

Open Postdoc Position in the OMIQ Lab at UC Davis

A postdoctoral scholar position is available immediately in the Omidvari Molecular Imaging and Quantification (OMIQ) Laboratory, led by Dr. Negar Omidvari, Assistant Professor at the Department of Radiology at UC Davis. This position offers an exciting opportunity to lead multiple newly funded cutting-edge research projects, focused on using total-body dynamic PET for quantitative assessment of immune response in various disease conditions, including cancer, long COVID, and Alzheimer's disease. We are particularly looking for a motivated, innovative, and organized candidate with expertise in PET image analysis and tracer kinetic modelling. You will join the EXPLORER team at UC Davis, working on development of innovative methodologies for total-body PET research and its clinical applications.

Required Qualifications

- PhD in Engineering, Physics, Mathematics, Computer Science, or related field.
- Familiarity with principles of PET.
- Experience in scientific writing and presentation, and fluency in English.
- Strong interpersonal and communication skills and the ability to work well both independently and as a part of a team.
- Passionate about science and learning new topics, with ability to work in an interdisciplinary research environment.
- Detail-oriented with strong problem-solving skills.

Preferred Qualifications (What Sets You Apart)

- Demonstrated expertise in quantitative PET imaging, data analysis, and tracer kinetic modeling.
- Strong proven record of peer-reviewed publications in a relevant topic.
- Strong mathematical background and analytical skills.
- Proficiency in programming (e.g., MATLAB, C/C++, Python).
- Prior experience with non-FDG tracers, particularly T-cell imaging tracers.
- Prior experience with handling radioactive materials in a hot lab.
- Prior experience with handling blood samples in a metabolite lab.
- Familiarity with PET/CT radiomics and segmentation methods.
- Familiarity with immunology.
- Familiarity with clinical and research applications of total-body PET.

Responsibilities

- Total-body PET/CT image analysis.
- Development and utilization of tracer kinetic modeling methods for high-temporal resolution total-body dynamic PET data.
- Handling and metabolites analysis of blood samples collected during dynamic scans.
- Conducting experimental phantom studies for harmonization of multi-site studies.
- Collaborating with our multidisciplinary team at UC Davis and our academic and industrial partners, consisting of engineers, medical physicists, radiologists, immunologists, neurologists, chemists, etc.
- Integration and interpretation of multi-modality multi-dimensional datasets in the study.

Why Join Us?

- This is not a regular post-doc position. You will be the first researcher joining my lab. We will work together to build this lab. You could make meaningful contributions here to shape the future of the lab and we will build a research program together.
- You will have the opportunity to work with an amazing group of scientists and mentors here at UC Davis and a collaborative multidisciplinary research environment that can help you grow personally and professionally.
- You will work with one of the best available clinical PET scanners in the world, the uEXPLORER, which provides you with exceptionally high-quality datasets and enables implementation of innovative data processing and kinetic modeling methods, and you will work the team who developed this first-of-its kind scanner and have the most experience in working with it.
- You will have a great opportunity for building close collaborations with our industrial partners.

Terms of Appointment

Initial appointment will be 100% (full time) for two-years, with renewal depending on performance.

Start Date: Fall 2025

Location: On-site, Sacramento, CA.

Salary Range

The salary range for this position is \$69,073 – \$82,836, based on [posted UC salary scales](#).

How to Apply

Qualified applicants should send the following documents as PDF files to Negar Omidvari at nomidvari@health.ucdavis.edu:

- A cover letter, describing your previous research experience and skills, as well as your current research interests.
- A CV, including a list of your publications.
- Contact information for three references.

Review of applications will begin immediately and continue until the position is filled.