INSPIRE receives funding from the EU Horizon 2020 research and innovation programme under the Marie Skłodowska-Curie grant agreement No 858070

We are looking for a talented and motivated scientist (PhD student) to advance an exciting research project:

inspire
European Training Network in Safety Pharmacology

Early Stage Researcher (ESR2)

Development and validation of cardiomyocyte model as a predictive assay to assess functional and structural cardiac liabilities

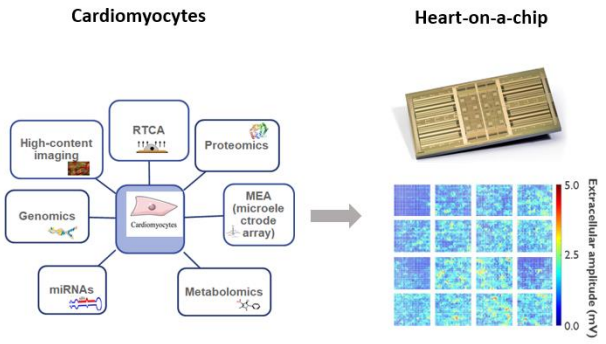
About INSPIRE – A European Training Network in Safety Pharmacology

The vision of INSPIRE is to advance and "inspire" Safety Pharmacology by exploring new technological capabilities to addressing emerging cardiovascular safety concerns. Hereto, INSPIRE unites expertise from academic teams, technology-providers, pharmaceutical companies, regulators and hospitals to create a European training platform for 15 Early Stage Researchers (ESRs). Key innovative aspects of INSPIRE include: i) *in vitro* humanized cardiomyocytes assays, ii) unparalleled *in vivo* hardware/software solutions, iii) *in silico* predictions of haemodynamics, iv) mass spectroscopy imaging of drug exposure, v) exploration of mechanisms of late-onset CV toxicity, as observed in cardio-oncology, and vi) early integration of feedback from industry and regulators.
Overall, INSPIRE constitutes a multidisciplinary and intersectoral training programme with a balanced combination of hands-on research training, intersectoral secondments, local courses and network-wide events on scientific and transferable skills, enabling future R&I collaborations. Hence, INSPIRE will equip the future generation of SP scientists with a wide range of scientific knowledge and the ability to adapt to a dynamic industry.

Description of the PhD project

Scientific Objectives:

- To investigate different cellular models of cardiotoxicity using various techniques;
- To identify early, selective, sensitive and predictive biomarkers of cardiac injury using in silico, in vitro and in vivo approaches;
- To develop novel structural endpoints of cardiotoxicity;
- To understand the translation and predictive capacity of non-clinical cardiovascular toxicity assays to humans healthy subjects and patients



Tasks and Responsibilities:

- You perform independently scientific research within a collaborative international research consortium (training network).
- You deliver written reports of your research on a regular basis.
- You prepare a doctoral thesis on the topic of cellular models for assessing functional and structural cardiotoxicity.
- You publish scientific articles related to the research project of the assignment.
- You (may) contribute (limited) to teaching activities.
- You (may) support the valorization of research results into tangible deliverables
- You participate to scientific meetings and conferences to present your research to the scientific community.
- You actively participate in outreach activities aimed to promote your scientific research to a wider audience.
- The selected candidate will get in contact with the other members of this international consortium and will benefit from the tailored training programme.
- The selected candidate will take part in the following planned secondments: 1. Secondment to IMEC to assess the utility of supplementary read-outs offered by IMEC's cardiac lab-on-chip platform. 2. Secondment to the

University of Antwerp for in vivo CV studies to evaluate the translational value of in vitro markers of structural cardiotoxicity. 3. Close collaboration with the University of Maastricht to study clinical translatability of identified biomarkers.

About UCB Biopharma

As a global biopharmaceutical company, UCB is engaged in researching, developing, manufacturing, selling and distributing medicinal products to meet the needs of the patients, the healthcare professionals and society as a whole. UCB is focused on creating value for people living with severe neurology and immunology conditions. Those novel therapeutic agents must have an acceptable benefit / risk profile. Given that CV safety liabilities remain a major cause of drug attrition during preclinical and clinical development, adverse drug reactions, and post-approval withdrawal of medicines, to date several questions remained to be addressed (i) what are the key CV safety liabilities in drug discovery, drug development and clinical practice? (ii) how good are preclinical and clinical strategies for detecting CV liabilities? and (iii) do we have a mechanistic understanding of these liabilities? The INSPIRE project will help answering these questions.

Profile & requirements

- ✓ Applicants must hold a MSc or equivalent in the field of Medicine, Veterinary Medicine, Biology, Pharmaceutical or Biomedical Sciences.
- ✓ Applicants must have a solid knowledge of cardiovascular (patho)physiology and methods for investigating this.
- ✓ Applicants can be of any nationality, but have to comply with the "Mobility Rule (cf. infra)".
- ✓ Applicants must have an ability to understand and express themselves in both written and spoken English to a level that is sufficiently high for them to derive the full benefit from the network training.
- ✓ Applicants must be eligible to enrol on a PhD programme at the host institution (or at a designated university, in case the host institution is a non-academic organisation).
- ✓ Applicants must have the necessary academic skills and background to make the success of a doctoral degree.
- ✓ ***H2020 MSCA Mobility Rule***: researchers must not have resided or carried out their main activity (work, studies, etc.) in the country of the host organisation for more than 12 months in the 3 years immediately before the recruitment date. Compulsory national service, short stays such as holidays, and time spent as part of a procedure for obtaining refugee status are not taken into account.
- ✓ ***H2020 MSCA eligibility criteria***: Early Stage Researchers (ESRs) must be, at the date of recruitment by the host organisation, in the first four years (full-time equivalent research experience) of their research careers and have not been awarded a doctoral degree. Full-Time Equivalent Research Experience is measured from the date when the researcher obtained the degree entitling him/her to embark on a doctorate (either in the country in which the degree was obtained or in the country in which the researcher is recruited, even if a doctorate was never started or envisaged).

Benefits

- ✓ The selected candidate will be employed by the host organisation for 36 months.
- ✓ A competitive salary plus allowances. Moreover, funding is available for technical and personal skills training and participation in international research events.
- ✓ The selected candidate will benefit from the designed training programme offered by the host organisation and the INSPIRE consortium.
- ✓ The selected candidate will participate in international secondments to other organisations within the INSPIRE network and in outreach activities targeted at a wide audience.

Please, find additional information in the *Information note for Marie Skłodowska-Curie ITN fellows*

Application

Interested candidates are invited to apply for this position by filing in the application form on our website (www.inspire-safety-pharmacology.eu), via this link: https://www.uantwerpen.be/en/projects/inspire-safety-pharmacology/job-openings/submit-your-applicat/ .

For additional information

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