

student profiles

Warming to the Environmental Science

SARAH ROTHENBERG WAS IN WASHINGTON D.C., in the summer of 1998 when she had an experience that set her on the path she continues to follow today.

Then an undergraduate on her way to a bachelor of science in applied mathematics, Rothenberg was spending the summer working as a congressional intern. One day she attended a committee hearing on global warming. At a time when Congress was preparing for a potential vote on the Kyoto Protocol, the agreement reached by 160 nations on limiting greenhouse gas emissions, Rothenberg watched as the legislators heard testimony on the legitimacy of an issue that the vast majority of the scientific community view as settled.

"It was stunning for me to see so many conservative legislators question the hypothesis of global warming," she says. "I had been looking for some way to use my interest in math, and at that moment I knew that applying it to environmental issues would be a great way for me to go."

Rothenberg, who spent nine years working in the film industry as a sound editor for feature films before starting as an undergraduate at age 33, went on to earn her master's degree in statistics before enrolling in UCLA's interdisciplinary Environmental Science and Engineering (ESE) program, based in the School of Public Health. She is now in her third year in the doctoral program, which trains environmental scientists, engineers and policy-makers for environmental leadership positions.

For her dissertation, Rothenberg will be researching numeric targets for a total maximum daily load (TMDL) for mercury in Ventura County, Calif. As part of the Clean Water Act, TMDLs are established by the U.S. Environmental Protection Agency to specify the amount of pollutant a water body can absorb while continuing to meet state water quality standards. Mercury is a potent neuro-

toxin that can travel long distances and be deposited in otherwise pristine environments. Studies showing the potential for human health problems from consumption of mercury-containing fish have raised concerns worldwide.

Rothenberg, who recently began an internship with the U.S. Army Corps of Engineers' Ventura County field office, spent last summer in Beijing, China conducting an investigation on terrestrial mercury contamination. Her internship was sponsored by the East Asia and Pacific Summer Institutes, a National Science Foundation program in which U.S. graduate students in the sciences and engineering spend eight weeks gaining firsthand laboratory experience working with researchers in China, Japan, Korea, Taiwan, or Australia. In 2002, Rothenberg was in Japan under the same program, researching residential water usage in eight Japanese cities, an extension of her master's thesis on water consumption in Kobe, Japan.

As she spent last year interviewing for internship positions, Rothenberg was reminded how valuable her education will be in opening up future options. "On a wide variety of subjects that came up at these interviews, I already had some knowledge of the problems, and employers at agencies and nonprofit organizations appreciate that," she says. "The ESE program gives you broad-based education so you are conversant in almost any environmental topic. You have a 360-degree scope of environmental problems in the world, which enables you to get in the door almost anywhere."



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— Sarah Rothenberg
(second from left)

Students in Family and Sexual Violence Course Moved to Action After Visit to Women's Prison

STUDENTS IN THE FAMILY AND SEXUAL VIOLENCE course taught by Dr. Susan Sorenson, professor of community health sciences, had learned about the consequences of domestic violence and how the violence sometimes becomes lethal. But a field trip to a women's prison brought the classroom discussions home – and moved many of the students to action.

Sorenson has arranged to have students in her Family and Sexual Violence course visit the California Institute for Women each year since 1992 to attend a meeting of Convicted Women Against Abuse, which was started by women convicted of killing their abuser. Last spring, for the first time, members of Sorenson's class received a tour of the Corona, Calif., prison before breaking into small groups and spending time talking with the imprisoned women.

"It was an eye-opening experience," says Marcia Suzuki, who graduated with her M.P.H. and is now a program officer for First 5 LA. "They described in graphic detail the abuse they had faced in their lives. You could tell they had given a lot of thought to the factors that had brought them to this point."

Once they returned to UCLA, the students, deeply moved, gathered to discuss what they had just experienced, and decided they wanted to follow up with assistance.

One of the things they had learned was that the inmates went through lengthy periods without access to notary services – and that when they did have access, many lacked the means to pay the \$10 fee. This was a particular problem for the women who wanted to have a say in what would happen to their children, since notary services are required for certain forms, particularly those pertaining to custody.

"They kept referring over and over again to their children," says Armine Kourouyan, a second-year M.P.H. student. "They were so sad that they had to leave their children and didn't know where they were. Our feeling was that their children shouldn't be made to suffer any more than they already had."

So the students began collecting donations for notary services, and several – led by Kourouyan, Talia Baruth and Ingrid Dries-Dafner – initiated contacts with legislative offices in an effort to effect policy changes. In the meantime, Suzuki began training as a notary with plans to volunteer her services where possible.

Three other students, Bridget Brownell, Mel Sage and Lidia Carlton, coordinated a book drive, collecting both from students at the school and through a larger drive at Taft High School in Woodland Hills, Calif., where Brownell teaches health. More than 200 books and approximately 75 CDs and cassette tapes were donated to the prison library, which has been unable to purchase many new items due to budget cuts.

"It's one thing to read about the situation these women find themselves in, but it's another to have a woman sitting in front of you telling you these things herself – how she had gone to the police for help on several occasions and nothing had changed," says Brownell. "This experience brought the textbook to life."

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— Armine Kourouyan (right)

