

# 2007-2008 Cattell Fund Fellowships Announced

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The James McKeen Cattell Fund and APS are pleased to announce that Lisa Feldman Barrett, Susan Gelman, and Sandra Waxman are this year's James McKeen Cattell Fund Fellowship recipients.

Since 1974, the prestigious Cattell Fund Fellowships have allowed researchers to extend sabbaticals from their home institutions in order to pursue new research. The goal of the Cattell Fund is to support "scientific research and the dissemination of knowledge with the object of obtaining results beneficial to the development of the science of psychology and to the advancement of the useful application of psychology." In this vein, the sabbatical awards allow researchers time to explore their research away from the hustle and bustle of ordinary academic life.

According to Cattell Fund Secretary-Treasurer Christina Williams, Duke University, "the Cattell Sabbatical Award is both an honor and an opportunity. The honor is being selected from a large group of very talented scholars. And, an opportunity to have the extended time to pursue a passion without interruption."

In recent years, APS and the Fund have begun a more formal affiliation. APS Past President Robert Levenson has been appointed to the Cattell Fund Board of Trustees, and the Fund is being showcased through APS more generally (see the November 2005 and November 2006 *Observer*).

This year's winners — the first ever all-female class of awardees — were announced at the APS Convention. APS is pleased to support this important program in furthering our science.

## **Lisa Feldman Barrett: A New Model of Emotion**

APS Fellow Lisa Feldman Barrett, Boston College, hopes to use her sabbatical to change how the world thinks about emotion. Feldman Barrett's years of research as head of Boston College's Interdisciplinary Affective Science Laboratory, as well as an adjunct research appointment in the Psychiatric Neuroimaging Group at the Charleston Navy Yard at Mass General Hospital and Harvard Medical School, have led her to develop a new affect-based model of emotion.

Traditional emotion theories are based on the "natural kind" model of emotion. In that model, each emotion (e.g., anger, fear, happiness) is a distinct entity, with a distinct neural circuit that is evolutionarily prescribed. In Feldman Barrett's view, the natural kind view of emotion is a form of essentialism that does not reflect the true nature of what emotions are or how they are implemented in the human brain. Her own model proposes that affect, the more basic state of feeling good versus bad, is the basis of all emotion and the events that we call "sadness" or "anger" or "fear" only occur because we categorize affect in different ways depending on the situation. Anger and sadness are constructs that we name and apply to ourselves or others rather than complex reflexes with firm biological signatures.

Feldman Barrett plans to spend her sabbatical writing a book about this new model of emotion and the

research behind it. The book, *What is an Emotion?*, is already under contract and partially written, but the sabbatical will provide the time necessary to complete it. The book will explore the existing research behind her theory and Feldman Barrett hopes it will challenge emotion researchers to question their assumptions about the nature of emotions, allowing emotion research to move beyond traditional theories. More generally, the book will address how complex psychological categories (like emotion or cognition) can be understood as mental states that are implemented by flexible, context-dependent brain states.

Feldman Barrett said she is grateful to have received this Sabbatical Award, especially because this will be her first sabbatical since completing her PhD at the University of Waterloo in 1992. After 15 years, it is a “wonderful opportunity to have time to do something I feel compelled to do,” she says.

### **Sandra Waxman: Cross-Cultural Research on Language**

APS Fellow Sandra Waxman received her PhD in 1985 from the University of Pennsylvania. She is currently professor of psychology at Northwestern University as well as the Director of Northwestern’s Project on Child Development, where she studies relations between early conceptual and language development in infants and toddlers. In her current project, she continues to examine these connections, this time asking how children and adults from diverse cultural and linguistic communities develop concepts of the natural world.

In her research, Waxman has shown strong universals, but also that “our naming systems, as well as our belief systems, influence the way that children acquire fundamental concepts,” including “human,” “non-human animal,” “plant,” and how they see the inter-relations among them. She is motivated by what she describes as one of the clearest insights from recent developmental science — that human development is guided by factors within children and shaped by their environment. “If we take it to be true that children’s knowledge is shaped by their environment, then it is important to consider how development unfolds within in a broad range of environments,” says Waxman. So far, she has examined people speaking English, Indonesian, Tzotzil Maya, and Spanish. She has also considered the implications of being raised in urban and rural environments, and in different cultural communities, including Native Americans. To conduct the research, she establishes ties within the communities and recruits community members to act as experimenters.

While on sabbatical, Waxman will continue to examine the influence of language and community-wide belief systems on our concepts about the biological world. She plans to spend time compiling her research into a book and traveling. She hopes to spend time in Vancouver with the Mandarin-speaking community there, as well in Mexico examining the Tzotzil Mayan and Latino cultures. She and APS Board Member Doug Medin, a colleague of Waxman’s at Northwestern, will be collaborating on the book.

Waxman said she appreciates the time that her sabbatical will allow to visit these research sites and to devote to careful analysis of the data and their implications. “Having leave at this time is perfect. It will allow me time to think about the patterns we’ve found on a larger scale,” she said.

### **Susan Gelman: New Concepts in Child Development**

Susan Gelman is the Frederick G.L. Huetwell Professor of Psychology at the University of Michigan. She is best known for her pioneering theories on psychological essentialism in children.

In her recent book, *The Essential Child: Origins of Essentialism in Everyday Thought* (Oxford Cognitive Development Series, 2003), Gelman argues that essentialism — the belief that members of a category share underlying characteristics that determine their identity and other properties — is, in fact, an early and fundamental cognitive assumption. This contradicts traditional theories that describe children's thinking as concrete or focused on the obvious. Gelman believes that children actually have an early, powerful tendency to search for hidden, non-obvious features of things, and that by two to four years of age, they display this understanding in many converging ways (e.g., word-learning, inductive inferences, causal explanations).

During her sabbatical, Gelman plans to launch two new directions in her studies of essentialism. First, she will study the mechanisms by which essentialist beliefs are transmitted within a culture, with a special focus on language. One powerful linguistic device that she will study is the generic noun phrase (e.g., “*Bats* live in caves”), which expresses the scope of an idea to children and implies that a category has deep commonalities. This project will examine the effects of generics on preschoolers' essentialist reasoning.

Second, Gelman will explore a concept that she proposes is one of the underpinnings of essentialism in children: attention to the historical path of an item. “Tracking an individual over time requires some hefty insights,” says Gelman. Children must come to understand that something can retain identity despite outward changes in appearance and that personal history is central to identity. She explains, “Just as the identity of an individual is decided by consulting the historical record, so too is the identity of an animal decided by consulting its origins (namely, parentage) or the identity of a work of art decided by consulting its provenance.”

Gelman welcomes the extra time she will have during her sabbatical to “read widely on related phenomena,” which will enrich her understanding of essentialism and allow for the creation of more pointed tests of children's understanding. She looks forward to visiting with collaborators and to spending three days at Princeton as a Whitney J. Oates Fellow. There she will present and discuss her work with an interdisciplinary audience of scholars.