Applications are invited for one Postdoctoral Fellow position in IMAGE-GUIDED RADIATION THERAPY at the Center of Excellence in Image-guided Radiation Therapy, Department of Radiation Oncology, University of Iowa. The center is a state-of-the-art radiation oncology facility where faculty are performing research in 4D imaging, treatment planning, verification, and treatment delivery. The center is equipped with the latest imaging and treatment equipment: 4 linear accelerators (with gating and megavoltage cone beam CT), 3T MRI scanner, 4-D PET/CT scanner, mobile C-arm for fluoroscopy and kV cone beam CT, and infrared optical image guidance.

The successful candidate will contribute substantially to the development of new computational tools improving the efficacy of 4-D image-guided radiation therapy, with an emphasis on increasing the precision of tumor localization and radiation dose delivery by accounting for respiratory motion during the treatment. This Postdoctoral Fellowship provides an opportunity to engage in this emerging multi-disciplinary research area involving imaging, medical physics, computer algorithm development, and radiation treatment, and to work in an interdisciplinary team of faculty collaborators from Radiation Oncology and Electrical & Computer Engineering Departments. With the formation of an Iowa Institute of Biomedical Imaging in the near future, the Postdoctoral Fellow will have an opportunity to interact with a large group of more than 100 medical imaging and image analysis scholars, postdocs, and graduate students.

The position is for one year in the first instance and has the potential to be extended for up to three years for suitably qualified candidates if skills, interest and performance allow. This position is immediately available and will start at a mutually agreed upon date. All qualified candidates are encouraged to apply.

The ideal candidate must be highly motivated and has a strong background in medical imaging and computational science. Proven ability to work independently and experience in Intensity-Modulated Radiation Therapy and medical image analysis are considered to be important assets for this position. The candidate is also expected to be willing to work in a cross-disciplinary environment. Strong programming skills in Matlab and C/C++ are required. Good communication as well as writing skills is desirable. Applicants should hold (or shall obtain within six months of application) a Ph.D. in Computer Engineering, Medical Imaging or a related field.

The application must include the following:

- Cover letter highlighting the candidate's suitability for this position;
- Curriculum vitae;
- Up to three selected preprints/reprints most relevant to this position;
- Three letters of reference.

The application should be sent to Dr. Xiaodong Wu at the address below (email applications only). The position is available until filled. Please feel free to contact us if you have any questions.

Dr. Xiaodong Wu
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