

Discover Chemistry and Chemical Biology @ IUPUI School of Science

Date June 15, 2010

Duration 7:31

Transcript

[M. Nguyen] The people that are here care, the people here think the students matter and that they are the reason we are here. Though we are actually in terms of student body quite large, I think we still have a small school feel.

Our department here encourages research from students for them to get involved, and I just think that the most important thing is that interaction between the people here in the department and the students.

[A. Siegel] IUPUI has a lot of advantages because it's got all the resources from Purdue and IU with which it's affiliated with. The chemistry department's affiliated with the Purdue in West Lafayette, but it also has a lot of advantages because it's a small department, and you have a lot of people, a lot of faculty, who know you personally and help you and give you advice.

[B. Hewitt] IUPUI is probably famous for having professional staff that are helpful to the students. The front line in chemistry is particularly helpful and courteous. We have university professionals that are able to direct the students to the advisors, and then help them find the faculty that maybe they're looking for their classes.

As a parent of teenagers that are going to college now, it's helpful because you know that there's someone there that the student can lean on, that they can go to if they get in trouble and if they need some guidance.

[C. Naumann] Just one of the nice features of this chemistry department is that we are relatively small in comparison to some other departments. It means business is done at a much more personal level.

[M. McLeish] I have both undergraduate and graduate students. Last summer, I had a freshman undergraduate student, who worked, and he was really good, and he's now currently doing a fellowship over at the medical campus, and actually I was talking to him today, and he's coming back to work in my lab again over the summer.

[A. Siegel] We have all kinds of experts in our department, and you can get involved in really exciting, cutting-edge research here at IUPUI.

[K. Anliker] The School of Science in general, but certainly the chemistry department; the people who are, and essentially everybody is engaged in teaching, but the people who are teaching the large number of students in introductory courses that is essentially their specialty. That's what they like to do. They want to do it. They're innovated in how they do it. They follow the research about how students

learn and what kinds of things you can do. They are innovators in the classroom. We all do different things. We're not all the same, but we do innovated stuff that's very student-centered, and we know it works.

[E. Hunt] Something that I was really impressed with on the IUPUI campus was their devotion to creating active learning environments that really, it seems like all the faculty were really devoted to doing that.

[A. Siegel] There's a real commitment to learning and that knowledge and science is something that's exciting and should be shared all over by all different groups, and the undergraduates can really make a big, significant advantage and can cause success. I've had some wonderful undergraduates work in the lab.

[K. Anliker] Students also have an opportunity, a huge opportunities to work in research labs, working with faculty mentors on particular problems and trying to find a solution, trying to learn more about some system or some chemical material, all those kinds of things. It's an integral part of student's kind of life here as they move on to the higher levels.

[M. McLeish] Once they get into the lab, they actually see, get some excitement about what they are doing. In my lab in particular, we really try and get the students to actually do part of the project. Some places you can go, and I've been to bigger institutions, where undergraduates come in, but there really, there's so many of them, and they're used really to clean dishes, to clean up the lab. Well, here, people, all the people that I know anyhow, are at least trying to get their students involved in projects, to actually do research and actually put their names on papers and publish this stuff.

[A. Strong] Research is a way to engage in your learning process, and I think for me, it was very beneficial because I could research the things that I was interested in.

[J. Siegel] IUPUI has evolved over the past 40 years into a research institution, and we take that very seriously in the sciences here. Our entire chemistry program is research driven. The teaching is informed by the research, and so, our teaching is the latest stuff that's going on in chemistry, especially in chemical biology, in the biological areas of chemistry.

[M. McLeish] Chemistry describes itself as a central science. In other words, through chemistry, you can go anywhere.

[J. Siegel] In my view, the world of science sort of revolves around chemistry. It's becoming a science that envelopes and uses all the other sciences, so if you know chemistry, and especially if you learn chemistry in a place like this where there's a life science emphasis, you're learning a lot more than just chemistry, and so it makes you a very versatile person that can work in a whole lot of different areas.

[M. McLeish] Chemists learn how to think, and if you can learn how to think, you can take your career into so many directions that are a surprise to you.

[C. Naumann] A strength of chemistry students is that they have a reasonable understanding of math, but they also certainly know not only what molecules are, but they can mix them, and this is a big

advantage, so they have a reasonable grasp about biological problems, but they also have the foundation in terms of math and physics, so they are very prepared actually for the future.

[S. Deo] There was much more beyond chemistry, there was chemistry, there was parts of biology, there's parts of engineering, and then the projects that I worked on, I could see that whatever I was doing in the lab had applications outside of the lab.

[E. Hunt] I know that the reason I started just really enjoying chemistry was because I always wanted to do something that would allow me to do some work that would allow me to give back to the community, and I feel like chemistry is a way that I can participate in research that specifically, directly impacts the medical field.

[A. Strong] It really goes down to foundational levels of the reality of this world and the way that we work. Chemistry uncovers and reveals a lot about this world that remains hidden unless you understand a little bit about the chemistry, a little bit about the molecular dynamics that are all around us, all the time.