Connecting the Classroom with the Biotech Industry

By Andrew Conley

Continued from main page

Preparedness for the industry is only one of the key ingredients of the MS Biotechnology program. Schulze says, "Early in the program, students get what is key in managing science. We merge what is vital from the industry perspective with the academic setting where we allow some freedom in terms of deciding the route to solving a challenge."

More than two decades of experience working for major biotech companies have influenced Schulze's view of the skill set necessary to be successful in the industry. At the core of his teaching philosophy is the belief that students should be proficient in ways other than having a scientific specialty. Schulze knows "the advantage of being able to communicate well, verbally or in writing, in a concise way, is key in the industry environment."

In addition to encouraging an interdisciplinary approach and communication skills, teamwork on a project of is a major component of the MS Biotechnology program. Speaking from his experience in the biotech field, Schulze recalls that his "major imprint was teamwork and collaboration." In the MS Biotechnology program, which is designed to challenge scientific, analytic, and management skills, students collaborate on a subject of relevance to the biotech industry. According to Schulze, "The team project is one of the gems of the program; students bring everything together in a real case. The project itself is everything in terms of a simulation of what will happen in real time in companies. I give students a high level, lofty, challenging goal in terms of putting something together that is absolutely industry relative, and that reflects what the actual problem-solving setting is in bio-pharma companies. Then, working in teams, peer to peer, they start to build against those objectives."

According to Schulze, the MS Biotechnology program merges the best of two worlds: "In the first, we simulate real world experience in an academic setting, giving students the opportunity to train and to apply their knowledge. We give them tools, use tools in real time, and allow them to make some mistakes along the way as learning experiences of what to do and what not to do, while also allowing them academic freedom of expression. Second, we teach them under the same types of constraints that the best of the biotechnology world operates under - almost the same set of circumstances under which you have to operate in the industry. In the classroom, as in industry, one has to operate on a given timeline, under time constraints that are often an 11 or 12-week endeavor. In both places, a lot needs to be accomplished in a short period of time."

Dr. Schulze is available to meet with prospective students by phone or in person at CI's Thousand Oaks campus. He can be reached at 805/777-9200 or thomas.schulze@csuci.edu.