Postdoctoral Scientists
Molecular Physiology of Cardiac Pacemaking
University of Colorado, Anschutz Medical Campus
Department of Physiology & Biophysics

The Proenza laboratory in the Department of Physiology and Biophysics at the University of Colorado Anschutz Medical campus seeks creative, independent, and motivated postdoctoral scientists for multiple NIH-funded projects to study HCN4 ion channel biophysics and the molecular physiology of cardiac pacemaking.

Exciting high-impact studies await first authors! Available projects include 1) Effects of aging on the function of cardiac pacemaker cells, 2) regulation of HCN4 channels by novel interacting proteins, 3) Ca^{2+} regulation of HCN4 channels, 4) Function and formation of SR-plasma membrane junctions in sinoatrial myocytes. Techniques include patch clamp electrophysiology (including dynamic clamp and action potential clamp), quantitative biochemistry, proteomics, RNAseq, structural biology, confocal microscopy, and mathematical modeling. Training is available and all resources are in place for rapid progress.

Job responsibilities and expectations:

- Contribute to experimental design
- Lead and organize data acquisition and analysis
- Troubleshoot protocols and equipment and develop new techniques as required
- Prepare figures and write manuscripts for publication in top journals
- Apply for postdoctoral fellowships
- Present work at national and international meetings
- Contribute to collaborative projects in the labs

Qualifications:

- PhD in physiology, biophysics, or related field.
- Demonstrated expertise with first author publications in at least one of the following areas: patch clamp electrophysiology, membrane protein biochemistry, confocal microscopy, Ca^{2+} imaging.
- Familiarity with basic principles of ion channel biophysics and cardiac physiology.
- Self-motivated, creative problem solver with strong work ethic and highest ethical standards.
- Ability to work both independently and as a member of a collaborative team
- Excellent oral and written communication skills (fluent in written and spoken English)
- Willing and able to work with mice

To apply:

Please send the following by email to Dr. Catherine Proenza (catherine.proenza@ucdenver.edu).

- A CV
- A cover letter describing your aptness and enthusiasm for the position, research accomplishments and career goals.
- Contact information for at least three references

Preferred start date: spring 2022 (negotiable). Salary according to NIH postdoctoral pay scale.

The University of Colorado is an equal opportunity employer.