



Post-Doctoral Fellowship in Therapeutic Ultrasound for Cancer Therapy

With nation-wide responsibility for improving the health and well-being of all Americans, the Department of Health and Human Services oversees the biomedical research programs of the National Institutes of Health and those of NIH's research Institutes.

The Frank Laboratory in the Clinical Center and National Institute of Biomedical Imaging and Bioengineering, NIH is accepting applications for a two-three-year post-doctoral fellowship position for highly motivated, independent, hands-on innovative Ph.D., M.D., or MD/Ph.D. candidates with Therapeutic Ultrasound (TUS) including focused ultrasound (FUS) and low-intensity pulsed ultrasound (LIPUS), Biomedical Engineering, Cancer Immunotherapy or related backgrounds to enter into an exciting new area of research that enhances cellular therapy by using FUS or LIPUS to alter the tumor microenvironment leading to the treatment cancer. The pre-clinical research focuses on understanding the molecular effects of TUS in tissues and organ systems and combining Cellular Therapies (Stem Cells, Genetically Engineered Cells, T-cells) coupled with TUS approaches serving as an adjuvant to target and treat malignancy. We are exploring several experimental model systems as well as exploring the effects of drug-host interactions on cellular therapy and serving as proof of concept of TUS to facilitate innovative cell therapy strategies.

Tasks associated with this position will include: working with and developing experimental cancer models, monitoring treatment effects of TUS with immunotherapy, cell culture and molecular biological techniques, histopathology, perform TUS experiments, manage experimental schedules, compile and present data for manuscripts.

One major research interest is to translate Therapeutic Ultrasound techniques developed in the lab and bringing the technology forward to clinical trials. The position is fully funded by the Frank Laboratory and includes the mentorship of post-undergraduate trainees.

We are looking for individuals who can think out of the box, with independent judgement, and critical analysis of research data. Individual should have excellent interpersonal and oral/ written communication skills. The individual must have background in complying with Animal Care and Use Committee protocols and ability to handle experiments involving small and large animal studies. Background in Therapeutic Ultrasound and MRI is a benefit but not a requirement.

The lab has an MRI compatible FUS system, Ultrasound based FUS System, 3T MRI scanner, 7T microimager, μ PET/ μ CT, confocal microscopy, and fully equipped cellular and molecular biology laboratory with a dedicated tissue culture room. In addition, resources are available in the mouse imaging facility at the NIH.

Salary for positions is commensurate with experience. The position will remain open until filled. Candidates should send a cover letter, curriculum vitae, and names and addresses of three references to:

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