

FACULTY RESEARCH AREAS

Dr. Andrew Ainsworth

My research interests center around the development and application of advanced statistical methods to improve the measurement and testing of psychological phenomenon. Studying quantitative psychology has afforded me the ability to work in many subfields of psychology and this is one of the reasons I am pursuing a degree in quantitative psychology. I plan on continuing my research and actively pursuing outside support to fund future research, which will involve both undergraduate and graduate student assistants.

Dr. Alyssa Arentoft

My research explores brain-behavior relationships in disease states using a biopsychosociocultural framework. I am particularly interested in health disparities and health-related outcomes among underrepresented and disenfranchised populations. My current work is focused on individuals with HIV/AIDS. Ongoing projects in this area include an NIMH-funded study examining longitudinal changes in the brain among HIV+ individuals as a function of HIV antiretroviral medication. Changes are measured using neuropsychological testing to assess cognitive functioning and MRI diffusion tensor imaging (DTI) to assess white matter integrity. Differences in healthcare quality between non-Hispanic white and African American participants, as well as factors associated with these differences, are also being examined.

Dr. Meeta Banerjee

My research employs both integrative and ecological frameworks to understand the influence of contextual factors on early and late adolescent developmental trajectories in ethnic minority families. I am especially interested in exploring the interaction between ecological contexts (e.g., schools, families, neighborhoods, racial discrimination, and communities) and racial socialization practices and processes. Moreover, I investigate how these factors are both directly and indirectly related to mental health and educational outcomes in ethnic minority youth.

Dr. Sara Berzenski

My research investigates emotional development in the context of adversity, from a developmental psychopathology perspective. I am interested in the ways that emotional development is altered in the context of child maltreatment, as well as the ways in which emotion competence skills may mitigate the negative impact of adversity on adaptation. In addition, I am interested in approaching these questions using diverse quantitative analytic techniques and measurement approaches, as well as applying a developmental perspective to quantitative issues. My current research projects include studying multi-domain adversity experiences in children, emotion and behavior regulation across development, and masked emotional expressions in the context of hostile parenting.

Dr. Gabriela Chavira

All of my research projects focus on successful transitions to adulthood for immigrant and ethnic minority youth. The Developing College Awareness and a College-Going Identity in Latina/o Youth is a new research project is currently being developed with the help of my two graduate researchers. For this project, we developed a six-workshop series for Latina/o parents and their adolescent youth (early adolescence through late adolescence) with the aim to a) increase their college knowledge, b) provide instrumental support and guidance navigating the college application process, and c) increase the number of Latina/o youth who apply for and enroll in four-year colleges and universities. We also have two ongoing studies, the Mentoring Matters Research Study and the Psychological Functioning and Cultural Discontinuity Project.

Dr. Stefanie Drew

My research spans across several different areas involving visual perception and neuroscience. These topics currently focus on:

- (1) Virtual Reality (VR): with the recent emergence of new immersive virtual reality systems on the market, little is known about the impact of these machines on the ocular system. We are currently exploring potential impacts these systems have on the accommodative and vergence oculomotor systems.
- (2) Asthenopia: asthenopia, or visual discomfort, is a common condition that is characterized by symptoms that can include sore eyes, blurred vision, headaches, re-reading when performing near-work tasks such as reading or looking at a computer screen. Currently we are utilizing a combination of

techniques including surveys, psychophysics and eye-tracking to examine the relationship between this condition and accommodation.

- (3) Synesthesia: synesthesia is a fascinating condition in which individuals experience additional sensory perceptions when viewing a stimulus. Currently we are investigating the effects of attention on synesthetic perceptions in grapheme-color synesthetes, individuals that experience colors when viewing black and white letters and numbers.
- (4) Electroencephalography (EEG): Currently, we are designing experiments to include EEG methods to examine the timing of neuronal responses to particular visual stimuli.

Dr. Elise Fenn

My lab examines the application of cognitive psychology (memory, judgment/judgment bias, and decision making processes) to improving society. Current work focuses on two main areas:

- (1) Understanding the cognitive processes involved in lying, and how those processes differ from telling the truth. Understanding these cognitive processes will help improve forensic interviewing techniques used by the police. One particular ongoing project examines the potential discrimination that occurs when minorities are accused of a crime.
- (2) Understanding judgment biases for fake news sources. Graduate students could work on a project that investigates how photos bias attention to, and belief in, fake and true news presented via social media. As a graduate student in the lab, I require at least 10 hours per week of work on your thesis.

Dr. Que-Lam Huynh

The primary focus of my current research is on prejudice and discrimination, specifically the relationship between such experiences and minority identity and well-being. In particular, I am most interested in understanding the effects of contemporary, subtle forms of prejudice, such as microaggressions. Thus, my primary focus is on the target's perspective (the person experiencing the microaggression) rather than the perpetrator (the person committing the microaggression).

Currently, this interest translates to various projects in my research group to (a) identify and quantitatively measure microaggressions directed at various marginalized groups (e.g., racial and ethnic minorities, LGB individuals, deaf and hard-of-hearing individuals, farm workers); (b) elucidate the affective, motivational, and cognitive mechanisms underlying the experience and interpretation of a microaggression; and (c) quantify the effect of microaggressions on the target's psychological and physiological well-being.

A secondary interest is in the sociocognitive foundations of microaggressions in an interpersonal context. Specifically, I focus on how attitudes and beliefs that operate outside of conscious control serve as the basis for expressing and interpreting microaggressions in everyday life.

Students working in my research group get exposure and training in a variety of research methods, depending on the research project and what is most appropriate for the questions being investigated. These methods include survey research, interviews and focus group research, archival research, and experimental research.

Dr. Sun-Mee Kang

Two projects are currently undergoing in my research lab.

- (1) I investigate the differences in emotion information processing between deaf signers and normally hearing non-signers using the Electroencephalography (EEG). We are particularly interested in N250 and P300 on frontal (F3, FZ, F4) and parietal (P3, PZ, P4) sites.
- (2) I explore the priming effect of racial discrimination on the bicultural identity of Asian Americans. Using implicit and explicit priming tasks, we are currently testing whether priming the past experiences of racial discrimination would lead them to make stronger ties with their American identity.

Dr. Justin Kantner

My work examines both basic/theoretical and applied questions in human memory and cognition, particularly at the intersection of memory and decision making. So many of the decisions we make are based on some form of supporting evidence from memory, yet memory is notoriously faulty. I am interested in the ways that evidence from memory is evaluated and translated into a decision, and the biases that enter into this process when memory evidence is incomplete or ambiguous. Three general goals guide this work: first, to identify biases that unify recognition memory and other decision-making processes, with an emphasis on individual

differences; second, to determine the neural mechanisms of individual differences in the expression of these biases; third, to determine how these biases manifest behaviorally in applied settings.

Dr. Luciana Lagana

I conduct experimental research on the anti-bias effects of my original social impact documentaries; I also conduct clinical assessment research on the psychosocial factors affecting quality of life in older adults.

Dr. Debbie Ma

My research focuses on social psychological phenomena related to stereotyping and prejudice. Members of my research lab and I examine the ways in which race shapes thoughts, influences judgments, and impacts behavior. Currently, we are investigating how physical features that signal racial category membership influence downstream social cognitive processes like stereotyping and prejudice. We are also investigating different aspects of how individuals process human faces.

Dr. Bradley McAuliff

My research uses basic social and cognitive psychological theories to understand human behavior in applied settings. I have used multiple methods to examine a variety of empirical questions relating to people's involvement in the legal system. For example, how do jurors and legal professionals evaluate scientific evidence? Do law enforcement personnel who know the suspect's identity administer lineups fairly? What factors influence the accuracy of children's reports? Are jurors sensitive to these factors or could expert testimony increase their understanding?

Dr. Mark Otten

My research and teaching focuses on sport performance, sport and exercise psychology and statistics. I run the "CSUN Sport Psychology Lab" alongside Drs. Ashley Samson and Jacob Jensen from the CSUN department of kinesiology. Our lab welcomes students with an interest in sport, and/or the pursuit of sport and exercise studies in graduate school.

Dr. Scott Plunkett

Investigating individual, family, peer, school, and neighborhood qualities in relation to adolescent and emerging adult mental health and academics. Evaluating university and community programs that promote the health and well-being of children and adults.

Dr. Jill Quilici

My research interests lie in the area of cognitive processes, decision making, problem solving, expertise, knowledge representation, and analogical reasoning. My current primary research interest is in the area of decision making. In particular, I am interested in the issue of how people make decisions about their nutritional intake. At a theoretical level, I am interested in the decision-making process and what factors influence our decisions to stick with or abandon healthy eating goals in our daily lives. At a practical level, I am interested in studying potential environmental or educational interventions designed to promote healthier eating decisions with the goal of reducing obesity.

More generally, I am interested in how we can use our knowledge of human cognition to design interventions in practical settings. What can we do to promote effective decision-making that will be consistent our goals in health settings? In educational settings? How can we help people to learn from past experiences and use them effectively to make decisions or solve problems in new situations?

Research assistants in my lab will get experience assisting with literature review, data collection, data scoring, data entry, and data analysis for a variety of data types. In addition, students who are motivated to be more active participants in the lab can be involved in designing research studies (including thesis projects), designing stimulus materials for experiments, preparing and presenting research findings at conferences, and preparing research findings for publication.

Dr. Abraham Rutchick

I am eagerly seeking at least one graduate student for next year. In addition to my lab's ongoing interests in nonconscious processes and social perception, we work on other applications of social psychological theory: social identity and acculturation, political psychology, and health psychology. We also have an interest in emerging technology – both as a tool to study cognition and behavior (e.g., with smartphones and other

recording devices) and as a topic in its own right (e.g., questions of morality, agency, and trust in a changing technological landscape; people's perceptions of and relationships with machines).

Currently we have two ongoing projects in the lab.

- 1) Personalization of Machines: We have recently completed our first lab study examining the connection people feel toward machines (here, small robotic toys) with different features (names, gender pronouns, etc). We have several follow-up studies planned in this vein – broadly, the question of endowing machines with lifelike qualities is of great interest.
- 2) Clothing: We have conducted four studies on the impact of wearing formal clothing (which confers power) and hospital gowns (which remove power) on a variety of cognitive and decision-making processes. More research is needed to understand these effects.

We also are engaged in programs of research on subliminal priming and pain (a smartphone-based intervention that reduces acute pain; we are working toward testing it in chronic pain) and killing (the use of an ostensible ladybug-smashing machine to examine the situational factors underlying the decision to kill).

New students will work on one or more of these projects, in addition to developing research in areas of mutual interest.

Dr. Omar Ruvalcaba

In my research, I focus on the relationships between culture and the process of computer science learning. It is my goal to better understand how Latina/o children, adolescents, and emerging adults draw on their cultural strengths (such as experience with flexible collaborative approaches) to pursue careers in Science, Technology, Engineering and Math (STEM). I am currently working on research that focuses on the experiences of underrepresented students in computer science (Latina/os and women) and possible mental health repercussions of pursuing a stem degree as an underrepresented student.

Dr. Holli Tonyan

My research interests examine children's development as part of social and cultural contexts. My interests are quite broad, but my research has focused on infancy through early childhood (before starting school) and social and emotional aspects of development. I have particular expertise in attachment theory, socio-cultural historical activity theory (SCHAT, following Vygotsky's legacy), ethology (drawing on evolutionary biology), mixed-methods, observational methods, and exploratory/graphic data analysis. Recent projects focus on in-home non-parental child care, specifically licensed family child care, commonly referred to as "home day care".

I am beginning a new line of work into associations between friendships, peer interactions and children's physiological stress responses (salivary cortisol and alpha amylase) in family child care. Several mixed-method projects are available for student involvement, but most current efforts focus on family child care providers' descriptions of their daily routine activities (in-depth qualitative interviews). Other recent projects have examined parents' responses to an internet survey of daily transitions between home and child day care settings (e.g., drop-off and pick-up times), a survey of child care providers to better understand the ecology of child day care settings in the San Fernando Valley, and mother-infant interaction among low-income Latino families (archival video or observational analysis).

Dr. Carrie Saetermoe

As a collaborative effort that involved many dedicated faculty and students, I developed and led a 12-year undergraduate program, NIMH Career Opportunities in Research (COR) that was highly successful in training undergraduates who moved on to doctoral programs (59.6%) or other degrees (an additional 36.5%) in psychology or allied fields. Students from the program are now neuroscientists, professors, social workers, researchers, and graduate students. For this program, I developed 9 honors courses, one of which teaches undergraduate students qualitative methods (grounded theory specifically, but introduces many methods generally). COR was a community of scholars and scholar-activists who worked on collaborative research related to mental health. NIH NIMH COR 2001-2011, California Endowment and The California Wellness Foundation, 2006-2012.

Another collaborative project I wrote and coordinate is a grant from the NIH's National Institute for Minority Health and Health Disparities entitled Research Infrastructure in Minority Institutions (RIMI). This program supports the development of faculty members and students by building a community around health equity research. The central purpose of our RIMI grant is to improve skills in ecologically valid research through working with community health care partners and in ecologically valid laboratory research for certain

types of research questions. We provide extensive training from specialists in research methodology and support over 80 faculty members, 20 intensively, and 12 students in cooperative research. NIH NIMHD RIMI 2009-2014, PI: Provost Harold Hellenbrand, Program Coordinator: Carrie Saetermoe

An innovation that links COR and RIMI is our notion of academic-community partnerships. I developed a program, along with the California Endowment, and now Janet Oh runs it, whereby students work as data managers for health-related nonprofits who need assistance in conducting program evaluation and write grants. Both COR and RIMI build communities with high expectations for all involved – faculty conduct new research and write grants and publications based on new training and technology, students build the skills required to succeed in graduate school and STEM-related careers, and local nonprofits benefit from sharing their wisdom with the academic community by integrating data interns who then often assist in program evaluation and grant writing.

I have taken a delegation of undergraduates on two occasions to work at FUNDABIEM, a nonprofit rehabilitation center in Guatemala City (there are actually several campuses of FUNDABIEM, Guatemala City is the largest). There, we conducted research and volunteered, fund-raised and brought out wheelchairs, therapeutic materials, and other resources for the children and adolescents who attend there. We developed workshops for parents on disability stigma, prenatal nutrition, talking with your doctor, and a variety of other topics devised from our first trip. We maintain our relationship with psychology professors from Universidad de San Carlos de Guatemala.

Dr. Erica Wohldmann

My research is concerned with factors that influence learning and memory for knowledge and skills, as well as decision-making.

- (1) Divided Attention and Learning: Situations that require divided attention can impact learning, memory, and performance of tasks in a variety of ways. My research in this area examines how cognition changes as a function of secondary task demands (divided attention). In the past, we have found learning to be highly specific to the task requirements, and future research will explore conditions under which learning is more flexible. Because divided attention can be thought of as a stressor, this research helps to inform how learning and memory are altered by conditions of stress.
- (2) Motor Imagery: Have you ever wondered how your thoughts influence your actions? Can thinking lead to doing? In my laboratory, I examine the impact of motor imagery, defined as the simulation of movements in the absence of any overt physical action, to understand the relationship between thinking and action. For example, I conduct experiments to test people's ability to use motor imagery to learn new motor skills and for maintaining motor skills over long delays. This research has important theoretical implications for understanding motor control and motor programming, as well as numerous practical applications to stroke rehabilitation, recovery from injury, and skill learning and retention.
- (3) Cognitive Factors that Influence Decision-Making about Nutrition and the Environment: What we choose to eat has huge impacts on social and environmental issues. For example, diet-related diseases such as cancer, heart disease, and diabetes are the leading causes of death in the U.S. Agricultural pesticides are polluting our rivers and streams, drinking water that is necessary for maintaining life. I design experiments to examine factors that influence food choices, but this research on decision-making and consumption can be applied more generally to understanding why we consume anything--material products and media, for example. The goal of this work is to better understand how to create a more environmentally and socially conscious world.

Research assistants who work in my lab will gain valuable experience conducting psychological research, which will make them highly competitive applicants for graduate programs. They are trained to help me collect data by testing human subjects, to do library research, and to help me analyze data