



University of California
San Francisco

Postdoctoral Research Associate Image-Guided Ultrasound Thermal Therapy

The Thermal Therapy Research Group within the Radiation Oncology Department at the University of California, San Francisco has an opening for a postdoctoral research associate. The appointee will conduct research and development on new devices and methods for delivering therapeutic ultrasound and thermal therapy under image guidance. The main objectives of this research group include development of catheter-based and endoluminal ultrasound heating technology, 3D treatment modeling and planning, methods of MR image based monitoring & control, methods of ultrasound image based monitoring, optimal treatment control, and support of translational studies to apply this technology for treating cancer and benign disease. Other topics of interest and research include development or characterizations of novel heating technology, thermal and acoustic targeted drug delivery, pFUS – LIPUS, and methods of ultrasound therapy monitoring. The appointee will participate in research projects to develop methods and devices for image-guided thermal and acoustic therapy with ultrasound devices, with an emphasis on endoluminal therapy of pancreatic cancer and interstitial ablation of focal prostate cancer in conjunction with ultrasound and/or MRI monitoring. These projects may involve some of the following activities: animal experiments; ex vivo tissue studies; working in an MRI environment; theoretical studies; software development; device and test apparatus development and fabrication; and collaboration with other academic or industry groups. This position is supported by NIH grants and Industry research collaborations.

The successful candidate will have a Ph.D. in bioengineering, mechanical engineering, electrical engineering or an associated field with strong emphasis on theoretical and experimental development of thermal therapy or therapeutic ultrasound devices and procedures. Candidate should have considerable knowledge and experience in laboratory skills and/or numerical analysis regarding acoustic and thermal treatment devices; or ultrasound image processing and devices for treatment monitoring; good skills in oral and written communication in English; demonstrated ability to work independently and work collaboratively in an interdisciplinary team; and contribute to an active intellectual environment. Salary for this position is commensurate with experience and adjustment for the San Francisco Bay area. Interested candidates should send a detailed CV, along with a list of publications, and names and addresses of three references to:

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UCSF seeks candidates whose expertise, teaching, research, or community service has prepared them to contribute to our commitment to diversity and excellence. UCSF is an affirmative action/equal opportunity employer. The University undertakes affirmative action to assure equal employment opportunity for underutilized minorities and women, for persons with disabilities, and for covered veterans. All qualified applicants are encouraged to apply, including minorities and women.