**Mechanistic overlap between chronic lung injury and cancer**

23-26 March, 2017 - Estoril, Portugal

*Scientific Programme as of 19.01.2017*

**Thursday 23 March 2017**

**Opening Session**

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Speaker/Details</th>
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<tbody>
<tr>
<td>18:00-18:15</td>
<td>Welcome and Introduction</td>
<td>Rachel Chambers, ERS Conferences and Seminars Director</td>
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<tr>
<td>18:15-18:45</td>
<td>Opening Lecture</td>
<td>Gary Anderson (Melbourne, Australia)</td>
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<tr>
<td>18:45-19:00</td>
<td>Discussion</td>
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<tr>
<td>19:00-19:30</td>
<td>Welcome cocktail</td>
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**Friday 24 March 2017**

**Session 1: Pathological and mechanistic disease similarities**

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Speaker/Details</th>
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<tbody>
<tr>
<td>08:45-09:05</td>
<td>ER stress in chronic lung disease</td>
<td>Stefan Marciniak, Cambridge, United Kingdom</td>
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<tr>
<td>09:05-09:20</td>
<td>Discussion</td>
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<tr>
<td>09:20-09:35</td>
<td>OP01 - CREB signaling in KRAS-driven lung adenocarcinoma</td>
<td>Georgia Giotopoulou, Patras, Greece</td>
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<tr>
<td>09:35-09:50</td>
<td>OP02 - Downregulation of the pro-apoptotic gene, BNIP3, in bronchial biopsies from COPD patients</td>
<td>Karl J. Staples, Southampton, United Kingdom</td>
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<tr>
<td>09:50-10:10</td>
<td>Angiogenesis in development, health and disease</td>
<td>Speaker to be confirmed</td>
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<tr>
<td>10:10-10:25</td>
<td>Discussion</td>
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<tr>
<td>10:25-10:50</td>
<td>Coffee break</td>
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**Session 2: Shared pathways of repair**

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<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Speaker/Details</th>
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<tbody>
<tr>
<td>10:50-11:10</td>
<td>Lung stem cells and lung cancer</td>
<td>Carla Kim, Boston, USA</td>
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<tr>
<td>11:10-11:25</td>
<td>Discussion</td>
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<tr>
<td>11:25-11:40</td>
<td>OP03 - Homeostatic roles for Trp53 in the regulation of epithelial progenitor cell quiescence and differentiation in airways</td>
<td>Barry R. Stripp, Beverly Hills, USA</td>
</tr>
<tr>
<td>11:40-11:55</td>
<td>OP04 - Deregulated SOX2 drives a migratory signature in a novel organotypic model of bronchial dysplasia</td>
<td>Lucia Correia, Cambridge, United Kingdom</td>
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<tr>
<td>11:55-12:15</td>
<td>Lung repair and disease</td>
<td>Georgios Stathopoulos, Munich, Germany</td>
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<tr>
<td>12:15-12:30</td>
<td>Discussion</td>
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<tr>
<td>12:30-14:30</td>
<td>Lunch for all delegates and mentorship lunch for bursary recipients and their mentors</td>
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</table>
Session 3: Intersecting immunity and inflammation

14:30-14:50  Tertiary lymphoid structures and cancer
Marie-Caroline Dieu-Nosjean, Paris, France

14:50-15:05  Discussion

15:05-15:20  OP05 - Nontypeable Haemophilus influenzae-promoted proliferation of K-ras-induced early lung cancer lesions is completely dependent on Toll-like receptor signaling
Christoph Beisswenger, Homburg, Germany

15:20-15:35  OP06 - Myeloid NF-κB signaling fosters KRAS-mutant tumors
Magda Spella, Patras, Greece

15:35-15:55  Discussion

15:55-16:10  OP07 - Dendritic cells, immunomodulation, COPD, and cancer
Karim Vermaelen, Ghent, Belgium

16:10-16:40  Coffee

16:40-18:40 - Poster Session 1

PP101 - Distinct M1, M2 macrophage populations in airway tissues and lumen of COPD patients
Mathew Eapen, Hobart, Australia

PP102 - A new mechanism of latent TGF-β1 presentation in lung fibrosis
Henna Karvonen, Toronto, Canada

PP103 - Targeting CD98hc: a key mediator of tumour and microenvironmental crosstalk in malignant mesothelioma
Claire Rooney, London, United Kingdom

PP104 - SHP-2 is a novel anti-fibrotic regulator of fibroblast homeostasis
Argyris Tzouvelekis, Athens, Greece

PP105 - Exosomal miRNA cargo in non small-cell lung cancer
Toby Mellows, Southampton, United Kingdom

PP106 - 6-Hydroxy-5,7-dimethoxy-flavone suppresses the neutrophil respiratory burst via selective PDE4 inhibition to ameliorate acute lung injury
Tsong-Long Hwang, Taoyuan, Taiwan

PP107 - Study of lung development, regeneration and repair using precision-cut lung slice model
Khondoker Akram, London, United Kingdom

PP108 - IL-17C promotes growth and proliferation of K-ras induced cancerous lesions
Felix Ritzmann, Homburg, Germany

PP109 - Roles of air pollution on lung cancer development
Natacha Rocks, Liege, Belgium

PP110 - Tissue-specific imprinting of innate immunity in the development of tumour metastasis
Amy Adlard, Manchester, United Kingdom

PP111 - Involvement of Igf1r in Bronchiolar Epithelial Regeneration: Role During Repair Kinetics after Selective Club Cell Ablation
Iciar P. Lopez, Logroño, Spain

PP112 - IL-17C promotes tumor-associated inflammation and lung tumor growth
Christoph Beisswenger, Homburg, Germany

PP113 - Using a novel organotypic model of bronchial dysplasia to screen potential therapeutic agents for the chemoprevention of lung cancer
Phil Barry, Cambridge, United Kingdom

PP114 - Wnt activity marks lung progenitors capable of forming spheres in vitro
John-Poul Ng-Blichfeldt, Groningen, The Netherlands

PP115 - The impact of myeloid and plasmacytoid dendritic cells in the development of lung cancer
Plamen Minkov, Stara Zagora, Bulgaria

PP116 - Senolytic drugs target alveolar epithelial cell function and attenuate experimental lung fibrosis ex vivo
Mareike Lehmann, Munich, Germany
PP117 - The role of LRIG1-dependent EGFR signalling in airway homoeostasis and squamous cell lung cancer development
Laura Succony, London, United Kingdom

PP118 - IL-17-mediated inflammation promotes cigarette smoke-induced genomic instability
Songmin Ying, Hangzhou, China

PP119 - Pneumococcal pneumolysin triggers cell-derived microvesicle release
Eleftheri Letsiou, Berlin, Germany

PP120 - The Micrometer 3D Characteristics of The Acinus
Ioannis Vogiatzis Oikonomidis, Bern, Switzerland

PP121 - Human rhinovirus infection impairs macrophage phagocytic capabilities
Jamil Jubrail, Paris, France

PP122 - Tumour Associated Macrophages from Human Lung Cancer that show activation of M1 functions, recruitment of CD8+ T cell by production of chemokines and strong anti-tumour activities are able to predict better survival
Eva Maria Garrido-Martin, Southampton, United Kingdom

PP123 - Inhibiting the inhibitor: How epigenetic silencing of BAMBI drives the TGF&beta; pathway to enhanced malignancy in human non-small cell lung cancer
Sebastian Marwitz, Borstel, Germany

PP124 - Role of AQP1 in tunneling nanotube (TnT) formation and mesothelial-mesenchymal transition (MMT) in malignant pleural mesothelioma (MPM)
Rajesh Jagirdar, Larissa, Greece

PP125 - Tenascin C knockout mice have an altered lung function at newborn and adult age
Tiziana Patrizia Cremona, Bern, Switzerland

PP126 - Investigating the role of cathepsin S in the pathogenesis of cystic fibrosis-like lung disease
Rebecca Delaney, Belfast, United Kingdom

PP127 - Effects of e-cigarette vapour condensate upon human alveolar macrophage function
Aaron Scott, Birmingham, United Kingdom

PP128 - A novel cell culture device to study the cross-talk between cells simultaneously exposed to different oxygenation mimicking hypoxic gradients in tumors
Isaac Almendros, Barcelona, Spain

PP129 - Antioxidant treatment can promote lung tumor formation during chronic oxidative stress
Marielle Breau, Creteil, France

PP130 - Lung cancer detection using a novel hybrid method based on wavelet and fractal analysis and nonlinear adaptive resonance neural networks application
Mahsa Tahmasebi Ghorabi, Najafabad, Iran

PP131 - Targeting glucose metabolism in experimental lung injury and fibrosis
Ellen Forty, London, United Kingdom

PP132 - Scatter factors receptors MET and RON mutations in brain metastases from non-small-cell lung cancer
Giulia Stella, Pavia, Italy

PP133 - Treg depletion decelerates bleomycin-induced pulmonary fibrosis
Kaustav Chakraborty, Kolkata, India

PP134 - mTOR-mediated cap-dependent translation is essential for human lung myofibroblast differentiation and collagen I synthesis
Jessica D Eley, London, United Kingdom

PP135 - Changes in the extracellular matrix – signs of remodeling leading to chronic rejection after lung transplantation
Catharina Mueller, Lund, Sweden

PP136 - Inhibition of CFTR-specific miRNAs in CF bronchial epithelial cells
Chiara De Santi, Dublin, Ireland

PP137 - Proteasomal activator 200 (PA200) regulates cellular proliferation: A putative role for IPF and lung cancer pathogenesis
Vanessa Welk, Munich, Germany

From 19:30 Dinner for all delegates
### Saturday 25 March 2017

#### Session 4: Stromal Similarities and synergies

<table>
<thead>
<tr>
<th>Time</th>
<th>Title</th>
<th>Speaker</th>
<th>Location</th>
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<tbody>
<tr>
<td>08:45-09:05</td>
<td><strong>FGFs in lung disease</strong></td>
<td>Severino Belluscì, Giessen, Germany</td>
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<tr>
<td>09:05-09:20</td>
<td>Discussion</td>
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<tr>
<td>09:20-09:35</td>
<td><strong>OP07 - Mesenchymal stem cell therapy reduces inflammation and damage in a model of chronic lung disease</strong></td>
<td>Doherty Declan, Belfast, United Kingdom</td>
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<tr>
<td>09:35-09:50</td>
<td><strong>OP08 - Circulating fibrocytes depletion results in reduced lung tumor growth and metastasis by modulating macrophage phenotype, angiogenesis and endothelin system</strong></td>
<td>Rajkumar, Savai, Bad Nauheim, Germany</td>
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<tr>
<td>09:50-10:10</td>
<td><strong>EMT in development and disease</strong></td>
<td>Angela Nieto, Alicante, Spain</td>
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<td>10:10-10:25</td>
<td>Discussion</td>
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<tr>
<td>10:25-10:50</td>
<td><strong>Group Picture and Coffee Break</strong></td>
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<tr>
<td>10:50-11:05</td>
<td><strong>Young Investigator Session – The William MacNee Award</strong></td>
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<tr>
<td>10:50-11:05</td>
<td><strong>YI01 - KRAS &amp; TP53 mutations cause malignant mesothelioma</strong></td>
<td>Anthi Krontira, Patras, Greece</td>
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<tr>
<td>11:05-11:20</td>
<td><strong>YI02 - Re-education of tumor-associated macrophages by modulating histone deacetylases in lung cancer</strong></td>
<td>Xiang Zheng, Bad Nauheim, Germany</td>
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<tr>
<td>11:20-11:35</td>
<td><strong>YI03 - Mouse lung adenocarcinoma cell lines as tools to identify novel lung cancer genes</strong></td>
<td>Nikolaos Kanellakis, Patras, Greece</td>
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<tr>
<td>11:35-11:50</td>
<td><strong>YI04 - Targeting the mTOR signaling pathway to inhibit lung cell senescence in chronic obstructive pulmonary disease (COPD)</strong></td>
<td>Amal Houssaini, Munich, Germany</td>
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<tr>
<td>11:50-12:05</td>
<td><strong>YI05 - The role of the epigenetic regulator HMGN5 in COPD resulting from chronic lung injury</strong></td>
<td>Gizem Gunes, Munich, Germany</td>
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12:05-14:45 - Lunch and Poster Session 2

PP201 - **RNA-Seq analysis reveals major differences between the effects of rapamycin and dual mTORC1/2 inhibition during TGFβ1-induced myofibroblast differentiation**
Manuela Platé, London, United Kingdom

PP202 - **Thyroid hormone inhibits pulmonary fibrosis through enhancement of mitochondrial function in alveolar epithelial cells**
Argyris Tzouvelektis, Athens, Greece

PP203 - **Antifibrotic effects of Nintedanib and Pirfenidone on alveolar epithelial cells in 2D and 3D culture**
Lara Buhl, Munich, Germany

PP204 - **Impact of in vitro expansion on the mesenchymal stem cell secretome and their use in Acute Respiratory Distress Syndrome**
Rahul Mahida, Birmingham, United Kingdom

PP205 - **What represents lung cancer in Combined Pulmonary Fibrosis and Emphysema Syndrome?**
Jolanda Nikolla, Tirana, Albania

PP206 - **DNA methylation alterations by carbon nanotubes in vitro**
Manosij Ghosh, Leuven Belgium

PP207 - **Functional gene polymorphisms of pro-inflammatory cytokines TNF-α and IL-17F and COPD**
Tanya Tacheva, Stara Zagora, Bulgaria

PP208 - Tissue-resident Natural Killer (NK) cell Phenotype in the Human Lung
Grace Cooper, Southampton, United Kingdom

PP209 - The effect of KRAS mutation on anti-VEGF treatment in advanced lung adenocarcinoma
Aron Ghimessy, Budapest, Hungary

PP210 - Lysoosomal-associated membrane protein 1 (LAMP-1) upregulation in small airway epithelium of COPD may have physiological consequence and role in autophagy
Mathew Eapen, Hobart, Australia

PP211 - GSK-3 B inhibition suppresses lung cancer cell survival, metastasis and proliferation through down-regulation the phosphorylation sites of CAP1
Changhui Wang, Shanghai, China

PP212 - Secretion of inflammasome complexes highlights unconventional neutrophil activity: insight into cystic fibrosis
Julie Laval, Tuebingen, Germany

PP213 - Genetically engineered MSCs to treat lung cancer, the TACTICAL Clinical Trial
Elizabeth Sagge, London, United Kingdom

PP214 - Thrombin induces IL-8/CXCL8 expression in human lung epithelial cells by mTOR, p70S6K, p300, and NF-κB pathways
Bing-Chang Chen, Taipei, Taiwan

PP215 - Postnatal development of pulmonary acini in rats
Tiziana Patrizia Cremona, Bern, Switzerland

PP216 - Organoid Model of Luminal Remodelling in COPD
Tankut G. Guney, London, United Kingdom

PP217 - The role of DICER in CD11c+ cells in smoke-induced inflammation
Elise De Smet, Ghent, Belgium

PP218 - Matrix metalloprotease-1 plays a detrimental role in the pathogenesis of pulmonary fibrosis
Jan Willem Duftman, Paris, France

PP219 - Interaction proteomics of the pulmonary extracellular matrix in fibrosis and repair
Christoph Mayr, Munich, Germany

PP220 - Allergen-induced late-phase airway inflammation trigger eosinophils adhesion and increase their effect on airway smooth muscle cells proliferation
Ieva Janulaityte, Kaunas, Luthania

PP221 - Evaluation the effect of bronchoconstriction on airway epithelial cells responses in asthma
Maria Ester Quesada del Bosque, Southampton, United Kingdom

PP222 - The serum levels of alpha-1 antitrypsin are strongly associated with its local production by NSCLC tumor cells
Adam Szpechcinski, Warsaw, Poland

PP223 - Improving lung cancer treatment by reducing normal lung toxicity
Lorena Giuranno, Maastricht, The Netherlands

PP224 - A method for clonal expansion of human airway basal cells for genomic analysis
Kate Gowers, London, United Kingdom

PP225 - Igf1r deficiency attenuates acute inflammatory response in a bleomycin-induced lung injury mouse model
Sergio Piñeiro-Hermida, Logroño, Spain

PP226 - Re-education of tumor-associated macrophages by modulating histone deacetylases in lung cancer
Poonam Sarode, Bad Nauheim, Germany

PP228 - The MERS coronavirus receptor DPP4 is increased in lungs of smokers and patients with COPD
Leen Seys, Ghent, Belgium

PP229 - Biological markers of survival and successful pleurodesis for malignant pleural effusion
Ioannis Psalidas, Oxford, United Kingdom

PP230 - N-acetylcysteine attenuates pulmonary fibrosis by inhibiting lung myofibroblast activation and altering TGF-β signaling
Soumya Chatterjee, Kolkata, India
PP231 - Development of 68Ga-labelled cyclic peptides for positron emission tomography imaging in idiopathic pulmonary fibrosis
James Thompson, Hull, United Kingdom

PP232 - Investigating the role and biomarker potential of exosomes in pulmonary sarcoidosis
Casper Wahlund, Stockholm, Sweden

PP233 - Cigarette smoke extract (CSE) and lipopolysaccharide (LPS) impair cytoskeleton rearrangement in airway epithelial cells. A proteomic approach
Claudia D’Anna, Palermo, Italy

PP234 - Profibrotic signaling by TGF-β involves NADPH oxidase 4 dependent activation of tyrosine kinase Src and mitochondrial ROS
Carmen Veith, Maastricht, The Netherlands

PP235 - Mechanisms of human lung repair: retinoic acid induces alveolar epithelial cell migration through VEGF Receptor-2-dependent microvascular angiogenesis
Joana Alçada, London, United Kingdom

PP236 - IL-1R1 but not IL-18Rβ or IL-18BP contribute to the beneficial effects of IL-37 on experimental asthma
Alexandra Schröder, Borstel, Germany

PP237 - Tumor-associated macrophages promote inflammasome-dependent lung tumor progression in mice
Michela Terlizzi, Salerno, Italy

PP238 - Expression of PD1 and PD1 signalling in innate and adaptive T cell responses to NTHi
Joshua Wallington, Southampton, United Kingdom

14:50-16:50  Junior session: Successful funding applications and opportunities

14:50-15:00 Introduction
15:00-15:20 ERS and EU Funding opportunities – Rory Morty, Giessen, Germany
15:20-15:40 ERC Grants – Stathopoulos Georgios, Munich Germany
15:40-16:00 Funding opportunities focused on flexible research careers – Janette K. Burgess, Groningen, The Netherlands
16:00-16:20 How to write a successful funding application? – Melanie Königshoff, Denver, USA
16:20-16:45 General discussion followed by a networking cocktail

19:30-20:00 Evening Pre-Dinner Talk
Modeling Disease with Organoids
Robert Vries, Utrecht, The Netherlands

From 20:00 Gala Dinner and Award Ceremony

Sunday 26 March 2017

Session 5: Dovetailing drugs and targets

08:45-09:05 Immune checkpoint and COPD
Tom Wilkinson, Southampton, United Kingdom
09:05-09:20 Discussion

09:20-09:40 Tumor heterogeneity and stemness in cancer
Speaker to be confirmed
09:40-09:55 Discussion
09:55-10:20 Coffee

10:20-10:40 Dissecting chronic lung disease
Richard Marshall, GSK, Stevenage, United Kingdom
10:40-10:55 Discussion

10:55-11:15 Cell therapy for lung disease
Felix Hermann, Apceth, Munich, Germany
11:15-11:30 Discussion
11:30-11:45 Conclusion by Rachel Chambers, ERS Conferences and Seminars Director