

PSYCHOLOGY NEWS

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Welcome from the Chair



I cannot believe I have just completed my first year as chair for the Psychology Division. I would like to start off by thanking Amy Buddie (the previous chair) for providing guidance to me as I embarked on this journey. I certainly have large shoes to fill.

Justin Yates

The division has done incredible

work during the past few years; we even received the CUR Division of the Year Award in June 2018! Here are some of the initiatives we will continue working on during the 2019–2020 academic year:

- We will continue awarding travel funds (\$200 ea.) for students presenting research at a conference. Submissions will be due by 5:00 pm EST on February 3, 2020.
- We will also continue recognizing a faculty member • with the Mid-Career Mentoring Award (\$500). This award is given out every two years (every evennumbered year). The next recipient of this award will be recognized at the 2020 CUR Biennial Conference.

Make sure to follow us on **Twitter** and to check out our Facebook page. We will also communicate with division members through the CUR Community. I hope everyone has had a great summer break!

> Best, Justin

Justin Yates Associate Professor **Psychological Science** Northern Kentucky University

About CUR's Psychology Division

The Psychology Division of the Council on Undergraduate Research provides networking opportunities, activities, and resources to assist psychology administrators, faculty members, students, practitioners, and others in advancing undergraduate research.

- Newsletter team: Amy M. Buddie, Kennesaw State University; Tsu-Ming Chiang, Georgia College & State University; Sarah K. Johnson, Moravian College; Elizabeth Nawrot, Minnesota State University
- Division chair: Justin Yates, Northern Kentucky University

Psychology Division Webpage Psychology Division on Facebook Psychology Division on Twitter

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Division News

Nominations Sought, Mid-Career Mentoring Award

The call for nominations for the CUR Psychology Division's Mid-Career Mentoring Award is posted <u>here</u>.

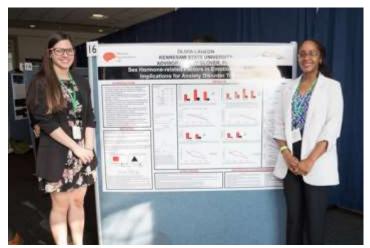
Please consider nominating candidates who excel at mentoring undergraduate researchers. The deadline for applications is **November 4, 2019**. The application process has been streamlined this year to include:

- One letter of support, up to three pages, from a colleague (this can be a revised letter from the nominator or a joint letter).
- Two one-page letters of support from former students.
- A full CV
- A two-page letter highlighting the nominee's contributions to all areas of undergraduate research.

Psychology Councilors in the News

- The Psychology Division was named the 2018 Division of the Year!
- Sarah Johnson (Moravian College) was named one of the 2019 Volunteers of the Year by CUR.
- Joanne Altman (High Point University) and Tsu-Ming Chiang (Georgia College & State University) were coauthors on CUR White Paper No. 1, <u>Undergraduate Research: A Road Map for Meeting</u> <u>Future National Needs and Competing in a World of</u> <u>Change</u>.
- Amy Buddie (Kennesaw State University) served as chair of the 2019 National Conference on Undergraduate Research (NCUR).
- A big thank-you to retiring Councilors Matthew Schmolesky (Georgia Gwinnett College), Katherine Kipp (University of North Georgia), and Judy Grisel (Bucknell University).
- Welcome to the newest division Councilor, Alisha Epps (Whitworth University)!

Interview with Posters on the Hill Student and Mentor



Left to right: Olivia Lauzon and Ebony Glover, Kennesaw State Univ

CUR: Provide a little background about yourselves.

Olivia Lauzon. I recently graduated from Kennesaw State University, majoring in psychology, with a minor in applied statistics and data analysis. I transferred from Georgia Highlands College in 2016, after receiving my associate's degree in psychology.

Ebony Glover. I'm an assistant professor of psychology and neuroscience and the director of the Affective Neuroscience Lab at Kennesaw State University. My lab is primarily concerned with understanding the neurobiological basis of emotion. We use tools in psychophysiology to examine the role that various biological and psychosocial variables play in emotional regulatory processes.

CUR: Tell us a little about the research you presented at Posters on the Hill.

OL. The research I presented focused on hormonal influences in emotion regulation, specifically how they contribute to anxiety risk in women. There is a sex disparity in the development of anxiety disorders as women are two times more likely to develop an anxiety disorder than a man. It is believed that hormones, especially estrogen, play an important role in a female's risk for developing this.

Specifically, low circulating estrogen has been associated with increased risk, whereas high estrogen may have a protective effect. Knowing that 28 percent of women of fertility age are using some type of hormonal contraceptive, it is important to examine how this may influence a female's risk of developing an anxiety disorder since they influence a female's natural hormones of estrogen and progesterone.

We used a behavioral paradigm, called fearpotentiated startle, to measure biomarkers for anxiety risk across naturally cycling women, contraceptive users, and men. We used an acoustic probe to elicit a startle response and measured the eyeblink component with electromyography. Heightened startle is directly linked to activity in the amygdala, a brain region that regulates fear and anxiety behaviors. The participants underwent fear conditioning in which a conditioned stimulus was paired with an aversive airblast to the throat (CS+ or danger cue), and another conditioned stimulus (CS-) was never paired with an airblast (safety cue). By measuring the change in magnitude of the recorded eyeblink response to the acoustic probe in the presence of the CS relative to the response to the sound alone, we can infer deficits in emotion regulation. We can infer this because previous research shows that people who have deficits in emotion regulation startle higher in the presence of a danger cue, and have higher startle in the presence of the safety cue. Our paradigm also allows us to measure how well a participant can discriminate between both cues, and their rate of fear extinction when the previously feared CS+ is no longer paired with an airblast.

We found that women with low estrogen and progesterone showed deficits in their ability to regulate their emotions, evidenced as heightened startle in both the danger condition and safety condition. This overall pattern was exacerbated in women using hormonal contraceptives, suggesting that contraceptive use puts women at greater risk for developing an anxiety disorder.

EG. Olivia did a fantastic job presenting our flagship research findings showing sex differences in emotion regulation! The primary outcomes of this project were observed differences in emotion regulation between sexes and among women with different hormonal statuses. Our overall findings provided strong empirical support for the idea that estrogen and progesterone are critical modulators of emotion, and underscore the need for further research, specifically on the effects of cycling ovarian hormones and contraceptive usage on female psychopathology. The data that Olivia presented at POH not only informs mental health research, but also served to increase public awareness of the issues surrounding health disparities in psychiatric illnesses.

CUR: What did you do as part of the Posters on the Hill experience?

OL. One of the main parts of the experience was meeting with my congressional representatives in Washington to discuss the importance of undergraduate research in my life, our community, our nation, and in federal policy. Dr. Glover and I were able to meet with a representative from Senator David Perdue's office, and we met with Congressman Barry Loudermilk and his staff. They openly welcomed us and enjoyed hearing what we were advocating for.

The biggest part of the experience was presenting my research on Capitol Hill. Each of the Posters on the Hill awardees invited members from the congressional representative offices so they could come see and hear about our research. This was a fun experience because we showcased our research to important figures in Washington, DC, and it allowed for networking. Also, seeing everyone else's research was exciting.

CUR: What was your favorite part of the trip?

OL. I think my favorite part was being surrounded by other students who enjoy research and who are actively a part of research. People like that are hard to find in our modern college environment. It felt really nice to be able to talk about my research and not have to see glossed-over eyes. The other presenters there were actually intrigued to hear all about my research, along with the attendees. That's probably what I miss most about the experience.

Posters on the Hill

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I can't forget exploring all the historical monuments in Washington, DC, either. The day I arrived I went to see the memorials of Abraham Lincoln, Franklin D. Roosevelt, Thomas Jefferson, and Martin Luther King Jr. Dr. Glover and I also visited the Smithsonian National Museum of Natural History. It was amazing seeing all these places!

Lastly, it was pretty incredible meeting with my congressional representatives.

CUR: What are your plans after graduation?

OL. I plan to apply to a PhD program focused on neuropsychology. I am excited about pursuing a research career because I have fallen in love with research. Dr. Glover was the first psychology teacher I had when I transferred to Kennesaw, and on that first day, she radiated such appreciation and excitement for research, even though it was just a class on perception. I never saw that at my previous college, but I wish I had. When she told the class she had a research lab and was looking for research assistants, I immediately wanted to be a part of it.

I started working in Dr. Glover's Affective Neuroscience Lab the following spring (2017). Because I never got exposed to research opportunities at my previous college, I wanted to soak up as much as I could during my time at KSU, specifically under the mentorship of Dr. Glover. I've never met anyone that has such a passion for research. It's admirable and inspiring. Dr. Glover has inspired me to want a life filled with constant learning, so I am confident that a research career is the right fit for me.

CUR: What is your approach to mentoring undergraduate researchers?

EG. When mentoring undergraduate researchers, I aim to foster a collaborative learning environment that encourages teamwork and peer mentoring while at the same time promoting independence and individual self-confidence. When new students enter my lab, they undergo training from senior undergraduate researchers on data collection procedures. As stu-

dents gain confidence in their understanding of our experimental paradigm, they are encouraged to develop an independent research project where they can invest more time in the analyses, interpretation, and dissemination of results surrounding their research topic of interest. I have found that when students are challenged to work collaboratively on a larger research team, they gain better interpersonal, critical thinking and leadership skills. Also, by encouraging students to take ownership of independent projects and disseminate their findings to the public, I hope to instill an appreciation of scientific discovery and build confidence. I tell all of my students that, by taking part in the research process, they add tremendous value to our lab's mission to make important contributions towards the advancement of science. It is a great honor to provide our students the opportunity to do impactful research at KSU, and I am extremely proud of their collective efforts.

CUR: What advice do you have for students and mentors who are accepted to Posters on the Hill?

OL. Take in everything you can from the experience and don't stress! Especially don't stress when it comes to meeting your congressional representatives. They actually enjoy hearing from students in their states and districts that are actively involved in research. Just be yourself and be confident in what research you are bringing to the conference. Also, network, network, network! You will meet many people that are interested in your research and what to learn more or what they can do to support what you're doing. Don't miss out on these opportunities!

CUR: Anything else you'd like to add about your experience?

OL. I'd like to thank the Office of Undergraduate Research at KSU for fully sponsoring and supporting my acceptance and travel to Posters on the Hill, along with Dr. Glover's. It was such an amazing experience and I was proud to be representing KSU as the first student accepted to present there.•

Tips from CUR Psychology Division Councilors

Assisting poster presenters

Many students struggle to present their research posters clearly and succinctly. Why? One factor is metacognition. Students often incorrectly assume they can present their posters clearly and succinctly without rehearsing. They seem surprised when their



Nestor Matthews

first attempt at an oral summary lacks organization and runs long. Poster audiences appreciate clarity and brevity. Indeed, conference attendees need clarity and brevity after attending many presentations each day; they bring depleted attention to your student's research poster. Not realizing this, student poster presenters often ramble, straining their audience's comprehension -and patience. Further challenges to the audience's comprehension and patience arise from a second type of student metacognitive error: the curse of knowledge. Student poster presenters often incorrectly presuppose that their audience understands the phenomenon under investigation, relevant acronyms, prior literature, and variables plotted on graphs.

To help prepare my students for conference poster presentations, I require them to practice three oralversions of varying duration: 30 seconds; 2 minutes; 5 minutes. They practice out loud, daily, for a week before their presentation. The practice builds confidence and makes students aware of what's essential in the poster. Also, distributing their practice across multiple days and sleep cycles consolidates the skill and knowledge in the student's long-term memory.

> -Nestor Matthews Professor and Chair Dept of Psychology Neuroscience Program **Denison University**

Including underrepresented students

In this tip I am arguing to intentionally include underrepresented minorities when recruiting research interns. In a large $(n = \sim 15,000)$ survey of student participants in undergraduate research, Russell, Hancock, and McCullough (2007) found that the benefits of undergraduate research were especially strong for Latinos. Lopatto (2007)



found that underrepresented minorities rated learning gains from undergraduate research higher than did Caucasians or Asians-these learning gains include such topics as the importance of supporting evidence, data analysis, ethics, understanding how scientists think, and self-confidence. A sense of belonging to the academic environment early in a student's college career, such as through a collaborative research internship with a faculty member, aids in retention to graduation-this is especially true for minority students (Nagda et al. 1998). It also helps to personally invite minority students to apply-students who may not yet see themselves as researchers may not think that a global call for interns applies to them (Gates et al. 1999).

> -Karen L. Gunther Assoc Professor and Chair of Psychology / Daniel F. Evans Assoc Professor in Social Science Wabash College

References

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Lopatto, David. 2007. "Undergraduate Research Experiences Support Science Career Decisions and Active Learning. CBE-Life Sciences Education 6: 297-306.

Nagda, Biren A., Sandra R. Gregerman, John Jonides, William von Hippel, and Jennifer S. Lerner. 1998. "Undergraduate Student-Faculty Research Partnerships Affect Student Retention." Review of Higher Education 22(1): 55–72.

Russell, Susan H., Mary P. Hancock, and James McCullough. 2007. "Benefits of Undergraduate Research Experiences." Science 316: 548-549.

Events and Deadlines

Name of Event	Deadline	Link
Submissions due for the CUR	November	https://bit.lv/2019CURPsyc-Midcareer-Noms
Psychology Division Mid-	4, 2019	
Career Mentoring Award	,	
Submission deadline for the	November	http://www.xcdsystem.com/swpsych/conference/
Southwestern Psychological	5, 2019	SubmissionInstructions
Association (SWPA) convention	-,	
in Frisco, TX, April 3–5, 2020		
Posters on the Hill	November	https://bit.lv/2020POTH-Apps
Applications	5, 2019	
Applications due for	November/	https://www.cur.org/assets/1/7/Councilor Handbook ao 12-
CUR Councilors	December	<u>2018.pdf</u>
	2019	
Submissions due for the Mid-	November	http://midwesternpsych.org/
western Psychological Associa-	5, 2019	
tion (MPA) conference in Chica-		
go, April 23–25, 2020		
Submissions due for the West-	November	http://westernpsych.org/wpa-convention-call-for-papers/
ern Psychological Association	15, 2019	
(WPA) conference in San Fran-		
cisco, April 30–May 1, 2020		
Submissions due for the Eastern	November	http://epasubmissions.org/submit_proposal/form/#/
Psychological Association	15, 2019	(students can submit posters until December 1, but space for these is
(EPA) conference in Boston,	,	limited; submissions by the November deadline are recommended)
March 12-14, 2020		
Submission deadline for the	November	https://www.psychologicalscience.org/conventions/annual
Association for Psychological	15, 2019, for	
Science (APS) convention in	symposia;	
Chicago, May 21–24, 2020	January 31,	
	2020, for	
	posters	
Division program submissions	December 2,	http://www.apa.org/convention/proposals.aspx
due for the American Psycho-	2019	
logical Association (APA) con-		
vention in Washington, DC,		
August 6–9, 2020		
Student and FAN (Faculty and	December 6,	https://bit.ly/NCUR2020-Gen
Administrator Network) sub-	2019	
missions due for the National		
Conference on Undergraduate		
Research (NCUR) at Montana		
State University, March 26–28,		
State University, March 26–28, 2020		
State University, March 26–28, 2020 Submissions due for the Rocky	December 9,	http://www.rockymountainpsych.com/
State University, March 26–28, 2020 Submissions due for the Rocky Mountain Psychological Associ-	December 9, 2019	http://www.rockymountainpsych.com/
State University, March 26–28, 2020 Submissions due for the Rocky Mountain Psychological Associ- ation (RMPA) conference in	-	http://www.rockymountainpsych.com/
State University, March 26–28, 2020 Submissions due for the Rocky Mountain Psychological Associ-	-	http://www.rockymountainpsych.com/
State University, March 26–28, 2020 Submissions due for the Rocky Mountain Psychological Associ- ation (RMPA) conference in	-	http://www.rockymountainpsych.com/ https://www.cur.org/who/governance/divisions/psychology/
State University, March 26–28, 2020 Submissions due for the Rocky Mountain Psychological Associ- ation (RMPA) conference in Denver, April 16–18, 2020	2019	