



ANNOUNCEMENT OF AN INTERNATIONAL CALL FOR THE SELECTION OF A RESEARCH TECHNICIAN

Internal code: Technician/COMPETE2030_NeurONiche/i3S/1407/2026

A call is opened for the position of a Research Technician, for an unfixed term work contract, to carry out technical duties within the project “**NeurONiche**: Advanced engineering of human innervated pre-metastatic niche: elucidating the impact of prostate cancer-derived extracellular vesicles on bone metastatic pathological neurotization” with reference COMPETE2030-FEDER-00697400, Operation no. 15860, funded by COMPETE2030 and national funds (FCT) under Call for Applications No. MPr-2023-12.

Scientific Area: Bioengineering and Biotechnology

1. Project summary and work plan

Innervation in prostate cancer has been associated with poorer prognosis, and bone metastases frequently display disorganized patterns of sensory innervation. In parallel, extracellular vesicles have increasingly been recognized as key mediators of intercellular communication and tumor dissemination. In this context, we propose the development of an innovative *in vitro* model to study how extracellular vesicles modulate sensory innervation in bone and contribute to conditioning the bone microenvironment, thereby favoring tumor cell establishment and progression.

The candidate will develop and characterize a human innervated and vascularized pre-metastatic bone niche model in a microfluidic platform, using 3D bioprinting, biomimetic hydrogels and human cell cultures, and will assess the impact of extracellular vesicles derived from prostate cancer patients on the modulation of sensory innervation, vascularization, bone matrix and tumor colonization.

2. Jury

Chairman: Estrela Neto; Other Members: Ruben Pereira, Miguel Aroso; Substitutes: Cristina Ribeiro, Daniela Vasconcelos.

3. Workplace

i3S - Rua de Alfredo Allen, 208 Porto, Neuro & Skeletal Circuits research group.

4. Professional category and monthly remuneration

Research Technician, € 1.621,95, subject to taxes and other mandatory deductions.

5. Requirements for admission

Mandatory:

- a) Master's degree in Bioengineering, Biomedical Engineering, or related fields;
- b) Proven experience in the isolation and characterization of extracellular vesicles from animal cells;

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- c) Experience in 3D cell models, organ-on-chip systems, microfluidics, or biomimetic systems;
- d) Experience in confocal microscopy;
- e) Ability to carry out experimental work autonomously, in an organized and rigorous manner;
- f) Ability to integrate into a multidisciplinary team and regularly communicate results;
- g) Fluency in written and spoken English.

Preferential:

- a) Laboratory and research experience with induced pluripotent stem cells;
- b) Experience in 3D bioprinting, additive manufacturing, or coaxial printing of cellular structures/hydrogels;
- c) Experience in the development or characterization of biomaterials and hydrogels;
- d) Immediate availability to start the contract.

6. Evaluation of the applications and publication of the results

Weight of the different curricular valuation criteria

- a) Curricular Evaluation (15%);
- b) Research experience relevant to the project (55%);
- c) Motivation letter (10%);
- d) Interview - *facultative* (20%).

If needed, the evaluation panel may invite the most highly ranked candidates (up to 3) for an interview. The final classification system for candidates is expressed on a scale from 0 to 100. Candidates who are not interviewed will have their maximum attainable score capped at 80% of the evaluation.

Candidates are excluded from admission to this call if they do not fill out their application correctly or do not meet the obligatory admission requirements. If in doubt, the jury may ask any candidate additional documents in support of their statements.

False statements made by candidates will be sanctioned in accordance with the law.

The jury will take minutes of their meetings, which may be consulted by candidates upon request.

The jury deliberates by means of a justified vote according to the evaluation criteria, with no abstentions allowed, and draws up a list of excluded and admitted candidates, ranked by the respective classification after the curricular evaluation. Candidates will be notified of the results by email.

After publication of the ranking list, if their wish to do so, the candidates have 10 working days to submit comments.



In the 90 days following the deadline for submission of applications, the institute Director, who is also responsible for the final decision of hiring, will ratify the decision of the jury.

This call is intended exclusively to fill the indicated position on offer and may be canceled before the final ranking list of candidates is ratified by the Director. Accordingly, the position will no longer be available.

7. Submission of applications

Applications must include all the documents proving that they fulfill the admission requirements, namely:

- a) Copy of certificate or diploma;
- b) Detailed Curriculum Vitae;
- c) Motivation letter;
- d) Other relevant documents for the assessment of the application.

The submission of applications is digital, in pdf format, from July 14th to July 27th, 2026, in the following link:

<https://dozer.i3s.up.pt/applicationmanagement/#/addapplications/f4db943cecce98f9f8bcc4314d224b3>

8. Start and duration of the contract

The anticipated start date of the contract is September 16th, 2026, and is subject to budget availability. The expected duration of the contract will be 12 months, eventually extendable, and may not in any case exceed the end date of the project, currently scheduled for August 30, 2028.

9. Non-discrimination and equal access policy

i3S actively promotes a policy of non-discrimination and equal access. No applicant shall be privileged, benefited, prejudiced, or deprived of any right or exempted from any duty on the basis of ancestry, age, gender, sexual orientation, marital status, family situation, economic situation, education, origin or social condition, genetic heritage, reduced work capacity, disability, chronic illness, nationality, ethnic origin or race, territory of origin, language, religion, political or ideological beliefs, or trade union membership.

Within the framework of the European Charter for Researchers and the Code of Conduct for the Recruitment of Researchers, i3S adopts the Open, Transparent and Merit-based (OTM-R) principles for the recruitment of researchers, with the aim of conducting fair and transparent recruitment processes, bringing equal opportunities to all candidates.

10. Applicants with disabilities

Under the terms of Decree-Law 29/2001, of February 3, the candidate with a disability is given preference in equal ranking, which takes precedence over any other legal preference. Candidates must declare under oath their degree of disability, the type of

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disability and the means of communication/expression to be used in the selection process, under the terms of the aforementioned decree.