

## FACULTY MENTOR OF THE MONTH

September 2015

### Xiangmin Xu



*For Professor Xiangmin Xu, his undergraduate students are a vital part of the research efforts of his lab. He values the energy and creativity they contribute, along with the opportunity to make a difference in their education and future careers. As a result of conducting research under Professor Xu's guidance, many of his students have gone on to graduate school or other professional schools. UROP is pleased to recognize Professor Xu for his continuing commitment to mentoring undergraduate research.*

1. How did you develop an interest in mentoring undergraduate research or creative projects, and what type of projects have you directed?

I have a long and successful track record of training undergraduate students as part of my research team. I started to mentor undergraduate researchers w to advancements of my projects. This has continued through my postdoctoral training and my tenure at UC Irvine.

Since I came to UCI in 2008, I have mentored about 40 undergraduates in my laboratory. During summer and fall breaks, we have students from other sc Smith College. They participate in brain circuit mapping projects, support electrophysiological and behavioral projects, and help with genotyping and mo

2. What do you look for and what are your expectations of undergraduates you select to conduct research under your guidance?

We look for students with motivation, enthusiasm and commitment to our research. We also look for curiosity for learning and reading, and good time m members of the laboratory and be committed to the project they work on.

3. Describe your level of engagement and style in mentoring undergraduates.

My laboratory embraces unique cultures and environments conducive to supporting undergraduate research. I know all my undergraduate researchers w including postdoctoral fellows, graduate students and senior undergraduate researchers. We collectively train undergraduate students. Our projects are ide of work related to brain sectioning and immunostaining, slice imaging, and anatomical plotting and neuronal counts, software-assisted data analysis undergraduate students. An undergraduate in my lab starts off by working directly with a graduate student or a postdoctoral fellow or senior undergraduat after basic lab training, and they work on independent projects and I mentor them as I would mentor graduate students. Undergraduate students have c program, and I in turn help them with their careers in any way I can. I help them prepare for their graduate school and medical school applications and ir career development of undergraduate students after leaving the lab to increase their chances of successful career outcomes.

4. In your experience, how have your students improved or benefited as a result of their undergraduate research experience?

Many of our students use their research experience to explore or discover whether they want to pursue research-related careers or move into some other experience, but they have opportunities to actively learn scientific concepts, methodology, and to participate in bi-weekly lab meetings and faculty lecture mouse brain sectioning, slice mounting and advanced microscopic imaging, and data collection. The lab outcomes have been successful; more than half o gone on to graduate school or other professional schools. Many mentored undergraduate students receive UROP awards and fellowships. Some of thei formal publications.

5. What have you learned or benefited from guiding undergraduate research or creative projects?

I have benefited greatly from being surrounded with their youth, energy and creativity. It has been a great experience for me and my graduate students an This is an important mission for all of us.

6. What recommendations and advice would you give students embarking on undergraduate research or creative projects?

Be open and informed, and embark on a topic you are truly excited about. And whatever you decide to pursue—commit to it!