When Industry and CIT Collaborate, Everyone Wins

Every time I have sat down to write about the strong relationships the College of Engineering has with industry, and the strong support we have received, I’ve had to postpone writing. I hoped that there would be news from the industrial sector, beyond more layoffs, that would allow me a reasonable hook while not seeming like an overly optimistic academic. I have been wrong about this so many times now that I have no choice but to write this column so that the newsletter can go out, only a bit delayed.

The College of Engineering has a long tradition of adopting the “problem-solving” approach to both education and research. I know we will continue to follow this approach since it has served us well. It has created an atmosphere within the college and the university where lofty dreams and pragmatism combine to create solutions that are valued by industry, society and also other academics. It allows us to educate our undergraduate and graduate students in the context of problems and issues that are rooted in the real world, whether that is in industry or society at large. When our students join the workforce, they hit the ground running as has been said to me many a time by our industry partners. Because our focus is always on “problem-solving,” we are able to address multi-disciplinary problems in ways that very few universities can.

Historically, the U.S. has created, dominated and walked away from many industries. When it has walked away, it was to deploy capital and human resources in more lucrative enterprises that were created because of innovation in universities and companies, and the entrepreneurial spirit that put the innovation into practice. The U.S. Government, industry and universities have a symbiotic relationship, and universities are at the center. Universities use federal R&D investments to look at long-term problems and mitigate the risk of technology development. Industry is able to leverage this investment by partnering with universities in solving problems and/or developing technologies that allow it to remain competitive. And industry is able to do so without paying the full cost of research and at a lower risk. This symbiotic relationship and the virtuous cycle of leveraging investments have not only led to knowledge and wealth creation, but have become a model for the developing world.

As we face one of the biggest recessions in recent history, it is only reasonable to be concerned about investment decisions that could break this cycle. While we are all being cautious and preparing for a potential downturn in research investments, my observations during the past nine months give me some reason for optimism. While we know that companies have reduced research investments especially at universities, on the whole, the college has not seen a decline in industry-sponsored research. This is a great testament to the strength of the college, the value that our industrial partners see us providing both in quality and quantity of work, and in developing well-educated and trained engineers for the future. Our relationship with industry is a win-win relationship, and I am confident that we will maintain the momentum and continue to grow this relationship.

Dean Pradeep K. Khosla

FROM ◆ THE DEAN

SPIKE IN ADMISSIONS FOR PORTUGAL PROGRAMS

For its second academic year, the Information and Communication Technologies Institute (ICTI), which represents an academic and research partnership between Carnegie Mellon and the Portuguese government has experienced a significant increase in its admissions. For 2008-2009, enrollment in the various degree programs has grown to 101 students; enrollment for 2007-2008, ICTI’s first year, was 29 students.

The ICTI offers four Professional Master’s and seven Ph.D. programs, including a new Ph.D. in Engineering and Public Policy.

Courses are taught both at Carnegie Mellon and at the nine affiliated Portuguese institutions, and all instruction is in English. ICTI has attracted students from 13 countries, including Chile, Italy, Thailand, Ghana, Brazil, Spain, India, Germany, China, Costa Rica, Ukraine, and of course, Portugal and the United States.

Students who complete the Professional Master’s or Ph.D. degree will receive dual degrees: a degree from Carnegie Mellon and a degree from an affiliated Portuguese institution. The first class of Professional Master’s students graduated in December 2008.