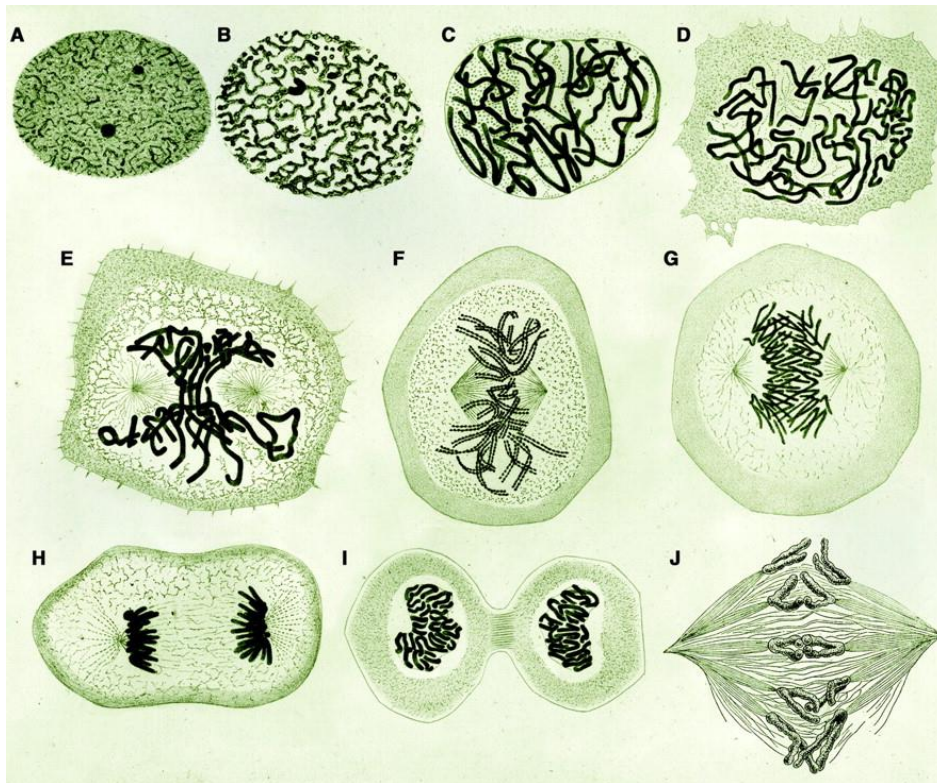


# Cell Division

May 7- May 18, 2018



Course Coordinator: Helder Maiato

# Objectives

In this course, students will be exposed to key tutorials and seminars on cutting-edge, cell division-related topics by world-renowned experts. These tutorials/seminars will cover fundamental concepts but will be specially oriented towards the identification of present challenges in the field and how they are being experimentally addressed. Tutorials/seminars will be complemented with a short microscopy overview. From the first day of the course, the students will team up with a teaching assistant and will be assigned a research project to be carried out during the two weeks of the course. This includes the preparation of the necessary reagents, design and execution of experimental work, interpretation of the data and preparation of a short written report. The report will represent the main student evaluation instrument for this course.

# Program

## Week 1 (May 7 - May 11)

	Monday	Tuesday	Wednesday	Thursday	Friday
9:00-12:00	<b>Tutorial: Cell Cycle Regulation</b> Claudio Sunkel (Room B)	<b>Tutorial: Mitosis</b> Helder Maiato (Room B)	<b>Tutorial: Kinetochores</b> Reto Gassmann (Room B)	<b>Tutorial: Cytokinesis</b> Ana Carvalho (Room B)	<b>Tutorial: Ageing and Aneuploidy</b> Elsa Logarinho (Room B)
12:00-13:00	<b>Seminar: Spindle Assembly Checkpoint</b> Carlos Conde (Room B)	<b>Seminar: Mitosis vs. Prolonged mitosis</b> Cristina Ferrás (Room B)	<b>Seminar: Enormous accelerators of electrons and neutrons elucidate DNA's own evolution</b> António Lima- de-Faria (Mariano Gago)	<b>Seminar: Epithelial Cell Division</b> Eurico Morais de Sá (Room B)	<b>i3S Seminar Gluing chromosomes: how much and what for?</b> Raquel Oliveira (Mariano Gago)
13:00-14:00	Lunch break	Lunch break	Lunch break	Lunch break	Lunch break
14:00-16:00	<b>Quantitative Microscopy</b> António Pereira (Room B)	<b>Projects</b>			
16:30	<b>Visit microscopes</b> António Pereira, Paula Sampaio & André Maia				

## Week 2 (May 14 - May 18)

	Monday	Tuesday	Wednesday	Thursday	Friday
12:00-13:00	Projects				Projects
					<i>i3S Seminar MECHANO- MOLECULAR REGULATION OF CELL DIVISION Tom Maresca (Mariano Gago)</i>
					<i>Projects conclusion and reporting</i>

### *Visit microscopes*

*Monday 7/05, 16:30-18:00 (visit to the microscopes: 3 groups, 3x 30 min rotations)*

#### **STED and Laser microsurgery**

António Pereira

#### **Scanning confocal, Spinning-disk confocal and wide-field/3D-deconvolution**

Paula Sampaio

#### **High-content screening microscope**

André Maia

## Faculty & Invited Speakers

<b>Claudio Sunkel</b> i3S, Universidade do Porto (cesunkel@ibmc.up.pt)	<b>Helder Maiato</b> i3S, Universidade do Porto (maiato@ibmc.up.pt)
<b>Reto Gassmann</b> i3S, Universidade do Porto (rgassmann@ibmc.up.pt)	<b>Ana Carvalho</b> i3S, Universidade do Porto (anacarvalho@ibmc.up.pt)
<b>Elsa Logarinho</b> i3S, Universidade do Porto (elsa.logarinho@ibmc.up.pt)	<b>Eurico Morais de Sá</b> i3S, Universidade do Porto (eurico.sa@ibmc.up.pt)
<b>António Pereira</b> i3S, Universidade do Porto (apereira@ibmc.up.pt)	<b>Carlos Conde</b> i3S, Universidade do Porto (CConde@ibmc.up.pt)
<b>Paula Sampaio</b> i3S, Universidade do Porto (sampaio@ibmc.up.pt)	<b>Cristina Ferrás</b> i3S, Universidade do Porto (cristina.ferras@ibmc.up.pt)
<b>André Maia</b> i3S, Universidade do Porto (andre.maia@i3S.up.pt)	<b>Raquel Oliveira</b> Instituto Gulbenkian de Ciência (rcoliveira@igc.gulbenkian.pt)
<b>António Lima-de-Faria</b> Lund University	<b>Tom Maresca</b> University of Massachusetts, Amherst (tmaresca@bio.umass.edu)