Master student scholarship in droplet microfluidics

Position in the project: Master student, starting from 01.10.2023 **Scientific discipline**: microfluidics, biophysics, analytical chemistry

Stipend amount/month: 2000 PLN net

Period of stipend agreement: 12 months (with possible extensions)

Institution: The University of Warsaw, Faculty of Biology / Warsaw, Poland

Project leader: Dr Tomasz Kaminski

Project title: Benchmarking Human Tissue Culture Systems that Mimic the Tumor Microenvironment

Key responsibilities:

1. Experimental work:

- a. implementation and optimization of state-of-the-art microfluidic high-throughput methods for single-cell RNA sequencing, such as VASA-seq (Nat Biotechnol 40, 1780–1793 (2022) doi.org/10.1038/s41587-022-01361-8) or spIndrop (Nat Commun 14, 4788 (2023) (doi.org/10.1038/s41467-023-40322-w).
- b. Applying scRNA-seq for analysis of primary tumor tissue and in vitro model systems such as patient-derived organoids (PDO) and patient-derived explants (PDE) developed at the Medical University of Lublin
- 2. Analysis of high-throughput single-cell RNA sequencing data
- 3. Support of project collaborators in the development of microfluidic technologies for tissue engineering and high-content screening.
- 4. Publication of the results of research articles and patent applications.

Profile of candidates/requirements:

- 1. Graduate of BSc studies in the following fields: molecular biology, biotechnology, biochemistry or related fields.
- 2. At least 1 year of research experience in microfluidics or molecular biology.
- 3. Scientific independence and teamwork skills.
- 4. Very good knowledge of English.
- 5. Willingness to gain new expertise.

Required documents:

- Short motivation letter
- 2. Curriculum vitae including: a detailed description of the academic degrees, titles of theses, names and affiliations of supervisors, places of employment, list of scientific publications, conferences, awards and trainings.
- 3. Address details of one direct supervisor/scientist who may recommend the given candidate.
- Copies of obtained diplomas.
- 5. For the purpose of the recruitment process, please attach a scan of signed, written permission for recruitment-related personal data processing, which states: "I give permission to the University of Warsaw, registered at the address of ul. Krakowskie Przedmieście 26/28, 00-927 Warszawa, to process my personal data for the purposes of carrying out the recruitment procedure, choosing the employee, and entering into an employment contract with the University of Warsaw, if applicable. I have been informed about my legal rights and obligations in relation to these actions. I acknowledge that providing the aforementioned personal data is done by me on a voluntary basis."

In case of any questions regarding recruitment, candidates are encouraged to contact the project leader ts.kaminski2@uw.edu.pl

Please submit the following documents to: ts.kaminski2@uw.edu.pl





Application deadline: 26.09.2023

For more details about the position, please visit:

• Lab website: https://microfluidicsuw.com/

Project description: https://www.ncn.gov.pl/sites/default/files/listy-rankingowe/2021-03-15bhga1/streszczenia/516577-en.pdf



