Circuitous Journey Has Rewarding Finish
For Biostatistics Student Susan Alber

THE PATH SUSAN ALBER HAS TAKEN in her post-high school education – starting as a student at the Berklee College of Music in Boston and ending up in the UCLA School of Public Health’s Ph.D. program in biostatistics – has been, to say the least, unconventional.

She has attended seven colleges, and had full-time jobs at four universities. After deciding a career in music wasn’t in the cards, she earned an associate degree in biology, then attended Cornell University for a B.S. in nutrition. That was followed by several years as a technician in a food microbiology lab at Rutgers University before Alber returned to Cornell for an M.S. in nutrition. It was back into the workplace before she decided on biostatistics, first earning an M.A. at UC Berkeley before heading south to UCLA for her doctoral studies.

“I’ve wandered around for a long time to get here,” Alber says, laughing. “I was always bored and unhappy with the jobs I had, or that I could see having in the future.”

That began to change with her first statistics class at Rutgers, along with the research she did there in developing mathematical models for predicting bacterial growth rates. As a scientist, Alber had never much enjoyed the often-tedious process of collecting data. “But once the data is collected and you’re at the point where you can look at it and learn something from it…that part I find really interesting,” she says.

For her doctoral work, Alber is analyzing data on the effects of lead on cognitive functioning. The toxicity of high levels of lead in the blood is well established, but the subtle behavioral and cognitive impairment resulting from lower levels has been a source of controversy. Alber’s dissertation research will develop a new version of the statistical modeling strategy known as longitudinal data analysis to examine data on the impact of lead on laboratory rats’ abilities to learn specific responses to an alternative series of environmental cues.

Alber’s ambition involves not just conducting research in biostatistics, but also teaching it. Through her many experiences, she has discovered that it’s an activity in which she excels. “Enough people have told me I’d be a good teacher that I’m starting to believe it,” Alber quips. She suspects her aptitude for teaching stems from the fact that learning about statistics hasn’t come easily for her. “When you have to struggle, and look at something in many different ways before it clicks in, you can more easily appreciate what is confusing to others,” she says.

Having had experiences at so many universities, Alber says the instruction she has encountered as a student in the UCLA School of Public Health’s Department of Biostatistics has been second to none. “We are fortunate to have a number of really wonderful and exceptional teachers,” she says. “They care about teaching, and put a lot of energy into it.” Insisting that the Ph.D. will be her final degree, Alber looks forward to following in the paths of her instructors via a university position that will emphasize teaching: “To be able to take difficult material and make it more digestible for students learning it for the first time gives me a great sense of fulfillment.”

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I had contact with people who did health services research, and it led me to think more broadly about health care than just seeing patients on a one-to-one basis,” Lim says.

The new thinking led him to come to the United States in 1997, where he enrolled in the UCLA School of Public Health and is on track to receive his Ph.D. from the Department of Health Services at the end of this year.

As a physician practicing in a variety of settings in Singapore, Lim had become intrigued by certain patterns. Working in a neonatal intensive care unit, he observed that patients with lower socioeconomic backgrounds seemed to have poorer birth outcomes. As an emergency room physician, he noted that certain types of patients were more likely to use the ER inappropriately. He saw inconsistencies in how physicians delivered care for the same conditions.

Once he got to UCLA, Lim became interested in a new set of issues related to the problem of access to care for vulnerable populations in the United States. (Access to care is less of an issue in Singapore, which has a universal health care system.) His dissertation examines the access to primary and secondary care for Los Angeles County’s indigent population, and how the L.A. County Department of Health Services’ restructuring of its public health care system in the mid-1990s has affected its delivery of care to this population.

The restructuring effort, which began in 1995, was focused in part on attempting to expand primary care for indigent patients and reduce their reliance on hospital and emergency room services. The Public-Private Partnership (PPP) program, in which the county contracted with private safety-net clinics to provide care for the uninsured, was introduced. Lim found in his research that the advent of the PPP program resulted in an increase in the number of uninsured patients going to the primary care clinics, as well as total patient visits. “This is a significant positive finding, because if indigent patients have access to primary care, they’re less likely to go to the emergency room for non-urgent conditions,” says Lim. “That reduces the overcrowding problem at county hospitals, reduces the costs to the county, and gives better access to the uninsured patient.” County health department decision-makers have been interested in the results, Lim says.

Upon completing his doctoral studies, Lim hopes to continue doing research in primary care delivery and its relation to hospital utilization and outcomes, as well as investigating the financing and organization of safety-net providers in the community and examining how the safety-net network could be developed and sustained under a variety of financial arrangements. “I have learned a lot from the doctoral program,” Lim says. “The faculty have been great mentors, and the hands-on research projects while I was doing my coursework really helped to solidify what I learned in class. I have thoroughly enjoyed the experience.”