

Research technician for the Microfluidics and Biomimetic Microsystems Laboratory (MiMic Lab)



POLITECNICO
MILANO 1863

The MiMic Laboratory of Politecnico di Milano is currently seeking a Research Technician to contribute to the organization and management of cell culture and analysis laboratories.

Microfluidics and Biomimetic Microsystems Laboratory (MiMic Lab) of Politecnico di Milano is recruiting a Research Technician. The position will be under the supervision of Prof. Marco Rasponi, PhD, and Prof. Paola Occhetta, PhD from MiMic Lab. The MiMic Lab develops cutting edge Organ-on-Chip technology to establish in vitro models of human organs and diseases. Our group takes a multidisciplinary approach, combining our state-of-the-art organs on chip models with high-content and high-resolution imaging, stem cell biology and biosensors technology. The group has strong collaborations with both academic and industrial partners worldwide.

Job responsibilities:

The candidate will contribute in the organization and management of two cell culture laboratories (focusing on cultures of different cell types, both of human and animal origin; cell lines, primary cells and iPSC-derived cells), equipped with related analysis facilities (i.e. FACS sorting, molecular biology, microscopy, biochemistry).

Responsibilities includes:

1. Responsible for aiding the day to day running and operation of the laboratories according to local Codes of Practice including supporting all personnel working in the laboratories.
2. Being responsible for a range of biological analytical services e.g. FACS, real-time PCR, bioanalyser, phase contrast and fluorescent microscopy. This includes undertaking or organising regular maintenance of these services as well as general laboratory equipment (e.g. pipettes, incubators).
3. Being responsible for the cryostores and maintaining the associated records.
4. Provide technical support and assistance for experimental research activities when requested.
5. Training of students and other staff in the use of laboratory facilities, equipment, materials, processes and procedures ensuring good laboratory and cell culture practice and compliance with safety regulations.
6. Participating in laboratory and unit meetings as requested.
7. Aid in the procurement and maintenance of adequate stocks of materials, goods and services relevant to the laboratories and associated training activities.

Duration: 3-5 years (approx. starting from March 2024), full time.

Candidate Qualifications:

- >1 year experience in cell culture laboratory
- Degree (B.Sc., M.Sc.) in Molecular Biology, Biotechnology, Biochemistry, or related field (PhD as a plus)

Candidate Requirements:

Essential:

- Extensive 'hands-on' experience in cell culture and preparation of bio-samples;
- Demonstrated ability to work independently in performance of laboratory processes such as execution of experimentation, quality assessment, documentation and reporting of results;
- Ability to keep detailed and organized records of all experiments and processes;
- Experience following experimental protocols;
- Good communication ability and desire to work with a collaborative, fast-paced project team in an entrepreneurial work environment
- Fluency in English

Desiderable:

Track record in the following areas:

- Experience and knowledge in genomics and molecular biology techniques such as DNA/RNA manipulation and extraction, PCR, qPCR, cloning, single cell manipulation, FACS, Sorting
- Familiarity with microscopy techniques and image/video analysis software

Selection process

Pre-applications and enquiries must reach mattia.ballerini@polimi.it by October 31st 2023, and must include: (1) your CV and (2) contact details for at least 2 referees. Single PDF preferred.

This informal job advertisement pre-announces a public competitive search for qualified candidates that will be performed according to Italian laws.

About Host Institution

The MiMic Lab is part of the **Biomechanics Group** of the Department of Electronics, Information and Bioengineering (DEIB) of Politecnico di Milano, which consists of about 23 research fellows including permanent staff, post-docs and PhD students, whose activities cover the fields of cardiovascular mechanics, molecular biomechanics, microfluidics and tissue engineering. The group benefits from being part of **Politecnico di Milano**, which is the largest Technical University in Italy with over 40,000 students in Engineering, Architecture and Industrial Design. Politecnico is also the Italian Technical University with the highest position in the international rankings. Of note, the Bioengineering division at DEIB is one of the largest in Europe, with a faculty staff of 35 people and an overall research staff of 100 fellows. The Bioengineering division coordinates the Bachelor and Master programs and the PhD School in Biomedical Engineering.

For more information on the research groups, please visit:

- <http://www.biomech.polimi.it/mimiclab>