INTERNATIONAL CALL IC49_25

JOB TITLE

Research Director – Environmental Informatics and Systems Toxicology

Researcher career profile (R4)

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.

About TecnATox – Center for Environmental, Food, and Toxicological Technology

The **Center for Environmental, Food, and Toxicological Technology (TecnATox)** was established in **2008**, following the strategic integration of several research groups from the **Universitat Rovira i Virgili (URV)**: the **Laboratory of Toxicology and Environmental Health (LTSM)**, the **Environmental Analysis and Management Group (AGA, later AGACAPE)**, and the **Research in Neurobehavior and Health Group (NEUROLAB)**. More recently, the **Mathematical Models for Environmental and Biomedical Engineering Group (MMEAB)** has also joined the center. All these groups are recognized as **consolidated research units** by the **Agency for the Management of University and Research Grants (AGAUR)**.

TecnATox's mission is to advance **research, development, and innovation** in the fields of **environmental protection, food safety, and toxicology**, with a strong emphasis on European-level collaboration. The center actively addresses the needs of both **public administration** and **industry**, leveraging academic excellence to deliver high-quality, scientifically rigorous solutions and services.

TecnATox is functionally integrated within the **Health and Environment Area of the IISPV (Institut d'Investigació Sanitària Pere Virgili)** and collaborates closely with other IISPV research units to pursue interdisciplinary objectives.

Appointment of Research Director – Environmental Informatics and Systems Toxicology

As part of its strategic response to emerging scientific challenges, TecnATox is currently seeking to appoint a **Research Director** in the area of **Environmental Informatics and Systems Toxicology**.

This senior leadership position involves overall responsibility for the **scientific direction, coordination, and strategic development** of research within this area. The appointee will play a pivotal role in the **scientific management of major European-funded initiatives**, including the **European Partnership for the Assessment of Risks from Chemicals (PARC)** and the **Merging scientific evidence with regulatory practices and leveraging identification of endocrine disruptors using new approach methodologies** Project (**MERLON**), both supported by the **Horizon Europe** framework programme.

The PARC project has been co-funded by the European Union under Grant Agreement No 101057014 and the MERLON project has been funded by the European Union under Grant Agreement No 101137411.

The successful candidate will also lead the design and execution of a broader **Research and Innovation Strategy** in Environmental Informatics and Systems Toxicology, driving the integration of **computational, in silico, and data science approaches** across the applied research portfolio of TecnATox and IISPV.

We are seeking an individual with an **internationally recognized research profile**, demonstrated **scientific leadership**, and a strong vision for the advancement of **computational toxicology**, **environmental informatics**, and **integrated risk assessment**. The appointee will be an effective communicator and advocate for the interdisciplinary research themes that define TecnATox and IISPV. S/he will have the capacity to align and inspire a distributed network of researchers under a unifying, forward-looking strategy, and will foster collaborations across institutional, national, and international levels.

This is an outstanding opportunity for an established research leader to shape the future of **environmental and human health protection** through data-driven science and innovation.

CANDIDATE PROFILE AND REQUIREMENTS

Academic Qualifications

- The researcher must hold a **Doctorate degree (PhD)** in **Chemical Risk Assessment** with a strong focus on **computational and data-driven methodologies**.

Additional Training

- **Master Degree in**: Computer Science, Bioinformatics, Toxicology, Computational Biology, Chemistry, Environmental Sciences, or a related field.
- Additional training/experience related to **computational toxicology, systems biology, predictive modelling, AI/ML for risk assessment**, Specific expertise in **in silico methods** for chemical risk assessment will be positively valued.

Professional Experience and Competencies

- **Minimum 10 years** of demonstrable leadership experience in **computational toxicology**, chemical safety, environmental health, or a closely related field.
- Proven track record of **research excellence**, with leadership in **designing and executing large-scale research programmes**.
- Competence and experience with **fund acquisition at the European level (e.g., Horizon Europe, FP7/H2020)**, with a history of successful grant proposals as PI or Co-PI.
- Strong **project leadership skills**, including management of multidisciplinary teams, coordination of international consortia, and delivery of results across multiple work packages.
- Demonstrated **international networking capabilities**, including collaborations with academia, regulatory agencies, and industry partners.
- Experience in **supervising PhD students and early-career researchers (PostDocs)** is essential.

Technical and Communication Skills

- Excellent competences in **computational modelling**, **data science**, **machine learning**, **PBPK modelling**, and/or **QSAR approaches** applied to toxicology.

- Proficiency in **programming languages** such as Python, R, or similar, and use of platforms for chemical modelling and data integration.
- Experience will be valued positively in **scientific communication**, preparation of **policy-relevant technical reports**, and contribution to **OECD guidelines or frameworks**.

Personal Atributes

- Teamworking skills and ability to lead as well as work independently.
- Excellent organizational and communication skills.
- Kindness, dynamism, versatility, rigour, responsibility, and confidentiality.

Research and Academic Excellence

- Has carried out and led independent research with scientific impact and strategic relevance.
- Has made a **substantial contribution to advancing computational toxicology**, with research outputs published in high-impact journals and presented at international conferences.
- Demonstrates a **strategic vision** for the future of the computational toxicology field, including **regulatory applicability** and **data-driven innovations**.
- Recognised with an **established international reputation** in the field of computational toxicology and/or chemical risk assessment.
- Has developed and implemented original methodologies that have expanded the **frontiers of knowledge** in their domain.
- Demonstrates strong **critical thinking, synthesis of complex concepts**, and ability to guide multidisciplinary research agendas.
- Capable of defining and leading **cutting-edge collaborative research projects**, engaging both academic and industrial stakeholders.

Scholarly Output and Dissemination

- Has published as lead and senior author in peer-reviewed journals, co-authored papers in conferences and workshops.
- Serves or has served on **conference committees, editorial boards**, and has delivered **invited talks** at major international events.
- Contributes actively to shaping the **scientific and policy discourse** on computational risk assessment and chemical safety.
- Recognises and communicates the broader **societal and regulatory implications** of their research.

IT WILL BE VALUED

- **High-level proficiency in English** with the ability to communicate effectively in both written and oral forms, particularly in scientific and policy contexts.
- Strong **interpersonal and intercultural communication skills**, with the ability to foster constructive collaborations across diverse teams and stakeholders.
- Specific **expertise in regulatory science, chemical risk assessment frameworks (e.g., REACH, CLP), and data standardization practices**.
- Demonstrated **creativity, motivation and a proactive attitude**, especially in identifying innovative research directions or applying novel methodologies.
- **Adaptability and learning agility**, including the ability to respond to emerging scientific challenges and shifting regulatory landscapes.
- Commitment to **efficiency, quality, and responsible use of resources**, with a goal-oriented approach to achieving scientific and strategic objectives.
- Familiarity with **emerging data platforms and tools** relevant to computational toxicology, such as KNIME, BioModels, OECD QSAR Toolbox, or similar.
- Awareness of **current trends in digitalization, AI, and big data integration** in environmental and health sciences.
- **Problem-solving and decision-making capabilities**, especially in complex interdisciplinary or multi-stakeholder environments.
- Understanding of **applicable EU and international legislation** relevant to chemical safety, environmental health, and data protection.
- Ability to **mentor and support early-career researchers**, fostering talent development and long-term scientific capacity.
- Proven ability to **translate complex research findings** into accessible formats for diverse audiences, including policymakers, industry, and the general public.
- Capacity to **build strategic partnerships** with stakeholders from academia, industry, public authorities, and international organizations.
- Demonstrated **innovation in research approach**, including the application of novel digital or integrative methodologies.
- Ongoing commitment to **career development**, as well as active contribution to the **professional growth of others** through mentorship and training.
- Ability to **define long-term research strategies** that address both scientific and societal needs.
- Recognition of the **societal and policy impact** of scientific work, with a willingness to engage in **science-for-policy dialogues**.
- History of **influential dissemination activities**, including invited talks, keynote presentations, book chapters, or service on international scientific boards or committees.

LABOUR CONDITIONS

- Part-time position (50%)
- Workplace: IISPV locations (Reus/Tarragona)/Teleworking under IISPV agreement
- Contract: Indefinite of scientific-technical activities linked to the PARC project under Grant Agreement No 101057014 and the MERLON project under Grant Agreement No 101137411.
- Gross annual salary: 30.000-40.000 €
- Approximate incorporation date: September 2025

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 (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 70 points in the sum of scores from the assessment of all phases of the selection procedure.

SELECTION COMMITTEE

- President: Joan Vendrell (IISPV Director)
- Chair 1: Mònica Bulló (Tecnatox Leader)
- Chair 2: Francesc López (IISPV Manager)

SUBSTITUTES:

- President: Elisabet Vilella (IISPV Deputy Director)
- Chair 1: Alberto Fernández (Tecnatox Researcher)
- Chair 2: Elisabet Galve (IISPV Technical Office Manager)

CANDIDATURES

- The CV must include the number inn DNI / NIE or personal identity document.
- 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 31/07/2025

COMUNICATIONS

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.

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Data	**Revisió**	**Modificacions**
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