

**PhD position for Medical Physicist at the Department for Radiotherapy,
Medical University of Vienna**

We would like to inform you about an **open position for 1 PhD student in the field of Medical Physics**. The PhD work will be carried out within the project “**Evidence-based decision making in image-guided brachytherapy**”, funded by the Austrian Science Fund (FWF) for a duration of 3 years, starting in summer of 2018. (abstract attached)

A Medical Physics PhD student at the Medical University of Vienna (MedUni Wien) will be hired for this project and supervised by the PI Ass Prof Dr Nicole Nesvacil. The PhD student’s role will be to participate in the development for evidence-based decision-support tools based on IGBT technical treatment and dose-volume data from the international EMBRACE study on cervical cancer, development of a radiobiological model parameter optimization routine and to implement and test the automatic online-MRI treatment verification for IGABT in our department.

The student will be employed for 30 hrs/week at the Medical University of Vienna for the project duration and is expected to enroll in the thematic PhD programme Medical Physics offered at MedUni Wien. Salary will be based on university regulations. For more information, see <https://www.meduniwien.ac.at/hp/phd-medphysics/>

The Department of Radiation Therapy of the Medical University of Vienna offers a clinical research infrastructure including access to imaging and treatment facilities for image-guided adaptive brachytherapy (MRI, CT and ultrasound, HDR and PDR afterloading), and facilities for advanced external beam radiotherapy. Basic clinical BT training for the PhD student will be supported by the department.

All researchers are embedded in the research activities at the department, represented in regular scientific meetings, journal clubs, and the doctoral students’ seminars co-organized by the project PI. The successful candidate will carry out the project in close collaboration with leading experts in radiotherapy/brachytherapy, an active local group of physicists and radiation oncologists, as well as the international EMBRACE research group (www.embracestudy.dk) and respective GEC-ESTRO working groups.

The ideal candidate has a Master’s degree in Physics or a related field, and a strong interest in Medical Physics and Medical Imaging. He/She has profound knowledge and experience with at least one programming language (C++, Python, IDL, ...), as well as experience with *machine learning/artificial neural networks*. Experience with statistical software tools (SPSS, R, ...) is an advantage. The working language will be English. Excellent English writing skills are required. German language skills are recommended for interaction with clinical staff. Clinical work experience with 3D image-guided brachytherapy is an advantage. Expected starting date will be September 2018.

If you are interested, please send your CV including a list of publications, and a letter of motivation to nicole.nesvacil@meduniwien.ac.at. (Received personal data will be deleted at the end of the recruitment phase.)