CaMP Faculty Research Areas

Toni Pak, PhD. Molecular signaling mechanisms and targets of nuclear steroid receptors.

Gregory Aubert, MD, PhD. Pathophysiological regulation of metabolism and energy use during heart failure.

Jordan Beach, PhD. Mechanisms of contractile force generation in cells.

Pete Kekenes-Huskey, PhD. Computer modeling & experimental characterization of Ca^{2+}-dependent proteins and their signaling pathways.

Jonathan Kirk, PhD. Mechanisms of contractile deficiency in cardiac diseases.

Ivana Kuo, PhD. Calcium signaling in cardiac and renal diseases.

Virginie Mansuy Aubert, PhD. NeurObesity lab/Neural regulation of body weight homeostasis, heart function and pain in obesity and diabetes.

Ruben Mestril, PhD. Heat shock proteins in normal and damaged muscles.

Patrick Oakes, PhD. Mechanisms of mechanical signaling that regulate cellular contractility and force generation.

Erika Piedras-Rentería, PhD. Function and modulation of voltage-gated calcium channels in neurons and in brain tumors.

Seth Robia, PhD. Cardiac responses to exercise and rest in health and disease.

Meharvan Singh, PhD. Mechanism by which estrogens, progestins and androgens regulate brain health in “normal” brain aging, Alzheimer’s disease and stroke.

Aleksey Zima, PhD. Mechanisms controlling calcium homeostasis and cardiac contractility.
What is the “summer CaMP” SURPH fellowship program?

This program is designed to provide undergraduate students an opportunity to participate in cutting edge research on the cardiovascular system or the nervous system with members of the Dept. of Cell and Molecular Physiology (CaMP).

The focus of the training will be actual ongoing research in individual laboratories. Students in the program will interact with other undergraduate students, graduate students, postdoctoral fellows and medical school faculty, and will attend lab meetings, seminars and safety training.

Investigators in the department are funded by the National Institutes of Health, National Science Foundation, American Heart Association and various foundations.

We are located at the Center for Translational Research and Education building of the Loyola Health Sciences Division, on the Maywood Campus.

The Stritch School of Medicine is dedicated to building a diverse and inclusive community that upholds access, equity and excellence as core values. We believe that diversity is integral to our mission of transformative education, innovative discovery and service to others.

Requirements:

- Completion of freshman year
- A 3.25 GPA or better, overall (more weight will be given to science courses)

Application Guidelines:

E-mail the following to Dr. Erika Piedras Rentería, surph@luc.edu

- A cover letter in pdf format stating the reason for your interest in the program
- The names of 2-3 potential mentors of interest from the list of faculty
- An unofficial transcript in pdf format from all colleges and universities attended
- ACT or SAT scores (overall and individual subtests)
- Proof of health insurance will be required upon acceptance

Applications will be considered on a rolling basis, as they are received. Earlier applications will have an advantage and more labs to choose from.

The deadline to apply is April 15, 2020.

Students will be notified no later than May 1.

Start Date: June 1st, 2020

For more information on the department and faculty, including contact information, visit www.stritch.luc.edu/physio/research.