

## Vienna is calling

### International PhD-Program in Vienna, Austria

The Medical University of Vienna is looking for highly motivated and talented students with a passion for science and interested in working in our

#### Preclinical *in vivo* imaging lab (PIL) at the Medical University of Vienna.

In your project you will decipher BC (breast cancer) heterogeneity and tackle the hypoxic TME (tumor micro environment) challenge by coupling the advanced PET/MRI technique with molecular tumor profiles through radiomics analyses. You will develop a novel multi-layered PET/MRI approach for imaging of the hypoxic TME and the induced angiogenic and metabolic switches using new MRI parameters and targeted radiotracers in murine models. PET/MRI data will be coupled with genomic, proteomic and metabolomic profiles through radiomics analyses and thereby identify signatures of lethal BC.

The project is funded by the department of Biomedical Imaging and Image-guided Therapy. MRI measurements will be performed at 9.4T on a Bruker BioSpec system.

Additional details about our lab and infrastructure can be found at <https://radnuk.meduniwien.ac.at/forschung/pil/>.

#### You want to:

- Work on top-notch scientific projects in the field of preclinical PET-MRI
- Become embedded in an international research community
- Profit from a multilayer mentoring environment
- Enjoy the multicultural spirit, culture and hospitality of Vienna

#### Eligibility criteria:

- Hold a master of science (MSc) or equivalent university degree (final degree) in a subject-relevant or -related field, e.g. biological sciences, physics, medicine, veterinary medicine or a related discipline and fulfill the admission criteria for PhD-students of the MUV.
- Have a fluent command of English (written and spoken) preferably with documented proficiency in English (TOEFL test, GRE test, or similar). The knowledge of the German language is not required.
- Provide a motivation letter explaining their commitment to science and a detailed curriculum vitae including scholarships, prizes, awards and high school degree transcripts (incl. presentations at meetings/publications if already applicable at this early stage of the career)
- Have strong communication skills as well as the ability and the ambition to work in a team
- Have the willingness to work with laboratory animals on a flexible time schedule
- Have interest to work on cell cultures and *post mortem* histological procedures
- Be eager to learn how to measure PET-MRI *in vivo* and analyze the acquired images via image post processing methods

Applicants admitted as PHD-students are eligible to receive financial compensation for their daily work according to the rules and regulations of the funding agency (Austrian Science Fund (FWF)

(<http://www.fwf.ac.at/de/projects/personalkostensaetze.html>). Moreover, they will receive full social security coverage. The work on the individual projects will be supervised on a daily basis. Additional support will come from regular progress reports. Moreover, an individual international Thesis Committee will be formed for each individual PhD-student.

For more information, about the PhD programs at the MUW, please refer to <https://www.meduniwien.ac.at/web/en/studies-further-education/phd-doctoral-programmes/phd-programme-n094/> and <https://radnuk.meduniwien.ac.at/forschung/pil/>.

If we have sparked your interest, please send your application documents including a motivational letter, CV, copies of relevant certificates and the addresses of two references to [vanessa.froehlich@meduniwien.ac.at](mailto:vanessa.froehlich@meduniwien.ac.at).