## Postdoctoral Fellow in Medical Physics – State-of-the-art Dose Evaluations for Brachytherapy

A postdoctoral fellow is sought to work under the supervision of Rowan Thomson within the Carleton Laboratory for Radiotherapy Physics (CLRP) and Ottawa Medical Physics Institute on a cutting-edge project financed by the Canadian Institutes of Health Research (CIHR). The project involves a collaboration of clinicians and medical physics experts from institutions across Canada to advance brachytherapy treatments of breast and prostate cancers.

Required qualifications:

1. PhD in physics, medical physics or a closely related discipline (within 5 years, excluding career interruptions)
    a. Knowledge of radiation therapy physics and radiation dosimetry are pluses
    b. Experience with Monte Carlo simulations in medicine, proficiency with EGSnrc, preferred
2. Computer programming skills in various languages, e.g., C++, fortran, Qt, python.
3. Demonstrated writing (in English) and excellent communication skills, including publications and conference presentations in relevant venues.
    a. Publications with application of the Monte Carlo method in the context of radiation and medical physics preferred
4. Ability to work well with others in a group and coordinate activities of different members dispersed geographically

The successful applicant will be based within the Carleton Laboratory for Radiotherapy Physics, a group well-known for excellence in development and application of Monte Carlo simulations for medical physics. Based at Carleton University in Ottawa, Canada, the successful applicant will engage with teams of physicists, clinicians and their trainees across Canada to coordinate and support clinical translation of egs_brachy, a fast Monte Carlo code for simulating brachytherapy treatments. This will involve virtual meetings, as well as travel between different sites (if permitted by COVID-19 travel restrictions). The team will undertake state-of-the-art patient-specific dose evaluations for prostate and breast low-dose rate brachytherapy, enabling study of dose-outcome relationships and radiobiological modelling.

Applications must be submitted to AcademicJobsOnline.org and must include:

- A cover letter clearly describing how you meet qualifications and describing your motivation in applying for this position, as well as when you would be available to start and your citizenship.
- A detailed and complete Curriculum Vitae (CV). This should include a publication list that distinguishes between journal publications, conference proceedings, abstracts, and invited presentations; also include leadership activities and service contributions (including community involvement).
- A short statement about your career goal(s).
- A transcript from your PhD studies and a copy of your diploma or proof of successful thesis defence and a copy of the statement confirming final submission of the thesis.
    - For academic institutions from outside North America, the applicant must explain the grading system in effect. For original transcripts and diploma issued in a language other than English or French, a translation must be provided.
- Please arrange to have three letters of recommendation uploaded directly by referees to AcademicJobsOnline.org.

We are committed to fostering diversity within our community as a source of excellence, cultural enrichment and social strength. We are active in advancing Equity, Diversity, and Inclusion (EDI) within our research group and beyond, and we encourage applications from individuals committed to advancing EDI. All qualified persons are encouraged to apply.

Salary will be commensurate with background and experience, ranging from $40K to 50K (CAD) in the first year (excluding benefits). The initial appointment is for 1 year but can be extended subject to satisfactory performance. Applications will start being considered April 20, 2021 but will continue until the post is filled. Start date can be as early as June 1, 2021 but is subject to negotiation and availability.

Contact: Professor Rowan Thomson, rthomson@physics.carleton.ca