

Dear 23 and 24E Psych Majors:

This is a friendly reminder that applications for juniors and sophomore Es interested in doing a thesis are **due March 24, 2023 at 5pm.**

Here is a link to the online application:

<https://forms.gle/VAnhNd5RsKLTG35d8>

The application asks about courses you have taken and the specific faculty members you would like to work with. Because the process of matching students with thesis advisors only occurs once a year, Sophomore E students interested in doing a thesis must complete the application in March, 2023.

In psychology, the focus of the thesis is developed collaboratively through discussions with the thesis advisor and typically centers on a topic within the advisor's area of expertise. It is advantageous and sometimes necessary to have had a course with the professor in whose research area one is interested. For some types of projects, students may need prior experience working in the advisor's lab or be required to work on-campus over the summer on their thesis. **Thus, you will need to have a conversation with faculty members that you are interested in working with to learn about the types of research projects you could do and any requirements.** Please see the description below of faculty research areas.

Please also remember that if you do not list three faculty members that you are interested in working with, you risk not matching at all. We will assume that students who do not list three faculty members would prefer to not write a thesis if they are not able to be matched with the faculty they have listed.

If you have any questions about the thesis process, you may email me as chair of the department (jmcquade@amherst.edu) or speak with your academic advisor.

Best,
Prof. McQuade

Faculty Research Interests for Honors Work

Professor Bair.

My research seeks to identify factors that contribute to or erode the wellbeing of members of stigmatized racial groups. At present, I am especially interested in Black racial ideologies as predictors of Black wellbeing. Black racial ideologies are the beliefs that Black individual may hold about how Black people should manage issues of race and interact within the larger society. I would be happy to support thesis projects building on this work. For example, I have conducted research examining relationships between Black racial ideologies, implicit bias, and race-based disadvantage. I would be excited to supervise projects examining how Black racial ideologies relate to other social justice, health, or educational outcomes (as well as other objective indicators of wellbeing that students may want to pursue). I would also be interested in supporting projects examining how racial ideologies manifest among other Non-Black POC. In a second line of research, I seek to identify how mainstream racial socialization impacts how research on racial disparities is conducted. Students interested in understanding the impact of references to race in self-report measures assessing racial difference are encouraged to contact me. I am also interested in exploring whether mainstream racial socialization messages influence how researchers choose to assess racial differences. I look forward to discussing possible thesis projects with interested students (email Allison.Bair@du.edu). Psychology 220 is strongly recommended as a background.

Professor Baird

My research is devoted to uncovering neural and psychological mechanisms that control feeding behavior. I have used modern behavioral analysis, pharmacological, and neural electrophysiology recording techniques to explore how various drugs and other treatments affect feeding behavior and taste coding in the brainstem. In past honors projects I have used behavior microstructure analysis methods to evaluate how direct brain application of novel neuropeptides recently implicated in obesity specifically affect feeding behavior. Previous thesis projects have also explored animal models of binge eating. The aim of these studies is to clarify the brain circuits through which obesity-related neuropeptides act and possibly how these circuits may become imbalanced in cases of obesity. For future thesis projects I am interested analysis of previously collected data related to the above studies, and in non-empirical studies that explore brain interactions with metabolism. Psych/Neur213 is strongly recommended as background.

Professor Cohen

The moment we open our eyes, we all have the subjective experience of a rich, vastly detailed visual world. However, a wide variety of results strongly suggest this is not true and that we actually aware of very little of what's going on around us. Drivers often get in accidents saying they "just didn't see" the object they drove into, viewers don't notice a plane flying in the background of a movie set in ancient Greece, and sometimes you simply can't find the object you're looking for even though it's directly in front of you. My research uses neuroimaging (fMRI) and behavioral techniques to investigate how much information we can perceive and remember from the world around us. Broadly speaking, I ask questions like: Why is some information perceived and remembered while other information goes unnoticed and is forgotten? What are the cognitive and neural factors that limit the bandwidth of memory and perception? Is information that you don't consciously perceive still processed by the brain subliminally? How much? Possible topics for thesis projects include using behavioral methods to measure what kind/how much information can be processed by the unconscious mind, as well as using a combination of behavioral and neural measures to understand how the functional organization of the brain acts as a bottleneck on perception and memory. However, there are many possibilities for thesis work in my lab for students interested in any of the aforementioned topics and questions.

Professor Demorest

My research focuses on the role of emotion in personality. In past research I have examined

individual differences among people as to which emotions are most prevalent in a person's life (e.g., some people are more prone to anxiety and others to sadness). I have also examined individual differences in people's emotion scripts, that is, the expectations people hold about how emotions are evoked and how to respond to them. For example, some people respond to anger by suppressing it whereas others respond to anger by acting it out aggressively. I usually study these things by collecting emotional memories from people and then coding those memories for thematic patterns. Recently I have collected autobiographical memories from a large number of people about anxiety and positive emotions. Future thesis students could analyze these narratives to see if there are individual differences in the ways people tell their emotional memories, and whether those differences determine how they feel after telling them. Personality (PSYC 221) or one of my seminars (PSYC 338 or 353) are strongly recommended as background.

Professor Hart

My research explores the role of interpersonal expectations in guiding human behavior in both laboratory and applied settings. I have conducted and supervised projects examining judges' expectations and nonverbal behavior in real trials, legal decision making in civil and criminal cases, and laboratory studies examining how physical characteristics (e.g., race, gender) and nonverbal behavior affect how we perceive and respond to others. For example, a recent honors project manipulated respondents' mood to see if induced negative mood, versus positive mood, would lead people to categorize outgroup members more quickly than they categorize ingroup members. Another project compared the recognition accuracy for same- versus cross- race faces across two different cultures.

Professor McQuade

My research examines social adjustment in children and adolescence. Some children are well liked, make friends easily, and are good at reading and understanding social cues. Yet other children struggle to make friends, are rejected or bullied by peers, and engage in behaviors that are harmful to others. My research seeks to understand the cognitive, emotional, and environmental factors that explain these differences in social functioning. Some of my research focuses specifically on children with Attention-Deficit/Hyperactivity Disorder (ADHD), who often demonstrate significant social impairments and other work focuses on social impairments in children more generally. My most recent work focuses on how children's emotion regulation capacities relate to their social behavior and adjustment. To examine this, I measure differences in how children respond physiologically to social stressors (i.e. changes in heart rate) and how that relates to their social adjustment. I am interested in how external factors, such as parenting, may serve to either exacerbate or protect children who struggle to regulate their emotions. Students interested in completing a thesis with me have the opportunity to work on ongoing data collection projects with child or college participants and to add their own measures. I strongly recommend that interested students work in my research lab junior year. Staying on campus for the summer to complete data collection also may be a requirement. Psychology 228 is strongly recommended as background.

Professor Palmquist

Broadly, I'm interested in questions of how children learn from others. There are two main ways that children learn about the world around them: gaining first-hand experience (e.g., tasting a lemon and figuring out that it's sour) and learning information from other people (e.g., hearing that lemons are sour, and believing what they're told). Understanding the process by which children learn from others is particularly important because much of what children need to know about the world cannot be learned through first-hand experience (e.g., the fact that the earth is round), instead, they must simply listen to others and trust what they are told. Learning from others also requires that children be discerning in terms of who they trust: they need to identify and rely on those who are knowledgeable and helpful, and identify and ignore those who are ignorant or deceptive. My research is focused on better understanding

how and when children choose to learn from others. One line of my research asks whether children evaluate others' nonverbal cues (i.e., pointing gestures), in addition to their spoken language, to determine good sources of information. Another, more recent, line of my research explores the variation and complexity in how children learn from others. In this line of research, we explore whether individual differences, previous experiences, and context affect children's decisions to trust others as good sources of information. I have ongoing studies that are conducted in local preschools and with children who come into my research lab. Students interested in completing a thesis with me have the chance to work on these existing projects and develop related manipulations. I strongly recommend that interested students work in my research lab during spring semester of their junior year. Staying on campus for the summer to complete data collection may also be a requirement. PSYC 227 is strongly recommended as a background.

Professor Sanderson

My research is based in social psychology and specifically on the power of social norms to shape people's attitudes and behavior, factors that lead people to misperceive such norms, and the consequences of feeling different from members of our social group. Thesis projects could examine individuals' accuracy in perceiving others' attitudes and behaviors as well as how such perceptions (and misperceptions) influence one's own attitudes and behaviors. For example, women see other women as thinner and as exercising more than they themselves do, which increases the risk of disordered eating, and both men and women see others as hooking up more frequently than they themselves do, which can lead to feelings of loneliness. Thesis projects could examine factors leading to such errors, the consequences of such perceptions, and/or strategies for changing these perceptions across numerous different types of health behaviors (e.g., hooking up, sleep, stress, eating and exercise behavior, etc.). Several recent thesis projects have examined different strategies for reducing mental health stigma and increasing willingness to seek out the counseling center; projects could also examine strategies for helping people speak up in the face of bad behavior (e.g., sexual misconduct, bullying, hazing, etc.). I have also supervised topics related to sport psychology, such as how beliefs about student-athletes influence individuals' attitudes and behavior in academic and athletic domains and strategies for increasing acceptance of reporting concussions. Most recently, my thesis students have examined the link between belongingness and well-being, including how various factors moderate this relationship (e.g., athlete status, gender, class year) and the influence of COVID on both belongingness and well-being. Psychology 220 is strongly recommended as background.

Professor Schulkind

My primary interests are in the field of autobiographical memory, which is memory for the events of one's life. I have recently begun to examine how one's personal identity is related to their memories for past experiences. Although many theorists believe that we know ourselves only by reflecting on our past experiences and behaviors, there are others who believe that our sense of self is entirely separate from our past experiences. Potential thesis topics might explore whether differences in personality (e.g., extraversion) and identity (e.g., I consider myself to be honest) influence the kinds of personal experiences that an individual regards as 'important'. I am also very interested in music cognition, especially how people identify melodies. Although people can easily name 100s of different songs, we know very little about how listeners distinguish 'Frosty, the Snowman' from 'Rudolph, the Red-Nosed Reindeer'. Current work in my lab is examining how expertise affects melody identification, the relationship between music and language, and whether musical training influences cognitive performance on other kinds of mental tasks. In addition to these topics, I am willing consider other questions relating to music and memory.

Professor Turgeon

My research is in the area of behavioral pharmacology. Recent work in the lab has focused on the effects

of caffeine on adolescent male and female rats and humans. In rats, we have identified a number of behavioral effects following exposure to caffeine in the drinking water, some of which vary by age and sex as well as housing conditions. Current questions in the lab revolve around assessing the longevity of these effects and attempting to identify possible neural correlates to these behavioral effects. Behaviors examined in the lab include object recognition memory, elevated plus maze behavior, light/dark box behavior, marble burying and behavior in the forced swim test, an animal model for depressive-like behaviors. Studies in humans have revealed sex differences in the effects of caffeine exposure on the response to a stressor and we are continuing to describe the nature of these differences. In another line of research, students in my lab have been investigating sex differences in drawing behavior and visual processing in humans and their possible relationship to early hormone exposure.