

Postdoctoral fellow in the Organs-on-Chip field



POLITECNICO
MILANO 1863

The MiMic Laboratory of Politecnico di Milano is currently seeking a highly motivated Postdoctoral Fellow to contribute to European founded projects in the Organ-on-Chip field.

Microfluidics and Biomimetic Microsystems Laboratory (MiMic Lab) of Politecnico di Milano is recruiting a Postdoctoral Fellow. 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 Organs- 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.

The candidate will work on **European founded projects** (e.g. **ERC Starting Grant, EIC Pathfinder**) to develop **innovative Organ-on-Chip platforms** to reproduce the complex environment of human organs and recapitulate selected pathological conditions to unravel underlying mechanisms and new clinically relevant targets.

The successful candidate is expected to be an active part of these challenging projects, being specifically responsible for designing, fabricating, and characterizing Organ-on-Chip devices tailored for specific biomedical applications. The successful candidate will be part of a multidisciplinary and international environment, with the opportunity to learn new methods and be highly supported in developing their scientific career.

The position offers a competitive salary in the vibrant, international scientific environment of Politecnico di Milano, a top-ranked technical University in Europe and Worldwide (and the 1st University in Italy). The candidate will have access to state-of-the-art facilities (e.g. the PoliFab, the micro and nano technology center of the Politecnico di Milano) and cutting-edge equipment (e.g. last generation super resolution confocal spinning disk microscopy), offering an excellent research environment, ideal for building a scientific career.

Duration: 3-5 years (approx. starting from June 2024)

Candidate Skills/Qualifications:

- 0-5 years postdoctoral experience
- PhD in a relevant subject area (molecular/cellular biology, engineering or similar). We expect candidates to have acquired their experience during their Ph.D. in one of these areas. However, we are happy to consider candidates with relevant experience in Industry or through a different role in Academia or non-profit.

Candidate Specific Requirements:

- Previous experience with cell culture in 3D models
- Previous experience in the field of microfluidic and/or organ-on-chip technology
- Experience with immunofluorescence techniques, confocal microscopy and imaging, flow cytometry
- Excellent communication, writing and presentation skills in the English language
- Proven independent working style, problem solving, and strong passion for science
- Willingness and ability to work in an open, transparent, and highly collaborative team
- Supervising skills (for Master students, MDs and PhD students)

Candidates should send a CV, a publication list, a short summary of research experience, and contact information for referees to: paola.occhetta@polimi.it

About Host Institution

The MiMic Laboratory 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>