



**BRAIN HEALTH
RESEARCH INSTITUTE**
at Kent State University

NEWS

BHRI RESEARCHER SPOTLIGHT

Angela Neal-Barnett, Professor, Department of Psychological Sciences

Clinical psychologist Angela Neal-Barnett, Ph.D., never considered herself a Brain Health researcher, but that all changed in 2015 when the founder of Birthing Beautiful Communities knocked on her office door. The



young doula wanted assistance in understanding how anxiety and stress were impacting Black infant mortality and maternal morbidity. Believing it would be a short-term project, Neal-Barnett agreed to help and her research trajectory changed.

Today, through the Program for Research on Anxiety Disorders among African Americans, (PRADAA) Neal-Barnett directs interventions research on Black perinatal mental health. Embedded in Urban Leagues in Northeast Ohio and other community organizations, her research involves doulas, musicians, cosmetologists, faculty, graduate students, undergraduates, and community members all

dedicated to making a difference in the lives of Black mothers and their babies.

Her latest funded work, Spirit of Motherhood focuses on intergenerational trauma. Perinatal women with PTSD participate in a brief intervention known as Written Exposure Therapy (WET). Following this, women and their infants complete a five-session doula-led infant parenting program that includes a musical intervention. A third component focuses on preschool children in the family and also involves music. Hair cortisol, a measure of chronic stress, is collected throughout the program using a culturally-competent methodology which includes Black cosmetologists and hair care.

The results of the research have been presented in testimony to the Ohio Legislature and U.S. Senate. Dr. Neal-Barnett, doulas, community members and KSU graduate students have traveled to Paris, France and Brussel, Belgium to present the work. The findings have been published in high-impact journals. Most importantly, Neal-Barnett and the PRADAA team are part of think tanks and taskforces to shape perinatal mental health policy at the state and national level.



BHRI Website

I PROMISE INSTITUTE 4TH-GRADERS DISCOVER NEUROSCIENCE

Future Flashes Learn How Their Brains Work

The BHRI hosted 90+ fourth graders from the I Promise Institute in Akron for a day of neuroscience. The students rotated through six stations lead by KSU student volunteers: the Brain, the Senses, Feelings and



Emotion, Movement and Reflexes, Memory and Learning, and Nursing. Each station had hands-on activities for the students to engage in while learning about the various aspects of their brains and how they work. The BHRI worked with KSU University Outreach and Engagement to coordinate the visit. Dr. Lique Coolen, Assistant Director, BHRI, and Professor, Biological Sciences, led the event, with additional activities planned and implemented by Drs. Lisa Audet and Taryn Burhanna, and over 40 student volunteers.

11TH ANNUAL NEUROSCIENCE SYMPOSIUM

Brain-Machine Interfaces in Health & Disease

BHRI 11th Annual Neuroscience Symposium entitled “Brain-Machine Interfaces in Health & Disease” took place on October 26-27, 2023, at the Kent State University Hotel & Conference Center in downtown Kent. The conference was attended by several hundred people, and began with a Keynote speech by Leigh Hochberg, MD, Ph.D., whose research focuses on the development and testing of novel technologies to help people with paralysis and other neurological disorders. Dr. Hochberg is the L. Herbert Ballou University Professor of Engineering and Professor of Brain Science at Brown University. Among the symposium presenters were A. Bolu Ajiboye, Ph.D., Dawn M. Taylor, Ph.D., Raymond Goldsworthy, Ph.D., Aysegul Gunduz, Ph.D., Eric M. Trautmann, Ph.D., Kwangtaek Kim, Ph.D., Ian Burkart, Olivia Coontz, Rob Franklin, Ph.D., Tim Lucas, MD, Ph.D., MHCI, and Doug Weber, Ph.D.



The two-day scientific event also featured a research skills workshop, a student poster presentations session, two panel discussions, and a reception. The research skills workshop consisted of four speaker presentations that highlighted advanced research technologies being used in the BHRI faculty labs. The poster session showcased research from 49 students and faculty members, and 10 students won awards for their research.

RESEARCH EXCHANGE & RETREAT

Exchange Sparks Invaluable Feedback for Future of BHRI

The BHRI Research Exchange & Retreat took place on September 22, 2023, at the KSU Hotel & Conference Center. The event consisted of a retrospective overview of the goals and accomplishments of BHRI to date, four sessions of research presentations by BHRI investigators, as well as table discussions during which valuable feedback was received on different aspects of BHRI, as well as what the institute’s key goals should be for the next five-year period.

FUNDING NEWS

Giving Tuesday Campaign

The BHRI Undergraduate Fellows Program was a featured fund for KSU’s Giving Tuesday events in November. The campaign secured over \$10,000 for the program.

SEMINAR SERIES - 2024

****New time – 9:30AM****

Kim Oller, Ph.D.
(Univ. of Memphis)
January 16, 2024

Eric Wilkey, Ph.D.
(Vanderbilt)
February 13, 2024

Teresa Pitts, Ph.D.
(Univ. of Missouri)
March 5, 2024

Jaideep Bains, Ph.D.
(Univ. Health Network)
April 9, 2024

