

# student profiles

## Doctoral Student Was First in Family to Attend College

AS A THIRD-YEAR STUDENT in the school's Dr.P.H. in Biostatistics program, **ROBIN JEFFRIES** is reveling in the challenges of her discipline. In addition to her coursework, Jeffries has been assisting UCLA School of Public Health faculty members on two studies. For Project Connect, a multi-center study testing interventions aimed at reducing teen pregnancy and sexually transmitted diseases, Jeffries works for Drs. Abdelmonem A. Afifi and William Cumberland in the Department of Biostatistics; she also assists Dr. Pamina Gorbach, associate professor of epidemiology, in her role as an investigator on an HIV microbicide clinical trial. "It's been an incredible experience to learn at the side of these professors," Jeffries says.

Both studies find Jeffries working with self-report survey data in which there is the potential for "missing values" – a common problem that statisticians have developed methods to overcome. "These studies are asking sensitive questions that rely on people's memories," Jeffries explains. "Respondents might forget, fudge their answers, or give conflicting reports, and so the challenge is to make the data as 'clean' as possible." It's a challenge Jeffries has embraced. "Part of my nature is to want everything to be just right...to have all the ducks in a row," she quips.

Jeffries' enthusiasm for the academic environment has to do with the fact that she never took it for granted that she would come so far. "It was a long journey," she says. "We didn't have a lot when I was a kid." Raised by her mother in Chico, in a rural part of California 90 miles north of Sacramento, Jeffries was the first in her family

to attend college. She started at a community college majoring in biology but found she couldn't stay away from the math courses. At the urging of one of her calculus professors she took a statistics class. "I instantly fell in love, because I could see that it wasn't just theoretical – this was something I could apply in everyday life," she says.

When she transferred to California State University, Chico, Jeffries decided to double-major in biology and statistics. There, a conversation with a chemistry professor as Jeffries was pondering which direction to take in graduate school proved fateful. "I said I didn't know what to do – I really liked biology and I really liked statistics," Jeffries recalls. "He suggested I look into biostatistics programs. I hadn't even known they existed." Jeffries ultimately chose the UCLA School of Public Health, where a Graduate Opportunity Fellowship would cover her first year of education. (As a Dr.P.H. student, Jeffries would receive more assistance as the recipient of the school's Wayne SooHoo Memorial Scholarship.)

At first, her intention was to stay only for her master's degree. But as the two-year program was ending, Jeffries decided she had to continue. "I thought to myself, 'I'm not finished – there's still more I want to learn,'" she says. While she is still deciding on the course she'll take once she obtains her Dr.P.H., Jeffries is excited about the possibilities. "As a biostatistician, I can work with public health professionals and clinicians on a variety of different problems with real-life applications," Jeffries says. "That's very exciting to me."



**"As a biostatistician, I can work with public health professionals and clinicians on a variety of different problems with real-life applications. That's very exciting to me."**

— Robin Jeffries

## As HIV Tester/Counselor, He Gets Up-Close Perspective of At-Risk Populations He Studies

**RYAN MURPHY** KNEW HE WOULD BE DEVELOPING analytical skills as part of his doctoral studies in the UCLA School of Public Health's Department of Epidemiology. But the third-year Ph.D. student didn't necessarily plan on becoming as intimately involved in the lives of his subjects as he has.

Since he began in the program, Murphy has worked as a graduate student researcher under the direction of Dr. Pamina Gorbach, associate professor of epidemiology. In that role, Murphy has assisted on community-based studies involving largely homeless, drug-using populations at high risk for HIV. Because the studies include HIV testing, Murphy took it upon himself to become a California certified HIV tester and counselor.

"Receiving HIV test results, positive or negative, is a big moment," Murphy explains. "For people who are taking time out of their days to participate in our studies, I wanted to make sure we were helping them in the best possible manner, and being able to provide testing, counseling and appropriate referrals was one way to ensure we could do that."

The desire to have more direct human contact is what brought Murphy into public health in the first place. As an undergraduate at Occidental College in Los Angeles he majored in biology with an emphasis in cellular and molecular biology, and considered enrolling in a molecular biology graduate program. But in public health he saw an opportunity to become involved in research where he might be able to see a more immediate impact on populations. And in HIV epidemiology, he found what for him was the best of all worlds. "Coming from a microbiology background I was very interested in infectious disease research, and HIV is obviously a huge concern in that area," he says. "But what I enjoy most is that by doing behavioral rather than laboratory-bench research, there is a level of human-to-human interaction that I didn't have before."

For his dissertation, Murphy is exploring the role of housing status on partnership dynamics and its potential relevance to the risk of HIV transmission. Studies have indicated that people in homeless shelters are up to nine times more likely to be HIV-positive than the general population – not having a stable living environment may increase the likelihood that people will engage in riskier sexual and drug-use behaviors, Murphy notes. His study is taking a broad view of housing status to include not just people with stable homes and those living on the streets or in shelters, but also people who are "marginally housed" through friends, family members or pay-by-day motels.

As with his work on Gorbach's studies, the dissertation will give Murphy a close-up view of the plight of the population he is studying – a vantage point he believes will be useful to his work. "From a purely research perspective, it gives you a better understanding of the data you're generating," Murphy explains. "If you're only on your computer and not interacting with people, it can be harder to know what led to the data and what you might need to account for in your analysis. And on a more personal level, interacting with people who are homeless and getting to know them better serves to motivate and remind me of why I'm doing what I'm doing."

**"What I enjoy most is that by doing behavioral rather than laboratory-bench research, there is a level of human-to-human interaction that I didn't have before."**

— Ryan Murphy (left)

