



Cell migration workshop: concepts, mechanisms and techniques

Program

23rd June – Concepts, mechanisms and techniques

10:30 - 11:00 - Registration

11:00 – 12:00 - Lecture 1: **Cell migration: concepts and techniques** (*Ana Fernandes, CBIOS - Universidade Lusófona, Portugal*)

12 – 13:00: Lunch

13:00 – 16:00: practical classes **P1, P2, P3** and **P4** (see list below)

16:00 – 16:30: Coffee break

16:30 – 17:30: Lecture 2: **Molecular mechanisms of cell migration: a technical approach** (*Nuno Saraiva, CBIOS - Universidade Lusófona, Portugal*)

24th June – Cell migration in health and disease

09:30 – 10:15: Talk 1: **Cell migration and morphogenesis** (*Elias Barriga, IGC*)

10:15 – 10:45: Talk 2: **Cell migration and tissue regeneration** (*António Jacinto, CEDOC*)

10:45 – 11:15: Coffee break

11:15 – 11:45: Talk 3: **Cell migration and cancer invasion** (*Maria José Oliveira, I3S*)

12 – 13:00: Lunch

13:00 – 15:00: Conclusion of practical classes **P1** and **P2** (see list below)

15:00 – 15:30: Concluding remarks

15:30 – 16:30 Evaluation (optional, for ECTS attribution only)

Practical classes

P1 - Collective cell migration assays – (*Ana Fernandes, CBIOS*)

Wound Healing Assay, Zone Exclusion Assay

P2 - Chemotaxis, and chemoinvasion – (*Tiago Granja, CBIOS*)

Transwell-based assays

P3 - Analysis of cell adhesion and cytoskeleton – (*Nuno Saraiva, CBIOS*)

Fluorescence microscopy

P4 - Data analysis with Image J – (*Raquel Pereira, IMM*)

Random cell migration, Collective cell migration and ECM degradation

Coordinators

Ana Sofia Fernandes – Course Coordinator

CBIOS - Universidade Lusófona, Portugal

Ana Sofia Fernandes is graduated in Pharmaceutical Sciences (2004), has a PhD in Pharmacy (specialty of Toxicology, 2010, Univ. Lisboa) and is a European Registered Toxicologist (2018). She is an Associate Professor at Universidade Lusófona. She is also the Scientific Director for Innovation and the coordinator of the Laboratory of Pharmacology and Molecular Mechanisms of CBIOS research center. Her main research interest is to explore the impact of ROS and redox modulators on cancer etiology and progression, including in cell migration mechanisms.

ORCID ID: 0000-0001-6350-0641

Nuno Saraiva – Course Coordinator

CBIOS - Universidade Lusófona, Portugal

Nuno Saraiva graduated in Genetics and Microbial Biology and is an MSc in Molecular Biology and Genetics from Lisbon University. Nuno finished his PhD in Cell Biology and Virology from Imperial College, London (2012) and worked as a PostDoc at the U. of Cambridge. He is a member of CBIOS since 2014, and an Assistant Professor of Cell and Molecular Biology at U. Lusófona. His research as a Principal Investigator at CBIOS has been focussed on the impact of Ca²⁺ and redox homeostases on cellular processes associated with cancer progression such as cell migration.

ORCID ID: 0000-0003-1333-9137

Speakers and Trainers

António Jacinto

CEDOC – Nova Medical School

Head of the “Tissue Repair and Inflammation” lab and Coordinator of iNOVA4Health

ORCID: 0000-0002-4193-6089

Elias Barriga

IGC – Instituto Gulbenkian de Ciência

Leader of the “Mechanisms of Morphogenesis” group

ORCID: 0000-0003-2912-3613

Maria José Oliveira

I3S – Universidade do Porto

Leader of the “Tumour and Microenvironment Interactions” group

ORCID: 0000-0002-0724-0272

Raquel Pereira

IMM – Universidade de Lisboa

Postdoctoral Researcher at the “Cell Architecture” group

ORCID: 0000-0001-9957-815X

Tiago Granja

CBIOS - Universidade Lusófona, Portugal

Member of the “Modelling systems” lab

ORCID: 0000-0002-8137-1449

Registration

- Registration deadline: 09 June 2022
- Maximum number of participants: 24
- Fee (includes attendance to lectures and laboratory classes; no meals included)
 - General: 120 €
 - Reduced rate: 100 €*

*The reduced rate applies to students, teachers and researchers from University Lusófona.

How to register

- **Registration form:** <https://forms.gle/Re8uk3rTXsvDuTCM6>
- Proof of payment should be sent to secretaria.cbios@ulusofona.pt. Registration will only be effective after reception of this document.

Payment

- Should be made by bank transfer to:
 - BPI- Banco Português de Investimento
 - NIB: 0010 0000 26831120001 44
 - IBAN: pt50 0010 0000 2683 1120 0014 4
 - SWIFT/BIC: BBPIPTPL
 - Beneficiary: ALIES (Associação Lusófona para o Desenvolvimento da Investigação e Ensino em Ciências da Saúde)

Description: CellMigrat2022+first+last name
- According to “ECTS General Terms and Conditions for Advanced Training Courses”, the course registration price includes a fixed administrative fee of 20 euros that will not be reimbursed in the case of cancelation by the student.

Contact details

Admin support

secretaria.cbios@ulusofona.pt

Course Coordination

ana.fernandes@ulusofona.pt

nuno.saraiva@ulusofona.pt