



THE UNIVERSITY OF ARIZONA  
COLLEGE OF SCIENCE

Psychology

### UA Psychology Department Research Faculty Interests

Alexander, Gene

The study of brain-behavior relationships in the context of aging and age-related, neurodegenerative disease, the use of univariate and multivariate network analysis techniques with multiple neuroimaging methods and measures of neuropsychological function, health status, and genetic risk to understand how these factors interact to influence cognitive function as we age

Allen, John J.B

Rtiology and treatment of mood and anxiety disorders, risk factors for depression using electroencephalographic and autonomic psychophysiological measures, especially EEG asymmetry, resting state fMRI connectivity, and cardiac vagal control. Development of novel and neurally-informed treatments for mood and anxiety disorders, including Transcranial Ultrasound, EEG biofeedback, and Transcranial Direct Current and Transcranial Alternating Current. Other work includes understanding how emotion and emotional disorders influence the way we make decisions and monitor our actions. Joint appointments with Cognitive Science and Neuroscience

Andrews-Hanna, Jessica

Internally-guided processes spanning self-referential thinking, memory, future thinking, emotion, and mentalizing; Mind-wandering, imagination and creativity; Neural and physiological underpinnings of internally-guided cognition & resting state connectivity; Changes in internally-guided cognition in aging and dementia; Dysfunctional thoughts in mental health disorders (i.e. depression & anxiety). Joint appointments in Psychology and Cognitive Science.

Barnes, Carol A.

Behavioral and systems neuroscience, aging, memory, hippocampus. Joint appointments with the Department of Neurology, Bio5, ARL Division of Neural Systems, Memory and Aging and Evelyn F. McKnight Brain Institute.

Bever, Thomas G.

Language and Cognition, including Learning, Music, Sentence Processing, Reading and Cerebral Asymmetries in humans and animals. Joint appointment with Cognitive Science, Linguistics and Neuroscience.

Ying-hui Chou	Investigating human brain connectivity and its relation to behavior. Developing image-guided transcranial magnetic stimulation (TMS) protocols to enhance cognitive functions in healthy adults and clinical populations (e.g. Mild Cognitive Impairment and Parkinson's disease).
Cowen, Stephen	The neurophysiological investigation of decision making, memory, and navigation.
Croft, Alyssa	Understanding how the self-concept is changed by social roles and societal expectations. Examining the effects of group membership on perceptions and evaluations of the social world. Identifying ways to promote positive and productive interactions within and between social groups.
Edgin, Jamie	Memory development and disorders of memory, neurodevelopmental syndromes, sleep and cognitive development, ERP and EEG approaches to the study of memory, Down syndrome.
Ekstrom, Arne	Human spatial navigation, a historic strength of UA psychology, and an important area of study because of how fundamental it is to our everyday lives. We employ techniques like high-resolution functional magnetic resonance imaging, encephalography (EEG), and patient work, all distinct strengths of UofA research. Our inter-disciplinary research — which has foundations in computer science (via virtual reality and neural networks), geographical science, cognitive science, linguistics, neurology, neurosurgery, and others — will benefit significantly from the collaborative and enterprising spirit of University of Arizona.
Fellous, Jean-Marc	Neural bases of spatial navigation in complex environments. Neural basis of emotion and motivation, role of neuromodulator substances in changing information processing in large neural networks, use of rat in vitro and in vivo behaving preparations, optogenetics, and computational models to understand neural mechanisms and computations.
Fernandez, Fabian	Identifying circadian factors during middle age that increase risk for later-life cognitive impairment. Developing novel, light-based treatments to stem loss of cognition during aging. Establishing basic principles for how circadian function shapes memory processing.

Figueredo, Aurelio J.	Evolutionary psychology, psychometrics, and behavioral genetics of life history strategy, personality, sex, aggression, and predation in human and nonhuman animals, especially insects, birds and primates; Behavioral development and evolution, behavioral ecology and sociobiology, research and quantitative methodology.
Gerken, LouAnn	Early language development with emphasis on language structure (phonology and syntax). Comparison of language structure learning in infants and adults. Comparison of language and music development.
Gomez, Rebecca	Learning and memory development in infants and young children. Language development in infants and young children. The role of sleep in memory formation in infants and young children.
Greenberg, Jeff	Social psychology, self—esteem, prejudice, aggression, political attitudes, self—awareness and depression. Joint appointment with Communication.
Grilli, Matthew	Neuropsychology and cognitive neuroscience of memory, in particular autobiographical memory. Populations of interest include individuals with brain lesions and older adults, spanning cognitively healthy to dementia.
Hamann, Heidi	My research is broadly focused on psychological and behavioral aspects of cancer screening, diagnosis, and survivorship. I am interested in the psychosocial consequences of a cancer diagnosis and testing interventions to ameliorate significant concerns. My recent work has identified stigma as a considerable challenge for patients with lung cancer; our lab is developing an intervention to lessen stigma. Another focus is on cancer survivors, including efforts to improve their quality of life.
Isham, Eve	Temporal awareness and time perception, action agency and intentionality. While these cognitive processes are essential to our daily lives, we have a limited understanding of how they operate and how they may be altered or compromised under different mental or health states. To further investigate, my lab employs techniques such as EEG, eye tracking, and TMS to observe the psychological and neural mechanisms of these cognitive processes.

Jacobs, W. Jake	Learning Rule Governance, Context (spatial and social), cognitive mapping, executive function, stress, fear, anxiety, and trauma; clinical neuropsychology; cognitive neuroscience; anxiety disorders; evolutionary psychology. Joint appointment with Psychiatry; Fellow in Sports Medicine; Directory Anxiety Research Group.
Vicky Lai	Using electrophysiological, imaging, and behavioral methods to study language meaning in context, including figurative language, emotion and language, and language and thought
Mehl, Matthias	Psychological implications of our everyday lives; personality expression; person perception; social interactions, coping and health, naturalistic observation, psychological text analysis.
Nicol, Janet L.	Comprehension and production of native and second languages, word learning, eye movements during reading. Joint appointments with Cognitive Science and Linguistics. Member of Graduate Program in Second Language Acquisition and Teaching.
O'Connor, Mary- Frances	Grief, loss and social stress research, using methods of psychoneuroimmunology, neuroimaging, autonomic physiology and virtual reality. Particular interest in aging and social isolation.
Peterson, Mary A.	Cognitive neuroscience of shape and object perception; face perception; context effects; attention; perceptual learning.
Piatelli-Palmarini, Massimo	The interdependence of cognitive and normative approaches to decision making. Linguistic theory, notably lexical semantics, the theory of concepts and the biological foundations of language. Joint appointments in Cognitive Science and Linguistics.
Ruiz, John	Investigate how our social lives constitute both risk and resilience for physical health with special emphasis on racial/ethnic and cultural differences in these effects. These efforts will use a variety of methods including community and hospital-based observational studies, surveys, ecological momentary assessment, ambulatory psychophysiology, and laboratory based paradigms. Prospective students with interests in cardiovascular disease, psychophysiology, social/interpersonal functioning, and/or racial/ethnic health disparities are encouraged to apply.

Ryan, Lee	Neurological basis of memory and memory disorders, functional magnetic resonance imaging, aging and memory, risk for Alzheimer's disease.
Sbarra, David A.	Social connectedness and health. Relationship dissolution, including divorce and non-marital breakups. Attachment processes. Experience sampling and quantitative methodology for the analysis of change.
Schwartz, Gary E.	Psychophysiology of love and emotion, emotional and spiritual factors in health psychology, energy clinical psychology and energy medicine.
Stone, Jeff	Cognitive dissonance theory, the self, stereotypes, attitudes and persuasion, person perception, social psychology applied to health, legal issues, and sports.
Sullivan, Daniel	Suffering, anxiety, guilt, cultural differences, religion and terror management.
Walker, Tammi	I conduct research that uses psychological theory and empirical research methods (both qualitative and quantitative) to generate evidence that can be applied to real-world legal problems. Policies and procedures are the focus of my work. I am most interested in improving outcomes by challenging the validity of commonly held beliefs that often support legal decision-making. My work includes an examination of the procedures used by colleges and universities to adjudicate sexual misconduct. Additionally, I conduct research designed to improve outcomes for delinquent youth by combating bias in treatment and punishment decisions.
Wilson, Robert	Computational, behavioral and neuroimaging studies of exploration, reinforcement learning and decision making. Joint appointment with Cognitive Science.