

## PhD student scholarship in droplet microfluidics

**Position in the project:** PhD student, starting from 01.10.2023

**Scientific discipline:** microfluidics, biophysics, analytical chemistry

**Stipend amount/month:** 3000 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:** High-throughput droplet microfluidics for dissecting cellular interactions.

### Key responsibilities:

1. Experimental work:
  - a. development of new microfluidic modules for single-cell transcriptome profiling, such as VASA-seq (Nat Biotechnol 40, 1780–1793 (2022). [doi.org/10.1038/s41587-022-01361-8](https://doi.org/10.1038/s41587-022-01361-8)) or spIndrop (Nat Commun 14, 4788 (2023) ([doi.org/10.1038/s41467-023-40322-w](https://doi.org/10.1038/s41467-023-40322-w))).
  - b. development of image-based droplet sorters (e.g. [doi/full/10.1002/admt.202101053](https://doi.org/10.1002/admt.202101053)) using sensor-level computer vision methods (e.g. [doi/full/10.1126/scirobotics.abl7755](https://doi.org/10.1126/scirobotics.abl7755))
2. Analysis and publication of the obtained results, participation in the preparation of patent applications, and potential commercialization of the research results
3. Participation in seminars and scientific conferences
4. Supervision of graduate students involved in research work in the project.

The successful candidate should be already enrolled or is expected to enroll in the Doctoral School of the University of Warsaw <https://szkolydoktorskie.uw.edu.pl/en/>

### Profile of candidates/requirements:

1. At least 1 year of research experience in the field of experimental microfluidics, biophysics, engineering, or analytical chemistry.
2. Experience in building optomechanical or microfluidic experimental setups.
3. Experience in lab automation (e.g. LabVIEW) or computer vision is a plus.
4. Scientific independence and teamwork skills.
5. Very good knowledge of English.
6. Willingness to gain new expertise.

### Required documents:

1. 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 at least one direct supervisor/scientist who may recommend the given candidate.
4. 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](mailto: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://projekty.ncn.gov.pl/opisy/539536-en.pdf>