



MOBILISE

ERA CHAIR

Deliverable D15 (D4.2)

Training and

Mentoring Plan



The project MOBILISE received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement no. 951723.

Project acronym	MOBILiSE
Project name	Molecular Bioengineering in health ERA chair
Call	H2020-WIDESPREAD-2018-2020-6
Grant Agreement ID	951723
Project Duration	1 st January 2021 – 30 th June 2026 (66 months)
Coordinator	Cristina Martins INEB – Instituto Nacional de Engenharia Biomédica
Number of Deliverable	D15 (D4.2)
Title of Deliverable	Training and Mentoring Plan
Related WP	WP4 – Performance and Capacity building
Author(s)	Helena Azevedo
Contact e-mail(s)	hazevedo@i3s.up.pt
Dissemination level	Public
Due date	31 st December 2021
Date of Submission	30 th December 2022
Version	1.0

Document History

Version	Date	Status
0.1	20220628	First draft by Helena Azevedo and Mariana Bexiga
0.2	20221221	Second draft including comments by Paula Lopez Perez
0.3	20221222	Third draft after revision by Helena Azevedo
1.0	20221230	Final version approved by the Management Committee

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List of Abbreviations

CDU	Career Development Unit
ECR	Early Career Researchers
ERA-CH	ERA Chair Holder
KTO	Knowledge Transfer Office
MSCA	Marie Skłodowska Curie Actions
RIU	Research and Innovation Unit
RSC	Royal Society of Chemistry

Executive Summary

One of the ways MOBILisE and its ERA Chair Holder (ERA-CH) will contribute to improving the scientific capacity of INEB/i3S is through the training and mentoring of young researchers, providing guidance on the improvement of their individual strengths, and fulfilling needs in terms of skills acquisition.

The Training and Mentoring Plan presented in this document builds on the training needs identified by the young researchers in D4.6 and has been prepared in collaboration with the Career Development Unit of INEB/i3S. It includes: (i) training on how to successfully apply to interdisciplinary research projects; (ii) advice on research management strategies; (iii) counselling for engagement with industrial collaborators; and (iv) initiatives regarding career building and development. A pilot Mentoring Scheme targeted at young researchers is also introduced.

1. Introduction

The overall strategic objective of MOBILISE is to increase the quality of the fundamental and applied research of INEB/i3S in Molecular Bioengineering to world-leading standards. Specifically, one of the objectives is to improve the capacitation of its researchers through skills acquisition and mentoring.

As identified in D4.9 *MOBILISE Funding Plan*, it is crucial to improve the success rate of INEB/i3S in large grant proposals, not only to improve its scientific or technological competitiveness, but also to enhance the international visibility of the research groups. Several international grant application calls, relevant to the researchers of INEB/i3S, were identified, such as European Research Council grants and Marie Skłodowska Curie Actions (MSCA), which are highly competitive. To improve the chances for winning these highly prestigious grants and support researchers in their careers, a training and mentoring plan has been devised to assist them in developing strong and ambitious proposals and identify successful career paths.

The Training and Mentoring plan of MOBILISE is organised in collaboration with the Career Development Unit (CDU) at i3S. The unit gives individual advice on career exploration, planning and development and organises events and activities to support researchers on their professional development towards careers in academic research, but also for research careers beyond academia, or in non-research careers that can benefit from the advanced skills of doctorate holders. To give some examples, the CDU organises actions on career exploration programs, skills identification or job applications in academia and beyond, as well transferable skills, such as project management, leadership or Intellectual property management. MOBILISE intends to support the sustainability of the current training programs, as well as promote new actions identified on D4.6 *Map of funding attraction training needs*. The training opportunities and the pilot Mentoring Scheme MOBILISE proposes to put in place at INEB/i3S are described below.

2. Training Plan

The training plan of MOBILISE will build on the courses already existing at INEB/i3S¹ and on the needs identified by the young researchers on D4.6 *Map of funding attraction training needs*. Currently, INEB/i3S has an extensive offer of Advanced Courses, focussed on technical skills, with a weaker portfolio of training on transferrable skills, which can contribute to improving the career prospects of INEB/i3S. researchers and also to enhancing their success rates in grant applications. A reason for that might be the lack of funding for the organisation of these particular training courses requiring the participation of external experts in specific areas. While MOBILISE will contribute to the specific training in Molecular Bioengineering through its Advanced Courses, it also intends to contribute to the training in transferable skills.

¹ <https://www.i3s.up.pt/advanced-training.php>

Regarding the existing courses (eg. Research Project Management or Intellectual Property Management Workshop), MOBILISE will participate in their organisation both by contributing with the expertise of the team, and by inviting external experts as lecturers.

The goal of MOBILISE is to capacitate the INEB/i3S researchers with complementary skills, particularly pertaining the writing of interdisciplinary research projects and engagement of industrial collaborators. MOBILISE will liaise with the CDU and the Research and Innovation Unit (RIU) to organise courses covering these subjects.

Regarding the writing of interdisciplinary projects, there will be several activities aimed at assisting researchers in developing and strengthening their research ideas and improving their writing style to convey their ideas in grant applications. For example, the research groups are encouraged to organise regular meetings dedicated for the presentation of research ideas from their junior members where external members from other groups at i3S will be invited to attend and provide feedback on a research idea that is at early stage and can thus be shaped and improved.

Information sessions on individual calls, namely MSCA and ERC have regularly been organised at INEB/i3S by the CDU and RIU units. For example, an MSCA Postdoctoral Fellowship information session was held at i3S on the 22nd of June 2022 by the CDU and the RIU with the participation of the ERA Chair Holder (ERA-CH), Dr Helena Azevedo, where she shared her experience not only as an MSCA Evaluator in the last three years, but also as a successful applicant (fellow and supervisor) (see Appendix I for the Programme).

MOBILISE will keep supporting the existing sessions and organise events for different calls to diversify the funding at INEB/i3S. MOBILISE also aims to organise sessions focussing on specific policies relevant to Horizon Europe, for example on the Green Deal or on Gender Equality.

Training sessions, specific for the identified calls, and grant writing events will be organised. These events will include the participation of researchers, who have been successful on those calls and/or have inside views as evaluators. When relevant, a leading international coach can be invited to lead a session.

Furthermore, in collaboration with the Knowledge Transfer Office (KTO) of the RIU, MOBILISE will organise workshops on Knowledge Transfer and Intellectual Property Management. Taking advantage of their expertise, MOBILISE will liaise with the KTO to organise workshops on Regulatory aspects relevant to Molecular Bioengineering, including related to medical devices and *in vitro* diagnostics, which have been identified in D4.6 as a training need by the researchers. Of note, the MOBILISE Launch event, taking place on the 27th January 2023, will be devoted to the industrial and clinical translation of Molecular Bioengineering research and will include a round table with the participation of Infarmed, the National Authority of Medicines and Health Products.

3. Mentoring Plan

Mentoring consists of a kind of confidential partnership between two people (the mentor and the mentee), where the mentor provides guidance for the mentee on several aspects of life that are important to them and what type of skills they want to improve and develop. Having mentoring

schemes in place at INEB/i3S will improve not only the working culture and professional development of the researchers, but will also strengthen fellowship proposals, when the institute acts as host institution.

Together with the CDU, MOBILiSE proposes to implement a pilot mentoring scheme at INEB/i3S where mentors with diverse career paths will be paired with early career researchers (ECRs – mentees) according to their future professional expectations. The mentor is not intended to act as supervisor, but rather to provide pastoral advice and should be from a different research area. Mentoring pairings will be done based on the answers given by mentors and mentees in a pre-questionnaire.

This Mentoring Programme is highly dependent on the availability and willingness of group leaders of INEB/i3S and external professionals to become mentors. To encourage their participation, information sessions about the programme will be organised to introduce the mentoring process in detail and explain the benefits of being a mentor.

A call for mentors and mentees will be open and pairings will be done based on the professional and personal interests of mentors and mentees. An Alumni network would be a potential source of mentors with positions at external institutions and different industries. INEB/i3S currently does not have an alumni network and a career track system in place. MOBILiSE will collaborate to implement an alumni network on LinkedIn, for example.

The MOBILiSE ERA-CH has already volunteered to become mentor of two ECRs (pairing to be made). Helena Azevedo is a Fellow of the Royal Society of Chemistry (RSC) that provides mentoring schemes to researchers at different stages of their career. She has received mentoring through the RSC and has been providing informal mentoring to young academics in the UK. Her mentoring experience, together with her professional network and international nature of her team, will be valuable to implement the mentoring plan.

Mentoring meetings are expected to occur on a regular basis (e.g. every 3 months, to be agreed between the mentor and mentee) with informal discussions in between, and when the mentee requests. In the first meeting, the mentors are expected to assist mentees in preparing a career development plan, identifying training needs for their project and also for their professional development (e.g. leadership, project management, IPR, entrepreneurship) according to their career goals. Later on, the mentors can provide advice on future job applications, preparing competitive proposals and practicing job interviews. They will provide constructive criticism and share their experience on their own career paths.

Informal and interactive lunch events between the ERA-CH and young researchers, including young group leaders, will be held every three months, eventually with the participation of other relevant role models. For example, a lunch with Professor Conrado Aparício, with considerable international experience in academia (Spain and USA, public and private universities), took place in July 2022 during his visit to INEB/i3S. Additional advice on alternative career paths in science was provided during the visit of Dr Christine-Maria Horejs, Chief Editor of Nature Reviews Bioengineering, in September 2022, who talked about editorial careers. These lunch sessions will serve as an inspiration and motivation towards different career paths.

Appendix I – Programme of the MSCA-PF info session



MSCA Postdoctoral Fellowships info session

i3S, Instituto de Investigação e Inovação em Saúde

Date: June 22nd 2022 | online event

PROGRAM

09h30 - 09h35 | Opening Remarks

Paula Perez (Career Development Unit, i3S)

09h35 - 09h55 | MSCA Postdoctoral Fellowships: Key features

Catarina Neves (Research & Innovation Unit - Research Funding Office, i3S)

09h55 - 10h35 | Structure overview and proposal key aspects
Q&A

Virgínia Carvalhais (Research & Innovation Unit - Research Funding Office, i3S)

10h35 - 11h30 | Round table: Tips and tricks for a successful application

Chair: Paula Pérez (Career Development Unit, i3S)

- Helena Azevedo. i3S Molecular Biomaterials Group Leader (MSCA Evaluator and former MSCA Fellow)*
- Catarina M. Seabra. Researcher at Center for Neuroscience and Cell Biology. U. Coimbra (MSCA Fellow)*
- Mani Diva. Assistant Professor at Radboud University Medical Center, Nijmegen, The Netherlands (MSCA Fellow)*

**INSTITUTO
DE INVESTIGAÇÃO
E INOVAÇÃO
EM SAÚDE
UNIVERSIDADE
DO PORTO**

Rua Alfredo Allen, 208
4200-135 Porto
Portugal
+351 220 408 800
info@i3s.up.pt
www.i3s.up.pt