

## **iMM-Laço Hub is recruiting a Research Technician under an Employment Contract Reference IMM/CT/46-2022**

The iMM – Instituto de Medicina Molecular João Lobo Antunes (iMM), has recently created the iMM-Laço Hub that is a structure dedicated to the study of breast cancer to uncover novel modalities of treatments (see <http://immlaco.org>). The iMM-Laço Hub opens a call for the hiring of a Research Technician under the project “*Multi-Dimensional Cartography of the Breast Cancer Micro-Environment*”. See flyer here > [ref IMM/CT/46-2022](#).

**What iMM seeks:** 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.

**Work Plan and Objectives:** In 2020, over 600 000 women died from breast cancer worldwide. Treatment of breast cancer, in particular metastatic, raises many challenges, due to resistance to available therapies. The development of novel, or combinatorial, treatments for breast cancer is an urgent unmet clinical need. Our goal is to create an unprecedented map of human breast cancer that will encompass the genetic identity of the tumour cells (whole genome/exome sequencing) and the specific gene expression profile of immune/stromal cells (RNA-seq and multiplexed imaging). In addition, fluorescent microscopy using multiplexed imaging (simultaneous staining of up to 50 makers) will be used to determine the architecture of the human breast cancer tissue and assess the local tumour/immune/stromal cell crosstalk. With these multi-dimensional approaches, we aim to unravel the major parameters and pathways that can be targeted to limit breast cancer progression.

The successful candidate will be integrated in a collaborative team constituted by **immuno-oncologist** (Dr. Karine Serre<sup>1-3</sup>) with **clinician-scientists** specialised in breast oncology (Prof. Luis Costa<sup>4</sup>, Dr. Rita Teixeira Sousa<sup>5</sup>), as well as experts in **cancer-induced angiogenesis** (Dr. Sérgio Dias<sup>6</sup>), **computational biology** (Dr. Nuno Morais<sup>4,7</sup>), and **microbiology** (Prof. Isabel Sá-Correia<sup>8</sup>).

### **The principal activities of the Research Technician will include:**

- Manipulating biological human samples (blood, tumour biopsies and specimens)
- Extracting DNA and RNA for sequencing
- Performing multiplexed imaging with microscopy
- Reporting results to a multidisciplinary team and jointly interpreting them
- Collaborating with MSc and PhD students
- Participating in the outreach and science communication activities of the iMM-Laço Hub

### **The following skills and qualifications will be highly valued:**

- Master in cancer biology, immuno-oncology, immunology will be appreciated, but not mandatory
- Experience in DNA and RNA extraction
- Experience in staining tissue section on slides for fluorescent microscopy and acquisition
- High organization skills and strong work ethics (care, rigor, consistency, intellectual honesty)
- Willingness to work independently to design and perform experiments
- Proficiency in English, spoken and written, and excellent communication skills

**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 infrastructures, namely Biobank and Imaging Units.

**Working Conditions:** The employment contract has an estimated duration of 12 months (possibly extendable to a maximum of 48 months). Gross monthly salary is between **1040 or 1200 €** in accordance with the CV and experience of the successful candidate, the project budget and iMM Career By-Law. The indicated amount will be subject to the mandatory taxes accordingly to Portuguese Labour Law.

**How to apply:** Please submit your detailed CV, motivation letter, Master/Licence degree certificate (if applicable) and contacts of 3 references, from **19<sup>th</sup> of April 2022** until **31<sup>st</sup> of May 2022** through iMM website, by clicking in the “**Apply**” button below the position job ad.

**Non-discrimination and equal access policy:** iMM promotes a non-discrimination and equal access policy, wherefore no candidate can be privileged, benefited, impaired or deprived of any rights whatsoever, or be exempt of any duties based on their ancestry, age, sex, sexual preference, marital status, family and economic conditions, instruction, origin or social conditions, genetic heritage, reduced work capacity, disability, chronic illness, nationality, ethnic origin or race, origin territory, language, religion, political or ideological convictions and union membership.

Pursuant to Decree-Law nr 29/2001 of 3<sup>rd</sup> February, disabled candidates shall be preferred in a situation of equal classification, and said preference supersedes any legal preferences. Candidates must declare, on their honor, their respective disability degree, type of disability and communication / expression means to be used during selection period on their application form, under the regulations above.

**Evaluation Criteria:** Applications will be evaluated by Sérgio Dias, Nuno Morais and Karine Serre (all PhD's) in accordance with the following method:

- 1<sup>st</sup> Phase: Curricular evaluation: 45% and Motivation Letter: 20%
- 2<sup>nd</sup> Phase: Interview: 35%

**Results:** Both admitted and excluded candidates list and final classification list shall be posted at iMM website at <https://imm.medicina.ulisboa.pt/jobs/#results> and all admitted candidates will be notified by email.

**Preliminary Hearing and Final Decision Deadline:** Pursuant to article 121 of the Administrative Procedure Code, after notified, all candidates have 10 working days to respond. Panel's final decisions are pronounced within a period of 90 days, from application deadline.

#### References:

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3. Kubo, H., S. Mensurado, N. Goncalves-Sousa, K. Serre, and B. Silva-Santos. 2017. Primary tumors limit metastasis formation through induction of IL15-mediated crosstalk between patrolling monocytes and NK cells. *Cancer Immunol. Res.* 1–10.
4. Gomes, I., B. P. de Almeida, S. Dâmaso, A. Mansinho, I. Correia, S. Henriques, R. Cruz-Duarte, G. Vilhais, P. Félix, P. Alves, P. Corredeira, N. L. Barbosa-Morais, L. Costa, and S. Casimiro. 2020. Expression of receptor activator of NFkB (RANK) drives stemness and resistance to therapy in ER+HER2- breast cancer. *Oncotarget* 11: 1714–1728.
5. Luz, P., I. Fernandes, J. Magalhães, R. Teixeira Sousa, P. Faísca, J. G. Costa, and A. S. Fernandes. 2022. Tumor-infiltrating lymphocytes in early breast cancer: an exploratory analysis focused on HER2+ subtype in Portuguese patients. *JBUON* Accepted.
6. Gregório, A. C., M. Lacerda, P. Figueiredo, S. Simões, S. Dias, and J. N. Moreira. 2018. Therapeutic Implications of the Molecular and Immune Landscape of Triple-Negative Breast Cancer. *Pathol. Oncol. Res.* 24: 701–716.
7. De Almeida, B. P., A. F. Vieira, J. Paredes, M. Bettencourt-Dias, and N. L. Barbosa-Morais. 2019. Pan-cancer association of a centrosome amplification gene expression signature with genomic alterations and clinical outcome. *PLoS Comput. Biol.* 15: 1–31.
8. Hassan, A. A., S. C. dos Santos, V. S. Cooper, and I. Sá-Correia. 2020. Comparative Evolutionary Patterns of Burkholderia cenocepacia and B. multivorans During Chronic Co-infection of a Cystic Fibrosis Patient Lung. *Front. Microbiol.* 11.

**Lisbon, 18<sup>th</sup> of April 2022**