



**Molecular Mechanisms of Disease  
PhD Program in Health Sciences.  
Faculty of Medicine of the University of Coimbra  
Coordinators: Isabel M Carreira, Henrique Girão e Joana B Melo**

**Semana 14-18 de outubro, 2019**

The lectures of this course will focus on different molecular mechanisms of disease, using different pathologies as examples or different technology approaches. The main topics are: Nucleus, Cellular Division and Development; Intracellular trafficking and Communication; Proteostasis and Quality; Cellular metabolism and regulation; Infection and Immunity

**14th of OCTOBER (2<sup>ª</sup>F)**

**14:00-14:30** Nuclear Mechanisms in developmental disorders and oncology

*Isabel M Carreira*

**14:30-15:00** Copy Number Variation in intellectual disability and cancer

*Joana B Melo*

**15:00-15:30** *Article discussion*

**15:30-16:00 – Coffee Break**

**16:00-16:30** JC virus: molecular mechanisms underlying viral reactivation and PML development

*Ana Miguel Matos, FFUC*

**16:30-17:00** *Article discussion*

**17:00-17:15 – Break**

**17:15-17:45** Controversies in immune response

*Manuel Santos Rosa*

**15th of OCTOBER (3<sup>ª</sup>F)**

**14:00-14:30** – Mechanisms of metabolic regulation in obesity

*Cláudia Cavadas*

**14:30-15:00** Como segregam os cromossomas e o que pode correr mal

*Helder Maiato*

**15:00-15:30** *Article discussion*

**15:30-16:00 – Coffee Break**

**16:00-16:30** - Diabetes-associated insulin signaling and mitochondrial defects predispose to Alzheimer disease

*Paula Moreira*

**16:30-17:00** [Article discussion](#)

**17:00-17:15** – Break

**17:15-17:45** – The neuroinflammatory hypothesis of delirium

*Joaquim Cerejeira*

**17:45-18:15** [Article discussion](#)

**16th OCTOBER (4<sup>th</sup>F)**

**14:00-14:30** – Endoplasmatic reticulum-mitochondria crosstalk in Alzheimer’s disease

*Cláudia Pereira*

**14:30-15:00** [Article discussion](#)

**15:00-15:30** – Role of cilia in development and disease

*Helena Soares*

**15:30-16:00** [Article discussion](#)

**16:00-16:30** – Coffee Break

**16:30-17:00** - Mitophagy in Parkinson and Alzheimer Disease

*Sandra Morais Cardoso*

**17:00-17:30** [Article discussion](#)

**17:30-17:45** – Break

**17:45-18:15**– Mechanisms of long distance intracellular communication: Exosomes in cardiovascular Disorders

*Henrique Girão*

**17th OCTOBER (5<sup>th</sup>F)**

**14:00-14:30** – Molecular mechanisms in head and neck cancer

*Ilda Patrícia Ribeiro*

**14:30-15:00** [Article discussion](#)

**15:00-15:30** –Taking the most from cellular trafficking for drug delivery

*João Nuno Moreira*

**15:30-16:00** [Article discussion](#)

**16:00- 16:30** – Coffee Break

**16:30-17:00** – Endosomal Trafficking Defects with genetic risk and neuronal aging initiate Late-onset Alzheimer’s disease

*André Miranda*

**17:00-17:30** [Article discussion](#)

**17:30-17:45** – Break

**17:45-18:15** - miRNAs in Pulmonary Arterial Hypertension

*Rui Batista*

**18th OCTOBER (6<sup>th</sup>F)**

**14:00-14:30** - Inflammation in osteoarthritis

*Alexandrina Mendes*

**14:30-15:00** *Article discussion*

**15:00-15:30** - Adenosine as an anti-inflammatory molecule: mechanisms in respiratory disease

*Tiago Alfaro*

**15:30-16:00** *Article discussion*

**16:00-16:30** – Coffee Break

**16:30-17:00** - Molecular mechanisms of respiratory allergies.

*Ana Todo Bom*

**17:00-17:30** *Article discussion*

**17:30-17:45** –Break

**17:45-18:30** AVALIAÇÃO

**FACULTY:**

**Alexandrina Mendes** – Faculdade de Farmácia da Universidade de Coimbra e Centro de Neurociências de Coimbra

**Ana Miguel Matos** – Faculdade de Farmácia da Universidade de Coimbra

**Ana Todo Bom** – Faculdade de Medicina da Universidade de Coimbra, Alergologia, CHUC

**André Miranda** – Universidade Nova de Lisboa

**Cláudia Cavadas**- Faculdade de Farmácia da Universidade de Coimbra e Centro de Neurociências de Coimbra

**Cláudia Pereira** - Faculdade de Medicina da Universidade de Coimbra

**Helder Maiato** - Institute for Molecular and Cell Biology, University of Porto I3Es

**Helena Soares** - Health Technology College of Lisbon ESTeSL

**Henrique Girão**- Faculdade de Medicina da Universidade de Coimbra

**Isabel Marques Carreira** – Laboratório de Citogenética e Genómica, CIMAGO, Faculdade de Medicina da Universidade de Coimbra.

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**Paula Moreira**- Faculdade de Medicina da Universidade de Coimbra

**Rui Batista** - Centro Hospitalar e Universitário de Coimbra e Faculdade de Medicina da Universidade de Coimbra.

**Sandra Cardoso**- Faculdade de Medicina da Universidade de Coimbra

**Tiago Alfaro** – Centro Hospitalar e Universitário de Coimbra e Faculdade de Medicina da Universidade de Coimbra