

## INTERNATIONAL CALL IC70\_25

### JOB TITLE

RESEARCH ASSISTANT IN ONCOLOGICAL PATHOLOGY AND BIOINFORMATICS (OP&B) TEAM FOR HISTOPATHOLOGICAL IMAGE ANALYSIS - Researcher career profile (R1)

### JOB DESCRIPTION

The Pere Virgili Institute for Health Research (IISPV) is an institution that integrates research in the field of biomedicine in the “Camp de Tarragona” and the “Terres de l'Ebre”. The IISPV is the instrument that the university hospitals of both health regions have been endowed with (Joan XXIII University Hospital of Tarragona, Verge de la Cinta Hospital of Tortosa, Sant Joan de Reus University Hospital, Institut Pere Mata University Hospital of Reus) and Rovira and Virgili University, in order to bring together and manage biomedical research and innovation in the territory.

The Oncological Pathology and Bioinformatics (OP&B) team of the IISPV, based at the Hospital de Tortosa Verge de la Cinta, has been working for more than 15 years on the prevention and advanced diagnosis of cancer. Led by Dra. Marylène Lejeune and Dr. Carlos López, the OP&B team is an interdisciplinary group that includes pathologists, oncologists, hematologists, biologists, biotechnologists and computer specialists, with strategic clinical and methodological skills for the development of the group's research lines.

The consolidated lines of research of the OP&B team focus on the study of the tumor microenvironment through digital image analysis and mathematical modeling. The immune response is one of the components of the tumor microenvironment that has been shown to play an important role in the evolution of cancer patients. Changes in the type and amount of immune cells in the tumor microenvironment have been related to differences in disease functionality. Our team has studied these changes through the development of new computer-assisted image analysis algorithms capable of providing more accurate and reproducible automated quantification of immune biomarkers with immunohistochemical and fluorescence staining.

Number of available positions: 1

The selected candidate will perform the following tasks: she or he will conduct histopathological image analysis using advanced digital image processing techniques, and design and develop innovative methods based on computer vision, machine learning, and deep learning algorithms. The candidate will actively contribute to research and development by identifying relevant challenges, implementing effective and efficient solutions, and developing tools that facilitate the team's progress and enable the evaluation of research outcomes.

### CANDIDATE PROFILE & REQUIREMENTS

- Bachelor and Master's degrees in Computer Science, Computer Engineering, Biomedical Engineering or a related field.
- Additional training related to computer vision, machine learning, or deep learning algorithms will be considered an asset.
- Competence and experience in developing and applying methods for image analysis using deep learning environments.
- Must be fluent in English, both written and spoken.

#### **IT WILL BE VALUED**

- Experience and proven skills in computer vision, machine learning, deep learning, and histopathological image analysis will be highly valued.
- Knowledge of histopathological image analysis.
- Motivation, creativity, initiative and proactive attitude.
- Ability to learn, flexibility and adaptability.
- Commitment to quality, to optimizing resources and to achieving results.
- Advanced skills in programming and software development for image analysis and artificial intelligence applications (e.g., Python, MATLAB).
- Applications and analytic tools used in medical image processing and data analysis (e.g., TensorFlow, PyTorch, OpenCV, scikit-learn).
- Previous experience in similar projects.
- Ability to identify and solve problems.
- Teamworking, ability to work independently, to organize, kindness, dynamism, versatility, rigour, responsibility and confidentiality
- The researcher has finished/is finishing a PhD in Computer Science, Computer Engineering, Biomedical Engineering or a related field., related to histopathological image analysis, medical image analysis, or image data processing.
- Have demonstrated a good understanding of a field of study

#### **LABOUR CONDITIONS**

- Full-time position
- Workplace: Hospital de Tortosa Verge de la Cinta
- Contract: temporary (1 year)
- Gross annual salary: 25.000 – 27.000 €
- Starting date: January 2026

## **SELECTION PROCEDURE**

- Selection of CV's. Suitable and unsuitable CV's will be identified according to the requirements. Applicants who do not meet the requirements indicated in the candidate profile and requirements will not pass to the next phase.
- Evaluation of the CV. Evaluation of the CVs up to a maximum score of 40 points.
- Cover Letter. Attach to the resume a cover letter with a maximum length of 2500 characters with spaces. With a maximum score of 10 points.

To access the interview phase it is necessary to have obtained a minimum score of 35 points in the sum of scores of the evaluation of the curriculum and cover letter

- Personal interview. With a maximum score of 50 points.

Items	50
Attitude	10
Fit in the work place	25
Experience, developed functions/skills	10
Teamwork	5

The selected person must have obtained a minimum score of 35 points in the sum of scores from the assessment of all phases of the selection procedure.

## **SELECTION COMMITTEE**

- President: Carlos López Pablo. (Group Leader)
- Chair 1: Emma Forcadell Drago. (Postdoctoral Researcher)
- Chair 2: Alba Fischer Carles. (Predoctoral Researcher)

### **SUBSTITUTES:**

- President: Ramon Bosch Príncep. (Principal Investigator)
- Chair 1: Esther Sauras Colon. (Predoctoral Researcher)
- Chair 2: Marylène Lejeune. (Group Leader)

## **CANDIDATURES**

- The CV must include the DNI/NIE number or another personal identity document number.
- Send the CV and the Cover Letter through the form that you will find on the bottom of the offer page <https://www.iispv.cat/treballa-amb-nosaltres/>

For any questions or queries: [recruitment@iispv.cat](mailto:recruitment@iispv.cat)

## **DEADLINE FOR RECEIPT OF CV 17/11/2025**

## **COMMUNICATIONS**

The IISPV will notify the candidates of the results of the different phases of the selection process through its website.

## **HRS4R Research in HR Excellence**

The IISPV has the European accreditation The Human Resources Strategy for Researchers (HRS4R), complies with the general principles of the European Charter for Researchers and the Code of Conduct for the recruitment of researchers.

The IISPV has an internal recruitment policy that follows the Open, Transparent and Merit-based Recruitment (OTM-R) policies. More information about the HRS4R policies implemented at the IISPV is available on the following website: <https://www.iispv.cat/hrs4r-hr-excellenceresearch/>

The IISPV will guarantee the right to equal opportunities and treatment, as well as the real and effective exercise of rights by people with disabilities under equal conditions with respect to other citizens, through the promotion of personal autonomy, universal accessibility, access to employment, inclusion in the community and independent living and the eradication of any form of discrimination, in accordance with articles 9.2, 10, 14 and 49 of the Spanish Constitution and the International Convention on the Rights of Persons with Disabilities and international treaties and agreements ratified by Spain.

In the event of a tie, priority will be given to hiring the person with a disability.

In the event of a tie between people of different genders, the person of the least represented gender in the work group/department/service in which he joins will be hired.

Fecha	Revisión	Modificaciones
03-07-24	00	Creación del documento