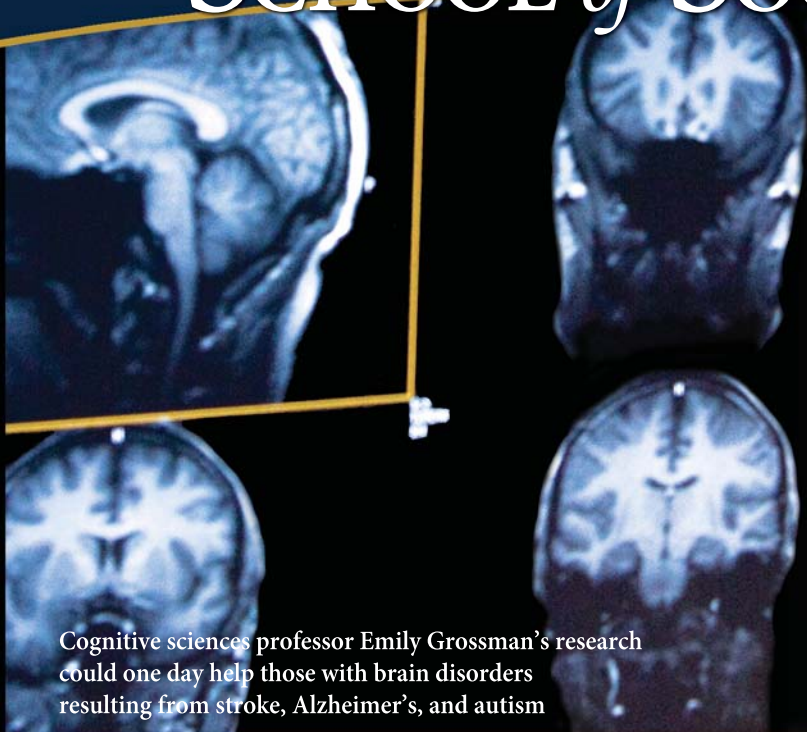


SCHOOL of SOCIAL SCIENCES

where I make a difference



Cognitive sciences professor Emily Grossman's research could one day help those with brain disorders resulting from stroke, Alzheimer's, and autism

COGNITIVE SCIENCES

The Department of Cognitive Sciences at UCI addresses one of the greatest current scientific challenges — to understand the human mind and its biological foundations.

Cognitive scientists within the department use noninvasive imaging and computational methods to understand the neural and computational basis of complex human behaviors including language, attention, consciousness, memory, multi-sensory integration, social cognition, and individual, economic, and social decision making. Their multidisciplinary approach combines concepts and tools from psychology, engineering, computer science, neuroscience, and medicine to answer one of the most vexing questions in science: how does the mind work and how can we fix it when it doesn't?

Findings from their research impact our scientific understanding of diseases and disorders including Alzheimer's, schizophrenia and autism, to name a few.

The department is home to 29 faculty, many of whom have received international recognition for their distinguished research achievements. Among this group are four members of the prestigious National Academy of Sciences, nine fellows and two William James fellows of the American Psychological Society, eight fellows of the American Psychological Association and five fellows of the Society for Experimental Psychology.

More than **1,000 students** are currently enrolled in cognitive sciences programs at UC Irvine, one of which includes the cognitive psychology program which is ranked 13th in the nation.

Research within the department is clustered in several areas:

Attention, Memory and Information Processing

Research in this area seeks to understand how the brain selects inputs and sustains effort, stores and retrieves information in memory, and processes information for reasoning and decision. This area has implications for attention deficit disorders, autism, memory deficits, and deficits in social interaction.

Hearing and Language

Discovery of the brain process that understand complex sounds, speech, and language and music. This research has implications for developmental delays of language, aging, and stroke.

Vision, Perception and Action

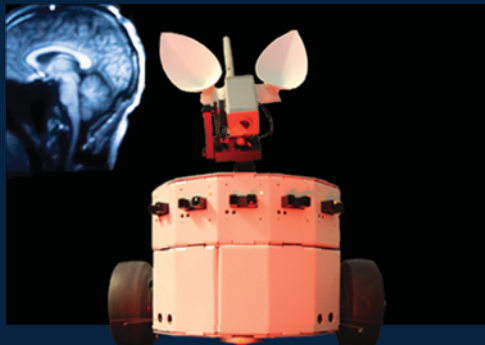
Discovery of the brain processes that create integrated sensory perceptions, process visual inputs, and organize motor responses. Applications include low vision, developmental and disease reductions in motor function.

Computational Neuroscience

Creating computational models of how humans process information, and of the brain mechanisms underlying those processes.



INVESTIGATE



INNOVATE



IMPACT

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Innovative, State of the Art Technology

Modern research in mind, brain, and behavior requires new tools to measure brain regions and brain states in humans as they carry out mental tasks. These include electrical (EEG) and magnetic (MEG) measures of brain activity and functional magnetic resonance images (fMRI) of brain state.

- **fMRI Brain Imaging Facilities**
Systems for measurement of functional magnetic resonance images (fMRI) that measure brain activity in humans, with auditory display capabilities.
- **EEG/MEG Brain Imaging Facilities**
Electrical and magnetic measurement of brain activity, including simultaneous measurement of EEG with fMRI.
- **Auditory, Visual and Behavioral Testing Facilities**
Anechoic chambers, sophisticated visual displays, and systems to measure human movements.
- **Computational Modeling**
Computer and robotic systems to model human brain and behavior.

Investing in People

To recruit and retain top scholars, facilitate excellence and growth in our academic programs and interdisciplinary centers and strengthen community service and outreach, we need your investment.

- **People**
Named Chairs in Cognitive Science (2 @ \$2M)
Graduate Endowed Fellowships (4 @ \$250K)
Graduate Term Fellowships (4 @ \$10K)
Undergraduate Scholarships (4 @ \$125K)
- **fMRI/EEG/MEG Brain Imaging Facilities**
Equipment Expenditures: \$3M
- **Annual Budget from Endowment Earnings:**
Directors research stipend: \$50K
Graduate Fellowships: \$50K
Research stipends for special research projects: \$50K
Facilities staffing, equipment contracts, etc.: \$200K
- **Audition, Vision, Perception and Action Facilities**
Equipment Expenditures: \$500K

Your gift to cognitive sciences has the power to transform individuals and communities and truly make a difference. Contact us or visit us online at www.socsci.uci.edu to learn how past donations have helped fund our future leaders.