

SU People



Danielle Jensen | Tuned to Discovery

AFTER A HARD DAY, DANIELLE JENSEN '04 LIKES TO SIT DOWN AT THE piano and unwind with classical music. A College of Arts and Sciences graduate who majored in biochemistry, Jensen admits that a rigorous class schedule, long hours in the chemistry lab, and numerous volunteer activities have made her fingers a bit rusty at the keyboard, yet she always tries to squeeze in time for her favorite hobby. "There's a challenging Mozart concerto that I love practicing," she says. "I know I'm capable of playing it well, so when I get frustrated I keep that in mind and stick with it." Jensen's intrinsic motivation extends far beyond her musical talents. Whether researching molecular interactions for her honors thesis, tutoring organic chemistry students in the Learning Resource Center, or serving as a College of Arts and Sciences student peer advisor, Jensen is accustomed to giving everything her best effort. "I don't ever want to be a mediocre person," she says. "I set high expectations for myself and I always try to meet them."

She's done a good job so far. A University Scholar and a Remembrance

Scholar, Jensen was honored for her academic achievements and dedication to the community during Remembrance Week, which she helped plan last fall. As president of Alpha Chi Sigma, SU's coed professional chemistry fraternity, she helped organize volunteer activities at the International Young Scholars Day at Hendricks Chapel and National Chemistry Day at the Milton J. Rubenstein Museum of Science and Technology in Syracuse. A member of the fraternity since her freshman year, Jensen petitioned the University in 2001 for funding to purchase supplies that enabled the group to present chemistry demonstrations to Syracuse Boys and Girls Clubs, community recreation centers, and local Boy Scout and Girl Scout troops. "There are so many fun things we do," says Jensen, who refers to the demos as "chemistry magic shows" for kids. "We show the kids color-changing reactions, blow things up, set things on fire, and then explain in simple terms how it all works. It's so rewarding to see their faces light up when they get excited about science."

That same excitement was what drove Jensen to major in biochemistry. "When I came to SU, I became interested in chemical structures—how a little molecule can cause your hair to be brown, or your eyes to be blue, or why somebody would have diabetes and somebody else wouldn't," she says. "That fascinated me." The quest for the "how" and "why" in chemistry led Jensen to chemistry professor Philip Borer, with whom she spent the past year researching technology for discovery of drugs that could be used to treat patients with HIV. "What's unique

about Danielle is her willingness to go above and beyond," Borer says. "She finished her research and lab work for her senior honors thesis a semester early, and—instead of stopping to write her paper—came to me and asked, 'What can I do next?'"

In the fall, Jensen will enter the biological and biomedical sciences doctoral program at Harvard University, where she plans to focus on developing pharmaceutical agents for the treatment of serious diseases. "My research at SU has allowed me to see that what I'm doing is paying off," Jensen says. "I feel like I have a solid chance of making an impact in the lives of others."

—Kate Gaetano

Ramesh Raina

Mother Nature's Helper

EACH MORNING, MOLECULAR BIOLOGY PROFESSOR Ramesh Raina awakens eager to check on the progress of his experiments at SU's Biological Research Laboratories. "The key to successful research is patience and persistence," says Raina, who joined the SU faculty last July. "There are few things that give me more pleasure than performing research and teaching my students." Both roles drive him to advance humankind's understanding of the world and to translate that knowledge into something that has societal value. "I may be doing a small piece of that puzzle in my lab," he says. "Some other person may be doing a small piece in another part of the world. Eventually, by gathering all this information and knowledge, we start to make big pictures."

For Raina, the big picture is plant defense, specifically in how plants protect themselves against pathogens. If the \$100 billion worth of crops lost annually to pathogens could be saved, there would be no hunger in the world, according to Raina. "This is especially important in developing countries, where starvation and malnutrition have devastating effects," he says. "The long-term goal of our research is to understand how plants protect themselves against pathogens. These studies should help us develop strategies to create plants that are resistant to pests."

Along with 17 researchers, including the students in his lab, Raina is attempting to identify, at the molecular level, how *Arabidopsis*—a small flowering plant of the mustard family—perceives and responds to its environment. The research is supported by a two-year grant from the National Science Foundation and a three-year grant from the Defense Advanced Research Projects Agency, the central research and development organization for the U.S. Department of Defense. "The goal of this project is to explore the possibility of developing plants that can be used as sentinels to sense chemical or biological weapons," he says. If the project is successful, the genetically modified plants would be clandestine, yet decorative, weapons detectors that could be placed in airports, government buildings, major tourist areas, or other large venues that terrorists may target. Such genetically altered plants could be used to sense TNT or other explosives to indicate where land mines are buried, or they could simply help a farmer detect which part of his field is plagued by pests.

Lately, research in Raina's field has been called into question. "Genetic engineering has become a



Schmitt Shoots!

FACULTY

big issue," he says. Opponents believe it has the power to create organisms that do not normally exist, which might behave abnormally or evolve into "super organisms." "I believe genetic engineering gives researchers more control over, say, developing the tastier, redder, and disease-resistant tomato," he says. "By creating these genetically modified organisms, we can also reduce the use of pesticides and other environmental pollutants."

In addition to being an accomplished researcher, Raina earns the respect of his students as an engaging and supportive teacher. "He always has time for his students and coworkers," says Shahina Bano Maqbool, a research associate in Raina's lab. "I feel comfortable asking him for advice about making progress and achieving my goals. Dr. Raina welcomes new thoughts and ideas. I have learned many things that have improved my skills as a plant molecular biologist, and I know I will be successful while working with him."

As Raina completes his first year at SU, he hopes to continue sharing his enthusiasm for hard work and exploration with his students. "It's important to generate an interest—to light the spark—because you can't force students to learn," he says. At the end of the day, he says he rests easy with "the satisfaction of having learned something new today and having a new idea to pursue tomorrow."

—Margaret Costello



Dr. James R. Jacobs | Medical Matters

DR. JAMES R. JACOBS, THE UNIVERSITY'S DIRECTOR OF HEALTH SERVICES, was enjoying a successful career as a college professor when he decided to push the envelope on the concept of vocational retraining. Upon completing a doctorate in biomedical engineering at the University of Alabama in 1987, he joined the faculty of Duke University. While there he taught in the engineering school, conducted research in anesthesiology at the medical school, and published frequently in professional quarterlies, including *Anesthesiology* and the *Journal of Pharmacological Science*. In 1992, while still teaching biomedical engineering, he became a medical student. "Medicine is actually a second career for me, though not far removed from my first," he says. "I found the biomedical research I was doing to be so clinically oriented that I came to a fork in the road with it. To continue, I had to become either a clinician or more of a 'pure engineer.' I had to make a choice."

As a Duke medical student, Jacobs went through two difficult transitions: professor to student and research scientist to practicing physician. The rote memorization of early medical training proved difficult for Jacobs, who was accustomed to following hunches in the lab. He became more comfortable as he advanced to interaction with patients, discovering an appreciation for

the art, as well as the science, of medicine. "While we like to think of medicine as a science, the messiness of the human body can really be a challenge to scientific minds," says Jacobs, who received a medical degree in 1995. "Patients tend not to follow the rules of the laboratory very well."

Coming to Syracuse from the University of North Carolina at Charlotte, where he served as medical director of the Brocker Health Center, Jacobs sees three roles for himself as director of health services: physician, administrator, and teacher. He finds SU students to be generally well-informed on health issues, despite the stereotypes about drugs, sex, and other lifestyle issues attributed to college students. As evidence, he cites the fact that the leading cause, by far, of student visits to health services is the upper respiratory infection—the good old common cold.

There are several areas of concern in which he plans to spearhead efforts to supply more wellness information to students. "There is still a phenomenal amount of naivete about sexually transmitted diseases. But we see a lot more patients who are concerned about STDs than who have them," he says. "This is important to me. It's a teachable

moment and that kind of opportunity for one-on-one education is one of the most gratifying parts of my job." According to Jacobs, who is board certified in emergency medicine, SU Health Services distributes some 75,000 condoms each year. "Do students use them? Do they leave them on the nightstand? Throw them away? We don't know. We can't dictate behavioral changes, but we can make sure students are educated on the consequences of their behaviors. The same is true of tobacco, alcohol, pot, exercise, and eating habits," he says.

A member of the board of directors of the American College Health Foundation, Jacobs has set high goals for Syracuse in student health. "The bottom line is simple: to be North America's preeminent university health service by striving to meet the health and wellness needs of as many students as possible, as efficiently as possible, at the lowest possible cost, and all in a way that engages the student as an adult consumer of health care," he says.

—David Marc



Tatiana Diaz | Healing and Hope

TATIANA DIAZ G'05 GREW UP IN A COUNTRY AT WAR WITH itself. But when the 36-year Guatemalan civil war ended in 1996, she realized what a profound impact it had on her life. "Being Guatemalan defines the kind of woman I am right now," says the Fulbright Scholar and College of Human Services and Health Professions master's degree student. "Growing up in a country with so many struggles defined my interest in mental health and the healing professions. I worked with refugees and people who lived the conflict to find out how the war affected them. Seeing these people suffering—regardless of which side of the war they were on—defined my search for social justice."

During high school, Diaz volunteered with a non-governmental organization, working with terminally ill children and youths institutionalized for a variety of reasons, including being gang members, runaways, or domestic violence victims. "This government-run home was like a jail—very sad," she says. "Sometimes I could see no hope for their lives." Then one day she walked in and the children were singing a Latin pop song that celebrates life's beauty, even in the face of adversity. "That really moved me because their lives were filled with so much pain, yet they could see hope for themselves," she says. "It was a very big lesson in my life. You can always find positive things. I always keep that in mind when I do my work."

After earning a psychology degree at the Universidad Rafael Landivar, Diaz ran her own clinical practice in Guatemala City for three years, mostly working with children and teenagers. She enrolled in the marriage and family therapy program at SU to broaden her focus from individual therapy to group conflict

resolution—and to fulfill a dream of studying abroad. Being an international student has forced her to examine her own beliefs and find a balance in maintaining her identity while assimilating into another culture. "I needed to see another culture to contrast and evaluate my own values," she says. Among the greatest differences between Guatemalan and American cultures are those found in family relationships and dynamics. "For example, I am 27 and live with my parents, and that is expected," she says. "Being part of the family is considered a strength. Here, people are more independent."

Her experiences in a multigenerational family unit are an advantage in the classroom as well as the clinical setting, says Professor Jonathan Sandberg, chair of the marriage and family therapy department. "Her perspectives help other students and clients expand their views of the family, find new solutions for problems, and identify ways to build on strengths," he says. "She brings a wealth of experience and is compassionate with clients. She also always wants to learn, which is probably why she is such a tenacious reader. I've never met anyone so widely read."

Diaz admits books constitute half of her diet. The rest is made up of makeshift Mayan dishes. "I miss my family and friends, but the food is the part I miss most," she says. Yet distance from the things she loves has also allowed her to identify and face her own fears. "My first goal in coming to the United States was professional—to get my master's degree and learn from my wonderful professors," she says. "But now that I'm here, I am discovering more about myself than I ever imagined. My goal now is to know me better so I can be a healer to others." —Margaret Costello



Anne Munly | Aesthetic Insights

ANNE MUNLY BEGAN PREPARING TO become an architect long before she even knew the field existed. As a child she taught herself to draw, inspired first by Disney cartoons and later by *Washington Post* political cartoonist Herblock. “I drew everything—the human figure, spaces, objects,” says Munly, a School of Architecture professor for nearly 15 years. “My father was a submarine commander, so we moved around a lot. Drawing helped me get in touch with the places we went.” It wasn’t until high school that she discovered the field of architecture. “At the time, girls were not allowed to take drafting or shop courses,” Munly says. “We

were required to take home economics instead. I remember seeing a guy carrying around a T-square and asking him how to use it. I was into math, science, and philosophy; architecture seemed to bring out my interests perfectly.”

Munly’s passion for architecture is still as strong as ever. In addition to her primary focus—architectural design—her teaching and research interests center on utopian theory and its influences on American urbanism. “Once you analyze the early structure of a town, you can study how it changes and mutates in relation to formal and social ideals,” Munly says. Her research found a local focus in Rome, New

York. In 1999, Munly—along with architecture professor Mark Linder and geography professors Don Mitchell and Anne Mosher—was awarded a Vision Fund grant for an interdisciplinary research project to create digital mappings of the town’s infrastructure, geography, history, and development. Part of the project asked Rome residents to create maps of how they view the town. Munly and Mosher are now analyzing the maps to understand how residents perceive Rome, reflected in the information they felt was necessary to include or exclude on their maps. Munly is also creating an interactive web site to post the results of the cognitive map analyses as well as new digital maps of Rome, which can be used by residents. “The project is about what’s important to the people who live in this community,” Munly says. “I like to think of our work as grass roots—starting with the people of Rome and working from there.”

The Vision Fund grant isn’t the first time Munly was given an opportunity to study “in Rome.” In 1995, she was awarded the prestigious Prix de Rome, or Rome Prize, which earned her a year to research in Italy as a fellow of the American Academy of Rome. For her academy project, she critiqued the 1762 Campus Martius map of Rome by artist G.B. Piranesi. “I just can’t get enough of Rome,” Munly jokes. Or of Italy, it seems. As an undergraduate at the University of Virginia, Munly spent a summer in Vicenza analyzing architectural sites and working on design problems. She also served as director of SU’s architecture program in Florence from 1996 to 1997.

When she’s not teaching or conducting research, Munly enjoys fly fishing and ice fishing with her son and husband. “Sometimes you’re casting a line into water, and other times you’re walking on ice and drilling through it,” Munly says. “Either way, it gets us into really beautiful environments in all seasons.” Munly also rows and used to race in college and with the Syracuse Chargers, a local rowing club. “Rowing is a real passion,” she says. “It’s very technical, and aesthetically pleasing as well. When I rowed I remember thinking, ‘This is like architecture.’”

—Kate Gaetano



Grant Williams | Positive Presence

FOR SENIOR LIEUTENANT GRANT WILLIAMS, LIFE IS LIKE A TREASURE hunt. Whether he's working to protect SU students or pursuing his hobby as a self-taught upholsterer, Williams has a talent for looking beneath the surface to discover buried gems. "I like finding pieces of furniture that have been tossed because they are seen as having no value," says Williams, a 34-year officer in the Department of Public Safety. "I build new life into them by refinishing the wood or adding springs or a cushion. Then I give them away as gifts that last a lifetime." Williams brings that same patience and caring attention to his interactions with students, especially those who may be in some kind of trouble. "I always look for the goodness in everybody," he says. "Even if a kid is 99 percent 'bad,' I'll find that other 1 percent. That gives you a base to start growing from."

Originally from Maryland, Williams worked in the department's canine unit when he joined public safety in 1969. He has held many positions since then, including patrol officer, shift supervisor, and director of patrol. Currently the coordinator for campus crime prevention programs, he often speaks to student groups and staff about safety and crime prevention issues. "Everything we do is geared toward keeping students—and all members of the campus community—safe," says Williams, who recently earned a bachelor's degree, graduating summa cum laude in criminal justice, through a distance learning program at St. John's University in Springfield, Louisiana.

While Williams enjoys all aspects of his work, his favorite part is interacting with students. "There are students who get off the straight path sometimes, and I think they are looking for someone they can talk to and identify with to get them back into the rhythm of things," he says. "That's the role I play." Williams often receives letters from students, even years after they leave Syracuse, thanking him for the positive impact he made on their lives. "Sometimes they send pictures of their kids, and that's better than anything, better than raises," he says. "I've always tried to be an advocate for students. You have to know what is bothering them so you can understand why they might be causing problems. And you find that out by listening, not by being judgmental."

Williams is a member of several professional organizations on campus and at the state and national levels. In his free time, he enjoys playing basketball and spending time with his family. He and Maxine (Jones) '79, G'81, his wife of 45 years and a principal at Webster Elementary School in Syracuse, have three sons. Steven and Rickey are detectives with the Syracuse Police Department, and Grant III '89 is a banking executive in Maryland. They have a 12-year-old granddaughter and a 4-year-old grandson. The family's newest addition, Grant IV, was born in March.

Williams also has a talent for drawing. His pen and ink illustrations have been showcased in the University's *On My Own Time* exhibition and during "I Have A Dream Week 2003" activities. "Drawing is another thing I sort of taught myself—a gift from God that I expanded on," he says. But the gift he values most of all is peace of mind. "I've never been one to want what others have, so I travel through life without much excess baggage," he says. "People know that, with me, what you see is what you get. I'm happy with the way I am."
—Amy Speech Shires