

Promoting Prevention in the Response to HIV/AIDS

WHEN HE WAS INTERVIEWING for his current position as director of the Office of AIDS Programs and Policy (OAPP) for the Los Angeles County Department of Public Health, **MARIO J. PÉREZ** promised his boss, county health officer and UCLA School of Public Health professor Jonathan Fielding, that if hired he would return to school to pursue his M.P.H. degree. “It was clear that as I assumed more responsibility in a Department of Public Health program, having formal training was crucial,” says Pérez, who had been forced to forgo his original graduate-school plans after the death of his parents in a car accident left him with responsibility for his younger siblings.

He fulfilled that promise this spring, completing the school’s Executive M.P.H. (EMPH) Program in Healthcare Management and Policy while maintaining his busy work schedule: At the OAPP, Pérez is responsible for managing, planning and guiding the annual investment of more than \$85 million in local, state and federal resources that support a comprehensive HIV/AIDS service delivery system.

L.A. County is second only to New York City in number of HIV/AIDS cases. Of the estimated 62,000 people in the county who are living with the virus, as many as a quarter don’t know it and many of those who are aware they are HIV-positive aren’t receiving life-saving treatment. In addition to efforts to ensure that infected individuals receive appropriate care, OAPP is charged with implementing strategies to prevent new infections, which currently number about 3,100 a year in the county. The county’s geography adds to the challenge. “We have many more square miles to cover than other counties around the nation where the epidemic is concentrated,” Pérez notes. As a result, his office tailors efforts to specific geographic areas where the needs are greatest.

Since becoming OAPP director in 2006, Pérez has fought to preserve HIV prevention programs in the face of substantial budget cuts resulting from California’s economic crisis. He has also taken on a national leadership role after being appointed last February to serve as one of 24 members of the Presidential Advisory Council on HIV/AIDS, formed to advise the Obama administration on the response to the epidemic. “We have significant room to improve on what’s been done in the last decade,” Pérez says. “The focus domestically has been on efforts to treat the disease rather than investing in preventing new infections. We need to mount a better prevention effort that addresses the social and economic factors that put communities at risk.”

Pérez’s commitment to raising awareness and serving persons with HIV/AIDS began in 1991 when, as a student at UC Berkeley, he helped to launch a volunteer group called the Multicultural AIDS Peer Program. A few years later, as a coordinator of HIV prevention services at a nonprofit drug treatment center in Los Angeles, he played a key role in launching needle exchange programs in the county. “It took a lot of political advocacy, but this was a critical harm reduction intervention that has helped to keep rates of HIV low among injection drug users – some of the most disenfranchised segments of our communities,” Pérez asserts.

Despite his ample on-the-job experience, Pérez says the EMPH program has made a significant difference in the way he approaches his work. “You learn the foundations of public health along with important skills,” he says. “But just as important, being with a cohort of professionals who bring different experiences to the classroom has broadened my perspective in a profound way.”



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— Mario J. Pérez (left, with Dr. Fred Hagigi, EMPH program director)

Doctoral Student's Air Pollution Studies Assume Greater Urgency with Motherhood

FOUR YEARS AGO, **JO KAY GHOSH** was contemplating job prospects as she prepared to complete her M.P.H. in Epidemiology and Biostatistics at UC Berkeley. That's when a friend told her about the work of Dr. Beate Ritz, professor of epidemiology at the UCLA School of Public Health. The conversation proved pivotal: Ghosh ended up getting a job on Ritz's research team and, a year later, enrolling in the school's Ph.D. program.

Since joining Ritz's group, Ghosh has worked on studies examining the impact of exposures to various air pollutants on birth outcomes in Los Angeles County. A history of strong regulations in California provides researchers with rich monitoring data from the state's Air Resources Board and Air Quality Management District. For the studies on which Ghosh has worked, these data have been used along with birth certificate records and surveys to demonstrate that exposure to air pollutants at certain levels increases the risk for preterm deliveries and low birthweight babies. Ghosh plans to continue pursuing the topic for her doctoral dissertation.

The studies are particularly compelling because they are addressing the issue at a finer level of detail than in the past, Ghosh notes. "Critics of air pollution studies have suggested that maybe, for example, people who live in highly polluted areas have poorer outcomes because they are more likely to smoke," she says. "Now we're able to see that even after taking into account the mother's smoking or smoking by someone else in the household, the air pollution effect is still present."

For another study, Ghosh helped to coordinate an effort in which air monitors were hung in 200 L.A. County neighborhoods to create a detailed exposure map of the region. This map is being used to determine risks for childhood asthma and adverse birth outcomes among those living near high traffic areas. "When you're looking at larger areas, you often can't differentiate exposures of the person who lives right next to the busy street from someone who lives up on a hill away from the traffic," Ghosh says. "This allowed us to learn more about the impact of specific pockets in the county where exposures are particularly high."

Ghosh hasn't for a moment regretted her decision to come to UCLA. "One of my motivations to go into public health is that I was interested in studying issues on a large scale, and being able to make a broad impact," she says. The prospect of influencing policy that could prevent some of the ill effects from air pollution has become more important since she started the program: In early 2009, Ghosh and her husband had a son. "My work has taken on a whole new meaning now that I'm raising a child in Los Angeles," she says.

The ability to apply epidemiologic methods she has learned in the classroom to the air pollution studies she conducts with Ritz has been gratifying, Ghosh says, as has the level of responsibility and hands-on experience Ritz provides. "She gives her students a lot of opportunities to interact with experts in the field," Ghosh says. "It's been amazing to be able to meet some of the people whose names I see on scientific papers all the time. She is so well connected, energetic and passionate about her work that anyone would be excited to be a part of it."

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