

EXPERIMENTAL GENETICS AND SYSTEMS BIOLOGIST RESEARCHER

The Department of Cellular and Molecular Pharmacology (CMP) at the University of California, San Francisco is recruiting a basic science researcher for a full-time Senior Scientist position. The selected candidate will join our efforts in identifying novel therapeutics for the treatment of inflammatory bowel disease (IBD), a group of chronic disorders strongly affected by immune and environmental factors that disrupt the immune/microbiome/endothelial barrier axis. This project aims to systematically map the physical and genetic interaction networks for a variety of genes that contain coding variants thought to significantly disrupt the protein interactome and influence the risk of developing adult or childhood-onset IBD. Ultimately, we will integrate network, structural, and functional approaches to identify common biological pathways and complexes across these genes that can be therapeutically targeted with potential broad-spectrum activity.

The successful candidate will lead the proteomic efforts for our IBD investigations, including large-scale protein-protein interaction (PPI) studies, Cas9-based knockout studies, and genetic interaction studies. As an independent scientist, the candidate will: (1) perform proteomics experiments; (2) analyze proteomic data (3) develop and implement new experimental genetics workflows in cultured and primary systems; (4) provide scientific oversight of the project including review and advice on experimental design, data interpretation, and long-term planning to her or his team and colleagues; and (5) write manuscripts and applications for federally sponsored research. This position will also offer the opportunity to significantly contribute to our ongoing infectious disease research, such as the QBI Coronavirus Research Group, and other efforts within the Krogan lab.

The applicant must have a PhD and/or MD degree in systems biology, biochemistry, genetics or a related field. Candidates must have research expertise in systems biology approaches such as mapping protein interaction networks, developing and applying RNAi and Cas9-based genetic approaches, and genetic interaction mapping. Experience with data analysis tools such as R and Python is preferred.

A strong research record is essential, including evidence of publishing in high impact peer-reviewed journals and experience in writing and submitting proposals for federally sponsored research. Applicants will have strong written, verbal, and presentation skills and an ability to communicate and work in an interdisciplinary team environment. In addition, she or he should have excellent management skills with experience mentoring and advising students and trainees. Applicants must satisfy the Required Qualifications by the time of hire. Candidate's CV or cover letter must state basic qualifications (or if pending) upon submission.

Required Qualifications:

- Extensive experience with molecular biology lab techniques and cell culture
- Experience with CRISPR/Cas9 gene editing in cultured and primary cell types
- Experience with either Genetic interaction mapping or Protein interaction mapping
- Demonstrated experience as a research project lead
- Manage diverse and collaborative projects between laboratories
- Excellent oral and written communication skills
- High productivity and successful record publishing in high impact journals

Preferred Qualifications:

- Unix / Linux command line
- Data analysis using R or Python
- Success in securing external research funding

- Community outreach
- track record of developing and leveraging innovative proteomic-based systems or structure research

UC San Francisco seeks candidates whose experience, teaching, research, or community service that 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.

Please apply online at <https://aprecruit.ucsf.edu/JPF03214>, with a CV, cover letter, and two reference contacts.