

KEYSTONE SYMPOSIA

on Molecular and Cellular Biology

Hypoxia: From Basic Mechanisms to Emerging Therapies (E2)

May 28-31, 2023 • INEC Killarney Convention Centre • Killarney, Co. Kerry, Ireland

Scientific Organizers: Sonia Rocha, Edurne Berra and M. Celeste Simon

Supported by the Directors' Fund

Scholarship Deadline: February 28, 2023 / Abstract Deadline: February 28, 2023 / Discounted Registration Deadline: March 28, 2023

SUNDAY, MAY 28

Arrival and Registration

MONDAY, MAY 29

Welcome and Keynote Address

Navdeep S. Chandel, Northwestern University, USA
Mouse Models of Mitochondria Defects

Mitochondria and Metabolism

Isha Jain, University of California, San Francisco, USA
Turning the Oxygen and Vitamin Dials

Jared Rutter, University of Utah, USA
Energy Sensing and Metabolism

Sarah-Maria Fendt, VIB-KU Leuven, Belgium
Metabolism in Cancer

Short Talk(s) Chosen from Abstracts

Workshop 1: Normoxia/Physioxia/Hypoxia Responses

Short Talks Chosen from Abstracts

Functional Hypoxia and Immune Cells

Maira K. Whyte, University of Edinburgh, Queen's Medical Research Institute, UK
Hypoxia and Immunity

Marina P. Kreutz, Universitat Regensburg, Germany
Oncometabolism and Immune Cells

Jane A. McKeating, Oxford University, UK
Virus and the HIF System

M. Celeste Simon, University of Pennsylvania, USA
Oxygen Availability and Tumor Microenvironments

Short Talk Chosen from Abstracts

Poster Session 1

TUESDAY, MAY 30

PHD and FIH Enzymes Substrates and Functions

Qing Zhang, UT Southwestern Medical Center, USA
Novel PHD Functions

Angus I. Lamond, University of Dundee, UK
Mass Spectrometry in the Quest for PHD Targets

Daniel J. Peet, University of Adelaide, Australia
FIH Hydroxylation Analysis

Short Talk(s) Chosen from Abstracts

Roundtable Discussion: The Future of Hypoxia Research

Cormac Taylor, University College Dublin, Ireland

Peter J. Ratcliffe, University of Oxford, UK

Amato J. Giaccia, Stanford University, USA

José López-Barneó, University of Seville, Spain

Human and Models Organisms and Hypoxia

Joaquín M. Espinosa, Linda Crnic Institute for Down Syndrome, USA
Multimics Approaches to Studying Hypoxic Signaling in Health and Disease

Cynthia M. Beall, Case Western Reserve University, USA
Human Genetic Adaptations to Low Oxygen

Irena Manov, University of Haifa, Israel
Does Hypoxia-Tolerant Blind Mole Rat Spalax Hold the Secrets for Healthier Aging?

Ernestina Schipani, University of Pennsylvania, USA
Bone Development and Hypoxia

Short Talk Chosen from Abstracts

Poster Session 2

WEDNESDAY, MAY 31

New Aspects of Hypoxia Signalling

Edurne Berra, CIC bioGUNE, Spain
DUBs in Hypoxia

Paul Boutros, University of California, Los Angeles, USA
Mutational Signatures in Hypoxic Tumors

Sonia Rocha, University of Liverpool, UK
Oxygen as a Signalling Molecule in Cells

Short Talk(s) Chosen from Abstracts

Workshop 2: Novel Methods to Detect Hypoxia and its Responses

Short Talks Chosen from Abstracts

Therapeutic Applications in Hypoxia Response and Disease

Rodolfo Perini, Merck, USA
Talk Title to be Determined

Alessio Ciulli, University of Dundee, School of Life Sciences, UK
VHL as Tool and Target for Therapy

Volker H. Haase, Vanderbilt University, USA
Pharmacological Targeting of HIF-prolyl hydroxylases

Short Talk Chosen from Abstracts

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

THURSDAY, JUNE 1

Departure