

## Mechanical Engineering and/or Material Sciences Postdoctoral Scholar

The Biodesign Laboratory under Prof. Shuvo Roy is seeking an experienced researcher/scholar of exceptional promise for a postdoctoral fellow position with expertise in mechanical engineering and/or materials science. The postdoctoral fellow will be working on The Kidney Project, a nationwide effort to develop a surgically implantable device combining cell therapy with convective filtration for total renal replacement therapy. They will also have opportunities to teach and supervise undergraduate and graduate students, write scientific papers and technical articles, present research findings at conferences, develop and submit grant applications, get involved with patient advocacy groups, and participate in planning for technology transfer through entrepreneurship activities.

**Background:** The research laboratory of Prof. Shuvo Roy in the Department of Bioengineering & Therapeutic Sciences of the University of California, San Francisco (UCSF) is developing next-generation medical devices by linking engineering innovations with basic science discoveries. Projects include the development of the implantable bioartificial kidney, an artificial placenta oxygenator, and intravascular bioartificial pancreas. In the Roy Lab, researchers are applying the best practices and design principles of microfabrication techniques, microfluidics, nanotechnology, biomaterials advances, wireless technology, electronics, cell and molecular biology, and computer science to pressing medical problems. Through regular collaboration with clinicians, engineers, scientists, regulatory and reimbursement experts, patient advocacy groups, and the investor community, the lab is perfectly positioned to play a key role in translating scientific breakthroughs for clinical needs.

**Required skills:** In addition to enthusiasm, motivation, and independent thinking, candidates must be knowledgeable in mechanical design and prototype construction. This person should be able to build test setups, develop complex assemblies, and evaluate failure modes.

Ideal candidates will have a passion for scientific research with the willingness and ability to learn and integrate knowledge from across different therapeutic areas. Personal skills such as teamwork, accurate listening, strategic thinking, along with very good oral and written English language skills will be critical for successful candidates.

**Post-doctoral research fellow candidates** should have completed or obtained a PhD in a relevant discipline such as bioengineering, mechanical engineering, chemical engineering, materials science, or related fields and have published their research in peer reviewed journals.

The successful candidate will be located in the Roy Laboratory on the Mission Bay campus of UCSF.

Salary is commensurate with experience. E-mail a curriculum vitae, a letter stating research interests and experience, and contact information for three references to: [shuvo.roy@ucsf.edu](mailto:shuvo.roy@ucsf.edu) and [desiree.khu@ucsf.edu](mailto:desiree.khu@ucsf.edu).

UC San Francisco seeks candidates whose experience, teaching, research, or community service has prepared them to contribute to our commitment to diversity and excellence. The University of California is an Equal Opportunity/Affirmative Action Employer. All qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, disability, age or protected veteran status.