcelona)
- 2) Untangling the molecular mechanisms and why they matter
Professor Bibek Gooptu (Leicester)
- 3) The AATD pipeline and opportunities
Professor Alice Turner (Birmingham)

Learning objectives:

- 1) To provide an update on the current scenario from basic science to potential therapies in the pipeline for AATD.
- 2) To draw analogies where applicable of where AATD research can inform wider COPD perspective.
- 3) In doing so, reiterate the importance of testing for AATD in patients with COPD.

2.00pm – 3.30pm **SYMPOSIUM**
HIGHLIGHTS FROM JAMA AND THORAX
Details to be confirmed nearer to the time

2.00pm – 3.30pm **SYMPOSIUM**
ILD IN 2020 – UPDATES FOR THE NEW DECADE

Chaired by: Dr Muhunthan Thillai (Cambridge)

- 1) ILD imaging and AI
Dr Joseph Jacob (London)
- 2) The impact of genetics and the role of genetic testing in clinical practice in ILD
Dr Maria Molina Molina (Barcelona)
- 3) Chronic hypersensitivity pneumonitis
Dr Julie Morisset (Montreal)

Learning objectives:

Following this session delegates will have an understanding of the future directions of both the diagnosis and management of interstitial lung disease. They will understand some of the new radiological advances, genetics and evidence-based strategies that will help clinicians diagnose, manage and treat ILD over the next few years.

2.00pm – 3.30pm **JOINT BTS/BPRS SYMPOSIUM**
BREAKTHROUGH DRUGS: BLINDED BY THE LIGHT OR SEEING THE BIGGER PICTURE?

Chaired by: Dr Iram Haq (Newcastle upon Tyne) and Professor Sejal Saglani (London)

- 1) Measuring the multidomain impacts of triple CFTR modulator therapy in children with cystic fibrosis; the RECOVER study
Professor Paul McNally (Dublin)
- 2) Biologics for severe paediatric asthma: not simply an extrapolation from adults
Dr Theresa Guilbert (Cincinnati)
- 3) Considering broader healthcare impacts of nusinersen in children with SMA
Professor Tracey Willis (Oswestry)

Learning objectives:

- 1) To consider how interventional or observational trials can be designed to capture broader impacts than those required for regulatory approval.
- 2) To be reminded of important differences between paediatric and adult lung diseases, particularly with some of the new advances in asthma therapies.
- 3) To gain an appreciation of the broader impacts of new, often high-cost drugs, on healthcare delivery.

2.15pm – 3.45pm **SYMPOSIUM**
THE CARE NEEDS OF COVID-19 SURVIVORS

Chaired by: Dr Rachael Evans (Leicester)

- 1) Recovery from COVID-19: PHOSP-COVID – initial results and progress
Professor Chris Brightling (Leicester) / Dr Rachael Evans (Leicester)
- 2) Caring for COVID-19 patients with complex ventilatory needs
Miss Debbie Field (London)
- 3) COVID step-down ward
Dr Thomas Jackson (Birmingham)

Learning objectives:

COVID-19 is a new illness with a variable course. In this symposium, participants will learn about the recovery pathways with those with the most complex manifestations of disease, including respiratory and cardiovascular disease, difficulties faced after prolonged ventilation and the nerve palsies and sarcopenia experienced by patients.

3.45pm - 5.05pm

SPOKEN SESSION

Genetics insights to respiratory health

3.45pm – 5.15pm

SYMPOSIUM**DILEMMAS IN RESPIRATORY SLEEP MEDICINE**

Chaired by: Dr Sonya Craig (Liverpool) and Professor Anita Simonds (London)

- 1) Should patients with OSA be treated with wakefulness promoting medications? Evidence from the Pitolisant and Solriamfetol trials
Professor Jean Louis Pepin (Grenoble)
- 2) Are chronotypes important in OSA and respiratory sleep clinics? Does the short sleep gene matter?
Dr Louis Ptacek (San Francisco)
- 3) Key questions in OSA and overlap syndrome
Professor Anita Simonds (London)

Learning objectives:

This symposium, for the multidisciplinary sleep team, will consider new approaches to the diagnosis, treatment and monitoring of patients with sleep disorders. This includes whether genetic traits can protect or increase susceptibility to sleep disorders, the place of therapeutics to increase wakefulness in OSA and the major clinical questions that need to be addressed to improve care in obstructive sleep apnoea hypopnoea syndrome (OSAHS) and overlap syndrome (co-existence of COPD and OSAHS) will also be covered.

3.45pm - 5.20pm

SPOKEN SESSION

Late breaking abstracts

3.45pm – 5.45pm

SYMPOSIUM**PLEURAL DISEASE: CUTTING EDGE DEVELOPMENTS IN SCIENCE AND CLINICAL STUDIES**

Chaired by: Professor Kevin Blyth (Glasgow) and Dr Amelia Clive (Bristol)

- 1) Understanding the origins of mesothelioma: from injury to prediction to target
Professor Kevin Blyth (Glasgow)
- 2) Altering the diagnostic paradigm in pleural disease: the role of confocal laser endomicroscopy
Dr Laurence Crombag (Amsterdam)
- 3) Drug eluting catheters in malignant pleural effusion: lessons from the SWIFT randomised trial
Professor Nick Maskell (Bristol)
- 4) Preventing drains falling out: the BASIC randomised trial
Dr Rachel Mercer (Oxford)

Learning objectives:

- 1) Review potential key steps in the evolution of mesothelioma, techniques for early detection and novel treatment targets that this offers.
- 2) Understand the current and future potential of novel diagnostic techniques allowing real-time assessment of tissues with confocal laser techniques in pleural disease.
- 3) Review the role of drug eluting catheters in malignant effusion, and their place in the treatment armamentarium on the basis of new randomised data.
- 4) Understand the frequency and implications of drain fall out rate on pleural intervention, and measures to prevent this including results of an RCT assessing a novel balloon catheter.

4.20pm - 5.55pm

SPOKEN SESSION

The care needs of those recovering from COVID-19

5.30pm – 6.00pm

SYMPOSIUM**TWILIGHT HIGHLIGHTS**

6.00pm - 7.00pm

POSTER DISCUSSION

Ventilatory strategies in COVID-19

6.00pm - 7.00pm

POSTER DISCUSSION

Monitoring and care delivery for children with respiratory disease

6.00pm - 7.00pm

POSTER DISCUSSION

Diagnostic and management challenges within asthma services

6.00pm - 7.00pm

POSTER DISCUSSION

The nuts and bolts of ILD clinical management

6.00pm - 7.00pm

POSTER DISCUSSION

TB or not TB, is that the question?

FRIDAY 19TH FEBRUARY 2021

7.45am – 8.00am

DAILY PREVIEW

8.00am – 8.30am

BTS JOURNAL CLUB

RESPIRATORY DISEASE IN ATHLETES

Dr James Hull (London)

Learning objectives:

- 1) Participants will be able to critically appraise the published studies discussed in this session, and will be able to discuss the rationale of the methodological approaches and analysis used.
- 2) Participants will develop an appreciation of how the findings from the studies discussed can be applied to clinical practice.

So that delegates may review the papers in advance, the relevant references will be available on the BTS website and Winter Meeting App.

8.00am - 9.00am

POSTER DISCUSSION

The clinical experiences of post-COVID-19 recovery

8.00am - 9.00am

POSTER DISCUSSION

Cough and carbon

8.00am - 9.00am

POSTER DISCUSSION

Pleural disease: what are we doing and could we do better?

8.00am - 9.00am

POSTER DISCUSSION

Time for sleep

8.30am – 10.30am

SYMPOSIUM

AFRICA'S RESPIRATORY 'BIG FIVE'

Chaired by: Professor Refiloe Masekela (Durban) and Professor Kevin Mortimer (Liverpool)

- 1) Pneumonia in the under 5's
Dr Rebecca Nantanda (Makerere, Uganda)
- 2) Post tuberculous lung disease
Dr Jamilah Meghji (Liverpool)
- 3) Ambient air pollution and respiratory disease
Dr Aneesa Vanker (Cape Town)
- 4) Non-communicable respiratory disease (asthma and COPD) across the life-course
Professor Andrew Bush (London)

Learning objectives:

- 1) To give an Africa-flavoured perspective on five of the major respiratory health challenges affecting low- and middle-income country populations.
- 2) To inspire BTS members to get involved with work to address global respiratory health through Global Health Group initiatives.
- 3) To set out priorities for action, research and opportunities to participate in the field of global respiratory health.

9.15am – 10.35am

SPOKEN SESSION

TB: still playing the long game

9.15am - 10.35am

SPOKEN SESSION

Pulmonary arterial hypertension: drugs, sox and cytokines

9.15am – 10.45am

SYMPOSIUM

CRITICAL ILLNESS: WHAT, WHO, WHY AND HOW TO TREAT

Chaired by: Dr Michelle Ramsay (London) and Dr Murali Shyamsundar (Belfast)

- 1) Sepsis: can we predict the right treatment for the right patient?
Dr Manu Shankar-Hari (London)
- 2) Pharmacotherapy for ARDS: the wrong treatment or the wrong disease?
Dr Charlotte Summers (Cambridge)
- 3) Ventilator-associated pneumonia: defining the undefinable?
Professor John Simpson (Newcastle upon Tyne)

Learning objectives:

- 1) An understanding of the pathophysiology of sepsis, the host response, individualised treatment plans and why some treatments will be effective in some patients but not in others.
- 2) An understanding of what therapies have been used to treat ARDS and why the scientific promise of some inflammatory modulating therapies has not been replicated with success in clinical trials.
- 3) The diagnostic challenge of ventilator-associated pneumonia, the results of the recent VAP-rapid trial and the future of diagnostic, monitoring and treatment strategies in VAP.

9.15am – 11.15am

SYMPOSIUM

TICK TOCK GOES THE RESPIRATORY CLOCK

Chaired by: Dr John Blaikley (Manchester) and Dr Julie Gibbs (Manchester)

- 1) What is the respiratory clock?
Professor David Ray (Oxford)
- 2) Rocking the clock in pneumonia
Dr Gareth Kitchen (Manchester)
- 3) Rocking the clock in asthma
Dr Hannah Durrington (Manchester)
- 4) Rhythm and flu: the circadian clock, proteostasis and viral infections
Dr Rachel Edgar (London)

Learning objectives:

- 1) Understand that the lung has a clock which influences its response to inflammation.
- 2) Describe how this clock can influence disease pathophysiology.
- 3) Understand how this clock may alter treatments and vaccination.

10.45am - 11.45am **SYMPOSIUM**
Analysis of respiratory patients' experience of living through COVID-19 from Asthma UK and the British Lung Foundation

10.45am - 12.20pm
SPOKEN SESSION
Lungs at work: occupation and lung health

11.00am - 12.30pm **SYMPOSIUM**
THE FUTURE OF PULMONARY REHABILITATION: ENHANCING THE INTERVENTION AND THE DELIVERY

Chaired by: Dr Claire Nolan (London) and Dr Thomas Ward (Loughborough)

- 1) Muscle response to exercise training in COPD: how can we maximise the benefits?
Professor Michael Steiner (Leicester)
- 2) Ambulatory oxygen in pulmonary rehabilitation: the evidence to support enhancement of benefit
Dr Claire Nolan (London)
- 3) Delivering alternative PR models: next steps for clinical commissioning groups and services
Professor Mike Morgan (Leicester)

Learning objectives:

- 1) Outline how an understanding of the muscle response to exercise training in COPD could be used to improve outcomes of PR.
 - 2) Describe the evidence for oxygen therapy during PR.
 - 3) Determine what Clinical Commissioning Groups and PR services need to do to develop and adapt for the future.
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11.00am - 12.30pm **SYMPOSIUM**
DETECTION, BIOLOGY AND MANAGEMENT OF EARLY LUNG CANCER

Chaired by: Professor Sam Janes (London) and Dr Laura Succony (Cambridge)

- 1) Lung health checks – NELSON at last!
Professor Harry de Koning (Rotterdam)
- 2) Molecular detection of early lung cancer
Dr Philip Crosbie (Manchester)
- 3) Early lung cancer treatment: knives, rays and microwaves
Mr Rammohan Kandadai (Manchester)

Learning objectives:

- 1) To discuss the role of lung cancer screening in at risk members of the population in light of recent evidence.
 - 2) To review new approaches to detecting lung cancer using non-invasive tests.
 - 3) To learn about the latest treatments for lung cancer including more targeted approaches to reduce healthy tissue damage.
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11.40am - 1.00pm
SPOKEN SESSION
Baby and bathwater: not all lung infections are COVID-19

12.00pm - 1.00pm
POSTER DISCUSSION
COVID-19: contact, admission, recruitment and outcome

1.00pm - 1.45pm **THE BTS GRAND CHALLENGE LECTURE**
CLIMATE CHANGE AND MOVES TOWARDS A SUSTAINABLE COMMUNITY

Professor Paul Ekins OBE (London)

Learning objectives:

Climate change has never been more in our thoughts, but what are the challenges we face in order to achieve "net zero"? Professor Ekins is a leading international expert on the conditions and policies required to achieve an environmentally sustainable economy. In this talk, delegates will gain insights into the potential benefits, challenges and current progress on our journey to carbon neutrality.

1.45pm - 3.20pm
SPOKEN SESSION
Living with and caring for respiratory disease during COVID-19

1.45pm - 3.20pm
SPOKEN SESSION
An update in lung cancer: interventions and outcomes

1.45pm - 3.20pm
SPOKEN SESSION
Sleep and ventilation ... masks, need help!

2.00pm - 3.30pm **SYMPOSIUM**
NEW INSIGHTS TO HOW PHYSIOLOGY CAN HELP

Chaired by: Mrs Julie Lloyd (Birmingham) and Dr Karl Sylvester (Cambridge)

- 1) What can exhaled volatile organic compounds tell us about respiratory disease?
Professor Stephen Fowler (Manchester)
- 2) How can capnometry waveform shape analysis help us diagnose and monitor respiratory disease?
Dr John Altrip (Cambridge)
- 3) Can neural respiratory drive help respiratory clinicians treat patients?
Dr Caroline Jolley (London)

Learning objectives:

- 1) To understand the methods for collection and analysis, and the potential sources of exhaled volatile organic compounds in relation to lung health and disease.
 - 2) To understand the measurement and analysis of high resolution tidal breathing carbon dioxide (CO₂) waveform shapes, and how metrics extracted from them are facilitating novel diagnostic and monitoring applications.
 - 3) To describe methods used to quantify neural respiratory drive, including invasive and non-invasive respiratory muscle electromyography.
 - 4) To understand how measurement of neural respiratory drive can be used to assess disease severity and breathlessness in stable and acutely unwell patients.
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2.00pm - 3.35pm
SPOKEN SESSION
Clinical considerations in ILD

3.30pm - 4.30pm

POSTER DISCUSSION

Infection, co-infection and chronic infection

3.30pm - 4.30pm

POSTER DISCUSSION

The lung cancer diagnostic journey

3.30pm - 4.30pm

POSTER DISCUSSION

Respiratory physiology: plans, training and mobility

3.45pm - 5.05pm

SPOKEN SESSION

Prognostic tools to treatments in COVID-19

3.45pm - 5.20pm

SPOKEN SESSION

Disease modulation within severe asthma

4.45pm – 5.15pm

SYMPOSIUM

TWILIGHT HIGHLIGHTS

Whilst every effort is made to provide the publicised programme, this may be subject to change where circumstances are outside our control.

DATES OF FUTURE BTS MEETINGS

Summer Meeting 2021

17th & 18th June, Manchester

Winter Meeting 2021

24th to 26th November, London



#BTSWinter



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