

## CALL: SEEKING CANDIDATES TO APPLY FOR 2 PhD Position in Bioinformatics (QSAR, PBPK Modeling, OMICS and Machine learning).

The Instituto de Investigación Sanitaria Pere Virgili (IISPV), based at the Hospital Universitari Sant Joan de Reus and Parc Sanitari Joan XXIII (Tarragona), is seeking two Ph.D. candidates with strong skills in bioinformatics to contribute to a research project on environmental health risk assessment. 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 PARC (Partnership for the Assessment of Risk from Chemicals), ENVESOME (The Environmental Exposome and Health) and MERLON (Merging scientific Evidence with Regulatory practices and Leveraging identification of endocrine disruptors using NAM).

**Number of available positions: 2**

Link: <https://insilicohub.org/>

### Key Responsibilities:

- 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 Requirements:

Essential Qualifications:

- 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,

1 / 3

QSARdb), read-across, PBPK (Simcyp, MoBi, pk-sim, or other platform), or omics data analysis (metabolomics, transcriptomics, proteomics)

- Ability to analyse complex datasets.

### 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.

### Offer:

- Full-time contract with flexible start date.
- Access to computing facility and collaborations with institutes in and outside Spain.
- Opportunities to attend conferences and workshops.
- Collaborative and international working environment.

**Application Process:** All applications must be sent by email to (**vikas.kumar@iispv.cat**) including your CV and a motivation letter. The open call offers a contract of **PhD position in Bioinformatics** through the Pere Virgili Health Research Institute (IISPV).

For more information about the Pere Virgili Health Research Institute (IISPV), please visit: <https://www.iispv.cat/>

**Application Deadline:** *Open until suitable candidates are found*

We look forward to receiving your applications.

### HR EXCELLENCE IN RESEARCH

The IISPV guarantees the right to equal opportunities and treatment, as well as the effective exercise of rights by persons with disabilities on equal terms with other citizens. This is ensured through the promotion of personal autonomy, universal accessibility, access to employment, community inclusion and independent living, and the elimination of any form of discrimination, in accordance with Articles 9.2, 10, 14, and 49 of the Spanish Constitution, the International Convention on the Rights of Persons with Disabilities, and international treaties and agreements ratified by Spain.

In the event of a tie, preference will be given to the candidate with a disability.

In the event of a tie between candidates of different genders, the candidate of the underrepresented gender in the research group/department/service will be selected.

The IISPV holds the European accreditation The Human Resources Strategy for Researchers (HRS4R) and adheres to the general principles of the European Charter for Researchers and the Code of Conduct for the Recruitment of Researchers.

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