

INTERNATIONAL CALL IC83_23

JOB TITLE

Collaboration grant in for the project PARC

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.

We offer a full time (35h) collaboration grant for a PhD student of the course 2023-2024.

The Center for Environmental, Food and Toxicological Technology (TecnATox) was born in 2008 as a result of the merger of members of the group of the Laboratory of Toxicology and Environmental Health (LTSM) and the groups of Environmental Analysis and Management (AGA, later AGACAPE) and Research in Neurobehavior and Health (NEUROLAB). The Mathematical Models for Environmental and Biomedical Engineering (MMEAB) group has recently joined. All four groups from the Universitat Rovira i Virgili are research groups consolidated by the Agency for the Management of University and Research Grants (AGAUR). TecnATox aims to carry out research and development in the field of environmental and food protection at the European level and to perform technology transfer and consultancy services arising from the needs of the regulatory/government departments and industrial/private sectors. TecnATox provides its customers with high-quality services ensuring scientific-technical rigor.

The Center for Environmental, Food, and Toxicological Technology (TecnATox) is functionally attached to Health and the Environment of the IISPV and works in close relationship with the other units of the institute.

Researcher career profile (R1)

Number of available positions: 1

The selected candidate will perform the following tasks:

The main role of the researcher will be to contribute to developing New Approach Methodology (NAMs) for AOPs and IATAs to support regulatory process for human health risk assessment. This will include reviewing the

existing literature especially in the context of neurotoxicity and immunotoxicity, identifying the gaps and facilitate filling those gaps with in-silico methodology like QSARs, PBPK, PD and utilizing existing novel tools for risk assessment. The project will also focus on identifying new pathways, biological process and molecular functions for individual and mixture toxicity utilizing databases like Comparative Toxicogenomic database (CTD) for identifying the association between chemicals and diseases through gene enrichment analysis using ToppGene Suite portal, Set-Analyzer tool etc.

CANDIDATE PROFILE

- Ph.D. student registered for the academic year 2023-24
- Degree in biochemistry, biology, chemistry, medicine, health, pharmacy, or any related field.
- Completed the master's degree in bioinformatics, biotechnology, health, life science, pharmacy, or other related scientific subjects with good computational skill.
- Availability to work in Tarragona

REQUIREMENTS

- Have project experience related to any of the field like human health/pharmaceuticals/pre-clinical/clinical studies/toxicology.
- Ability to solve the problems and manage multiple activities, timelines while working as a team.
- Developed bioinformatics pipeline for omics analysis.
- Familiarize with any of the common softwares like R, Python, Java, Matlab.
- Have familiarity with machine learning/deep learning framework like Pytorch, TensorFlow, transformers. DeepChem, Rdkit, scikit Learn, Matplot, Pandas, numpy.
- Familiar with machine learning/artificial intelligence in the field of human health/pharmaceuticals/toxicology/drug design.
- Be capable of critical analysis and ability

It will be valued:

- Motivation, creativity and active attitude to participate in conferences, workshops and other related activities.
- Ability to work alone and in a team with collaborations.
- Experience of collaborating with international scientists from different countries.
- Capacity for learning, working in a flexible environment and adaptability.
- Experience about writing and editing relevant reports, protocols and other related documents.
- Knowledge of minimum level of English (Can be demonstrated through course taught in English).

LABOUR CONDITIONS

- Full-time position (35h/week)
- Workplace: Department of Chemical Engineering (ETSEQ)
Universitat Rovira i Virgili
- Contract: 12 months/years
- Gross Salary: 1200 €/month
- Starting date: 1st of March, 2024 (flexibility to join within 3 months based on circumstances)

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 20 points.

To access the interview phase it is necessary to have obtained a minimum score of 40 points in the sum of scores of the evaluation of the curriculum and cover letter

- Personal interview. With a maximum score of 40 points.

Items	40
Attitude	5
Fit in the work place	10
Experience, developed functions/skills	20
Teamwork	5

SELECTION COMMITTEE

- President: Dr. Vikas Kumar (Principal Investigator)

- Chair 1: Dr. Montse Mari
- Chair 2: Dr. D. Deepika

SUBSTITUTES:

- President: Prof. Mònica Bulló (Principal Investigator)
- Chair 1: Prof. Marga Torrent (Principal Investigator)

Chair 2: Joaquim Rovira (Postdoctoral Researcher)

CANDIDATURES

- The CV must include the number in DNI / NIE or personal identity document.
- The CV and the Cover Letter will only be accepted through the IISPV website.

For any questions or queries: recruitment@iispv.cat

DEADLINE FOR RECEIPT OF CV: 10/01/2024

COMMUNICATIONS

The IISPV will inform the candidates if they have been admitted or excluded to access the interview.

HR EXCELLENCE IN RESEARCH

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.