

INTERNATIONAL CALL IC55_25

JOB TITLE

PhD Position in Bioinformatics (QSAR, PBPK Modeling, OMICS and Machine learning).

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.

This position offers an exciting opportunity to work in a multidisciplinary environment focused on translational health research. Successful candidates will join a dynamic team of researchers in Insilico vida lab which is part of Tecnatox group. The lab performs cutting edge research about bioinformatics, predictive modeling and regulatory science. The selected candidate will get the opportunity to work in European research projects like:

- European Partnership for the Assessment of Risks from Chemicals (PARC) which has been co-funded by the European Union under Grant Agreement No 101057014.
- Merging scientific evidence with regulatory practices and leveraging identification of endocrine disruptors using new approach methodologies Project (MERLON) which has been funded by the European Union under Grant Agreement No 101137411.
- The Environmental Exposome And Health (ENVESOME) project which has been funded by the European Union under the Grant Agreement No 101157269.

PARC



Co-funded by
the European Union



Merlon



Funded by
the European Union



Number of available positions: 2

The selected candidate will perform the following tasks:

- Develop and apply QSAR models to predict biological activities and toxicological endpoints.
- Design PBPK models for predicting kinetics using experimental and in-silico data.
- Implement machine learning algorithms on PBPK models and OMICS datasets to train the model.
- Analyze large-scale biological, and OMICS datasets.

CANDIDATE PROFILE & REQUIREMENTS

- MSc in bioinformatics, pharmacy, computational biology, data science or related field.
- Strong programming skills in R/python or other programming language.
- Core knowledge and proven experience in one of the following fields: machine learning approaches (Scikit-learn, XGboost, tensorflow), QSAR (OECD toolbox, QSARdb), read-across, PBPK (Simcyp, MoBi, pk-sim, or other platform), or omics data analysis (metabolomics, transcriptomics, proteomics)
- Ability to analyse complex datasets.

IT WILL BE VALUED

- Knowledge of toxicology, toxicokinetic or systems biology.
- Familiarity with modeling tools and programming languages.
- Good communication skills in English.
- Must have hands-on experience working with R or Python.
- Ability to identify and solve problems.

LABOUR CONDITIONS

- Full-time position
- Workplace: IISPV locations (Reus/Tarragona)
- Contract: Indefinite of scientific-technical activities linked to PARC under grant Agreement No 101057014, MERLON under Grant Agreement No 101137411 or ENVESOME under Grant Agreement No 101137411 (Approximately 1 year, with further annual extension).
- Gross annual salary: 1.200-1.800€ per month
- Starting date: 1 October 2025 (flexible for 2-3 months)

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 35 points.
- Cover Letter. Attach to the resume a cover letter with a maximum length of 2500 characters with spaces. With a maximum score of 5 points.

To access the interview phase it is necessary to have obtained a minimum score of 30 points in the sum of scores of the evaluation of the curriculum and cover letter

- Personal interview. With a maximum score of 60 points.

Items	60
Attitude	10
Fit in the work place	15
Experience, developed functions/skills	25
Teamwork	10

The selected person must have obtained a minimum score of 70points in the sum of scores from the assessment of all phases of the selection procedure.

SELECTION COMMITTEE

- President: Dr. Vikas Kumar (Team Leader)
- Chair 1: Dr. Montserrat Mari Marcos (Senior Researcher and administrative staff)
- Chair 2: Dr. Deepika Deepika (Postdoctoral Researcher)

SUBSTITUTES:

- President: Dr. Monica Bulló Bonet (Professor)
- Chair 1: Dr. Joaquim Rovira (Ass. Professor)
- Chair 2: Dr. Kanchan Bharti (Postdoctoral Researcher)

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

DEADLINE FOR RECEIPT OF CV 25/08/2025

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.

CHANGE CONTROL		
Date	Review	Modifications
03-07-24	00	Document creation