

## Lung Science Conference Metabolic alterations in lung ageing and disease

#### 05-08 March 2020 - Estoril, Portugal

Scientific programme as of 17.01.2020

The conference is granted **13 European CME credits** by the European Accreditation Council for Continuing Medical Education (EACCME) and by the European Board for Accreditation in Pneumology (EBAP)

| Thursd | lav O | 5 Marc | h 2020 |
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#### **Opening Session**

| 18:00-18:15 | Welcome and Introduction<br>Reinoud Gosens, ERS Conferences and Seminars Director                                                                              |
|-------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 18:15-18:45 | <b>Opening Lecture</b><br>"The mitochondrion revisited: an overview of its role in lung inflammation<br>and lung ageing" – Phil Hansbro (Newcastle, Australia) |
| 18:45-19:00 | Discussion                                                                                                                                                     |
|             |                                                                                                                                                                |

## 19:00-19:30Welcome "cheese and wine" cocktail

#### Friday 06 March 2020

| Session 1:  | Immunometabolism and inflammageing                                                                                                            |
|-------------|-----------------------------------------------------------------------------------------------------------------------------------------------|
| 08:45-09:05 | Metabolic profiling of severe asthma: implications for phenotyping<br>and treatment<br>Craig Wheelock (Stockholm, Sweden)                     |
| 09:05-09:20 | Discussion                                                                                                                                    |
| 09:20-09:35 | Abstract Oral Presentation 1                                                                                                                  |
| 09:35-09:55 | Metabolic reprogramming of tumor associated macrophages and<br>its impact on lung cancer progression<br>Rajkumar Savai (Bad Nauheim, Germany) |
| 09:55-10:10 | Discussion                                                                                                                                    |
| 10:10-10:25 | Abstract Oral Presentation 2                                                                                                                  |
| 10:25-10:50 | Coffee break                                                                                                                                  |
| Session 2:  | Mitochondrial dysfunction in lung ageing and disease                                                                                          |
| 10:50-11:05 | Abstract Oral Presentation 3                                                                                                                  |
| 11:05-11:25 | Mitochondrial in airway smooth muscle as a driver of airway<br>hyperresponsiveness in asthma<br>Thomas Trian (Bordeaux, France)               |
| 11:25-11:40 | Discussion                                                                                                                                    |



| 11:40-11:55 | Abstract Oral Presentation 4                                                                                        |
|-------------|---------------------------------------------------------------------------------------------------------------------|
| 11:55-14:00 | Lunch for all delegates and mentorship lunch for bursary recipients and their mentors                               |
| 14:00-14:20 | Mitochondrial iron in the susceptibility, pathogenesis and progression of COPD<br>Suzanne Cloonan (Dublin, Ireland) |
| 14:20-14:35 | Discussion                                                                                                          |
| 14:35-14:50 | Abstract Oral Presentation 5                                                                                        |
| 14:50-15:10 | Senotherapies for chronic lung disease<br>Peter Barnes (London, United Kingdom)                                     |
| 15:10-15:25 | Discussion                                                                                                          |
| 15:25-15:40 | Abstract Oral Presentation 6                                                                                        |
| 15:40-16:00 | Coffee break                                                                                                        |
|             |                                                                                                                     |

16:00-18:00 Poster Session 1

#### Saturday 07 March 2020

| Session 3:  | Cellular senescence                                                                                                                  |
|-------------|--------------------------------------------------------------------------------------------------------------------------------------|
| 08:45-09:05 | Heme oxygenase-1 regulation of cell senescence in COPD<br>Maylis Dagouassat (Paris, France)                                          |
| 09:05-09:20 | Discussion                                                                                                                           |
| 09:20-09:40 | <b>Respiratory muscle senescence during chronic lung disease and ageing</b><br>Joaquim Gea (Barcelona, Spain)                        |
| 09:40-09:55 | Discussion                                                                                                                           |
| 09:55-10:10 | Abstract Oral Presentation 7                                                                                                         |
| 10:10-10:25 | Abstract Oral Presentation 8                                                                                                         |
| 10:25-10:45 | An atlas of the aging lung mapped by single cell transcriptomics<br>and deep tissue proteomics<br>Herbert Schiller (Munich, Germany) |
| 10:45-11:00 | Discussion                                                                                                                           |

### **GROUP PICTURE**

| 11:15-13:45 | Poster Session 2 and Lunch                            |
|-------------|-------------------------------------------------------|
| 13:45-15:00 | Young Investigator Session – The William MacNee Award |



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

- 15:00-17:00 Early-Career delegates session Strategically and successfully funding of your future
- **15:00-15:20 How to write a convincing research grant** Reinoud Gosens (Groningen, Netherlands)
- 15:20-15:40Obtaining a grant to organize an ERS Research Seminar<br/>Rachel Chambers (London, United Kingdom)
- 15:40-16:00 Your first personal research grant within the ERS fellowship programme Louise Donnelly (London, United Kingdom)
- 16:00-16:20Funding possibilities from the European Union (EU)/European<br/>Research Council (ERC)<br/>Nadia El Mjyad (Brussels, Belgium)
- 16:20-17:00 Panel discussion with all speakers and networking event
- 17:00 Coffee Break
- 19:25-19:55Evening Pre-dinner talk<br/>"Metabolic reprogramming in innate immunity and inflammation" Luke<br/>O'Neill (Dublin, Ireland)

From 20:00 Gala Dinner and Award Ceremony

# Sunday 08 March 2020

| Session 4:  | The ageing lung under stress                                                                                                         |
|-------------|--------------------------------------------------------------------------------------------------------------------------------------|
| 08:45-09:05 | Linking proteostasis to immune activation in the ageing lung<br>Silke Meiners (Munich, Germany)                                      |
| 09:05-09:20 | Discussion                                                                                                                           |
| 09:20-09:40 | Protein oxidation as a driver of disease and gateway to novel<br>therapies for lung fibrosis<br>Martina Korfei (Giessen, Germany)    |
| 09:40-09:55 | Discussion                                                                                                                           |
| 09:55-10:05 | Coffee break                                                                                                                         |
| Session 5:  | Therapeutics targeting metabolic alterations in disease                                                                              |
| 10:05-10:25 | Metabolic reprogramming by mesenchymal stem cells as a strategy<br>for lung repair<br>Anna Krasnodembskaya (Belfast, United Kingdom) |
| 10:25-10:40 | Discussion                                                                                                                           |



| 10:40-11:00 | Nutritional modulation to correct metabolic alterations in chronic lung disease<br>Annemie Schols (Maastricht, Netherlands) |
|-------------|-----------------------------------------------------------------------------------------------------------------------------|
| 11:00-11:15 | Discussion                                                                                                                  |
| 11:15-11:35 | <b>The promise of mTOR signaling as a therapeutic target for IPF</b><br>Rachel Chambers (London, United Kingdom)            |
| 11:35-11:50 | Discussion                                                                                                                  |
| 11:50-12:10 | Conclusion by Reinoud Gosens, ERS Conferences and Seminars<br>Director                                                      |