Oncobiology 2016

The structure of the module:

This module (29th February – 11th March) has a dual structure: lectures and seminars, and work on research projects.

The aims of the module:

The Oncobiology module will have sessions to discuss biological/molecular mechanisms of cancer development and progression. Sessions will include discussion of clinical cases followed by open discussions with the students about the underlying etiological factors, the biological pathways and molecular mechanisms underlying pathological lesions. The sessions will include:

- 1- Presentation of clinical cases (sporadic and hereditary)
- 2- Pathological aspects of the tumours
- 3- Etiology and molecular basis of the disease

Teaching staff: Researchers and Professors from IPATIMUP/i3S, the Medical Faculty, and Post-docs.

29 February

Morning:

9.00-10.00 - Documents and structure of the module (Participants: R Seruca and Celso Reis)

10:00.12:00- Distribution of the projects (Raquel Seruca and Celso Reis, with the collaboration of Paula Soares, Carla Oliveira, Raquel Almeida, José Carlos Machado).

12:00 – 13:00 Projects preparation/discussion

Afternoon:

15.00-17:30 - Cancer genes: Beyond the classic dual division (Participant: M Sobrinho-Simões)

17.30-19.00 – Projects preparation/discussion.

1 March

<u>Morning:</u> 9.30-12.30 – Oncogenes and Tumor suppressor genes (Participants: Raquel Seruca, Sofia Fernandes, Patricia Carneiro)

Afternoon:

14.30-17.30 – Tumor Immortalization and Growth (Participants: Paula Soares, João Vinagre)

17.30-19.00 – Projects preparation/discussion.

2 March

Morning:

9.30-12.30 – Communication and dynamics of cancer cells (Participants: José Carlos Machado, José Luís Costa, Sónia Melo)

Afternoon:

14.30-17.30 – Metabolism and cancer (Participants: Valdemar Máximo, Jorge Lima, M Sobrinho-Simões).

18.00-19.00 – Projects preparation/discussion.

3 March

<u>Morning:</u> 9.30-12.00 – Projects preparation/discussion.

Afternoon:

14.30–17.30 – Cancer stemness and differentiation (Participants: Joana Paredes, Raquel Almeida, Rita Barros)

18.00-19.00 - Projects preparation/discussion

4 March

<u>Morning:</u> 9.30-12.30 – Cancer Cell invasion and microenvironment (Participants: Joana Figueiredo, Sérgia Velho, Maria Oliveira, Fátima Carneiro)

Afternoon:

14.30-17.30 – Metastization (Participants: Leonor David, Ana Sofia Ribeiro)

7 March

<u>Morning:</u> 9.30-12.30 – Glycosylation in cancer (Participants: Celso A. Reis, Salomé Pinho, Ana Magalhães)

Afternoon:

15.00-17.30 – Proteomics applications in Cancer Research (Participants: Celso A. Reis, Hugo Osório, Catarina Gomes)

17.30-18.30 – Projects preparation/discussion.

8 March

Morning:

9.30-12.00 – Immunology, chronic inflammation and cancer (Participants: Manuel Vilanova, Salomé Pinho)

Afternoon:

14.30-15.30 – Epithelial to mesenchymal transition and cancer cell plasticity (Participant: Carla Oliveira)

16:00-17:00 Cancer treatment and Drug resistance (Participant: Gabriela Almeida)

17.00-18.00 – Projects preparation/discussion.

9 March

Morning:

9.30-12.00 – DNA/RNAomics and Bioinformatics: applications in Cancer (Participant: Patricia Oliveira; Pedro Ferreira)

<u>Afternoon:</u>

14:30-18.00 - Projects preparation/discussion.

10 March

<u>Morning:</u> 9.30-12.00 – Projects preparation/discussion.

Afternoon:

14.00 – 17.30 – Infection and cancer: "the example of *Helicobacter pylori* and gastric carcinoma" (Participants: Céu Figueiredo, Marina Leite, Rui Ferreira)

11 March

<u>Morning:</u> 9.30-12.30 – Projects preparation/discussion.

Afternoon:

14.00 - 18.00 - Projects: presentations and general discussion.