

APS Fellows Honored

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Feldman Barrett's NIH Pioneer Award

APS Fellow Lisa Feldman Barrett has received the prestigious NIH Director's Pioneer Award. Feldman Barrett is one of 12 new awardees who will each receive \$2.5 million to support their research over the next five years.

Feldman Barrett, who is at Boston College with joint appointments at Massachusetts General Hospital and Harvard Medical School, said the award will allow her lab to collaborate with others "to simultaneously pursue several lines of work that [she hopes] will change how the field understands emotion." She also is using the award as "an excuse to express gratitude to those who have been so supportive and great sources of intellectual inspiration to [her] throughout the years."

Feldman Barrett's research centers around an innovative theory of emotion, which contradicts decades of previous thought on the subject. Traditionally, emotions have been thought of as distinct categories of events that pop up fairly spontaneously as humans react to the environment. In examining the emotion literature, however, Feldman Barrett and her colleagues saw that "studies that measure emotion by relying on human perception...typically produce reasonably consistent evidence for the categories that in English we call 'anger,' 'sadness,' and 'fear,' but instrument-based measures of the brain, face, and body...do not." When people were asked to identify their own or someone else's emotions, the responses were in line with the theory of distinct emotions.

People identified happiness, anger, sadness, and so forth. But when objective measures were used, these categories didn't show up. So Feldman Barrett concluded that emotions exist because that's how we label them, not because they are innate biological states. She believes that humans do possess a basic, biological sense of whether an experience is positive or negative. This "core affect" works in conjunction with our effortless categorization of experiences to "divide ongoing changes in core affect into discrete meaningful experiences."

The Pioneer Awards, overseen by NIH's Roadmap for Medical Research, were created to support the work of innovative researchers whose work has the potential to greatly impact biomedical or behavioral research, but is not well supported by traditional funding mechanisms. For more information, visit <http://nihroadmap.nih.gov/pioneer>.

Thompson Wins Lashley Award

Past APS President Richard F. Thompson, William M. Keck Chair in Biological Sciences at the University of Southern California, has been awarded the 2007 Karl Spencer Lashley Award by the American Philosophical Society. The award will be presented in Philadelphia on November 9, during the Autumn General Meeting of the Society. Founded in 1957 by American Philosophical Society

member and renowned researcher Karl Lashley, the award is given to one member each year in recognition of research excellence in integrative behavioral neuroscience.

Thompson is one of today's most eminent memory researchers. In 2002, he mapped the complete essential neural circuit in the cerebellum and hippocampus involved in classical conditioning, determining that the cerebellum is key for procedural learning, but that the hippocampus becomes important when remembering experiences. Thompson's lab also has shown that connections between neurons are strengthened when learning new things. This strengthening of connections is how Thompson defines creating a memory. Thompson and his colleagues have used a wide range of methods in their research, from intracellular recording, lesions, and reversible inactivation to computational modeling and behavioral training.

Thompson said he is "enormously pleased and proud" to have received this "very great honor." The award holds particular meaning for him because Lashley's writings inspired him to go into "physiological psychology," as it was then called, and his senior undergraduate thesis at Reed College tested one of Lashley's theories. In the 1970s, Thompson held a tenured chair position at Harvard previously held by Lashley and vacant until offered to Thompson.

In addition to this newest tribute, Thompson has received many other honors, including APS's William James Fellow Award. He is a member of the National Academy of Sciences and the American Academy of Arts and Sciences. He also serves on the National Science Board.

For more information on the Lashley award, see <http://www.amphilsoc.org/prizes>.