

## MEET THE NEW FACULTY



**Lisa F. Barcellos, Ph.D.**  
Assistant Professor of  
Epidemiology

Lisa Barcellos is a genetic epidemiologist specializing in diseases of the immune system. She is working to identify genetic factors that predispose people to autoimmune diseases and that modulate disease expression and clinical progression. Most of her research to date has

centered on multiple sclerosis (MS), and she and colleagues at the University of California, San Francisco (UCSF), have recently initiated new studies focused on systemic lupus erythematosus, rheumatoid arthritis, and other autoimmune conditions. She is also investigating environmental exposures, such as smoking and maternal-fetal relationships. "I'd say in the last five years, it's become even more apparent that environment is playing a huge role in autoimmune diseases, as well as other common complex disorders like diabetes, heart disease, and mental illness," she says. "Studies in genetic epidemiology are going to have to incorporate that information."

Collaborations and consortiums play a large role in her work. Such teaming up is essential, she says, not only because it mitigates the expenses, but more importantly, because "the scope of what's neces-

sary is beyond what a single researcher, or even a handful, can accomplish. You've got to have experts from all relevant disciplines." She is an active member of the MS Genetics Group, a national group working on uncovering genetic factors in MS. The group involves researchers from UCSF, Duke and Vanderbilt Universities, and now Berkeley. She is also part of a larger international MS Genetics consortium which includes researchers from the U.S. MS Genetics Group, the University of Cambridge (U.K.), Harvard University, and MIT's Whitehead Institute. One of the group's goals is to identify the genetic factors in MS using newly available tools such as haplotype maps or "hapmaps," which will help characterize regions within the human genome contributing to disease risk. In another collaboration, she is working with the Division of Research at Kaiser Permanente to assemble large population-based samples of individuals with autoimmune diseases, looking for common susceptibilities, both environmental and genetic, across these disorders.

*"I have such an appreciation for teaching. I don't think you ever really know something until you teach it."*

Barcellos is especially excited about the explorations in genetic epidemiology that will be made possible by the characterization of the human genome—"not just the currently available sequence data, but a real, full characterization of variation in genes, using large numbers of individuals across multiple populations, and the identification of proteins that are encoded by these genes and their respective functions, so we'll potentially know the whole genetic architecture of the human genome," she says. "That information will really impact future genetic epidemiologic studies."

Having earned her doctorate at the UC Berkeley School of Public Health, Barcellos is well aware of the many resources available here, including the wealth of expertise in biostatistics and epidemiology. The opportunity to teach at Berkeley was also a big draw for her. She says, "I have such an appreciation for teaching. I don't think you ever really know something until you teach it."

"Berkeley is such a wonderful, diverse campus with people in other departments and disciplines who have overlapping interests," says Barcellos. "That's really what genetic epidemiology is—a compilation of researchers from all sorts of areas, including biomedicine, genetics, epidemiology, and biostatistics, who are seeking a better understanding of the cause and prevention of human disease."

#### Education

Ph.D. in Immunology, School of Public Health, UC Berkeley, 1996

B.A. in Biological Sciences, California State University, Sacramento, 1988

#### Selected Experience

Faculty, Program in Human Genetics, UCSF, 2001–2003

Assistant Adjunct Professor, Department of Neurology, UCSF, 2001–2003

Biostatistician, Department of Neurology, UCSF, 2000–2001

Postdoctoral Fellow, Department of Neurology, UCSF, 1997–2000

Postdoctoral Fellow, Department of Human Genetics, Roche Molecular Systems, Inc., Alameda, California, 1996–1997

#### Selected Honors

Building Interdisciplinary Research Careers in Women's Health Scholarship, UCSF, 2002–2004

UCSF Research Evaluation and Allocation Committee Award, 2002–2003

Nancy Davis Young Investigator Award, 2001–2004

National Multiple Sclerosis Society Fellowship, 1997–2000

Fellowship, Genetic Analysis Methods for Medical Researchers, Duke University, 1999

Fellowship, Advanced Linkage Analysis Course, Rockefeller University, 1999



**Emily J. Ozer, Ph.D.**  
**Assistant Professor of**  
**Community Health and Human**  
**Development**

Emily Ozer is a psychologist whose research has focused on two areas: community and school-based intervention, primarily for adolescents; and risk and protective factors for mental health following violence.

"I'm particularly interested in what makes interventions more effective," she says. "What kinds of social and psychological conditions get created in an intervention that make it more or less effective? How does the impact of the context—for example, the school or classroom in which the intervention program is implemented—affect what happens?" Ozer explains that there are good reasons for communities and schools to choose intervention programs for which the efficacy is supported by research evidence. The question of whether or not a program works, however, is complex. "Each context can be very different, so rather than asking if a program works, the question should really be, 'Under what conditions is it most effective?'"

#### Education

UCSF, National Institutes of Mental Health Postdoctoral Fellow in Health Psychology, 2000–2002

UCSF, Clinical Psychology Internship in Public Service and Ethnic Minority Mental Health, 1998–2000

Ph.D. in Clinical Psychology, UC Berkeley, 1999

M.A. in Clinical Psychology, UC Berkeley, 1995

A.B. in Psychology, cum laude, Harvard University, 1989

#### Selected Experience

Small Group Instructor, UCSF Medical School, 2001–2002

Program Evaluator, San Francisco Unified School District, 1997

Graduate Student Instructor, UC Berkeley, 1992–1994

Program Developer, Families in Transition, Catholic Charities of San Mateo, East Palo Alto, California, 1991–1992

#### Selected Honors

Robert E. Harris Award in Health Psychology, UCSF Department of Psychiatry, 2002

Emory Cowen Dissertation Award for Promotion of Wellness, 2000

Dissertation Research Grant, National Institutes of Mental Health, 1997

Sheldon J. Korchin Dissertation Prize, UC Berkeley Clinical Psychology Program, 1998

Regents Fellowship, UC Berkeley, 1994

As a clinical psychology intern and postdoctoral fellow at UCSF she trained in emergency psychiatric evaluation and referrals, bilingual (Spanish and English) semi-structured clinical interviewing and cognitive-behavioral therapy, cognitive-behavioral group therapy, and coordination of patient care with primary care providers.

*"I'm particularly interested in what makes interventions more effective."*

Her interest in both interventions and violence is rooted in the time she spent in Central America and India between college and graduate school. Harvard University awarded her its Trustman Traveling Fellowship, which she used to support her work for the Central American Human Rights Commission, an agency based in Costa Rica. Working with people who had experienced political violence and trauma in their lives had a major influence on her academic work. "I became interested in how people cope with severe stress and how interventions could be helpful in promoting mental health in the context of severe stress without promoting dependency. As a psychologist, it also shifted my identity more toward community-type approaches and exposed me to public health."

Although she has worked with a range of age groups, most of her research has involved students at middle schools. In one project, she worked with 350 students in nine San Francisco middle schools to research factors that promote adolescents' mental health in the context of exposure to violence. The resulting paper is currently in press in the *Journal of Clinical Child and Adolescent Psychology*. In another project, Ozer conducted a study of a school-based, peer-led AIDS prevention program for adolescents in Oakland schools. Using a combination of qualitative and quantitative methods, she examined how the theory guiding the intervention program actually played out in the classroom contexts in which it was implemented—and how differences in implementation led to differences in the program's effectiveness in influencing the students' attitudes and behavior. That research was published in the *American Journal of Community Psychology*.

Ozer joins the school's new Division of Community Health & Human Development (see p. 13). Having pursued her graduate studies at the University, Berkeley is a natural fit for her. She says, "In terms of the quality of the students and the faculty and the diversity, it's like no other place that I know of. I can't think of another intellectual cultural community that's as vibrant." 🍷

— Michael S. Broder