ISAC XXI Meeting 2020
International Society of Arterial Chemoreception

Mal(adaptive) responses of peripheral chemoreceptors: 
$O_2$ dependent and independent mechanisms

Jun 29-Jul 2, 2020, Lisbon, PORTUGAL

29th June

13.00 - Registration and coffee

13:45 -14:00 Opening session – Emilia Monteiro (ISAC President, NOVA Medical School, Portugal)

14:00 – 14:30 Celebrating 40 years of carotid body research in Portugal – Alexandre Ribeiro (Portugal)

14.30- 16.00 Plenary sessions

14.30-15.15 Emerging molecular and physiological perspectives in chronic intermittent hypoxia - Nanduri Prabhakar (Director of the Institute for Integrative Physiology and the Center for Systems Biology of Oxygen Sensing at the University of Chicago, USA)

15.15 - 16.00 Adaptive responses to chronic intermittent hypoxia: contributions from the European Sleep Apnea Cohort (ESADA) - Maria Bonsignore (University of Palermo, Italy)

16:00 – 16:30 Coffee-break

16.30 - 18.30 Symposium- Chronic intermittent hypoxia and systemic arterial hypertension
Chair: Davi Moraes

16.30 - 17.00 Emerging evidences from animal models - Emilia Monteiro (NOVA Medical School, Portugal)

17.00 - 17.30 Emerging evidences from clinical studies – Jean Louis Pepin (Service EFCR/Pneumologie, CHU de Grenoble site Nord - Hôpital Albert Michallon, Grenoble, France)

17.30 (4 oral presentations)
18.30-19.30 Poster presentations with wine and cheese (chaired by Trevor Day)

30th June

9.00-12.00 Symposium - Chronic intermittent hypoxia and metabolic dysfunction
Chair: Claudia Cavadas
9.00 - 9.30 Hypoxia and diabetes – Silvia Conde (NOVA Medical School, Portugal)
9.30 - 10.00 Intermittent hypoxia and lipid metabolism – Seva Polotsky (Johns Hopkins Bayview Medical Center, Baltimore, USA)

10.00-10.30 Coffee

10.30 -12.00 (6 oral presentations)

12.00- 13.30 Lunch

13.30-15.30 Symposium- Chronic intermittent hypoxia and cancer
Chair: Tiago Oliveira de Sà
13.30-14.00 Evidence from animal models- Ana Obeso (University of Valladolid, Spain)
14.00- 14.30 Evidence from clinical studies – David Gozal (School of Medicine, University of Missouri, USA) (tbc)
14.30-15.30 (4 oral presentations)

15.30-16.30 Poster presentations and coffee (chaired by Andrea Porzionatto)
16.30-17.30: Scientific speed dating: networking and benchmarking - organized by Maria Guarino (ciTechCare, Leiria, Portugal) and by David Burns (University of Cork, Ireland)

17:30- 20:00 Lisbon downtown guided tour

1st July

9.00-10.45 Symposium - (Mal)adaptive responses to chronic sustained hypoxia: heart failure, COPD and altitude
Chair: Rodrigo del Rio
9.00-9.30 Hypoxia and Heart failure: Evidence from experimental models – Harold Schultz (University of Nebraska Medical Center, USA)
9.30-10.15 3 oral presentations
10.15-10.45 Coffee

10.45-12.30
Chair: António Morais
10.45-11.15 Genetic and epigenetic changes induced by chronic sustained hypoxia in experimental models - Rodrigo Iturriaga (Pontifical Catholic University of Chile, Chile)
11.15-11.45. New insights in COPD: data from clinical studies (Portuguese Society of Pneumology guest)
12.45-12.30 3 oral presentations

12.30-14.00 Lunch

14.00-16.30 Symposium- O₂ independent mechanisms of chemoreceptor function
Chair: Isabel Rocha
14.00-14.30 Neurogenic hypertension and autonomic function - Julian Paton (The University of Auckland, New Zealand)
14.30-15.00 Role of carotid bodies in the management of salt overload - Eduardo Colombari (São Paulo State University, Brasil)
15.00 – 15.30 Neuronal mechanisms involving the carotid body in asthma – Richard Wilson (University of Calgary, Canada)
15.30-16.30 (4 oral presentations)

16.30-17.30 Poster presentations and coffee  (chaired by Angela Gomez-Niño)
17.30-18.30 Meet the seniors: mentoring and emerging opportunities for young investigators (organized by Chris Wyatt)
18.30 ISAC Assembly Meeting

2nd July

9.00-11.00 Symposium - Chemoreceptor function through the life span and sex differences
Chair: Aida Bairam
9.00-9.30 – Comorbidities of hypoxia in neonates - Estelle Gauda (The Hospital For Sick Children, Toronto, Canada)
9.30-10.00 – Sex differences in the control breathing – Richard Kinkead (Université Laval, Quebec, Canada)
10.00-11.00 4 oral presentations

11.00-11.30 Coffee

11.30-13.00 Symposium Mechanisms of O₂ and CO₂ sensing and transduction
Chair: Jose Lopez-Lopez

11:30- 12:00 O₂ sensing in the carotid body – José Lopez Barneo (Instituto de Biomedicina de Sevilla, Spain)

12.00-13.00 4 oral presentations

13.00 – 14.30 Lunch

14.30-16.00 Symposium- Mechanisms of O₂ and CO₂ sensing and transduction
Chair: Mark Evans

14.30 – 15:00 The tripartite synapse – Colin Nurse (McMaster University, Hamilton, Canada)

15.00-16.00 (4 oral presentations)

16.00 – 16.30 Coffee

16.30-18.00 New insights in CO₂ control of breathing
Chair: Andrew Holmes

16.30-17.00 Gut microbiota and ventilatory response to hypercapnia – Ken O’Halloran (University College Cork, Ireland)

17.00-18.00 4 oral presentations

18.30 Reception and Gala Dinner

3rd of July

Free Lisbon Museums pass - optative

Scientific Committee
Emilia C. Monteiro
Silvia V. Conde
Estelle Gauda
Rodrigo Iturriaga
Rodrigo del Rio

Machiko Shirata Grants to PhD and Post-doc Students
Estelle Gauda

DeCastro-Heymans-Neil-Award Committee
Ana Obeso
Camilo Di Giulio
Richard Wilson

Organizing Committee
Emilia C. Monteiro
Silvia V. Conde
Fátima Martins
Bernardete F. Melo
Sofia A. Pereira
Joana F. Sacramento
Nuno Coelho
Maria João Correia

Administrative Office
Teresa Bastos Lopes
Sofia Ramos

Website and social media support
George Kim