

POST-GRADUATED TRAINING '14

Mammalian and yeast as complementary cell models in programmed cell death - 5th edition

Coordination: Manuela Côrte-Real and Maria João Sousa

Dates: 23th June to 4th July, 2014

Course includes theoretical lectures and hands-on intensive modules of lab work that will be followed by results interpretation, group discussion and final wrap up.

INVITED LECTURERS

Cecília Rodrigues (Molecular Pathogenesis Centre, Faculty of Pharmacy, University of Lisbon, Portugal)

Helena Vasconcelos Meehan (Faculty of Pharmacy and IPATIMUP, University of Porto)

Muriel Priault (CNRS- Université de Bordeaux, France)

Nadine Camougrand (CNRS- Université de Bordeaux, France)

Stéphen Manon (CNRS- Université de Bordeaux, France)

Vítor Costa (IBMC, University of Porto)

IN-HOUSE LECTURERS

Ana Preto (CBMA-DB, University of Minho, Portugal)

António Rego (CBMA-DB, University of Minho, Portugal)

Manuela Côrte-Real (CBMA-DB, University of Minho, Portugal)

Maria João Sousa (CBMA-DB, University of Minho, Portugal)

Susana Chaves (CBMA-DB, University of Minho, Portugal)

Topics:

1. Programmed cell death processes *versus* necrosis
2. Apoptosis and programmed necrosis
3. Acetic acid/acetate-induced apoptosis in yeast and mammalian cell
4. Features of cell death in human disease
5. Evasion from programmed cell death in cancer and in cancer drug resistance. Pharmacological modulation of apoptosis as a therapeutic approach
6. Yeast as a model system to study mechanisms of apoptosis induced by anti-tumour drugs
7. Sphingolipid signalling and oxidative stress in yeast cell death and ageing
8. Modulation of mitochondrial outer membrane permeabilization and apoptosis by ceramide metabolism
9. Mitochondrial membrane permeabilization mechanisms
10. Utilization of yeast to study the molecular aspects of the function of Bcl-2 family members
11. Autophagy in physiology and pathology
12. Mitophagy: from yeasts to mammalian cells
13. The role of autophagy in cancer: the special case of oncogene KRAS and colorectal carcinoma