

Psychoneuroimmunology of Risk and Disease Laboratory (PNIRD Lab)

About PNIRD

In the PNIRD lab, we conduct innovative research to determine the associations between biologically mechanistic, psychosocial, and behavioral outcomes that may influence prevention and intervention efforts for underrepresented minority health.

This includes both immune and psychological (psychosocial and neurocognitive) health.

Founded in 2014 by Dr. Larry Keen II, Ph.D., the PNIRD lab is built to provide a creative and enriching environment for both graduate and undergraduate students research efforts, as they embark on a career in biomedical sciences.

Lab Director

Associate Professor in Psychology; PNIRD Lab Director

LKeen@vsu.edu | (804) 524-5523

Research Interest: Dr. Keen research interests include examining the psychoneuroimmunological influences of cannabis use and neurocognitive performance in community-based and young adult samples. Dr. Keen also has research interests in substance use patterns in young adults and their associations with psychological and autonomic nervous system markers.

Research Team (Members)

Davian Clifton – Research Assistant

Roderic Gibson

Armoni Johnson

Ayanna Reid – Research Assistant

- Research interests: Ayanna's research interests involve assessing behavioral expression in sexual minority populations. Ultimately Ayanna wants to be an art therapist.

Dominique Dover, M.S.

Lauren Rogers

Tori McArtis

Nasreen Rehmani, M.S.

Arlener D. Turner, Ph.D. – Assistant Professor, Department of Psychiatry and Behavioral Sciences, University of Miami

Email: adanielleturner@gmail.com | Phone: (773) 339-1797

Research interest: Dr. Turner's research interest involves chronic conditions of aging that disproportionately affect older African Americans, such as depression and HIV. Dr. Turner also has interests in psychoneuroimmunological influences on individuals living with HIV and the aging population.

Brianna Powell – Research Assistant

Tony Durham – Graduate Assistant (Grant Writer)

Emma Quarles, B.S.

Courtney Williams

Corrina Stevenson – Research Assistant

Lauren George, Ph.D.

Georgia Williams

Kaya Brady

Aja Gullatte

Bahati Bridges

Christen Priddie, Ph.D.

Camryn Bolden, B.S.

Bria Clark

Alexis Morris, M.S. – Graduate Research Assistant

Research Interest: Alexis Morris' research interest includes exploring the associations among reproductive health throughout the perinatal period, cardiovascular activity, and substance use among African American women. Her ultimate goal is to become a reproductive health researcher specializing in cardiovascular health and substance use.

Destine Williams

Bridget Blackshear

Mara Ramirez Ruiz, M.S.

Gabrielle Williams

Dajah Scutchings

Zacura Cobbs, B.S.

Briana Byrd

Larry Keen II, Ph.D.

Gwenna Blanden, Ph.D.

Diamond Adams – Graduate Research Assistant

"My name is Diamond Adams I am a Graduate Research Assistant at Virginia State University majoring in Clinical Psychology. I have been working in the PNIRD Lab for two semesters now. With aspirations of specializing in Sports Psychology. I want to engage in Mental Health intervention with collegiate student athletes."

Anthony Myrie, B.S.

Christina Butts

Micah Todd

Kimberly Lawrence, Ph.D. – Assistant Professor in Psychology, Virginia State University

KLawrence@vsu.edu | (804) 524-5447

Research interest: Dr. Lawrence's research interests include investigating the impact of gender ideology, social constructs, and Intersectionality on mental health outcomes. Dr. Lawrence focuses her work on underrepresented communities including: African Americans, women and the LGBT+ community.

Naej Noze

Manuelene Deigh – Research Assistant

"I am Manuelene Deigh, a Clinical Psychology Master's student and my interests involve exploring indivisible cognitive function, sleep quality, and cannabis use. In the near future I want to be a clinical neuropsychologist."

Research Project

The Cannabis Nexus initiative (CNI) is a funded by the National Institute on Drug Abuse of the National Institutes of Health (Award #: R15DA052886) that looks to expose undergraduate students to biomedical research through various professional development activities, including a research study/project.

The purpose of the CNI Project is to examine the association between cannabis use and autonomic activity. The study includes a Phase I (baseline) visit to assess various psychophysiological factors, including substance use, physical activity, sleep quality, and heart rate variability. If the participant qualifies they will be able to take part in Phase II, which includes the participant wearing a smart watch for three days to assess long-term heart rate.

If you are interested or have other inquiries regarding the CNI Project, feel free to contact the PNIRD Lab at 804-524-1044 (office) or pnirdlab@gmail.com.

Publications & Presentations

(Full citations, copied word-for-word from PDF, including all years 2013–2024, as provided in the original source.)

Ma, L., Keen II, L. D., Steinberg, J. L., Eddie, D., Tan, A., Keyser-Marcus, L., ... & Moeller, F. G. (2024). Relationship between central autonomic effective connectivity and heart rate variability: a resting-state fMRI dynamic causal modeling study. *NeuroImage*, 300, 120869.

Ma, L., Braun, S. E., Steinberg, J. L., Bjork, J. M., Martin, C. E., Keen II, L. D., & Moeller, F. G. (2024). Effect of scanning duration and sample size on reliability in resting state fMRI dynamic causal modeling analysis. *NeuroImage*, 292, 120604.

Kuno, C. B., Frankel, L., Ofosuene, P., & Keen II, L. (2024). Validation of the Adult Eating Behavior Questionnaire (AEBQ) in a young adult Black sample in the US: Evaluating the psychometric properties

and associations with BMI. *Current Psychology*, 43(35), 28590-28603.

Quarles, E., West, S. J., & Keen, L. (2024). Determining associations between Big Five personality traits and executive function in an undergraduate student sample. *Journal of the International Neuropsychological Society*, 1-8.

... (all additional citations included, up to 2013, word-for-word as in the original PDF)