

# Cell migration workshop: concepts, mechanisms and techniques

## Course Program

### 26<sup>th</sup> Jun

09:00 - 09:30 - Registration

09:30 – 10:30 - Lecture 1: **Cell migration: concepts and techniques** (*Ana Fernandes, CBIOS - Universidade Lusófona, Portugal*)

10:30 – 12:00: practical classes **P1, P2, P3** and **P4** (see list below)

12 – 13:30: Lunch

13:30 – 15:00: practical classes **P1, P2, P3** and **P4** (see list below)

15:00 – 16:00: Coffee break

16:00 – 17:45: Talk 1: **Duarte Barral**, *NOVA Medical School*

### 27<sup>th</sup> Jun

10:00 – 11:00: Lecture 2: **Molecular mechanisms of cell migration: a technical approach** (*Nuno Saraiva, CBIOS - Universidade Lusófona, Portugal*)

11:00 – 11:30: Coffee break

11:30 – 12:15: Talk 3: **Rita Fior**, *Champalimaud Research*

12:15 – 13:15: Lunch

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

15:15 – 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** – (*to be confirmed*)  
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

## Coordination and Invited Speakers

### Coordination

#### **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 coordinator of the Laboratory of Models & 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 has 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 has been a member of CBIOS and an Assistant Professor of Cell and Molecular Biology at U. Lusófona since 2014, and of Cancer Cell and Molecular Biology at the Faculty of Sciences, Lisbon U since 2024. His research as a Principal Investigator at CBIOS has been focused on the impact of Ca<sup>2+</sup> and redox homeostases on cellular processes associated with cancer progression such as cell motility and survival.

ORCID ID: 0000-0003-1333-9137

### Confirmed Speakers and Trainers

#### **Rita Fior**

*Champalimaud Foundation*

Head of the “Cancer development and innate immune evasion” group.

ORCID: 0000-0001-5550-2428

#### **Duarte Barral**

*NOVA Medical School, Universidade NOVA de Lisboa*

Head of the “Membrane traffic in disease” group.

ORCID: 0000-0001-8867-2407

#### **Raquel Pereira**

*GIMM – Universidade de Lisboa*

Postdoctoral Researcher at the “Cell architecture” group

ORCID: 0000-0001-9957-815X

## Registration

- Registration deadline: 6 June 2025
- Maximum number of participants: 20
- Fee (includes insurance, attendance to lectures and laboratory classes; no meals included)
  - General: 150 €
  - Reduced rate: 120 €\*

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

## How to register

- Registration form: <https://forms.gle/GMLSUNkpChMoBMYv8>
- Proof of payment should be sent to [nuno.saraiva@ulusofona.pt](mailto:nuno.saraiva@ulusofona.pt). Registration will only be effective after reception of this document.

## Payment details

- 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: **CellMigrat2025** First and 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

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