66

FACULTY PERSPECTIVE KRISTEN PICARDO, Ph.D

ASSOCIATE PROFESSOR, BIOLOGY DIRECTOR, CENTER FOR STUDENT SCHOLARSHIP, RESEARCH, AND CREATIVE WORK ST. JOHN FISHER COLLEGE On a recent flight I was seated next to an undergraduate Ivy League college student. She was exhausted after having chosen to leave a stint in a military training academy and slept for a solid hour, mouth wide open. When she awoke, we assumed the typical mentor-student chit-chat even before she realized I was a biology college professor and she an undergraduate biology major grappling to plan her future. She was confused and needed to tell someone about it, and I couldn't help but be her sounding board, offering free advice—get in the lab and try a research experience!

Often times, students seek out a welcoming professor to ask about how they can get involved as a student researcher. At my small PUI, our doors are open, our classes are small, and so we enjoy plenty of student interaction and time to explore such conversations. We connect our students with our colleagues who have research expertise in the students' favorite course topic and natural connections occur.

At times this serendipitous method isn't the best approach. If a student is one of many or is not comfortable approaching a professor, it can be helpful if the college or program offers details on a website or through scheduled information sessions. Some colleges have formalized offices that serve to reach out to educate students about research opportunities on and off their home campus. Attending these sessions can be very helpful and informative and remove the hesitation some students feel about approaching a faculty mentor on their own. A survey at my own institution revealed that most of our students learn about research opportunities through talking with other students. Attending research presentations hosted by departments is also a great way to learn about opportunities.

When students approach me or when I discuss research projects ongoing in my laboratory, I do two things: 1) get them excited and 2) use

language that shows them that my research is accessible, understandable, and not just for senior students. In order to succeed, I've learned that students in my lab need to be excellent communicators. I am not with them every hour they spend in the lab, and therefore I ask for meetings and pop-ins as well as electronic updates as students plan experiments and decipher their data. Sometimes, I am "busy in meetings" when I know I want my students to struggle a bit and work toward a solution to a problem they are facing in their project. In order for a student to be ready to take on a project with me, they must have the maturity to handle to recursive nature of a sometimes frustrating process. Finally, they must have time in their schedules to fully commit. The best way for students to be an attractive candidate for a project is to show their potential mentor that they have time in their schedule to fully engage with the research (e.g. minimum course load not including research,

Through mentored research experiences, students grow in their ability and confidence to creatively analyze information in new ways often leading to novel solutions to complex problems. They learn practical, transferrable skills and resiliency allowing them to grow from challenging experiences. These experiences prepare students for advanced work in their disciplines, and more importantly ignite their curiosity and strengthen their ability to adapt and utilize core skills and habits of mind that will prime them for their futures. It is no wonder that employers and graduate programs look highly on how these experiences prepare the future workforce. As I told the sleepy student, a research experience will transform and direct one's future in ways traditional classwork cannot. I look forward to reading her first manuscript someday, that will prime them for their futures. It is no wonder that employers and graduate programs look highly on how these experiences prepare the future workforce.