

ANNOUNCEMENT OF A CALL FOR THE SELECTION OF A RESEARCH TECHNICIAN

Reference: IBMC_TI_NCbio_0611_2025

IBMC – Institute for Molecular and Cell Biology, is opening a call to one Research technician in an unfixed term work contract, to carry out technical duties within the project “Capacitating the Neurobiology and Neurologic Diseases Research Program at IBMC/i3S - support to the ERA Chair NCBio: Unlocking Excellence in Research and Innovation in Neurobiology and Neurological Disorders at IBMC/i3S (WIDESPREAD-06-2020 project: 951923)” (NCBio-2030)", reference NORTE2030-FEDER-01711200, financed by NORTE2030 Program, under notice NORTE2030-2024-11, at the IBMC Institute, under the following conditions:

1. Scientific Area: Neurosciences

2. Project Summary and Workplan: The main objective of this task is to understand the cellular and molecular mechanisms of the newly discovered phenomenon consisting in side-specific regulation of motor function by the endocrine system. Specifically, our goal is to determine how the left and right brain injury signals are encoded into hormonal messages in the hypothalamus and pituitary, and how these molecules induce motor responses lateralized to the left or right sides of the body. Our ultimate goal is to identify specific neuropeptides that induce motor changes after brain injury, with the aim of targeting them pharmacologically.

1. Investigation of the structural organization of the hypothalamic AVP system, separately on the left and right sides, by quantifying the number of cells expressing AVP in different subdivisions of the paraventricular and supraoptic nuclei. Control rats and rats with BI on the left or right side will be used. Hypothalamic cells expressing AVP will be identified by

immunohistochemistry. Cell numbers and volumes will be quantified, and the morphology and volumes of the nuclei will be determined with their respective 3D reconstructions using stereological methods, namely the optical fractionator and Cavalieri principle (MBF StereoInvestigator).

2. Investigation of hypothalamic-pituitary AVP pathways. Brain sections from control rats and rats exposed to unilateral brain injury will be stained for AVP using immunohistochemical methods. AVP-labeled axons will be traced from their origin to the target region (3D visualization and reconstruction using the MBF Neurolucida system). The contribution of the left and right halves of the hypothalamus to the density and total number of AVP terminals in the pituitary gland and median eminence will be estimated using the optical fractionator (MBF StereoInvestigator).

3. Admission Requirements:

Mandatory:

1. Master's degree in chemistry, biochemistry, chemical or biochemical technology or related areas, with the final classification of the Master's degree being equal to or greater than 17 points;
2. Experience in immunohistochemistry, neuroanatomy, animal models of epilepsy and brain lesions, and behavioural methods in rodents.
3. Ability to communicate proficiently in English (spoken and written);
4. Certification in laboratory animals training according to FELASA recommendations for category B;

If the degree has been awarded by a foreign higher education institution, it must comply with the provisions of the Decree-Law no. 66/2018, of august 16th, and must be recognized by a Portuguese higher education institution, which approves the regime legal recognition of academic degrees and diplomas in Higher Education, arising from foreign higher education institutions, and paragraph e) of paragraph 2 of article 4 of Decree-Law No. 60/2018, of August 3, all of which the formalities must be fulfilled there until the time of signing the contract.

Preferential: Preference will be given to candidates with solid experience and knowledge in:

- Immunohistochemical studies of the limbic system and the hypothalamus;
- Preparation of serial brain sections and stereological methods.

4. Legislation and other applicable regulations: Portuguese Labour Code, approved by Law 7/2009 of February 12, and the respective updates.

5. Workplace: Instituto de Biologia Molecular e Celular IBMC /Instituto de Investigação e Inovação em Saúde – i3S, under the group Neuronal Networks and scientific supervision of Boris Safronov.

6. Start and Duration of the contract: The estimated start date of the contract is January 1st 2026, subject to budget availability. The expected duration of the contract will be 9 months, eventually extendable. It is a part-time position, corresponding to 75% of a full-time contract.

7. Professional category and monthly remuneration: The gross monthly salary, for the Research Technician career, corresponds to 1.174,04€, according to the Table of Allowances of IBMC, subject to taxes and other mandatory deductions. Includes food, holidays and Christmas apart.

8. Evaluation Criteria: The evaluation of the CV of the candidates will focus on the adequacy of previous work experience within the scope of the call (point 3). The Selection will be based on:

- Curricular evaluation (100%):
 - research experience, as defined in the requirements for admission (70%);
 - scientific and technological production and impact (30%);

- b) The Jury may invite the highest-ranked candidates (up to 3) for an interview, which will only take place when the Jury considers that the curriculum evaluation does not provide sufficient clarity regarding the actual skills of the candidates or distinguish which candidate is best suited to the position and duties to be performed. The final classification system for candidates is expressed on a scale from 0 to 100. In this case, the curricular evaluation will weight 75% for all candidates and the interview will weight 25%.

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The jury deliberates by means of a reasoned vote according to the evaluation criteria, with no abstentions allowed.

Minutes of the jury meetings will be drawn up, which should contain a summary of what took place, as well as the votes cast by each member and their respective reasons, and will be made available to candidates upon request.

Once the selection criteria have been applied, the jury will draw up a list of excluded and admitted candidates, ranked by the respective classification after the curricular evaluation.

9. Jury Composition:

President: Boris Safronov

Members: José Paulo Alves Vieira de Andrade; Susana Maria de Sousa Silva Ferreira;

Substitutes: Susana Isabel Ferreira da Silva de Sá; Gisela Henrique Maia;

10. Publication/Notification of results: The final results of the evaluation will be publicized through an ordered list by final mark obtained, published on the IBMC website, and the approved candidate will be notified by e-mail. After notification, as provided in the Administrative Procedure Code, by the preliminary hearing, candidates have 10 working days to comment and, within that period, a complaint may be submitted by email to: rh@ibmc.up.pt.

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

11. Application deadline and form of presentation of applications: The competition is open from November 11th to November 24th 2025. Applications must be submitted electronically at:

<https://dozer.i3s.up.pt/applicationmanagement/#/addapplications/8882ba2fa8fef3247e421c3161827795>

The required documents for the application are:

- Certificate of Qualifications;
- Curriculum Vitae;
- Other documents, considered as relevant by the candidate

Candidates who incorrectly formalize their application or who fail to meet the requirements of this competition will be excluded from admission to the competition.

The selection board has the right to ask any candidate, in case of doubt, to produce documentary evidence of their declarations.

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

12. Non-discrimination and equal access policy: IBMC 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, IBMC 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.

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