



# ERS

# 20<sup>th</sup> ERS LUNG SCIENCE CONFERENCE

## **Lung Science Conference**

### ***Mucosal immunology of the lung: balancing protective immunity and chronic inflammation***

10-13 March 2022 – Estoril, Portugal

*Scientific programme as of 13.01.2022*

#### **Thursday 10 March 2022**

**LIVE**

#### **Opening Session**

Chair: Reinoud Gosens

**18:00-18:15**

#### **Welcome and Introduction**

Reinoud Gosens, ERS Conferences and Seminars Director

**18:15-19:00**

#### **Opening Lecture**

“Cytokines: Orchestrating immune responses in lung disease” – Anne O’Garra (United Kingdom)

19:00-19:15

Discussion

**19:15-20:30**

**Welcome “cheese and wine” cocktail**

#### **Friday 11 March 2022**

**LIVE**

#### **Session 1:**

#### **Lung Cell atlas in health and disease**

**08:30-08:50**

#### **Healthy atlas of the human airways**

Laure Emmanuel Zaragosi (France)

08:50-09:05

Discussion

**09:05-09:25**

#### **Integrated human lung cell atlas & Launch of the human cell atlas platform**

Malte Lücken (Germany)

09:25-09:40

Discussion

**09:40-09:55**

#### **OP01 – The multi-omics spatial lung atlas reveals new cell states and their functions in airway mesenchyme**

Elo Madissoon (United Kingdom)

**09:55-10:15**

#### **Exploring cell-cell interactions at a newly defined IgA immune niche at the submucosal glands: novel roles for pericytes and duct cells**

Kerstin Meyer (United Kingdom)

10:15-10:30

Discussion

10:30-10:50

*Coffee break*

**LIVE**

#### **Session 2:**

#### **Tissue resident versus recruited immunity (part 1)**

**10:50-11:10**

#### **Role of macrophages plasticity in chronic and infectious lung disease**

Scott Budinger (USA)

11:10-11:25

Discussion

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- 11:25-11:40**      **OP02 – Macrophages acquire a TNF-dependent inflammatory memory in allergic asthma**  
Franziska Hartung (Germany)
- 11:40-12:00**      **Innate and adaptive immune responses to RV**  
René Lutter (Netherlands)
- 12:00-12:15      Discussion
- 12:15-12:30**      **OP03 – G-CSF drives pathophysiology of RV-induced allergic asthma exacerbations by potentiating neutrophilic inflammation and ILC2 function**  
Nicoletta Bruno (United Kingdom)
- 12:30-12:45**      **OP04 – Identification of a host antiviral and anti-inflammatory metabolite that protects against influenza virus-driven morbidity and mortality**  
Adeline Cezard (France)

12:45-14:45      Lunch for all delegates and mentorship lunch discussion for bursary recipients and their mentors



## **Session 2:      Tissue resident versus recruited immunity (part 2)**

- 14:45-15:05**      **Tissue resident T cells in healthy and diseased lung**  
Donna Farber (USA)
- 15:05-15:20      Discussion
- 15:20-15:35**      **OP05 – A high probability of short-range interactions between fibrocytes and CD8+ T cells potentiates the inflammatory response in COPD**  
Edmée Eyraud (France)
- 15:35-15:50**      **OP06 – Gene signature for patient stratification: Lessons learned from IL-33 stimulated TH2 genes**  
Akshaya Keerthi Saikumar Jayalatha (Netherlands)

*From 15:50 coffee will be served in the poster area*

## **16:00-18:00      Poster Session 1**

### Group A

- TP101 – Longitudinal impact of conjugated pneumococcal vaccine (PCV13) on cytokine profile in different asthma phenotypes.** - Kostinov Anton, Russian Fed.
- TP102 – A helminth glutamate dehydrogenase targets eicosanoid pathways to modulate type-2 immunity** - Sina Bohnacker, Germany
- TP103 – Characterization of neutrophilic responses in a pollutant-aggravated asthma mouse model** - Joyceline De Volder, Belgium
- TP104 – Post-COVID: The multimodal path to the right treatment strategy** - Daniel Gagiannis, Germany

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**TP105 – Pulmonary In Vitro Perfusion (PIPE) Model to Study Cellular Crosstalk in Neonatal Pulmonary Vascular Disease** - Motaharehsadat Heydarian, Germany

**TP106 – Distinct metabolic reprogramming of airway epithelium in asthma in response to infection with rhinovirus** - Mengting Huang, Switzerland

**TP107 – Innate immunity plays an important role during NTHI and RV sequential infection.** - Yuqing Long, United Kingdom

**TP108 – Antibiotic-induced microbial disruption drives metabolic rewiring in pulmonary macrophages and a dysregulated type 2 response in the lung** - Elizabeth Mann, United Kingdom

**TP109 – Monocyte migratory signatures identify acute and convalescent COVID-19 patients, and are associated with long COVID-19 symptoms** - Laurence Pearmain, United Kingdom

**TP110 – Phenotype and severity of asthma determines bronchial epithelial immune responses to a viral mimic** - Celeste Michala Porsbjerg, Denmark

**TP111 – Polymeric immunoglobulin receptor and immunoglobulin A system in an eosinophilic mouse model of chronic rhinosinusitis** - Alba Sánchez Montalvo, Belgium

## [Group B](#)

**TP112 – The respiratory epithelium expresses ACE2 isoforms differentially in response to interferons: Implications for IFN- $\beta$  as COVID-19 therapy** - Cornelia Blume, United Kingdom

**TP113 – Specialized pro-resolving mediators' biosynthesis by cystic fibrosis airway epithelial cells and their impact on mucociliary clearance** - Maelle Briottet, France

**TP114 – Spatial ECM proteomics resolves instructive tissue niches in the distal human lung** - Yuexin Chen, Germany

**TP115 – Insulin-like Growth Factor 1 Receptor facilitates NSCLC tumor growth acting in the tumor microenvironment** - José Manuel García Pichel, Spain

**TP116 – Lineage tracing of cells expressing the mesenchymal profibrotic transcription factor Prrx1 in the normal and fibrotic lung** - Méline Homps-Legrand, France

**TP117 – scRNA sequencing on human airway epithelium reveals transcriptional changes during healthy aging** - Pavan Prabhala, Sweden

**TP118 – Exploring IL13 effects on the remodeling of airway epithelial cell populations by single-cell RNA sequencing** - Elisa Redman, France

**TP119 – The chitinase-like protein Ym2 is an amplifier of innate type 2 responses** - Ursula Smole, Belgium

**TP120 – Local airway expression of Inc-SERPINA12-1 in children with Cystic Fibrosis** - Zuzanna Stachowiak, Poland

**TP121 – High-dimensional characterisation of the airway wall of paediatric patients with asthma and pre-school wheeze using Imaging Mass Cytometry** - William Traves, United Kingdom

**TP122 – Exploring the role of infection experienced lung stromal cells following re-challenge with influenza A virus** - Julie Worrell, United Kingdom



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## Group C

**TP123 – Lung Cancer-Associated Fibroblasts in MHCII immunity: Understanding its Molecular Basis to Design Novel Immunotherapies** - Ilias Angelidis, Greece

**TP124 – The activity, function and exploitability of tumour-reactive CD8+T-cells in malignant pleural effusion.** - Delaney Dominey-Foy, United Kingdom

**TP125 – Mapping the Immune Response Diversity after Murine Lung Transplantation** - Janne Kaes, Belgium

**TP126 – Differential expression of PD-1/PD-L1 axis in mediastinal lymph nodes of experimental and human lung fibrosis** - Theodoros Karampitsakos, Greece

**TP127 – Mitochondrial iron regulates AEC2 dysfunction, senescence and senescent associated secretory phenotype in response to bleomycin challenge.** - Sarah Kenny, Ireland

**TP128 – Broncho-vascular mesenchymal stromal cells guided spatiotemporal establishment of antibody secreting cell pro-survival niches in the lung** - Vibha N. Lama, USA

**TP129 – Pulmonary macrophage subsets associated with lung allograft dysfunction revealed by single-cell RNA sequencing** - Sajad Moshkelgosha, Canada

**TP130 – Hyaluronan (HA) accumulation following SARS-CoV-2 infection and in non-resolvable COVID-19 fibrosis** - Andrew Peters, USA

**TP131 – Biosynthesis and implementation of Thyroid Receptor beta (TR $\beta$ ) agonists (thyromimetics) for the treatment of pulmonary fibrosis** - Argyris Tzouvelekis, Greece

**TP132 – Myeloid cells immunomodulate tissue niches and promotes idiopathic pulmonary fibrosis** - Valeria Viteri-Alvarez, Germany

**TP133 – Patient derived malignant pleural effusion cell cultures as a platform to understand pleural malignancies and advance personalised treatment** - Yu Zhao, United Kingdom

## Group D

**TP134 – Circular RNA expression in cystic fibrosis bronchial epithelium** - Chiara De Santi, Ireland

**TP135 – Extracellular vesicles produced by airway epithelial cells from COPD patients contain miRNAs involved in cellular senescence** - Justine Devulder, United Kingdom

**TP136 – Effects of blocking TSLP on ILC and T cell subpopulations in patients with asthma** - Nanna Dyhre-Petersen, Denmark

**TP137 – Construction of a 3D innervated bronchial epithelium from human induced pluripotent stem cells iPSC** - Florent Foisset, France

**TP138 – Alveolar macrophages from people with severe eosinophilic asthma show differential antiviral responses to human rhinovirus 16 and SARS-CoV-2.** - Andrew Hearn, United Kingdom

**TP139 – Regulation of MHC I expression in lung epithelial cells during inflammation.** - Justine Mathé, Canada

**TP140 – Effect of eosinophilopoetins on proliferative properties of blood eosinophil subtypes in allergic asthma** - Jolita Palacionyte, Lithuania



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**TP141 – Kynurenine pathway as a modulator of inflammation in COPD and its exacerbations.** - Odile Poulain-Godefroy, France

**TP142 – Activation of epithelial RIG-I inflammasome leads to sustained antiviral response and modification of SARS-CoV-2 infection in asthma** - Urszula Radzikowska, Switzerland

**TP143 – Inhibiting RIPK1 kinase activity is protective in experimental models of COPD** - Hannelore P. Van Eeckhoutte, Belgium

**TP144 – Cigarette smoke modulates cellular responses of differentiated human bronchial epithelial cells to rhinovirus-A16 infection** - Ying Wang, Netherlands

From 19:30 Dinner for all delegates

## Saturday 12 March 2022



### Session 3: Trained immunity

**08:45-09:05** **Inducible bronchus associated lymphoid tissue drives immunity in COPD**

Önder Yildirim (Germany)

09:05-09:20

Discussion

**09:20-09:35** **OP07 – Inflammatory blood neutrophils in COPD stem from activated bone marrow progenitors**

Theodore Kapellos (Germany)

**09:35-09:55** **Trained immunity and allergy: State of the art and future perspectives**

Uta Jappe (Germany)

09:55-10:10

Discussion

**10:10-10:25** **OP08 – COPD Monocyte-derived macrophages display hallmarks of senescence**

Shyreen Hassibi (United Kingdom)

10:25-10:55

*Group Picture and Coffee Break*



### 10:55-12:10 **Young Investigator Session – The William MacNee Award**

**10:55-11:10** **YI01 – Human CD116+ fetal liver progenitors migrate to the perinatal lung and give rise to alveolar macrophages in vivo**

Elza Evren (Sweden)

**11:10-11:25** **YI02 – The potential role of innate lymphoid cells in non-allergic neutrophilic asthma model**

Anne-Charlotte Jonckheere (Belgium)

**11:25-11:40** **YI03 – A novel IgA plasma cell niche in the human airways**

Amanda Oliver (United Kingdom)

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**11:40-11:55**      **Y104 – d Influenza infection of epithelial cells alters extracellular vesicle microRNA involved in viral replication and the immune response**

Laura Reid (United Kingdom)

**11:55-12:10**      **Y105 – Resolving aging-related cellular phenotypes in pulmonary fibrosis by longitudinal single-cell transcriptomics**

Janine Schniering (Germany)

**12:15-13:30**      **Lunch**

**13:30-15:30**      **Poster Session 2**

## Group E

**TP201 – Sphingosine-1-phosphate drives sex-dimorphism in lung function** - Ida Cerqua, Italy

**TP202 – Targeting CXCR4 as a therapeutic strategy to improve outcomes in a mouse model of early chronic obstructive pulmonary disease (COPD)** - Isabelle Dupin, France

**TP203 – Reactivation of latent virus infection links air pollutants to chronic lung disease** - Verena Haefner, Germany

**TP204 – No differences in cytokine responses to moderate-intensity exercise in -10°C versus 10°C.** - Helen Hanstock, Sweden

**TP205 – Different Effects of Inhaled Corticosteroids on Infiltrating Mast Cells in Type 2 High and Type 2 Low Asthma** - Morten Hvidtfeldt, Denmark

**TP206 – Real time in vivo investigation of the innate immune response during ventilator-assisted nanoparticle inhalation** - Qiongliang Liu, Germany

**TP207 – Elevated ferritin is associated with systemic inflammation, inflammasome activation and mortality in Acute Respiratory Distress Syndrome (ARDS)** - Puja Mehta, United Kingdom

**TP208 – Effects of probiotics in uncontrolled asthma** - Catherine Moermans, Belgium

**TP209 – Budesonide reduces the bronchial epithelial response to a viral mimic in T2high asthma, and boosts anti-microbial responses in T2low asthma** - Juan-José Nieto-Fontarigo, Sweden

**TP210 – Differential toxicity in an alveolar epithelial cell line of fine particulate matter from brakewear, roadwear, and diesel exhaust** - James Parkin, United Kingdom

**TP211 – Inhaled continuous exposure to farmyard microbes suppress type 2 inflammation in a neonatal murine model of viral-induced wheeze and asthma** - Kunyuan Tian, United Kingdom

## Group F

**TP212 – Allergen exposure induces airway macrophage metabolic reprogramming** - Gesa J Albers, United Kingdom

**TP213 – Mast cell tryptase contribute to airway remodelling by inducing pro-survival and cell growth properties in lung epithelial cells** - Frida Berlin, Sweden



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**TP214 – The memory of airway epithelium damage in smokers and COPD patients -**  
François Carlier, Belgium

**TP215 – Human lung microbiota drives differential innate immune response -**  
Sudip Das, Switzerland

**TP216 – Expression of miR-185-5p, miR-146b-5p, miR-320b, miR-21-5p in Blood Eosinophil Subtypes and Plasma in Allergic Asthma Patients -**  
Egle Jurkeviciute, Lithuania

**TP217 – The role of IGF2BP3 in Type 2 signalling in bronchial epithelium: a novel player in severe asthma -**  
Paniz Khooshemehri, United Kingdom

**TP218 – IL-13 modulates exosome production and miRNAs cargo in bronchial epithelial cells in severe asthma -**  
Martin Klein, Canada

**TP219 – Function-specific IL17A and Dexamethasone interactions in primary human airway epithelial cells -**  
Siti Farah Rahmawati, Netherlands

**TP220 – Impact of treatments targeting the GM-CSF pathway on the functions of human pulmonary macrophages -**  
Hélène Salvator, France

**TP221 – Generation of apical-out airway organoids from human primary airway epithelial cells -**  
Georgios Stroulios, United Kingdom

**TP222 – Intracellular Sphingosine-1-Phosphate is involved in lung cancer cells proliferation -**  
Michela Terlizzi, Italy

## [Group G](#)

**TP223 – NTHi-IAV coinfection of macrophages alters infection outcomes and inflammatory responses -**  
Jodie Ackland, United Kingdom

**TP224 – Pseudomonas aeruginosa modulates mucosal immune response to rhinovirus infection in an in-vitro chronic infection model -**  
Adrian Endres, Germany

**TP225 – Chronic Bacterial Airways Infection in Severe Asthma -**  
Maisha Jabeen, United Kingdom

**TP226 – The Cathelicidin LL-37 and microbial dysbiosis in COPD patients receiving inhaled corticosteroids -**  
Holly Rachael Keir, United Kingdom

**TP227 – Ex vivo modelling of human lung fibrogenesis and drug mode of action screens using single-cell RNA-seq in precision-cut lung slices -**  
Niklas Lang, Germany

**TP228 – G-protein coupled receptor 87 is a novel basal cell marker in distal IPF bronchioles -**  
Mareike Lehmann, Germany

**TP229 – Profiling systemic inflammation and neutrophil function in hospitalized patients with COVID19: results from PREDICT-COVID19 -**  
Merete Long, United Kingdom

**TP230 – The microbiota plays a critical role in the reactivity of lung immune components to innate ligands -**  
Quentin Marquant, France

**TP231 – Modulation of antiviral responses to rhinovirus by the nonsense mediated decay pathway and implications in rhinovirus-induced exacerbations -**  
Rocio Teresa Martinez-Nunez, United Kingdom

**TP232 – Extracellular vesicles and soluble factors secreted by lung fibroblasts support alveolar organoid formation -**  
Luke Van Der Koog, Netherlands

**TP233 – Single cell transcriptomic dissection of virus induced immunopathology in interferon gamma receptor null mice -**  
Lin Yang, Germany



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## Group H

**TP234 – In Vitro Simulation of Aerobic Exercise Effects in Eosinophils in Severe Asthma: Involvement of Kinins** - Maysa A. R. Brandao-Rangel, Brazil

**TP235 – Lung surfactant lipids reduce the alternative activation and proliferation of alveolar macrophages induced by IL-4** - Cristina Casals, Spain

**TP236 – Monocyte migration and COPD pathogenesis are epigenetically regulated by PRMT7** - Aicha Jeridi, Germany

**TP237 – High-resolution transcriptomic and epigenetic profiling across disease stages identifies novel regulators of COPD phenotypes.** - Renata Jurkowska, United Kingdom

**TP238 – Biomarker identification to assess effects of bone-marrow derived mesenchymal stromal cell-therapy in emphysema through immune profiling** - Padmini P. S. J. Khedoe, Netherlands

**TP239 – An ex vivo model of cellular senescence and inflammaging in precision-cut lung slices** – Maria Camila Melo Narvaez, Germany

**TP240 – Support of human alveolar organoid growth by pulmonary endothelial cells: possible influence of cigarette smoke exposure** - Abilash Ravi, Netherlands

**TP241 – Overzealous degradation of collagen fragment Pro-Gly-Pro by leukotriene A4 hydrolase (LTA4H) perpetuates fibrosis in IPF** - Kornelija Suveizdyte, United Kingdom

**TP242 – Mitochondrial DNA stress in lung parenchymal cells activates autoreactive CD8+ T cells - implications for pulmonary fibrosis** - Xinyuan Wang, China

**TP243 – A transcriptomic and phenotypic study of the anti-fibrotic effects of Prostaglandin E2 in IPF lung fibroblasts and macrophages** - Kristin Wiquist, Sweden

**TP244 – Cigarette smoke and air pollution induce dysfunctional pulmonary microvascular endothelial repair** - Xinhui Wu, Netherlands

From 15:00 coffee will be served in the poster area



<b>17:00-19:30</b>	<b>Early-Career delegates session – Tools for career development</b>
<b>17:00-17:10</b>	<b>Introduction</b> Niki Ubags (Switzerland)
<b>17:10-17:30</b>	<b>Effective teaching and mentoring: where to start?</b> Agnes Boots (Netherlands)
<b>17:30-17:40</b>	<b>How to collaborate successfully (industry vs academic perspective) – part 1</b> Alexander Mackay (Sweden)
<b>17:40-17:50</b>	<b>How to collaborate successfully (industry vs academic perspective) – part 2</b> Rachel Chambers (United Kingdom)
<b>17:50-18:10</b>	<b>Transferable skills: you are more than ‘just’ a scientist!</b> Verity Elston (Switzerland)

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**18:10-18:30**      **Setting the scientific playfield outside academia: a career in scientific editing**  
Timothy Powell (United Kingdom)

**18:30-19:30**      **Panel discussion and networking event**

**19:30-20:00**      **Evening Pre-dinner talk**  
"Beyond Covid-19" – Petter Brodin (Sweden)

From 20:00 Gala Dinner and Award Ceremony

## Sunday 13 March 2022

**LIVE**

**Session 4:**      **The mucosal immunity in the lung and infections**

**08:45-09:05**      **Virus provided protection against allergic asthma**  
Laurent Gillet (Belgium)

09:05-09:20      Discussion

**09:20-09:40**      **How cells protect themselves against aberrant immune responses**  
Hermelijn Smits (Netherlands)

09:40-09:55      Discussion

09:55-10:15      *Coffee break*

**LIVE**

**Session 5:**      **Cytokine targeted therapies / personalized medicine in the context of (chronic) respiratory diseases**

**10:15-10:35**      **Cytokines targeted therapies in asthma versus COPD**  
Guy Brusselle (Belgium)

10:35-10:50      Discussion

**10:50-11:10**      **Precision medicine: New biomarkers and targets beyond T2 inflammation**

Chris Brightling (United Kingdom)

11:10-11:25      Discussion

**11:25-11:45**      **Role of lung microbiome in airway diseases**

James Chalmers (United Kingdom)

11:45-12:00      Discussion

12:00-12:15      Conclusion by Reinoud Gosens, ERS Conferences and Seminars Director

12:15      *Lunch and departure*

**Access LSC resources on the virtual platform from Monday 28 February**

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## Exclusively online - ePosters:

eP301 - In Vitro Simulation of Aerobic Exercise Effects in Neutrophils in Severe Asthma: Involvement of Kinins - Maysa A. R. Brandao-Rangel, Brazil

eP302 - Aerobic exercise modulates the phenotype of severe asthma: the role of Kinins - Maysa A. R. Brandao-Rangel, Brazil

eP303 - The level of sIgA in nasal secretions and the incidence of complications in hospitalized patients with COVID-19 against an immunotropic drug - N. D. Abramova, Russian Fed.

eP304 - CT scan imaging in acute infectious infiltrative lung disease before the covid-19 era - Meriem Affes, Tunisia

eP305 - Efficacy of vitamin D on chronic obstructive lung disease (COPD): a systematic review - Syed Morsalin Ahmed, United Kingdom

eP306 - The biological activity of interferons in post-COVID syndrome - Lidia Arifullina, Russian Fed.

eP307 - Mitochondrial alterations in T cells after invivo and invitro smoke exposure - Vidya Srokhna Balasubramanian Lakshmi, Germany

eP308 - Serum Levels of Surfactant Protein-B (SP-B) as biomarker in IPF and ILD-SSc - Gabriele Bartoli, Italy

eP309 - Single-cell analysis reveals airway epithelial cell-specific expression quantitative trait loci in asthma - Marijn Berg, Netherlands

eP310 - NK and T cell in patients with end-stage lung disorders waiting for lung transplantation in response to CMV infection. - Laura Bergantini, Italy

eP311 - Protective effect of interferon type I on barrier function of human airway epithelium during rhinovirus infections in vitro - Helena Boland, Germany

eP312 - Receptor-binding domain of SARS-CoV-2 facilitates internalization of 100 nm particles by neutrophils in conducting airway mucosa of mice. - Elena Bolkhovitina, Russian Fed.

eP313 - Maladapted epithelial response in the post-influenza lung as a potential driver for enhanced susceptibility to bacterial superinfection - Dunja Bruder, Germany

eP314 - Therapeutic potential of mesenchymal stem cells in the restoration of local immune homeostasis for transitional phase pneumonia-induced sepsis - Declan Byrnes, Ireland

eP315 - Eosinophilic exacerbations of chronic obstructive pulmonary disease (COPD) have elevated reactive oxygen species (ROS) release - James Camp, United Kingdom

eP316 - The metabolite succinate inhibits influenza virus replication through succinylation and nuclear retention of the viral nucleoprotein - Adeline Cezard, France

eP317 - The glycosylated extracellular domain of MUC1 protects against SARS-CoV-2 infection at the respiratory surface - Maitrayee Chatterjee, Netherlands

eP318 - Ionic Calcium in Blood as Early Marker of Severity in Patients with COVID-19 - Jorge Nelson Chung Ching, Peru

eP319 - AIM2 inflammasome could be at the crosstalk between COPD and lung cancer - Chiara Colarusso, Italy

eP320 - Novel nasal virosome spray vaccine to protect against COVID-19 - Tiziana Patrizia Cremona, Switzerland

eP321 - Impact of cigarette smoke on caspases activation and gasdermin D cleavage in human macrophages - Marta Cristaldi, Italy

eP322 - Effect of Bromhexine among COVID-19 Patients - A Meta-Analysis - Anna rossa magda Cuerdo, Philippines

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- eP323 - Effect of Hyperbaric Oxygen Therapy among COVID-19 patients: A Meta-Analysis - Anna rossa magda Cuerdo, Philippines
- eP324 - Immune-Checkpoint expression on CD4, CD8 and NK cells in blood, BAL and lymph nodes of sarcoidosis - Miriana D'Alessandro, Italy
- eP325 - Source-related composition and toxicological effects of shipping-associated particulate matter - Lareb Dean, United Kingdom
- eP326 - Diesel exposure favors lung cancer progression through induction of an inflammatory microenvironment. - Marie-Laure Delhez, Belgium
- eP327 - Correlations between volumetric capnography and automated computed tomography quantitative analysis in patients with severe COPD - Odair Diniz, Brazil
- eP328 - Cigarette smoke extract promotes caspase-1 activation and IL-18 release in primary human bronchial epithelial cells. - PAOLA DINO, Italy
- eP329 - The impact of virus infection on the development of Bronchopulmonary Dysplasia (BPD) - Anna Dmitrieva, Germany
- eP330 - A Bioinspired Mini-Lung Model as A Pharmacokinetic Platform - Ali Doryab, Germany
- eP331 - Chronic unpredictable stress exacerbates allergic airway inflammation in mice. - Guilherme Dragunas, Netherlands
- eP332 - Cigarette smoke alters macrophage mitochondrial iron handling in COPD - Lynne Faherty, Ireland
- eP333 - Physiomimetic culture of mesenchymal stromal cells affects macrophage activity in a paracrine manner. - Bryan Falcones, Sweden
- eP334 - Features of submicroscopic structure of respiratory part of lungs in early stages of development of streptozotocin-induced diabetes mellitus - Yuliya Fedorchenko, Ukraine
- eP335 - Bronchiectasis in severe asthma is associated with eosinophilic airway inflammation and activation - Laurits Frøssing, Denmark
- eP336 - Using lung organoids to recapitulate HRas/NRas-double knockout alveolar maturation defects in mice - Rocío Fuentes-Mateos, Spain
- eP337 - A study to evaluate nasal mucosal IgA development in neonates using a non-invasive sampling method - Genevieve Po Gee Fung, Hong Kong
- eP338 - Decreased expression of S100A7/A8/A9 in severe asthmatics following bronchial thermoplasty. - Pierre-Alexandre Gagnon, Canada
- eP339 - Cooperation between fatty acid binding protein 5 and peroxisome proliferator-activated receptor ? in regulating macrophage programming - Fabienne Gally, USA
- eP340 - Understanding the cellular immune response in silicosis by exposing human lymphocytes to silica nanoparticles - Nirosha Ganesan, Belgium
- eP341 - Synergistic action of apoptotic cells and surfactant protein A in boosting IL-4-dependent alternative activation of alveolar macrophages. - Belen Garcia-Fojeda, Spain
- eP342 - Transcriptional response to RSV in asthma primary bronchial epithelial cells: are the basal cells responsible for the reduced NF-kB response? - Aurore Gay, Netherlands
- eP343 - Lung volume and density assessment over time in hospitalized COVID-19 patients - Vincent Geudens, Belgium
- eP344 - Involvement of FGF21 in pulmonary fibrosis - Mada Ghanem, France
- eP345 - Prenatal exposure to ozone triggers development of lung diseases in offspring - Alison Gillard, Belgium

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eP346 - Exploring the anti-inflammatory effect of commensal lung microbiota members in a 3-D lung epithelial cell model - Ellen Goeteyn, Belgium

eP347 - Clinically relevant levels of hyperoxia lead to cell cycle arrest and long-term changes in DNA repair in the developing lung - Erika Gonzalez, Germany

eP348 - Human mast cell differentiation optimization to study MRGPRX2-induced activation in vitro - Janne Goossens, Belgium

eP349 - Human plasma-derived IgG protects against respiratory pathogens in an epithelial air-liquid interface model - Stefanie Graeter, Switzerland

eP350 - Diesel exhaust particles and TNF-alpha or LPS induce pro-inflammatory pathways, including TSLP expression, in bronchial epithelial cells - Fien Gysens, Belgium

eP351 - End stage lung disease is characterized by a pro-inflammatory imbalance in the innate lymphoid cell compartment. - Olga Halle, Germany

eP352 - Environmental Nanoparticle Exposure Triggers Herpesvirus Reactivation via MAPK Signaling Pathway - Lianyong Han, Germany

eP353 - Average Volume Assured Pressure Support Auto-titrating EPAP(AVAPS-AE) mode in Lung Cancer Patients with Respiratory Failure - BoXue Han, China

eP354 - Nasal mucosal lining fluid (MLF) biomarkers for monitoring acute and chronic respiratory disease - Sarah Harbach, United Kingdom

eP355 - The effect of interferon-alpha-2b therapy on humoral immunity after COVID-19 infection - Albina Hasanova, Russian Fed.

eP356 - Systematic review and meta-analysis of interstitial lung disease transcriptomics - Daniel He, Canada

eP357 - COVID-19 and smoking: Worse outcome from a surveillance analysis - Gholamreza Heydari, Iran

eP358 - A novel non-invasive approach to quantify microRNA expression in nasal fluid from COPD patients using a microfluidic platform - Vanessa Ho, United Kingdom

eP359 - Relations between blood and tissue microbiome in sarcoidosis patients - Yordan Hodzhev, Bulgaria

eP360 - Novel alveolar macrophage-like model (ImmuPHAGE) as a platform for better mechanistic understanding for the fate of inhaled medicines. - Ewelina Hoffman, United Kingdom

eP361 - Blockade of K-ras signalling prevents fibrosis formation in the lung by attenuating the coagulatory phenotype of macrophages. - Philipp Hohensinner, Austria

eP362 - Community-based asthma assessment in young children: Adaptations for a multicentre longitudinal study in South Asia - Mohammad Shahidul Islam, Bangladesh

eP363 - Interleukin-10 expressing regulatory B cells are decreased in blood of smokers and COPD patients - Merel Jacobs, Belgium

eP364 - Ferroptosis, induced by macrophages drives COPD pathogenesis - Aicha Jeridi, Germany

eP365 - Epigenetic modulation of TLR-driven inflammatory responses in airway epithelial cells - Akhilesh Jha, United Kingdom

eP366 - Exosomes from EGFR-mutated adenocarcinoma induce a partial/hybrid EMT - Amina JOUIDA, Ireland

eP367 - The bacteriology of pleural infection using next generation sequencing: The Oxford Pleural Infection Metagenomics Studies (TORPIDS) - Nikolaos I. Kanellakis, United Kingdom

eP368 - Multi-omics analysis reveals the NAD<sup>+</sup> salvage pathway as defense mechanism against Streptococcus pneumoniae infection - Björn Klabunde, Germany

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eP369 - DNA-viruses modulates changes in B cells phenotype and auto-Abs in asthma. - Anna Konishcheva, Russian Fed.

eP370 - Eosinophil-associated gene signature expression in U-BIOPRED severe asthma - Janice Koranteng, United Kingdom

eP371 - Background of the use of lyophilized dialysate leukocytes (DLL) in ASIT in patients with seasonal allergic rhinitis - Ieliena Koretskaia, Ukraine

eP372 - IL11 negatively impacts adult lung alveolar organoid formation - Rosa K. Kortekaas, Netherlands

eP373 - Assessment of mucosal and systemic phagocytosis in Health Care Professionals (HCPs) in the post COVID-19 period - Nadezda Kryukova, Russian Fed.

eP374 - Radiation modulates bronchial epithelial progenitor activity as assessed in organoid formation assays - Merian Kuipers, Netherlands

eP375 - Inhibition of histone deacetylase activity reduces pulmonary vascular remodeling and inflammation in experimental pulmonary hypertension - Konda Babu Kurakula, Netherlands

eP376 - Epithelial and neutrophil responses to microbes in cystic fibrosis airways - Daniel Laucirica, Australia

eP377 - Characteristics of DNA repair capacity of peripheral blood lymphocytes from asthmatic patients with different phenotypes and severity - Andrey Evgenievich Lintsov, Russian Fed.

eP378 - Cytogenetic Alterations In Cells from Allergic and Non-Allergic Asthmatic Patients - Andrey Evgenievich Lintsov, Russian Fed.

eP379 - Phenotype and function of innate lymphoid cells in a murine model of impaired muco-ciliary clearance challenged with allergen - khatuna Lobjanidze, Germany

eP380 - Unravelling the role of miR-223 in the regulation of pollutant-aggravated allergic airway inflammation - Tania Maes, Belgium

eP381 - Respiratory and systemic effect of diet and exercise in obese mice - Fopke Marain, Belgium

eP382 - The RNA binding proteins ZFP36L1 and ZFP36L2 exert genome-wide effects on airways epithelium and glucocorticoid responses - Rocio Teresa Martinez-Nunez, United Kingdom

eP383 - Production and delivery of a recombinant modified superoxide dismutase protein to a rodent ARDS model by vibrating mesh nebulisation - Sean McCarthy, Ireland

eP384 - Validation of CXCL10 as a biomarker of respiratory tract infections detectable by lateral flow immunoassay - Dayna Mikkelsen, Canada

eP385 - High-sensitivity TSLP assay demonstrates a role of TSLP in eosinophilic and non-eosinophilic asthma. - Louise Munkholm Andreasson, Denmark

eP386 - Meta-analysis on novel biomarker use in lung cancer screening - Sahraoui Nassima,

eP387 - Favipiravir induced rhabdomyolysis in patient with severe COVID-19 pneumonia - Nurgul Naurzvai, Turkey

eP388 - IL-10 induced by alum-adjuvanted acellular pertussis vaccine reduces its capacity to induce protective respiratory tissue-resident CD4 T cells - Caitlín Ní Chasaide, Ireland

eP389 - Persistent COVID-19 symptoms and quality of life among the Dutch pediatric population - Lieke Noij, Netherlands

eP390 - Altered eicosanoid profile in association with nasal polyp severity in patients with chronic rhinosinusitis - Axel Nordström, Sweden

eP391 - Airway hyperreactivity and type of acetylation as the predictors of eosinophilic asthma in school-age children - Yevheniya Ortemenka, Ukraine



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- eP392 - Influence of the long-term usage of inhaled corticosteroids on development of obesity and growth retardation in children with bronchial asthma - Yevehniya Ortemenka, Ukraine
- eP393 - A human ex vivo model to study the innate immune response to NTHi in the lung - Lee Page, United Kingdom
- eP394 - Alteration of lung defense mechanisms after exposure to urban coarse PM leads to infection by *Streptococcus pneumoniae* - Muriel Pichavant,
- eP395 - Allergic risk factors for severe asthma among preschool children: a descriptive-analytical study from rural Sri Lanka - Shashanka Indeevara Rajapakse Rajapakse Mudiyansele, Sri Lanka
- eP396 - Comparing epithelial alarmin responses to different aeroallergens in bronchial epithelial cells from allergic asthma patients - Sangeetha Ramu, Sweden
- eP397 - Development of novel alveolar and bronchial microphysiological systems for use in disease research and drug development. - Emily Richardson, United Kingdom
- eP398 - Tissue resident memory T cells are increased in the lungs of COPD patients - Bradley Richmond, USA
- eP399 - Club cells are the primary source of pIgR in small airways - Bradley Richmond, USA
- eP400 - Seroprevalence of SARS-CoV-2 immunoglobulins in a community-based population in Tizi-Ouzou, Algeria. - Salim Sadi, Algeria
- eP401 - Pharmacologic masking of the glycocalyx reduces binding of SARS-CoV-2 spike protein - Manuel Salzmann, Austria
- eP402 - Farm dust exposure decreases expression of IL-33 in primary bronchial epithelial cells in part by inhibiting STAT1 phosphorylation - Jasmijn A. Schrupf, Netherlands
- eP403 - Multi-omic profiling of lung inflammation in early life cystic fibrosis - Shivanthan Shanthikumar, Australia
- eP404 - Lung tuberculosis characteristics in association with herpesvirus infection - Alexey Shibanov,
- eP405 - *Haemophilus influenzae* is associated with fibrotic phenotype of COVID-19 and idiopathic pulmonary fibrosis. - Pooja Shivshankar, USA
- eP406 - LDH inhibition rescues pulmonary fibrosis features in human primary cellular models of IPF - Wioletta Skronska-Wasek, Germany
- eP407 - Inhalable textile microplastic fibers impair lung repair - Shanshan Song, Netherlands
- eP408 - The impact of nasal colonization with *Staphylococcus aureus* and its enterotoxin B on allergic airway inflammation in patients and mouse models - Sabine Stegemann-Koniszewski, Germany
- eP409 - Profibrotic and proinflammatory pulmonary response to bleomycin in a Swiss nude mice model - Kristiyan Stiliyanov Atanasov, Spain
- eP410 - Course of lung inflammation and injury caused by nanoparticle inhalation depends on material specific cellular perturbation pattern - Tobias Stoeger, Germany
- eP411 - Epidermal growth factor receptor protects from loss of lung function during early life allergic airway disease - Helen Stölting, United Kingdom
- eP412 - Altered hyaluronan metabolism in response to IL1 $\beta$  in the lung microenvironment is associated with defective repair - Vasili Stylianidis, Netherlands
- eP413 - IgA-reflected mucosal immunity in patients with bronchiectasis (Bx) - Kseniia Suska, Ukraine
- eP414 - The bronchodilatory and anti-inflammatory effect of TRPV4 ion channels blocker in experimentally-induced allergic asthma. - Martina Šutovská, Slovakia
- eP415 - Investigation of the interplay of pattern recognition receptors in IFN responses in bronchial epithelial cells from asthma patients - Sofia Magdalena Tillgren, Sweden

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eP416 - The role of mucosal IgE and cytokine levels in reflecting the intensity of allergic symptoms - Joseph G S Tsun, Hong Kong

eP417 - Igf1r deficiency attenuates lung inflammation in a mice model of sub-chronic cigarette smoke exposure - Alfredo Urtubia, Spain

eP418 - Association between serum IgG levels and time to first antibiotic prescription in COPD patients - Anna Vanoverschelde, Belgium

eP419 - Partial apoptosis of epithelial cells in Idiopathic Pulmonary Fibrosis(IPF). - Eirini Vasarmidi, France

eP420 - Exosomal miR16, miR21, miR126, miR146a and miR215 as biomarkers for asthma severity - Sara Vázquez Mera, Spain

eP421 - IL1 $\beta$  induces RANKL secretion in control but not COPD lung fibroblasts - Jelmer Vlasma, Netherlands

eP422 - One drug to rule them all: Targeting host cell metabolic pathway to combat respiratory infections - Laxmikant Wali, Austria

eP423 - Mucosal immunology of the gut and lung in a cigarette smoke-induced murine model for COPD: the lung-gut axis - Lei Wang, Netherlands

eP424 - Deep learning in pulmonary drug delivery - Lin Yang, Germany

eP425 - Fibroblasts drive the differentiation of murine pneumocytes in air-liquid interface cultures - yiwon yao, Germany

eP426 - Prevalence and associated risk factors of post covid-19 interstitial lung disease; An emerging challenge to pulmonologists - Duminda Yasaratne, Sri Lanka

eP427 - Outpatient antibiotic therapy leads to endotoxemia markers elevation in acute SARS-CoV-2 lung damage - Igor Yatskov, Ukraine

eP428 - Local and systemic responses to SARS-CoV-2 infection in children and adults - Masahiro Yoshida, United Kingdom

**[Access LSC resources on the virtual platform from Monday 28 February](#)**

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