CONVOCATÒRIA DE VACANT IC31_24

JOB TITLE

Post doctoral candidate in the computational toxicology for human health risk assessment.

Researcher career profile (R2)

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 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.

The primary role of the appointee will be varied research contributions in the European Partnership for the Assessment of Risks from Chemicals (PARC) project co-funded by the European Union's "Horizon Europe" framework programme (Grant Agreement No 101057014).

Number of available positions: 1

The selected candidate will perform the following tasks:

The researcher will contribute in developing computational model for assessing human health utilizing New Approach Methodology (NAM). The specific task of selected candidate will include: i) Developing physiologically based pharmacokinetic model (PBPK) for priority chemicals, ii) utilizing quantitative in-vitro to in-vivo extrapolations (QIVIVE) for parameterization of chemicals, iii) data extraction and parameterizing the model using in-silico approaches like quantitative structural activity relationship (QSAR), iv) Developing novel computational models (pharmacodynamic model (PD), systems biology model) with NAM methodology for developing adverse outcome pathways (AOPs) related to neurotoxicity.

S/he will contribute in the area of System Toxicology and human Health risk assessment and development and implementation of the broader Research and Innovation Strategy and coordinate with a team of interdisciplinary scientists of IISPV. S/he will be able to collaborate with a broad range of scientists, within a distributed organisation, under a compelling, overarching research strategy. The appointed individual will be committed to championing and embedding broader in silico and human Health risk assessment across the applied research of the TecnaTox research and innovation portfolio.

CANDIDATE PROFILE

- Completed the Ph.D. degree in bioinformatics, pharmacy, biochemistry or any other related discipline with demostrable computational background.
- Master's degree in science, pharmaceutics, bioinformatics or related discipline.
- Published papers related to PBPK/PD models, pharmacokinetic or similar area in peer reviewed journal.
- Experience working in public or private sector as a research scientist or related position in medicine/toxicology/pharmaceutics/clinical studies.

REQUIREMENTS

- Competence and experience in the area of environmental or human health risk assessment especially in applied computational modelling.
- Demonstrable experience in Chemo-informatics and Systems biology including a broad range of in silico tools for environmental and human health risk assessment including but not limited to specialized tissue dosimetry (physiologically based kinetic models), translational models (IVIVE, QIVIVE, inter-species scaling), QSAR, quantitative AOPs and Systems biology models.
- Spoken and written English skills at a full professional level (demonstrable by lead authorship in scientific publications)
- Experience in scientific programming with R or Python
- Teamworking, ability to work independently and within a team with the ability to organize, and adjust with dynamism, versatility, rigour, confidentiality but equally take responsibility and show kindness to junior team members.
- Have the ambition to develop new research areas and seek to expand in new emerging multidisciplinary disciplines like (but not limited to) personalised medicines, System toxicology and OMICS.

- Be capable of critical analysis, evaluation and synthesis of new and complex ideas.
- Publishes papers as lead author, organises workshop or conference sessions.

IT WILL BE VALUED

- 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-silico modelling for human health risk assessment and new emerging paradigms like NAM, AOPs, systems toxicology etc.
- Previous experience of involvement/collaboration in large EU projects.
- Establishes collaborative relationships with relevant industry research or development groups
- Communicates their research effectively to the research community and wider society
- Is committed to the professional development of his/her own career and acts as a mentor for others.
- Can take the lead in executing collaborative research projects in cooperation with colleagues and project partners and able to explain the outcome of the research.
- Has demonstrated a systematic understanding of a field of study and mastery of research associated with that field.
- Has demonstrated the ability to conceive, design, implement and adapt a substantial programme of research with integrity.
- Makes a positive contribution to the development of knowledge, research and development through co-operations and collaborations.
- Identifies research problems and opportunities within their area of expertise.

- Identifies appropriate research methodologies and approaches and design and conducts research independently and in the team which advances the research agenda.

LABOUR CONDITIONS

- Full-time position
- Workplace: Chemical Engineering Department, URV, C/ Països Catalans, nº 26, Tarragona
- Contract: Indefinite - scientific-technician linked to the PARC project (duration approximately 36 months)
- Gross annual salary: 27.000 – 28.000€
- Starting date: October, 2024

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 (interview). With a maximum score of 40 points.

Items	Score
Attitude	10
Fit in the workplace	10
Experience, developed functions/skills	10
Teamwork	10

SELECTION COMMITTEE

- President: Dr. Vikas Kumar (Principal Investigator PARC project, Tecnatox group)
- Chair 1: Prof. Monica Bullo (Researcher PARC project, Director Tecnatox Group)
- Chair 2: Dr. Joaquim Rovira (Researcher PARC Project)
- Chair 3: Dr. Montse Mari (Technician, Tecnatox Group)

SUBSTITUTES:

- President: Prof. Teresa Colomina (Researcher PARC project, Tecnatox Group)
- Chair 1: Prof. Laureano Jiménez Esteller (Researcher PARC project, Tecnatox Group)
- Chair 2: Dr. Jaume Folch (Researcher PARC project, Tecnatox Group)
- Chair 3: Dr. Marti Nadal. (Technician, Tecnatox Group)

CANDIDATURES

- The CV must include DNI / NIE number or personal identity document.
- Send the CV and the Cover Letter through the IISPV website. **https://www.iispv.cat/treballa-amb-nosaltres/**

For any questions or queries, please contact us by email: recruitment@iispv.cat

DEADLINE FOR RECEIPT OF APPLICATION: 05/07/2024

COMMUNICATIONS

The IISPV will inform the candidates if they have been admitted or excluded for the next phase of selection (personal 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.