



Ksilink Early Career Program – Application of Artificial Intelligence and stem-cell derived model systems in arrhythmogenic cardiomyopathy (EU Horizon – 18 months)

About Ksilink

Ksilink (www.ksilink.com) is a French-German association of 12 renowned industrial and academic players with the aim to provide innovative patient-based, translational tools for phenotypic drug discovery and the development of next generation medicine in the fields of muscular, cardiac and neurologic disorders.

The association provides a network of excellence with unique capacities for disease modelling, phenotypic screening and preclinical drug development. Its affiliated platform, Ksilink Services SAS, combines outstanding expertise in high-throughput, high-content screening (HTS/HCS) with AI-driven image analysis and data mining in an industrialized surrounding.

Job Description

The Ksilink Early Career Program (ECP) program aims to support excellent early-stage post-doc scientists focusing on collaborating R&D projects between Ksilink, industry and academic institutions.

As a Postdoctoral fellow, you will contribute mainly to the EU Horizon IMPACT project labelled as “Cardiogenomics meets Artificial Intelligence: a step forward in arrhythmogenic cardiomyopathy diagnosis and treatment”.

This postdoctoral project will be based at Ksilink, Strasbourg, France and you will benefit from cooperation with multidisciplinary collaborators within Ksilink and within the IMPACT consortium.

Within this consortium, you will be a key player in (i) the optimization of cardiac microtissues as a primary assay for chemogenomic screen and (ii) the assessment of potential pharmacological rescue of ACM phenotype.

You will report directly to the project team leader in charge of the project at Ksilink.

This position is for 18 months and opens from October 2023 on. Further opportunities within Ksilink could then be explored but cannot be guaranteed at that stage. A new position and a new contract would then be required.

Key responsibilities

- Collaborate with partners involved in the IMPACT consortium in alignment with the project team leader;
- Plan, design, execute and document experiments (high-throughput/high content cellular assays, MEA, Calcium imaging, Contractility), analyze data and present results at lab meetings in alignment with the project team leader;
- Develop and apply multicellular stem-cell-derived in vitro systems for modeling ACM and response to treatments;
- Generate high-quality results, prepare reports and present the project's advancements at scientific conference;
- Supervise or train personnel and students when required.

Key qualifications, experience and competencies

You have a PhD in the field of cardiovascular, cell biology, biotechnology or another related scientific area with a focus on stem cell technology.

You have recently completed your PhD studies or will do by the end of year 2023.

The position requires advanced expertise in:

- Extensive experience with human cell culture, 3D culture models, organoids, organ-on-chip technologies, single cell technologies, bioimaging and molecular biology.
- Experience with cardiac in vitro models.
- Good knowledge of the human cardiovascular physiology and architecture in healthy and diseases conditions.
- Good understanding of stem cell and organoid biology and molecular biology is preferable.
- Excellent communication and presentation skills, including the ability to proactively interact with multidisciplinary teams (from biology team, screening team to data mining team) and to present scientific results to project partners.
- Ability to prioritize, see the big picture and nevertheless focus on details.
- Ability to work independently, quickly set up effective working relationships.
- Curiosity towards drug development and medicine.
- Fluency in written and spoken English which is the central language at Ksilink. Other major languages are French and German.

Ksilink is an equal opportunity employer and follows non-discriminatory practices.

The following experiences would be considered as an asset:

- Processing and interpretation of Omics data (RNA sequencing);
- Computational approaches and programming languages (e.g. C, R Matlab, Python).

What to expect from Ksilink?

- Opportunities to develop your career in a scientifically vigorous and exciting professional environment promoted by an open culture and a spirit of community;
- Outstanding and motivated team of international scientists with expertise in cellular disease modeling, assay miniaturization and automation, phenotypic HCS/HTS and cutting-edge image and data analysis approaches including computer vision and machine learning technologies;
- Established European network of renowned academic and industrial partners in our fields of activity;
- Competitive salary, individual performance-based bonus, and company performance-based bonus. Our remuneration package includes additional financial benefits such as health insurance, lunch allowance, mobility allowance, sport & culture allowance...
- Located in Strasbourg in France, at the border to Germany, next to city center. Strasbourg has been voted most attractive French city in 2019.

Interested candidates should send a cover letter, curriculum vitae with bibliography, and the contact information of at least three references to contact@ksilink.com. In order for the application to be read and considered, please indicate "ECP: PDF Cardio" in the e-mail's subject.