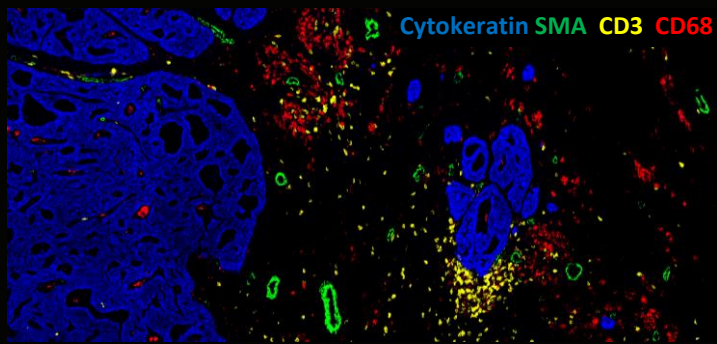


iMM-Laço Hub is recruiting a Computational Biologist Postdoc

The iMM-Laço Hub, a structure dedicated to the study of breast cancer, opens a call to hire a Postdoctoral Researcher to join the project “*Multi-Dimensional Cartography of the Breast Cancer Micro-Environment*”.

We hypothesize that an *Onco-Immuno-Microbial axis* plays critical roles in breast cancer progression, response to therapy and even relapse. However, much is still to be understood about this three-dimensional crosstalk that holds some therapeutic promises. Thus, our goal is to create an unprecedented map of human breast cancer that will encompass the genetic and clonal distribution of the tumour cells (whole genome/exome sequencing), the specific gene expression profile and the localisation and phenotype of immune/stromal cells (RNA-seq and multiplexed imaging), and the local microbiota (16S rRNA sequencing). This multi-omics landscape will be integrated and associated with clinical data using dimensionality reduction approaches and machine learning to unravel the major parameters and pathways that can be targeted to limit cancer progression and to determine the clinical course of the patients.



The successful candidate must be a **highly motivated, pro-active, independent, gregarious and versatile** individual to join our multi-disciplinary team. He/She should be passionate about iMM-Laço Hub’s missions of bringing hope to the women who are diagnosed with breast cancer.

THE PRINCIPAL ACTIVITIES INCLUDE:

- Performing the bioinformatics analyses and integration of complex data (exome, transcriptome, microbiome, etc.) from local tumour samples and public databases (e.g., The Cancer Genome Atlas)
- Leading the development of bioinformatics tools for non-computational researchers and oncobiologists to explore data generated by the project when publicly released
- Collaborating with and/or co-supervising computational biology MSc and PhD students
- Participating in the conception of projects related with the iMM-Laço Hub and in the writing of associated grant applications
- Reporting results to a multidisciplinary team and jointly interpreting them
- Participating in the outreach and science communication activities promoted by the iMM-Laço Hub

THE REQUIRED SKILLS / QUALIFICATIONS:

- PhD in Biological Sciences, Biomedical Sciences or Bioengineering, preferentially in Bioinformatics and/or Computational Biology
- Good programming skills, preferentially with advanced knowledge in programming in R
- Experience in bioinformatics analyses of next-generation sequencing data, preferentially transcriptomic data
- Knowledge in Statistics and Linear Algebra
- Aptitude to write and lead projects
- High organization skills and strong work ethics (care, rigor, consistency, intellectual honesty)
- Proficiency in English, spoken and written, and excellent verbal and written communication skills

Ref application: IMM/CT/45-2022
<http://imm.medicina.ulisboa.pt/jobs>

HOW TO APPLY:

Please submit your detailed CV, motivation letter, PhD degree certificate and contacts of 3 references, from 11th of April 2022 until 30th of May 2022 through iMM website, by clicking in the “**Apply**” button below the position job ad.

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The success of this project lies on a strong multidisciplinary team. The postdoc will be integrated in a collaborative team constituted by **computational biologist** (Dr Nuno Morais^{1,2}), **immuno-oncologist** (Dr Karine Serre³⁻⁹), **clinician-scientists** specialised in breast oncology (Prof Luis Costa^{2,10}, Dr Rita Teixeira Sousa¹¹), expert in **cancer-induced angiogenesis** (Dr Sérgio Dias¹²) and **microbiologist** (Prof Isabel Sá-Correia¹³).

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<http://immlaco.org>

WHAT IMM OFFERS:

iMM will offer outstanding working conditions, including an unfixed-term full-time contract, starting predictably in July 2022, and the possibility to work in the interface between hospital and biomedical institute on clinical and basic research. iMM will also offer access to state-of-the-art high-performance computing infrastructure, namely a multi-hundred-core HPC cluster, as well as full support for individual postdoctoral and career development fellowship applications by a dedicated Pre-Award Unit.

EVALUATION CRITERIA:

Applications will be evaluated by Dr. Sérgio Dias, Dr. Nuno Morais and Dr. Karine Serre in accordance with the following method:

- 1st Phase: Curricular evaluation 45%; Motivation Letter 20%
- 2nd Phase: Interview 35%

WORKING CONDITIONS:

The employment contract has a predicted initial duration of 12 months (possibly extendable to a maximum of 48 months). Gross monthly salary is **2.153,94€**. The indicated amount will be subject to the mandatory taxes accordingly to Portuguese Labour Law.

NOTIFICATION OF RESULTS:

The results will be published in iMM website <http://imm.medicina.ulisboa.pt/en/>

Ref application: IMM/CT/45-2022
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