



Jill M. Mateo

GRFP Recipient: 1989

Undergraduate Institution:
B.S. 1988, Manhattan College

Graduate Institution:
M.S. 1990, University of Georgia

Ph.D. 1995, University of
Michigan

Graduate Field of Study:
Psychology and Animal Behavior

//

Current Position:
Associate Professor, Department
of Comparative Human Develop-
ment, Committee on Evolutionary
Biology, Institute for Mind and
Biology, Center for Health and the
Social Sciences and The College,
University of Chicago

RESEARCH INTERESTS //

Jill M. Mateo studies the development of adaptive behavior in young animals, with particular focus on how young animals recognize family members from non-family members and how young animals learn to avoid predators. Current work integrates hormonal, immunological and genetic approaches to understand evolutionary pressures affecting social behaviors and survival. Mateo's primary models are Belding's ground squirrels, a highly social squirrel found in mountainous regions of the Western United States, but her research includes birds, hamsters, voles and primates, including humans. Her research, including the "armpit effect"--the way in which animals can differentiate kin from non-family member through smell--has been covered in the news including Science News and the New York Time's Science Times.

THE BROADER IMPACTS OF MY WORK ON SOCIETY //

Since 1992 I have worked closely with 9 graduate and 45 undergraduate students in my field and lab research, and at least 12 field assistants have since entered graduate school. I encourage all assistants to conduct independent projects while in the field. They do a variation of an experiment we conducted, or analyze datasets, or develop a whole new project unrelated to what we are doing. I also use local high-school students as field assistants. I seek women assistants, who tend to be discouraged from field work, and all but 11 have been women. I cover transportation, room and board so that anyone can participate, regardless of finances. I encourage minority students to apply for the lab and field positions, and have hired 2 Latinos, 3 Asians, and 2 African Americans,

but it has been my experience that only a small number of non-whites have been interested in behavioral ecological research (I did successfully recruit an African American and a Latina graduate student, both NSF predoctoral fellows, to our program).

I give public lectures at the field station and have written articles for the local newspaper and conservation committee, and this summer we gave a lecture to a high school ecology class. I worked with the BBC on their segment on *U. beldingi* for *The Life of Mammals*, as well as *The Discovery Channel*, *Animal Planet*, and a local cable channel. My research is included in tours at the field station involving >100 school children/year. I encourage young female students to pursue science careers. I also explain the scientific method and the importance of both basic research and conservation at the local level. These opportunities are especially important in the eastern Sierra, as local residents are rarely exposed to higher education, and many are wary of scientists who are viewed as threats to the local economy. We helped develop a *U. beldingi* exhibit at the USFS welcome center in town, to foster appreciation of this species.

As chair of the Animal Behavior Society's Public Affairs Committee, I was charged with promoting an appreciation and understanding of animal behavior research. This included a "Public Night" at an annual meeting, inviting the community to learn more about the science of animal behavior; creation of a resource for the media (> 100 members); and creating and distributing press releases for articles published in ABS's journal, *Animal Behaviour*. Separately, I organized a symposium for the 2009 AAAS meeting, 'Beyond the Beagle: Evolutionary Approaches to the Study of Social Behavior in the 21st Century'. We had an hour long press panel moderated by *The Guardian's* Tim Radford, which resulted in many news articles.

At U of C, I run a Fee-For-Service program in my Integrative Endocrinology Laboratory that allows us to provide hormone analyses or training for people who lack the facilities or ability to do so themselves. The proposed work will involve videotaping *U. beldingi* behaviors, and I plan to make digitized samples available for lab exercises (e.g. Macaulay Library of Natural Sounds, EthoBank). I developed and maintain a website about my research on *U. beldingi* (<http://mateolab.uchicago.edu>; > 15000 collective visits in 4 years).

A FOND MEMORY FROM MY EXPERIENCE AS A FELLOW //

Over twenty years ago, so this is stretching the memory! I do remember that having the fellowship meant I did not have to be a teaching assistant every semester. This allowed me to spend more time working on my research, both an initial project on campus studying prairie voles during my first two years, and in the field with ground squirrels starting my first summer. I believe this is in part responsible for my success in receiving a number of small grants, which in turn led me to receive an NSF Doctoral Dissertation Improvement Grant. As noted above, my dissertation garnered several awards, which helped propel my early career.

AWARDS/ HONORS //

Mateo has published numerous research papers and has been awarded numerous grants from the National Science Foundation and National Institutes of Health for her research. Her NSF-funded dissertation research received numerous awards, including the New York Academy of Sciences James McKeen Cattell Award for Outstanding Doctoral Dissertation in Psychology, the American Psychological Association F. A. Beach Comparative Psychology Award (Honorable Mention) and the University of Michigan Marquis Award for Outstanding Dissertation in the Department of Psychology.

POSITION PROFILE //

1996-2002 Research associate, Department of Psychology, Cornell University

2002-Present Professor, Department of Comparative Human Development, Committee on Evolutionary Biology, Institute for Mind and Biology, Center for Health and the Social Sciences and The College, University of Chicago

Associate editor, *Proceedings B*, Royal Society Publishing