Title of the Position:
Postdoctoral Fellow in Cardiovascular Physiology

Summary of the Position:
The cardiovascular research laboratory of Dr. Ayako Makino at the University of California, San Diego, seeks a postdoctoral fellow who is highly motivated, creative, and devoted to the project goals. One postdoctoral position in cardiovascular physiology is immediately available. Our research focuses on endothelial dysfunction in pulmonary hypertension and diabetes, particularly mitochondrial function, posttranscriptional and posttranslational modification, cell-cell communication in endothelial cells, pericytes, and smooth muscle cells, and calcium handling in the cytosol and endoplasmic reticulum. For related publications, please check below:

[Links to PubMed articles]

Duties and Responsibilities:
1. Perform physiological experiments in mice
   1.1 Evaluation of cardiac function using Millar system (e.g., RVSP, LVSP, dP/dt, EF)
   1.2 Measurement of pulmonary and coronary flow using an ultrasound system
   1.3 Isometric tension measurements in mouse distal pulmonary and coronary arteries using a wire myograph
2. Conduct basic molecular biological experiments (e.g., Western Blot, PCR, qPCR)
3. Perform fluorescence microscopy experiments to measure Ca^{2+} and ROS concentration in cytoplasm and mitochondria
4. Isolate vascular endothelial/smooth muscle cells from mouse heart and lung
5. Design and implement research protocols and conduct experiments
6. Data acquisition and analysis, grant and manuscript preparation, and presentation of findings at weekly lab meetings
7. Coordinate with other investigators for lab research, including maintaining transgenic mouse colony, cleaning the laboratory, managing the lab research record (including methodological approaches and animal protocols), and maintaining primary cells with an aseptic technique

Qualifications and Experience:
The successful candidate must have a Ph.D. in biomedical sciences, M.D., or equivalent degree. Three or more years of relevant experience in a research environment are required.

Salary/Stipend
According to UCSD standards/regulations

Special Instructions to Applicant:
The applicants should send a C.V., a letter of interest, and three references' names and contact information to amakino@ucsd.edu. For more information about Dr. Makino's research, please visit https://profiles.ucsd.edu/ayako.makino.

All qualified applicants will receive consideration for employment regardless of race, color, religion, sex, sexual orientation, gender identity, national origin, disability, or status as a protected veteran.