

## Postdoc Opportunities in the EXPLORER program at UC Davis

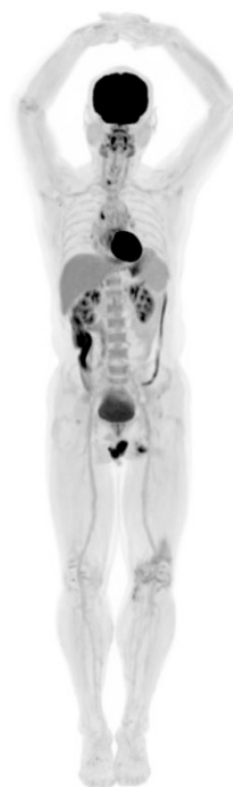


The EXPLORER program at UC Davis (in Davis and Sacramento) has vacancies for several postdoctoral fellows in topics such as imaging physics, kinetic modeling, image reconstruction and translational imaging. These people will work under the supervision of Drs. Simon Cherry, Ramsey Badawi, Jinyi Qi and Guobao Wang. They will also collaborate with other faculty and scientists in the Department of Biomedical Engineering and the Department of Radiology such as Drs. John Boone, Abhijit Chaudhari and Emilie Roncali. In addition, the successful candidates will work with our industrial partners.

The initial goal of the EXPLORER program was to build the world's first total-body PET scanner for humans. This task is complete (delivery to UC Davis is planned for the Spring of 2019) and attention moves to utilizing it to further biological understanding and improve human health. Research foci for these positions will include addressing the multitude of unique problems that this scanner poses in areas such as image reconstruction, multi-organ kinetic modeling, low-dose attenuation correction, performance characterization and motion correction, and in the numerous new clinical and biological applications spaces opened up by this device. The work may be multi-disciplinary, involving a mixture of software development, imaging physics lab work and clinical trials, with some opportunities for hardware development.

In addition to specific research projects, the successful candidates will be expected to contribute to journal clubs and actively participate in team-based critical assessment of all on-going projects in the weekly lab meeting of the Molecular Imaging Physics and Engineering group. These projects include detector development, high resolution PET and microPET/MR, breast CT and PET/CT, applications and development for the two mini-EXPLORER scanners at UC Davis, Cerenkov imaging, applications of AI for image generation, simulation of imaging and biological systems, computational imaging, and use of MR to characterize complex anatomical motions.

Successful candidates will have a Ph.D. in imaging physics or other numerate discipline. Good laboratory and software skills are essential. The successful candidates will be liaising with clinicians and imaging technologists as well as physicists and engineers, so good communication skills are very important. The initial appointments will be for one year, with the possibility of extension depending on funding and performance.



*MIP image from the first human subject to be scanned on EXPLORER*

More information on the EXPLORER program may be found at <http://explorer.ucdavis.edu> and on twitter (@TotalBodyPET). Interested candidates should send their CV, by December 15<sup>th</sup> 2018, to Drs. Simon Cherry and Ramsey Badawi by email at [srcherry@ucdavis.edu](mailto:srcherry@ucdavis.edu) and [rdbadawi@ucdavis.edu](mailto:rdbadawi@ucdavis.edu).