UC SANTA BARBARA

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UC Santa Barbara's Best-Kept Secret

When Karina Gaeta graduates from UC Santa Barbara on Saturday, June 14 with a degree in actuarial science, she has a job in her chosen field waiting for her at L.A. Care Health Plan. That's no small feat in a shrinking American job market.

Gaeta took a career counseling class at community college where an assessment test suggested actuarial science as a possible profession. "At that point I had never heard of an actuary before. I thought, 'What is that?'" she recalled. "I researched the requirements needed for the actuarial profession and I felt like they fit what I was good at: math and economics. So I researched more and found out that actuarial science is one of the biggest careers right now."

According to the Bureau of Labor Statistics, jobs for actuaries are projected to grow 26 percent from 2012 to 2022, much faster than the average for all occupations, and that has been true for the past decade. When alumnus Tim Reilly, chief financial officer of L.A. Care, a nonprofit health maintenance organization that serves Medi-Cal participants, spoke at UCSB's Actuary Day, he told the audience that he wished there were more actuarial science students he could hire.

Because the general public largely doesn't know what actuaries do, the <u>Department of Statistics and Applied Probability</u>, home to the campus's actuarial degrees, hosts Actuary Day each April. In addition to Reilly, Larry Stern, president of Canterbury Consulting LLC in Charlotte, North Carolina, was also a keynote speaker at this year's event. He said actuaries are the architects and engineers of the products sold by insurance companies.

"In addition to educating the public, Actuary Day is also designed to give students a better awareness of what is happening in the profession," said Raya Feldman, codirector of the actuarial science program. "A major complaint from recruiters is that students are good at taking exams but often don't understand what the profession is about; what insurance is about; what consulting actuaries do; what kind of job opportunities there are; how actuaries contribute to society."

While the majority of actuaries work in the insurance industry — developing, pricing and managing insurance products or defining and creating pension and retirement plans — their skills and talents are transferable to any industry that requires risk modeling and management. Actuaries also work in the financial services industry, in the energy sector and for government agencies such as the Social Security Administration, the Department of Labor and the Center for Medicare and Medicaid Services.

In fall 2010, UC Santa Barbara established an undergraduate major in actuarial science with a few students; today there are close to 200. In winter quarter of 2013, a five-year combined Bachelor of Science/Master of Science in actuarial science was added, the first graduate actuarial degree in California. This model program integrates traditional actuarial courses with financial mathematics and computational statistics.

Richard Pulliam, who will complete his combined degree in December, had high praise for the actuarial science program. "I love it here," he said. "Everyone here is really smart, so there's a culture of academic excellence."

This summer, Pulliam has a three-month internship at the Fireman's Fund Insurance Company in Northern California. "In my interview with Fireman's Fund, we mostly talked about the projects that I've done here at UCSB," he said. "I've taken a number of classes that add to my arsenal of research projects which I'm certain to use later in my career."

One project Pulliam worked on was the Research Projects in Actuarial Science graduate course. This two-quarter sequence features research projects for actuarial companies such as AAA Insurance, Towers Watson and Blue Shield of California. Pulliam's project involved time series analysis for the Northern California division of AAA, which he will present at the 49th Actuarial Research Conference (ARC) to be held at UC Santa Barbara July 13-16.

About 120 actuaries attend this annual conference, which is sponsored by the Society of Actuaries, Casualty Actuarial Society, Canadian Institute of Actuaries and several private companies. The conference, which meets at different locations each year, brings together actuarial professionals from academia and business to present their ideas and exchange new research and developments in actuarial science.

In 2012 and 2013, actuarial science undergraduates won prizes for their ARC presentations, competing against Ph.D. students at other universities. "I'm a little bit nervous about presenting at ARC because they're all actuaries who are going to critique my work," Pulliam said. "But I feel prepared because these last two months I've been working very hard on the project. I'll be practicing a lot before the conference begins."

About UC Santa Barbara

The University of California, Santa Barbara is a leading research institution that also provides a comprehensive liberal arts learning experience. Our academic community of faculty, students, and staff is characterized by a culture of interdisciplinary collaboration that is responsive to the needs of our multicultural and global society. All of this takes place within a living and learning environment like no other, as we draw inspiration from the beauty and resources of our extraordinary location at the edge of the Pacific Ocean.