

# KEYSTONE SYMPOSIA

on Molecular and Cellular Biology

## Therapeutic Targeting of Hypoxia-Sensitive Pathways (V1)

April 10-14, 2018 • University of Oxford Mathematical Institute • Oxford, UK

Scientific Organizers: Chris W. Pugh, Pablo Wappner, Johanna Myllyharju and Moira K. Whyte

Sponsored by Akebia Therapeutics

Abstract & Scholarship Deadline: December 11, 2017 / Abstract Deadline: January 10, 2018 / Discounted Registration Deadline: February 13, 2018

### TUESDAY, APRIL 10

#### Arrival and Registration

### WEDNESDAY, APRIL 11

#### Welcome and Keynote Address

**Peter J. Ratcliffe**, University of Oxford, UK  
*New Horizons in Hypoxia Biology and Therapeutics*

#### Acute Oxygen-Sensing

**Mark A. Krasnow**, Stanford University School of Medicine, USA  
*Acute Oxygen Sensing in the Lungs and Carotid Body*

**Francesco Licausi**, Scuola Superiore Sant'Anna, Italy  
*Cysteine Oxidases Act as Oxygen-Dependent Molecular Switches in Plants*

**Betty A. Eipper**, University of Connecticut Health Center, USA  
*Neuroendocrine Tissues*

#### Short Talk(s) Chosen from Abstracts

#### Hypoxia and Organ (dys)Function

**Johanna Myllyharju**, University of Oulu, Finland  
*Brain*

**Dörthe M. Katschinski**, Georg August University, Germany  
*Heart*

**Volker H. Haase**, Vanderbilt University, USA  
*Oxygen Sensing in the Kidney*

#### Short Talk Chosen from Abstracts

#### Poster Session 1

### THURSDAY, APRIL 12

#### Hypoxia and Development

**Hesham A. Sadek**, University of Texas Southwestern Medical Center, USA  
*Heart Development*

**Josh Bonkowsky**, University of Utah School of Medicine, USA  
*Hypoxia and Connectivity in the Developing Vertebrate Nervous System*

**Ernestina Schipani**, University of Michigan, USA  
*Impairment of Mitochondrial Respiration Is an Indispensable Requirement for Survival of Growth Plate Chondrocytes*

**Pablo Wappner**, Fundacion Instituto Leloir, Argentina  
*Cellular and Developmental Adaptations to Hypoxia. Lessons from Drosophila Melanogaster*

#### Short Talk(s) Chosen from Abstracts

#### Clinical Inhibitors of HIF Hydroxylases and HIFs

**Speaker to be Announced**  
*Late Breaking Industrial Trial on Treatment of Anaemia*

**Christopher J. Schofield**, University of Oxford, UK  
*Inhibiting 2-Oxoglutarate Oxygenases for Therapeutic Benefit*

**Chris W. Pugh**, University of Oxford, UK  
*Review of Other Indications / Complications*

#### Poster Session 2

### FRIDAY, APRIL 13

#### Immune and Inflammatory Effects of Hypoxia

**Moira K. Whyte**, MRC/UoE Centre for Inflammation Research, University of Edinburgh, Queen's Medical Research Institute, UK  
*Hypoxic Regulation of Lung Injury and Repair*

**Yun-Cai Liu**, La Jolla Institute for Allergy and Immunology, USA  
*VHL-Glycolytic Pathway in Immune Regulation*

**Sarah R. Walmsley**, University of Edinburgh, Queen's Medical Research Institute, UK

*Hypoxia and Regulation of Inflammation and Anti-Microbial Responses*

**Nicholas P. Restifo**, NCI, National Institutes of Health, USA  
*Tumour Immunity and Metastasis*

#### Short Talk(s) Chosen from Abstracts

#### Hypoxia and Stem Cell Function

**Kamil R. Kranc**, University of Edinburgh, UK  
*Hypoxia Signaling in Normal and Malignant Haematopoiesis*

**Paul R. Riley**, University of Oxford, UK  
*The Role of Hypoxia and HIF Signaling in Epicardial Activation*

**Edurne Berra**, CIC bioGUNE, Spain  
*Talk Title to be Announced*

#### Short Talk(s) Chosen from Abstracts

#### Poster Session 3

### SATURDAY, APRIL 14

#### Tissue Degeneration, Regeneration and Programming

**Peppi Koivunen**, University of Oulu, Finland  
*HIF Prolyl 4-Hydroxylase Inhibition in Fatty Liver Diseases*

**Sean P. Colgan**, University of Colorado Denver, USA  
*Hypoxia and HIF as Regulators of Barrier Function in the Mucosa*

**Dino A. Giussani**, University of Cambridge, UK  
*Heart Disease Link to Fetal Hypoxia: An Intergenerational Perspective*

**Tracey A. Rouault**, NICHD, National Institutes of Health, USA  
*Translational Regulation of HIF2 alpha and Erythropoiesis by the IRE-IRP System*

#### Short Talk Chosen from Abstracts

#### Epigenetic and Pan-Genomic Effects of Hypoxia

**Raul Mostoslavsky**, Massachusetts General Hospital, Harvard Medical School, USA  
*Linking Epigenetics, Metabolism and Cancer: Lessons from SIRT6*

**Skirmantas Kriaucionis**, University of Oxford, UK  
*TET Proteins and 5-Hydroxymethylcytosine in Transcription*

**Joaquín M. Espinosa**, University of Colorado Boulder, USA  
*Talk Title to be Announced*

#### Meeting Wrap-Up: Outcomes and Future Directions (Organizers)

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**SUNDAY, APRIL 15**

**Departure**