With the beginning of the fall quarter, DU’s classrooms, dorms, and libraries are bustling again. With exams on the horizon, Anderson Commons will soon be full of students, perhaps aspiring to enter medical or graduate school, hunkering down to study. While this behavior is familiar, it depends on a complex mix of motivational and cognitive processes we are just beginning to understand. The student in the library might draw on her future aspirations to help focus attention on the study material, ignore distractions such as friends’ text messages, and ultimately, master the concepts that she needs to remember.

The Motivation, Affect, & Cognition (MAC) Lab, directed by Dr. Kimberly Chiew, investigates the psychological and neural mechanisms by which motivation and emotion shape human cognition. We focus primarily on cognitive control – an umbrella term for attention, working memory and inhibition functions that make controlled behavior possible – and episodic memory – detail-rich, long-term memory representations of specific events. Our research has important implications for understanding how these processes support adaptive behavior in healthy individuals (in a range of settings, including education!) but also in conditions such as depression, schizophrenia, and attention-deficit/hyperactivity disorder (ADHD), where these processes are often disrupted.

We use a variety of research tools in our work. In many of our studies, we combine emotion and motivation manipulations (including happy/sad film clips or pictures, and reward or punishment
incentives), cognitive control or memory tasks, and physiological measures. This approach lets us investigate how emotion or motivation influence cognitive performance and what biological changes are associated with those interactions. For example, we use pupillometry (measuring the diameter of the pupil, using an eye-tracker) to examine how reward incentives change the timing of attentional processes during task performance, or brain imaging to characterize what neural circuits might be involved. We're also interested in how cognitive processes might differ under reward vs. punishment motivation, and the role of individual differences, such as personality measures, in influencing how emotion or motivational influences alter performance.

We investigate these mechanisms in naturalistic settings, as well as using laboratory tasks. A recent project in the lab has investigated whether positive vs. negative motivation leads to differing exploration and memory behaviors in a real-life art exhibit. Video data of exploration and emotional responses, together with use of individual difference measures, allow us a unique glimpse at motivated cognition “in the wild”. Findings from this project suggest that individual differences and motivational context interact to predict exploration and memory outcomes. In another project, we are studying real-life autobiographical memories for the night of the 2016 American election, and whether those memories differ depending on whether individuals considered the event positive vs. negative, and surprising vs. unsurprising. We are following individuals over a 12-month period to examine these memories over time.

The MAC Lab is launching at DU Psychology this fall and will be working on these projects and more. We are excited to be joining the DU community!

Alumni Matters

We are eager to share scholarship from our department with you – our alumni.

We invite you to join us for our inaugural "Psychology and the Public Good" research-sharing event, which is designed to showcase ongoing research in a setting that invites dialogue and sharing.

This first research-sharing event will focus on new scholarship from our Stress, Early Experience and Development (SEED) Center. During the event, you'll have a chance to talk one-on-one with graduate students and faculty doing research on this theme as well as hear four brief "lightning" talks from faculty on recent and ongoing work. We invite you to engage with us during this interactive event in order to share your reflections, ideas, and questions as you connect with alumni, friends, graduate students, and faculty!

Our focus for this first Psychological Science and the Public Good Event is on SEED research because we are excited to celebrate the recent launch and early success of this center.

Associate Professor Sarah Watamura notes: "With the creation of the Stress, Early Experiences and Development (SEED) Research Center, we have committed ourselves to work collaborative at the
forefront of the most pressing public health issue of our time. I am honored and energized by this incredible group of scholars and trainees and look forward to the exciting and impactful work to come.”

We look forward to seeing you on the 26th!

**When:** September 26th, 5 to 7 PM  
**Where:** Rose Andom Center  
[Register Here](#)

Can't make it?  
Watch the livestreamed lightning talks on Facebook via [facebook.com/DUPsyche](https://www.facebook.com/DUPsyche)

**Diversity Matters**

By Elly Barrow  
Developmental Psychology, Graduate Student

How does variation in refugee families’ experiences prior to their resettlement impact later mental health and integration? Are there culturally distinct strategies that caregivers use to protect their children from the psychological stress and trauma of the refugee experience? Once resettled, how do refugees promote resilience in their children after years of upheaval, chaos, physical hardship, and uncertainty?

These questions are central to a new project in the Child Health and Development lab, in partnership with the Traumatic Stress Studies Group, investigating resettled Syrian and Iraqi refugee families in the Denver area. As conflict intensifies in the Middle East, refugee populations from this region continue to grow in relevance and have largely spurred the recent global refugee crisis. Refugees are often exposed to war, trauma, and exploitation, are displaced and forced to migrate, and struggle to survive in other countries prior to their resettlement. After arriving in the United States, families are faced with stressors associated with navigating a new environment, language, and culture. Despite these adversities and challenges, most refugees do eventually successfully integrate and become meaningful contributors to their host communities. Understanding this incredible resilience after such extraordinary stress-exposure is the focus of our project.

While the unique experiences of refugee families merit careful investigation, approaching such sensitive topics in vulnerable cross-cultural groups at risk for exploitation requires special considerations. For instance, it is important to consider how our role as institution-based researchers may be perceived by groups who have historically been oppressed or betrayed by official institutions. Further, cultural differences may dictate the level of personal information participants are willing to share and language barriers may lead to misinterpretation of psychological concepts and expressions. To begin addressing these issues, our study will utilize mixed-methods, encompassing both qualitative assessment and quantitative analysis of caregiver-child physiological stress functioning and measurement of acculturation, mental health, coping and protective factors, and child behavioral health. We will conduct this investigation through a community-participatory framework, in which community partners and
culturally-rooted navigators inform and influence the study design and recruit and engage participants from their respective communities.

Many professionals and volunteers demonstrate commitment and desire to aid newly arrived refugee families; yet, their ability to provide evidence-based interventions is stymied by low consensus on risk and protective factors across populations. Our aim is to contribute culturally grounded evidence toward risk and protective processes, strengthen the professional service provider community by disseminating our findings in various community-forums, inform early preventative support services within resettlement agencies, and contribute to advocacy efforts.

**Major Matters**

By Carlyn Scheu  
President, Psi Chi

Psi Chi and Psychology Club are student-run organizations at DU that aim to get both undergraduate and graduate students involved within the Psychology Department. Our Psi Chi chapter is part of the larger International Honor Society in Psychology with chapters at universities around the world. Majors or minors in psychology are welcome to apply for membership, but there are certain credit hour and GPA restrictions. Psychology Club is an inclusive club that anyone can join. Both organizations work closely to plan events, host guest speakers, and help psychology students and faculty get to know each other.

This year, we are looking forward to hosting our four main events: Research Night, Psi Chi Induction, Grad School and Career Night, and the Psychology Department Picnic. In addition, we are hoping to host guest speakers from other universities and meet biweekly to get to know one another and talk about current events in the psychology world, from new research findings to psychology news at DU and around Denver.

Last Tuesday, September 12\textsuperscript{th}, we hosted our first event of the year with researcher Dr. Michael Nadorff from Mississippi State University. His talk, titled Sour Dreams, focused on his investigation into the link between sleep disturbances and suicide. Through his research, he has found that nightmares predict a higher risk of suicide, independent of other psychological factors that may explain nightmares and suicidal ideation. We are so grateful to Dr. Nadorff for visiting our campus and look forward to hosting more guest speakers in the 2017-2018 school year!

Anyone who is interested in joining Psi Chi or Psychology Club or getting more involved with the Psychology Department should like the [University of Denver, Department of Psychology](https://www.academic.ud.depts/psychology) on Facebook and join the DU Psi Chi/Psych Club page for updates on events, meetings, and other psychology opportunities.