Please tell the JPUR audience a little about yourself and your role at Purdue.

My role is the vice provost of teaching and learning. That means that I’m responsible for four big areas. The first area is all the programs for student success, which includes orientation programs like Boiler Gold Rush (BGR) and Summer Transition Advising and Registration (STAR), as well as support programs like Purdue Promise. The second area is the Center for Career Opportunities (CCO) so we can help students get jobs. The third main group is a mixture of certain programs that belong to the University instead of a specific department, like Exploratory Studies, advising offices, and so forth. These are basically the things that serve the entire campus. The fourth group is teaching. IMPACT is trying to work with classes and faculty to make them better teachers in the classroom. At its heart, my job is to try to make the campus focus on how we should put things in place where students are walking out of here with a degree that has value. When I say value, I mean more than economic value. It’s so you’re prepared for life. You can go to grad school, med school, you can get a job—you can choose what you want to do, but you really feel like you are prepared for anything.

Were you involved in undergraduate research as a college student, and if so, how did it benefit you?

I went to a small liberal arts school and we didn’t have a formal undergraduate research program, but we had a J-term. During the month of January you had an independent study project with a faculty mentor, so I had four of them over my college career. The one I’m proudest of was the first time people started to talk about world hunger. There were a couple of us students who looked at different aspects of world hunger. You spent the whole month just studying the one thing; you weren’t going to class, so you would do some work and report to the professor, who would give you feedback. My professor was brutally honest, but the feedback he gave me really prepared me for the world.

What is the most important part of undergraduate research?

The most important part of undergraduate research is learning how to take feedback. Feedback, as you go through research, is equivalent to discovery because you’re trying to learn new things. Discovery means really different things depending on the discipline. Feedback can shape the process from when you’re creating the idea. You have a conversation with your faculty mentor, or you’re talking with a group of students about
a research question. Feedback gives you an approach and how you’re going to study the question you have. There may be a dozen ways to do the study, so having some other minds help you think that through might help you develop a better research design. So you go through as the student and do the analysis, and you think you’re done, but then hopefully someone will look at your work and ask, “Who is this important to? Why does it matter? Who cares?” By asking these questions, you might really change the approach to why you want to do this study.

How do you see undergraduate research affecting the world around us—both at Purdue and beyond?

I think today, roughly one in five of our undergrads go to grad school, med school, professional school, law school, vet school, and so forth. One of the things we can do to help you be successful is to give you a leg up in the next part of your education, because you’ll be much more prepared for the research part of it. If you’ve done undergrad research and really loved it, it becomes a lot easier to know you want to go to grad school and continue research. It’s another feedback loop for the student because it helps him or her decide if it’s their passion. What we ought to be doing is hoping that people find what they love in life. In a way, undergraduate research is equivalent to an internship. You find out if you’re comfortable in a position and if that’s what you want to do in life. Showing a student what it means to be a researcher prepares the student to know what they are signing up for if they are going to school post-graduation. You’re prepared to make those big breakthroughs when you’re out in the world.

What sets Purdue apart in terms of the research opportunities that exist for its undergraduate students?

I think there are probably two things. There are a number of places doing really great on this, but one of the biggest leaps we’ve made in the last few years is the Honors College. Not everyone doing research is in Honors, but what it has done for us is really created a focus on both sides. Now a focus is on students walking in the door expecting this opportunity, which is half of the equation. The other half of the equation is there are more faculty in more departments eager to bring students into their labs. Across campus, you have faculty sitting down with students and helping them figure out how to get their research done. So I think what Honors did, even though we are not the only place with an Honors program by far, is change the atmosphere to emphasize that research is something really important.

What advice would you give someone who is considering undergraduate research?

Don’t be afraid to ask questions. Start in your home department and with the person you know best; the professor you had in your intro-level course, advisor, and so forth. To a certain extent, you have to take the first step. The second thing is to be persistent. That’s the most important characteristic of a good researcher because you’ll try lots of things and they might not work, but you’re trying to come at it from a structured perspective or with an analytical framework in mind. You’re trying to eliminate the reasons it didn’t work. Then all of a sudden, because you’ve narrowed it down, you discover the important link in this relationship.

Who should take part in undergraduate research?

Any student with a passion for a subject. You have to have some fire in the belly. Some curiosity. Any student thinking in the back of his or her mind that grad school, med school, or professional school might be for them, they had better be lining up for this. If you designed it correctly, you will learn a lot about how to approach something. According to the Gallup Purdue Index, the first things a student should do are get involved, get relevant work experience, and have a project that is at least a semester long or longer to complete. The other three things are related to your coursework and classroom experience. My job is to prepare you for life. Once you get in the door, it’s up to you. Companies are looking for motivation, strong communication skills, the ability to work with people, leadership, and involvement.


Interviewer

Brooke Halteman is a junior pursuing a bachelor of arts in professional writing with minors in French, global studies, and religious studies. This is her second year serving as the coordinator for the Journal of Purdue Undergraduate Research, while also serving as a resident assistant in Wiley Hall and a leader in the campus ministry Cru.