



Medical Physics PhD position at Aarhus University Hospital

Aarhus University, Department of Clinical Medicine, is inviting for applications for one full time three-year PhD position in medical physics for radiation oncology.

Job description

The research project for the position will fall within the topic of investigation of advanced metrics and development of tools for treatment plan comparison, particularly in relation to patient selection between treatment modalities such as photon and proton radiotherapy. Metrics for plan comparison can include physical dose-volume parameters, considerations for biological effect, plan robustness towards geometrical and range uncertainties, robustness towards variations in target and organ delineation, and prioritization of dose objectives.

The project will be supervised by Associate Professor Stine Korreman, and is funded by Aarhus University Research Foundation.

Qualifications

The applicant must have:

- MSc degree in physics, preferably in medical physics (biomedical engineering may be acceptable depending on specific content of education).
- Fluency in English (oral and written).
- Programming skills will be an advantage (such as Matlab, Python, and/or C# or similar programming language).
- Experience with treatment planning for radiotherapy will be an advantage.
- Analytical skills and ability to work independently on a project basis.
- Research interests and ambitions for excellence in medical physics.
- Good communication skills relevant for working in an international research and study group.
- Prior experience in radiation oncology will be an advantage.

The PhD programme includes PhD courses (in total app. ½ year), writing scientific articles and the PhD thesis, teaching and disseminating your research, active participation in scientific meetings etc. Further details on the PhD program can be found here: http://phd.health.au.dk/doingaphd/

About Department of Oncology, Aarhus University Hospital

The Department of Oncology has 12 linear accelerators, as well as CT-, PET/CT and MR scanners dedicated for radiotherapy. A proton facility is being established and is expected to start patient treatment in October 2018, with three gantry rooms for patient treatment and a fourth dedicated research room with a fixed beam. The department has a well-established and highly international research environment, with research activities in radiation oncology bridging translational and clinical research. More than 30 PhD students and postdocs and more than 10 senior full time researchers are working in an inspiring environment.

Application

Applications must contain the applicant's CV, a motivation letter (cover letter), list of publications, diploma and transcripts of records (grades etc.), and at least one letter of support or 1-3 professional references.

Applications should be mailed to Stine Korremann at stine.korreman@oncology.au.dk no later than <u>May</u> **5, 2018.**

Please note that the selected candidate will have to apply for and get approved for enrollment at the AU Graduate School of Health http://phd.health.au.dk/application/ in a separate procedure. For the chosen applicant, the application deadline for enrolment is May 14, 2018.

For further information, please contact Stine Korreman, stine.korreman@oncology.au.dk, mobile phone: +45 28119886.