

Changing Students' Lives

An Interview with Dr. Alice Petry Gast, President, Lehigh University

EDITORS' NOTE Alice Gast became the 13th president of Lehigh University in August of 2006. Prior to arriving at Lehigh, Gast served as the Vice President for Research and Associate Provost at the Massachusetts Institute of Technology, where she was also the Robert T. Haslam Chair in Chemical Engineering. Prior to joining MIT in 2001, she spent 16 years as a professor of chemical engineering at Stanford University



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and at the Stanford Synchrotron Radiation Laboratory. Gast serves on the Board of the American Association for the Advancement of Science (AAAS) and is a member of the National Research Council Committee for Science, Technology, and the Law. She received the National Academy of Sciences Award for Initiative in Research, and was named an American Academy of Arts and Sciences Fellow in 2007. After earning a bachelor's degree in chemical engineering from the University of Southern California, Gast was a Hertz Fellow while earning her doctorate in chemical engineering from Princeton University. She spent a postdoctoral year completing a NATO fellowship at the École Supérieure de Physique et de Chimie Industrielles in Paris.

INSTITUTION BRIEF Situated in Bethlehem, Pennsylvania, Lehigh University's (www.lehigh.edu) picturesque 1600-acre wooded campus is built into the side of what is affectionately known as "Old South Mountain." Lehigh is a coeducational, non-denominational, private university with 4,856 undergraduates and 2,118 graduate students. It was ranked in the top tier among national research institutions in the U.S. by U.S. News & World Report 2010 rankings.

What are the key leadership programs and areas of focus for Lehigh University?

Lehigh is the right size for our students who want additional attention from their faculty and the opportunity to take their theoretical knowledge and put it into practice with hands-on experiences. Our campus has the feel and look of a residential liberal arts college, and it's a place where people live in a collegial, intellectual environment. Yet, we

have extremely strong programs in engineering and business, so it has a good combination of those aspects of higher education. Lehigh also has an excellent graduate college in education.

Has it been important for you to build an international student body, and have you reached outside the U.S. to attract students to the university?

Higher education is becoming a global commodity. In the U.S., we have always benefitted from being the great attractor for international students. But we're going to have intense competition for the best and brightest in the future, and we can't take it for granted that they will all continue to come to the U.S. At Lehigh, we've doubled our undergraduate population of international students from a little less than 3 percent to 6 percent in the last two incoming classes, and that's an important aspect of who we are and where we need to go.

How critical is it for the university to support research work, both for the faculty of Lehigh University as well as for the students?

Research is essential. It allows the top faculty to pursue leading-edge opportunities that stretch the boundaries of their fields, and then to bring those fresh ideas and perspectives into the classroom. In addition, we have the ability to provide opportunities for both the graduate and undergraduate students to pursue that leading research themselves. It is those kinds of experiences that allow students to put together what they've learned.

In addition, you've also been focused around service as part of the culture of the university. How important is that aspect?

This generation of students is very service-minded, and interested in what good their work will be for society. Our faculty are interested in fundamental knowledge, but are also thinking about the impact that has on society. It's very exciting to integrate service work with academic work. We had students studying the asthma-related emergency room calls in our local hospitals, and constructing a map of the region that shows the asthma prevalence in South Bethlehem. They can

then better understand why that happens, given their local environments. So taking that knowledge of sociology and human health from the classroom into the community is very powerful.

Lehigh also has various initiatives involving health care and the environment. Is the mission for the university much broader than what happens within the Lehigh campus?

As a nation and a world, we turn to our institutions of higher education to solve difficult problems. They are solved through the creation of new knowledge and the education of students who can lead us in the future by applying what they've learned in the context of large problems and grand challenges. We see that in the ability to make a difference in local schools and neighborhoods, but also on bigger problems that have to do with the challenges of globalization, energy, the environment, and health.

In a world where students are communicating with their teachers via e-mail, how do you balance the value of technology but make sure you don't lose the teacher/student relationship?

There is access to vast quantities of knowledge, so imparting knowledge and information in a class is less important than imparting how to learn, how to solve problems, and how to face complex realities that don't lend themselves to just looking up the answer.

You have been associated with great institutions throughout your career. When the opportunity to lead Lehigh came about in 2006, did you know it was the right fit and timing, and has it been what you expected?

I found a very strong affinity to Lehigh. Coming here provided the opportunity to take some of the things I'd learned and thought about in a research context and put them to use in some of the aspects of teaching and student experiences. Lehigh excels in that interface between forefront research and forefront student experiences. I'm very excited about taking all that we do and integrating it further into a forefront research institution that brings these experiences right down to the freshmen, and the opportunity to make it an intellectual environment that changes students' lives. ●