

Johns Hopkins Hospital
Department of Radiation Oncology and
Molecular Radiation Sciences
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Postdoctoral Fellow in Optical Tomography for Preclinical Radiation Research

A two-year postdoctoral fellowship is available in the Division of Medical Physics in the Department of Radiation Oncology at Johns Hopkins University (JHU). The candidate will be involved in the research of pre-clinical image guided irradiation, in particular, the development of an integrated bioluminescence and fluorescence tomography/x-ray cone beam CT system for the small animal radiation research platform (SARRP). The tri-modality (CBCT/BLT/FT) imaging system is constructed to improve target localization and quantitative assessment of radiation response using the SARRP. The candidate will play a key role in the development of the advanced optical tomography system, reconstruction algorithms and system validation using animal models. The project also involves collaboration with other laboratories as well as with our industrial partner, Xstrahl Ltd (<http://www.xstrahl.com/life-sciences/pre-clinical-systems/molecular-imaging/muriglo.aspx>).

Excellence in problem solving, strong verbal and written communication skills are required for this position. The candidate with experience in animal experiment and proficiency in computer programming will be given priority for this position.

The project has strong ties to human radiation medicine in terms of biomedical optics, image-guided radiation therapy, radiation dosimetry and treatment planning. The position exposes the candidate to the practice of medical physics where he/she will have opportunities to receive some clinical training and participate in selected tasks under the supervision of qualified medical physicists. The experience will prepare the interested candidate in applying for residency in medical physics as well as pursuing an academic career in the medical physics in radiation oncology. The career in medical physics can be found in the link provided by American Association of Medical Physics;
http://www.aapm.org/medical_physicist/default.asp

Qualified applicants should have a recent PhD in physics, biomedical engineering, optics, medical physics or related discipline and a demonstrated publication record. Interested candidates should send a cover letter, a copy of current CV, and the names (with email contact information) of three academic references to Dr. Ken Wang at email address kwang27@jhmi.edu Please include "JHU Postdoctoral Fellow" in the subject line.