



FACULTY SEED GRANTS

The Center provides awards of up to \$50,000 to faculty researchers across the Stanford campus. Projects are selected through a competitive process open to all faculty, and proposals have encompassed a wide range of solutions to improve life at all ages. Seed grants are intended to back new areas of study that might not be funded through traditional sources. The Center's goal is that these studies will then win support from external sponsors or have tangible impacts in the private or public sector.

SCIENTIFIC RESEARCH NETWORK ON DECISION NEUROSCIENCE AND AGING SEED GRANTS, 2012

NEURAL MECHANISMS OF VALUE-DIRECTED REMEMBERING IN YOUNGER AND OLDER ADULTS

Michael Cohen – PhD student in Psychology, UCLA

Alan Castel – Assistant Professor of Cognitive Psychology, UCLA

Jesse Rissman – Assistant Professor of Cognitive Psychology, UCLA

Barbara Knowlton – Professor of Behavioral Neuroscience, UCLA

Aimee Drolet – Professor of Marketing, UCLA

Summary: The ability to use memory effectively requires one to focus on more important to-be-remembered information at the expense of less important information. Previous studies have shown that, at least in certain contexts, older adults are able to successfully prioritize the encoding of valuable information. Still, relatively little is known about the cognitive and neural mechanisms that underlie the ways in which high-value items are processed differently from less valuable items, particularly in healthy older adults. In this research project, an fMRI study will adapt Castel et al.'s behavioral paradigm to characterize neural correlates of value-directed remembering in young and older adults. In addition, to provide a stronger connection between the laboratory measure of value-incentivized remembering and real-world economic outcomes, the project will relate individual differences in selectivity on the word memory task with more traditional measures of economic decision-making.



FINANCIAL DECISION MAKING AT RETIREMENT

Vinod Venkatraman – Assistant Professor of Marketing, Temple University

John Payne – Professor of Business, Law, and Psychology, Duke University

This project examines complex decisions like annuities and accumulation of retirement investments in older adults using a multi-methodological approach that involves behavioral, eye tracking, and neuroscience experiments. A major emphasis will be on the development and validation of decision-making tasks that represent the complexities of real-world decisions and yet are suitable for experimentation using all three methodologies. This research will be carried out in two phases. The first will be an exploratory phase where the researchers will design and validate complex decision-making tasks that are suitable for laboratory evaluation using eye-tracking and fMRI. In phase 2, the researchers will obtain pilot data about the effects of aging on decision preferences in this task.

