

## Advanced course

# Ageing: from fundamental biology to societal impact

### Organizers

Ira Milosevic (MIA-Portugal, University of Coimbra)

João Malva (Faculty of Medicine, University of Coimbra)

Nuno Raimundo (MIA-Portugal, University of Coimbra)

Paulo Oliveira (Center for Neuroscience and Cell Biology, University of Coimbra)

**Dates** June 27 – July 8, 2022

### Online event

#### Registration link

<https://surveys.uc.pt/index.php/222129?lang=en>

**Registration deadline** June 20, 2022

#### June 27

16:00-16:30 **Introduction to the course** (I Milosevic, J Malva, N Raimundo, P Oliveira)

16:30-18:00 **Keynote Lecture: Expanding mechanisms and therapeutic targets for neurodegenerative disease** (A Gitler, Stanford)

#### June 28

16:00-19:00 **Workshop Supporting an ageing population: from politics to technologies**

16:00 **Regional ecosystems to support healthy living and active ageing; Ageing@Coimbra** (J Malva, Coimbra)

16:50 **Work and retirement as determinants of healthy ageing** (S Stenholm, Turku)

17:40 **pHealth and data mining solutions: opportunities in the management of cardiovascular diseases** (J Henriques, Coimbra)

18:30 **Debate**

#### June 29

16:00-19:00 **Workshop Biology of Ageing 1 – Basics of ageing and longevity**

16:00 **Metabolic choice in an ageing world** (A Krisko, Gottingen)

16:50 **Asymmetrical cell division and replicative ageing** (J Saarikangas, Helsinki)

17:40 **Transcellular signalling in ageing** (P van Oosten-Hawle, Leeds)

18:30 **Debate**

#### June 30

16:00-19:00 **Workshop Biology of aging 2 - Senescence and cancer**

16:00 **The chronology of FH loss** (C Frezza, Cologne)

16:50 **Mechanisms of senescence** (J Passos, Mayo Clinic, Rochester)

17:40 **Understanding the role of oxidative metabolism in cell proliferation** (K Birsoy, Rockefeller, New York)

18:30 **Debate**

# EIT Health Ageing PhD School

## July 1

16:00h-19:00 Workshop **Biology of aging 3 - Cardiovascular ageing**

- 16:00 **Cardiovascular ageing: modeling and therapies** (L Ferreira, Coimbra)
- 16:50 **Metabolic and molecular effects of dietary restriction** (L Fontana, Sidney)
- 17:40 **The effects of ageing on the cardiac microvasculature** (Guillermo Luxán, Frankfurt)
- 18:30 **Debate**

## July 4

16:00-19:00 Workshop **Biology of aging 4 - Brain ageing and neurometabolism**

- 16:00 **Understanding and preventing the deposition of misfolded proteins in ageing brains** (A Bertolotti, Cambridge)
- 16:50 **Autophagy and presynaptic plasticity in brain ageing** (S Sigrist, Berlin)
- 17:40 **Selective autophagy of lipid droplets in the brain** (J Chung, Harvard)
- 18:30 **Debate**

## July 5

16:00-19:00 Workshop **Health literacy for ageing well**

- 16:00 **Eat Well to Age Well** (E Carvalho, Coimbra)
- 16:50 **Education, health literacy and healthy ageing** (J-P Michel, Geneva)
- 17:40 **Linkages between health literacy and health behavior among older adult immigrants in Wisconsin, the United States** (M Hawkins, Milwaukee)
- 18:30 **Debate**

## July 6

16:00-19:00 Workshop **Inflammation and Ageing**

- 16:00 **Inflammageing and long COVID** (MC Polidori, Cologne)
- 16:50 **Mitochondrial control of the immune system** (M Tigano, Philadelphia)
- 17:40 **Lysosomes, autophagy and inflammation** (N Raimundo, Coimbra)
- 18:30 **Debate**

## July 7

16:00-19:00 Workshop **Centenarians**

- 16:00 **Transcriptomics of centenarians: identification of longevity associated genes from humans to invertebrates** (J Vina, Valencia)
- 16:50 **Harnessing the power of big data to address the societal challenge of ageing** (R Westendorp, Copenhagen)
- 17:40 **Ageing clocks in centenarians** (C Franceschi, Bologna)
- 18:30 **Debate**

## July 8

17:30-18:00 **Evaluation/student's presentations**

- 18:00 **Keynote lecture The new biology of mitochondrial microproteins** (P Cohen, Los Angeles)
- 19:00 **Course ends**