

Position: 01/24 - Early Stage Researcher (recent MSc graduate)

Porto, Portugal

Job Description

Biofabrics is seeking a highly motivated and committed early stage researcher who wishes to develop his/her research at the interface of industrial and academic environments and with a strong interest in design of organs-on-chips/bioreactors, tissue/organ models, biofabrication, tissue engineering and regenerative medicine. **The researcher is expected to be available to spend long periods abroad in the scope of various projects, namely:**

ESCULAPE - Electro-conductive polymeric 3D scaffolds as novel strategies for biomedical applications

This project is targeted to building a strong interdisciplinary partnership to support research and innovation activities in the fields of biomaterials, polymer science, nanotechnology, tissue engineering, microbiology and medicine with the aim to explore development and implementation of new medical engineering solutions for regenerative medicine and wearable electronics. The project consortium is composed by 10 partners from 8 European Union countries, namely:

- Latvijas Universitate (LV)
- Sumy State University (UA)
- Ita-Suomen Yliopisto (FI)
- Uniwersytet im. Adama Mickiewicza Poznaniu (PL)
- Institut National de la Sante et de la Recherche Medicale (FR)
- Elektronikas un Datorzinatnu Instituts (LV)
- Vilniaus Universitetas (LT)
- Materials Research Center (UA)
- Biofabrics (PT)
- Respilon Membranes S.R.O. (CZ)

iP-OSTEO - Induced pluripotent stem cell seeded active osteochondral nanofibrous scaffolds

This project focuses on the development of novel cell-based scaffolds for bone and cartilage repair in patients with poor regenerative capacity. This project comprises an international and interdisciplinary training program bringing together 7 companies (SMEs) and 7 academic institutions across the European Union, namely:

- Institute of Experimental Medicine CAS (CZ)
- Inocure SRO (CZ)
- Széchenyi István University (HU)

- Ospin GmbH (DE)
- Bioneer A/S (DK)
- Orthosera GmbH (AT)
- University College London (UK)
- Rhine-Wall University of Applied Sciences (DE)
- LLS Rowiak LaserLabSolutions GmbH (DE)
- Corticalis AS (NO)
- Fraunhofer IGB (DE)
- Scinus Cell Expansion BV (NL)
- Institute of Fundamental Technological Research, Polish Academy of Sciences (PL)
- Biofabics (PT)

ActiTOX - Active organotypic models for nanoparticle toxicological screening

This project focuses on the development of a novel, pre-clinical, high content, in vitro testing platform focused on the evaluation of nanoparticles/drugs via ADME (absorption, distribution, metabolism, excretion) toxicity studies. This project also comprises an international and interdisciplinary training program bringing together 5 companies (SMEs) and 5 academic institutions across the European Union, namely:

- Fraunhofer IBMT (DE)
- Inocure SRO (CZ)
- Technical University of Vienna (AT)
- Széchenyi István University (HU)
- Ospin GmbH (DE)
- University of Graz (AT)
- Bioneer A/S (DK)
- Orthosera GmbH (AT)
- Institute of Experimental Medicine CAS (CZ)
- Biofabics (PT)

You will be involved in:

- Research, development and innovation activities
- Drafting briefing notes, reports, articles and research materials

Requirements

The ideal candidates for these positions:

- Have completed an MSc degree less than 4 years ago in biomedical sciences, biomaterials engineering or related field
- Do not have a doctoral degree

- Are skilled in employing and/or developing technologies and techniques such as static and/or dynamic cell/tissue culture, development/processing of biocompatible biomaterials and scaffolds. Experience in 3D printing/bioprinting, automation and programming would be a plus, although not strictly necessary
- Are knowledgeable about the biology and physiology of cartilage and/or skin, intestine, lung and liver
- Are able to drive collaborations across multiple organizations and carry out communication of research activities through presentations at informal and formal meetings, reports, research articles and conference presentations
- Have an excellent track record, demonstrated through meaningful research publications, grades and/or relevant professional experience
- Are available for long travels to perform research at consortium partners as well as available for short travels to consortium meetings and/or conferences
- Are reliable and effective workers
- Are self-motivated, can excel in both unsupervised solo projects and in tight teamwork contexts
- Have a growth mindset and an ability to learn quickly
- Are creative and critical thinkers

Benefits

- Full-time contract with competitive salary
- The positions will be formally based at our Porto (Portugal) facilities, although a large part of the time may be spent at consortium academic partners
- Immersion into a vibrant startup and academic community

About Biofabics

Biofabics is an R&D company specialized in 3D Biotissue analogues, providing next-generation solutions for studying, mimicking, repairing and replacing living tissues and organs. In particular, Biofabics develops: truly 3D customizable organ-on-chip devices for drug discovery and personalized diagnostic/treatment; body-like environments for study of cells and tissues in in vivo-like states; tailor-made implants and bioreactors for research and implantation. Biofabics provides R&D services to companies and labs around the world who are looking to employ novel, more accurate, and more reliable tissue/organ models in their own research activities.

Application process

- Applications should consist of a full curriculum vitae as well as a one-page cover letter describing briefly how you meet the criteria indicated above and outlining your interests, greatest achievements so far and future perspectives. Given that this position is meant for early stage

researchers, recommendation letters and academic transcripts (grades) can also be added to the submitted documentation.

- Applications shall be filed via e-mail to info@biofabics.com by January 19th, 2024. When sending your application, please include in the email subject "01/24-Early Stage Researcher Position".
- Pre-screened candidates will be invited for an interview
- The final selected candidate is expected to start in the beginning of February 2024

Funding sources:

ESCALAPE - Electro-conductive polymeric 3D scaffolds as novel strategies for biomedical applications

This project has received funding from the European Union's Horizon Europe research and innovation programme under the Marie Skłodowska-Curie grant agreement No 101131147.

ActiTOX - Active organotypic models for nanoparticle toxicological screening

This project has received funding from the European Union's Horizon 2020 research and innovation programme under the Marie Skłodowska-Curie grant agreement No 823981.

iP-OSTEO - Induced pluripotent stem cell seeded active osteochondral nanofibrous scaffolds

This project has received funding from the European Union's Horizon 2020 research and innovation programme under the Marie Skłodowska-Curie grant agreement No 824007.