

Plano de Estudos

Specific Topics and Schedule

Monday, September 16th, 2024

TOPIC A Oxidative stress and Antioxidants and Redox enzymes systems

- Lecture A1 Oxidative stress and oxidative species (Vasco Branco);
- Lecture A2 Redox active systems: thioredoxin and glutathione (Lucia Coppo; KI);
- Flipped classroom A: Natural and custom-design inhibitors, emulators, and modulators of redox elements.

Tuesday, September 17th, 2024

TOPIC B Reactive Oxygen Species in biology

- Lecture B1 ROS as signaling molecules in physiology (Fernando Antunes; FCUL);
- Lecture B2 Nitric oxide-dependent neurovascular coupling to support cognitive performance (João Laranjinha; FFUC);
- Flipped Classroom B methods to evaluate ROS and oxidative stress.

Wednesday, September 18th, 2024

TOPIC C Redox signaling and cancer

- Lecture C1 Redox regulation in cancer cells (Nuno Oliveira);
- Lecture C2 Redox systems and therapy resistance in glioblastoma (Cristina Carvalho);
- Flipped classroom C: MAPK cascades: major pathways of redox signal transduction.

Thursday, September 19th, 2024

TOPIC D Oxidative stress and neurodegenerative diseases

- Lecture D1 Redox-based regulation of adult neurogenesis: implications for CNS (Susana Solá);
- Lecture D2 Oxidative modifications in neurodegenerative diseases (Andreia Carvalho);
- Flipped classroom D: Redox signaling in glia cells.

Friday, September 20th, 2024

- Student's project presentation and discussion.

Deadline for final proposal submission: October 4th, 2024.