UT Southwestern Medical Center

Postdoctoral Scholar Position in Medical Physics

A postdoctoral training position is available in the laboratory of Dr. You Zhang**,** in the Medical Physics & Engineering Division, Department of Radiation Oncology at UT Southwestern Medical Center to study **medical physics, imaging,** and **radiation therapy**. Our laboratory has several exciting projects related to:

- Developing analytical and AI-driven medical image reconstruction, registration, synthesis, and segmentation techniques for image-guided radiotherapy;
- Developing algorithms and workflows for image-guided adaptive radiation therapy, for both photon and proton treatments;
- Developing automatic QA techniques for MR-guided adaptive radiotherapy using MR-LINACs;
- Developing dual-model, dynamic, and anthropomorphic phantoms through 3D printing and casting.

Candidates must hold a recent Ph.D. degree in physics, electrical engineering, biomedical engineering, computer science, applied mathematics, or related disciplines. Strong programming skills are essential. Previous experience in programming (MATLAB/Python/C/C++) and image processing is preferred. Knowledge in machine/deep learning and high-performance computing is a plus but not required. Previous background in medical physics is NOT required. The candidate should demonstrate excellent written and communication skills.

Successful candidates are also eligible to enroll in our CAMPEP-accredited didactic medical physics certificate program for free, whose curriculum covers the essential medical physics courses for individuals to enter the medical physics residency to become a professional medical physicist in the US.

UT Southwestern is a leading academic medical center—world-renowned for its research and scientific training, and nationally recognized for the quality of clinical care that its faculty provides to patients at UTSW University hospitals and clinics. With six Nobel Laureates and 26 members of the National Academy of Sciences currently on faculty, UT Southwestern is among the top biomedical research institutions in the nation and consistently ranks the No. 1 academic medical center in the world for publishing high-quality scientific research, according to Nature Index. The Division of Medical Physics and Engineering currently has 40 faculty-level physicists and more than 40 postdoctoral researchers and graduate students. Our division is equipped with a wide range of advanced radiotherapy machines, including state-of-the-art adaptive radiotherapy machines (Unity MR-LINAC, Ethos, and Reflexion PET-LINAC), which offer an excellent resource for data collection, analysis, and innovation.

Initial appointment will be for one year with renewable appointments for subsequent years. Salary and benefits will be commensurate with the applicant's experience and the NIH guideline (https://www.niaid.nih.gov/grants-contracts/salary-cap-stipends)**.** More information on our postdoctoral training program, benefits, and a virtual tour can be found at http://www.utsouthwestern.edu/postdocs.

Interested candidates should send their curriculum vitae to:
Dr. You Zhang, Ph.D.
You.Zhang@UTSouthwestern.edu.

For more information on our program, or medical physics as a field and profession, please refer to:

https://profiles.utsouthwestern.edu/profile/161901/you-zhang.html
https://labs.utsouthwestern.edu/advanced-imaging-and-informatics-radiation-therapy-airt-lab
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