



Report

D4.2 Mid-term report on activities targeted for Early Stage Researchers

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Executive Summary

One of the main aims of the OLISSIPO project is to promote Early Stage Researchers (ESR) careers and leverage the research potential of students in the first years of their PhD programmes and also students that have recently received their MSc degree. In line with this, OLISSIPO has been supporting their participation in conferences and workshops, as well as networking activities and training, in order to promote mentoring activities, networking and international collaborations.

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1. Introduction

The main aim of Work package 4 (WP4) of the OLISSIPO project is to sharpen the research profile of INESC-ID. Profiting from the existing staff exchange programme (WP1), ESRs are invited to visit the other Twinning partners, get to know their work, discuss ideas and establish new collaborations. The project also supports the participation of ESRs in external courses, workshops, national and international conferences and meetings. In addition, OLISSIPO promotes several training courses. Deliverable 4.1 described the main planned ESR training programme, which is complemented by the management training plan (Deliverable 5.2) since training in fields such as project management, communication, proposal writing, human resources, data management plan and research ethics will also be provided to ESR.

1.1 Deliverable objective

This deliverable outlines the midterm report on the activities targeted for ESRs corresponding to the first 18 months of the project.

2. Midterm report on activities targeted for Early Stage Researchers

2.1. Scientific courses

OLISSIPO has been supporting ESRs participation in external workshops, courses and international conferences and meetings to leverage the scientific excellence of INESC-ID and also Instituto Superior Técnico (IST).

2.1.1. [Computational Data Analysis Course](#) | May 20-28, 2021 | University of Minho (Portugal), Online

OLISSIPO supported the participation of Carolina Peixoto, an INESC-ID ESR, in the Computational Data Analysis Course between May 20-28, 2021 at the University of Minho, Portugal. This was a 7-day hands-on advanced course intended for students and researchers of biological/biomedical fields who may have basic knowledge of statistics and data analysis but want to learn the basics of fundamental advanced computational techniques to analyze large complex data sets.

2.1.2. [Computational Biology Course](#) | February 28 - March 4, 2022 | Centre for Neuroscience and Cell Biology (Portugal), Online

The ESRs José Basílio and Mónica Silva from INESC-ID participated in this online course, whose main aim was to provide an overview of different subareas techniques in the Computational Biology field.

2.1.3. The Gulbenkian Training Programme in Bioinformatics - [Precision Oncology](#) | May 9 - 13, 2022 | IGC

The INESC-ID ESR Mónica Silva participated in this course, whose main is to present a complete computational pipeline for the analysis and interpretation of Next-Generation Sequencing (NGS) data such as exome sequencing or targeted panels that are commonly used in the clinic.

2.2. International Conferences

2.2.1. [Cancer Genomics](#) | November 22-24, 2021 | EMBL, Online

Carolina Peixoto participated in this conference to learn about and keep up to date with the rapidly progressing area of cancer genomics. It covered presentations from cancer genome projects, the areas of cancer functional genomics, systems biology, cancer immunogenomics and epigenomics, cancer mouse models and the translation and clinical impact of obtained scientific results. Carolina presented a scientific poster about her work entitled “Biomarker selection in survival colorectal cancer data using correlation-based regularization”.

2.2.2. [ISMB/ECCB'2021](#) | July 25-30, 2021 | Online

The annual international conference on Intelligent Systems for Molecular Biology (ISMB) and the European Conference on Computational Biology (ECCB), organised by the International Society for Computational Biology (ISCB) are the world’s largest bioinformatics and computational biology conferences. ISMB/ECCB’2021 provided an intense multidisciplinary forum for disseminating the latest developments in bioinformatics and computational biology. Carolina Peixoto was present at this conference which foster fresh dialogues, collaboration and learning opportunities.

2.2.3. Joint Meeting on Vascular Biology, Inflammation and Thrombosis 2022 | June 1, 2022 | Vienna, Online

José Basílio, an ESR at INESC-ID, participated in this meeting with a scientific poster entitled: “Bioinformatic support by the Coordination Project”. This meeting is important to

exchange ideas and create successful collaborations between young and established scientists working in the field of Vascular Biology, Thrombosis Research, Inner Medicine, Clinical Pharmacology, Surgery and Atherosclerosis Research.

2.2.4. [CSAMA 2022](#) | June 19-24, 2022 | Brixen, Italy

The ESRs Mónica Silva and João Aparício from INESC-ID participated in this one-week intensive course on Statistical Data Analysis for Genome-Scale Biology teaches statistical and computational data analysis of multi-omics studies in biology and biomedicine (Figure 1). It comprises lectures covering underlying theory and state-of-the-art, and practical hands-on exercises based on the R / Bioconductor environment. The course is intended for researchers who have basic familiarity with the experimental technologies and their applications in biology and are interested in making the step from a user of bioinformatics software towards adapting or developing their own analysis workflows.



Figure 1. INESC-ID ESRs with the EMBL PI, Dr. Wolfgang Huber, and the project manager Simone Bell in Brixen, Italy.

“The CSAMA is a requirement for anyone starting out in bioinformatics. It is not only a great opportunity to learn theory and practice in the field, in an interactive way. But also a way to connect with researchers from other leading institutions.” - João Aparício, ESR.

“CSAMA’2022 was an outstanding opportunity to enrich my training in the field of statistical analysis of genomics data. The course covered the most relevant and emerging topics of

Bioinformatics, curated and lectured by high-level experts from renowned institutes. The learning content was vast, with complementary theoretical and practical hands-on sessions, supported by high-quality study material and data analysis programming workflows that I will consider as a strong reference for my research project. I also had the chance to interact with participants with diverse academic backgrounds, discussing mine and their research projects, and therefore allowing me to develop new ideas and expand my professional network.” - Mónica Silva, ESR.

2.3. Training Activities for ESR

2.3.1. Voice and Communication Training Workshop (1st Edition) | July 5-7, 2021 | INESC-ID, Lisbon

Carolina Peixoto, together with Prof. Susana Vinga and the project manager Dr. Sara Tanqueiro, participated in this intensive and practical 3-day workshop, organized by Raquel Bulha from TIMBRE (Figure 2). Participants had the opportunity to discover how to effectively communicate with others in both a professional and personal sense and become aware of their own voice.



Figure 2. Voice and Communication Training Workshop (1st Edition).

2.3.2. Seminar on Mental Health | December 13, 2021 | INESC-ID, Lisbon

This seminar, given by Dr. Isabel Gonçalves from the Academic Development Office of IST, was focused on mental health and how the pandemic has been affecting people's daily life,

thoughts and behaviours. Two ESR (Carolina Peixoto and Mónica Silva), the OLISSIPO PI and PM and INESC-ID president, Professor Inês Lynce, participated in this seminar (Figure 3).



Figure 3. Mentah Health Seminar.

“This seminar allowed me to understand the wide impact of the COVID-19 pandemic on our wellbeing, leading me to be more aware of signs that those around me might be struggling to manage this critical period - and that such is to be expected and normalized. It was a great opportunity to reflect on the importance and urgency of having dialogues on the thematic of mental health.” - Mónica Silva, ESR.

“This seminar was very important because it covered a very relevant, and sometimes neglected topic, mental health. I have learnt how to be aware of my peers and my own mental health and also learnt strategies on how to cope with stress and anxiety.” - Carolina Peixoto, ESR.

“This seminar gave me the opportunity to discuss ways to identify potential problems within my team, as a first step to find supporting strategies to cope with mental problems and promote a healthy environment.” - Professor Susana Vinga, PI.

“In the last decade, we have been increasingly recognizing the importance of emotional and mental health and its impact on our daily life, thoughts and behaviours. The emergence of the pandemic has exacerbated poor mental health: uncertainty and the fear of the unknown can be determinants of anxiety and depression. In this seminar, I learned how to identify and distinguish between these two states, what we can do to help others in these situations and what tools we have to deal with stress. Overall, it was really worthwhile and valuable to reflect on this

extremely important topic we unconsciously tend to neglect in the rush of the days.” - Sara Tanqueiro, Project Manager.

2.3.3. Voice and Communication Training Workshop (2nd Edition) | February 4-5, 2022 | Palácio Pancas Palha, Lisbon

José Basílio and Mónica Silva, two of our ESRs participated in the second Training sessions on Voice and Communication with Raquel Bulha from TIMBRE (Figure 4).

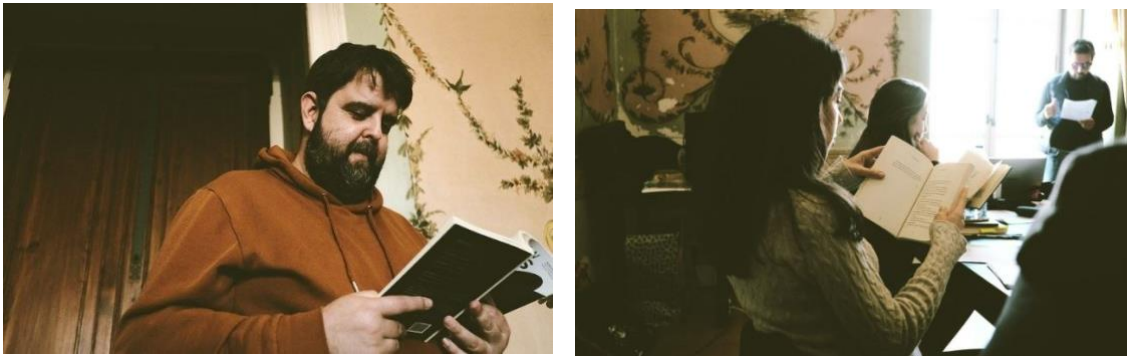


Figure 4. Voice and Communication Training Workshop (2nd Edition).

"Raquel was fantastic, and we were in an amiable and participatory group, which allowed us to exchange essential feedback with each other to improve!" - Mónica Silva, ESR.

"Raquel makes the course very light and funny, but at the same time, she helps us to improve our expression. The group was also very cohesive, and we were able to learn a lot from each other." - José Basílio, ESR

2.4. Scientific internships and exchanges

Profiting from the existing staff exchanges, ESRs have been the opportunity to visit the Twinning partners (see *D1.2 - Midterm report staff exchanges for the full description of these activities*). These visits are crucial to get to know the other institutions, learn more about the work that has been developed on similar topics, discuss new ideas and establish collaborations. One of the main aims of the OLISSIPO project is to leverage the scientific profile of the ESRs of the coordinating institution. In this context, Table 1 summarises the ESRs staff exchanges carried out involving the INESC-ID team.

Table 1. Summary of the staff exchanges involving Early Stage Researchers. For each Twinning Partner (column), the meeting venues (i.e., host institution city) are reported.

INESC-ID	Inria	EMBL	ETH	#Travels / #Hosts
Ana Rita Baião, ESR	Lisbon	Lisbon	Lisbon	0/3
Carolina Peixoto, ESR	Lyon, Lisbon	Lisbon	Basel, Lisbon	2/3
Daniel Gonçalves, ESR	Lisbon	Lisbon	Lisbon	0/2
David Calhas, ESR	-	Lisbon	-	0/1
Isabella Kim, ESR	Lisbon	-	Lisbon	0/2
João Aparício, ESR	Lisbon	Lisbon	Basel, Lisbon	1/3
José Basílio, ESR	Lyon, Lisbon	-	Basel, Lisbon	2/2
Leonardo Alexandre, ESR	Lisbon	Lisbon	Basel, Lisbon	1/3
Mónica Silva, ESR	Lyon, Lisbon	Lisbon	Basel, Lisbon	2/3

3. Conclusions

Events of the second half period will be reported in D4.3 - Final report on activities targeted for Early Stage Researchers.