Alexander J. Shackman

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Overview

I am a Professor in the Department of Psychology (Clinical and CNS Area Groups), core faculty member of the interdepartmental Neuroscience and Cognitive Science (NACS) Doctoral Program and the Maryland Neuroimaging Center (MNC), and Director of the Affective and Translational Neuroscience Laboratory at the University of Maryland. My work has been continuously supported by the NIH since 2016 and led to >100 publications (*h*-index: 54). I am an Associate Editor at the *Journal of Psychopathology and Clinical Science* (formerly *Journal of Abnormal Psychology*); was Co-Editor of *The Nature of Emotion* (Oxford University Press); served as an Associate Editor at *eLife* and several other journals; and co-edited 4 special issues focused on the neurobiology of emotion and multidisciplinary science, most recently at *Clinical Psychological Science*. I am a Fellow of the Association for Psychological Science; an active member of the international Affective Neuroimaging Collaboratory, ENIGMA Anxiety, and Hierarchical Taxonomy of Psychopathology (HiTOP) research consortia; and a standing member of the NIH Adult Lifespan Psychopathology (ALP) study section. I have been invited to teach and lecture at meetings and institutions around the world. Our work has been featured in *Discovery Magazine* and *Newsweek*, and I have provided expert scientific commentary for the BBC and *Smithsonian Magazine*. Most of our work—both empirical and theoretical—is focused on understanding the nature and biological bases of anxiety-related states, traits, and disorders. When extreme, anxiety contributes to a variety of debilitating, often treatment-resistant mental illnesses, including internalizing disorders, substance misuse, and psychosis. To understand the origins and course of this liability, my group uses a broad spectrum of tools—including multimodal neuroimaging (MRI, PET), psychophysiology, smartphone digital phenotyping, semi-structured clinical and life-stress interviews, and genetic analyses—in pediatric and adult patients, university students, community members, and monkeys, working closely with collaborators in the U.S., Germany, China, and South Korea. More recently established secondary lines of research are focused on psychiatric nosology and graduate-student health and wellbeing. In addition to my own research, I regularly serve as an expert consultant and co-investigator on emotion-related neuroimaging and ecological momentary assessment (EMA) studies.

Academic Appointments

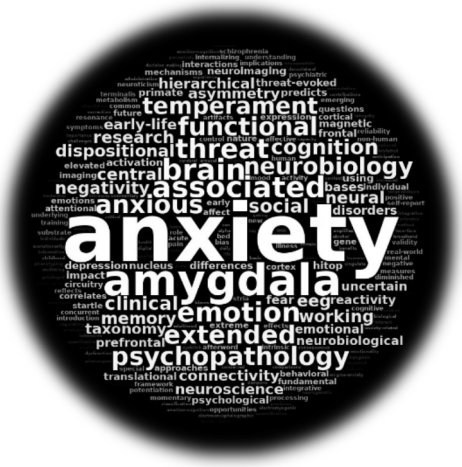
8/2024—present	Professor (Clinical and CNS area groups) Department of Psychology, University of Maryland, College Park *Note. The Clinical Psychology program is accredited by the APA and PCSAS*
8/2019—7/2024	Associate Professor (Clinical and CNS area groups) Department of Psychology, University of Maryland, College Park
8/2013—7/2019	Assistant Professor Department of Psychology, University of Maryland, College Park
8/2013—present	Core Faculty Maryland Neuroimaging Center, University of Maryland, College Park
6/2013—present	Faculty Member Neuroscience and Cognitive Science (NACS) Program, University of Maryland, College Park

6/2013—8/2013	Visiting Assistant Professor Department of Psychology, University of Maryland, College Park
8/2011—7/2013	Postdoctoral Scientist Department of Psychiatry, University of Wisconsin—Madison Supervisor: Ned H. Kalin, MD
1/2010—8/2011	Postdoctoral Scientist Departments of Psychology and Psychiatry, University of Wisconsin—Madison Supervisor: Bradley R. Postle, Ph.D.
9/2008—12/2009	Postdoctoral Scientist Department of Psychology, University of Wisconsin—Madison Supervisor: Richard J. Davidson, Ph.D.

Education

2008	Ph.D., Biological Psychology (Distributed Minor in Neuroscience) University of Wisconsin—Madison
1997	Bachelor of Arts, *cum laude*, Psychology (Honors) University of Wisconsin—Madison

Research Sketch



Major Interests

Affective, translational, and clinical neuroscience; dimensional models of psychopathology; emotion; fear, anxiety, and their role in anxiety and trauma disorders, depression, addiction, and psychosis; temperament/personality; developmental psychopathology; graduate student health and wellbeing; extended amygdala; cingulate; prefrontal cortex.

Major Methods

Multimodal neuroimaging (MRI, PET); Smartphone digital phenotyping; ecological momentary assessment/Experience sampling method (EMA/ESM); Meta-analysis (imaging/ALE, random effects); Clinical assessments (SCID, MINI, C-IRLE).

Sponsored Research

Current

September 2024—August 2029	Co-I. *Explicit, Vicarious and Internalized Racial Discrimination on Daily Associations and Long-Term Health Trajectories among Korean, Filipino and Indian Americans.* NIAAA R01. AA031261. $2,608,585 in total costs.
March 2023—February 2028	PI. *Using computational neuroimaging and extended smartphone assessment to understand the pathways linking threat-related brain circuits to alcohol misuse across adulthood.* NIAAA R01. AA030042. $3,088,370 in total costs.
July 2022—May 2027	PI. *Using theory- and data-driven neurocomputational approaches and digital phenotyping to understand RDoC acute and potential threat.* NIMH R01. MH131264. $3,869,739 in total costs.
January 2021—November 2025	Faculty mentor. *The Mid-Atlantic Neuroscience Diversity Scholars (MiNDS) Program*. NINDS R25 NS119644. *Note: The aim of this NIH-sponsored multi-institutional program is to bolster the number of underrepresented minority (URM) students within the neuroscience academic pipeline and build a foundation for URM students to succeed in graduate school and beyond.* **WEBSITE**
June 2020—April 2026	MPI. *Using multimodal neuroimaging and real-world experience sampling to understand negative affect and paranoid ideation in psychosis.* NIMH R01 MH121409. $3,701,474 in total costs.

Pending

January 2026—December 2027	Primary Mentor. *Non-invasive temporal interference electrical stimulation to alleviate anxiety during threat anticipation.* BBRF Young Investigator Award. $70,000 in total costs.
December 2025—November 2029	Primary Mentor. *Social and Neural Pathways Linking Parental Anxiety with Youths' Daily Emotions.* K01 MH139898. $724,552 in total costs.
April 2026—March 2031	Co-I. *Multimethod analysis of sleep health's impact on social functioning in psychosis spectrum disorders.* NIMH R01. MH######. $3,712,487 in total costs.

Prior

August 2023—June 2025	Co-Sponsor. *Using functional neuroimaging and smartphone digital phenotyping to understand the emergence of internalizing illness.* NIMH Diversity F31. MH132280. *1st percentile.*
December 2020—September 2023	Co-I. *A prospective-longitudinal investigation of the biopsychosocial predictors of loneliness across adolescence in autism and typical development.* NIMH R01 MH125370. $3,643,779 in total costs.

November 2022—June 2023	Co-I. *Leveraging ultra-high field fMRI to understand the neurobiology of anxiety and fear reaction in early Alzheimer's Disease: Preliminary work to support a future DFG application.* Köln Fortune Programme, Faculty of Medicine, University of Cologne, 29,260 € in total costs. *Note: This pilot grant will support a preliminary extension of the Maryland Threat Countdown paradigm to the 7T fMRI environment, with the potential for substantially enhanced resolution of subcortical and brainstem substrates (Dr. Xiaochen Hu, Cologne, PI; Dr. Jason Smith, UMD, Co-I; Dr. Benjamin Becker, University of Electronic Science and Technology of China, Co-I)*
April 2016—January 2022	PI. *Prospective determination of neurobehavioral risk for the development of emotion disorders.* NIMH R01 MH107444. $3,384,218 in total costs.
September 2019—September 2022	Consultant. *A behavioral economics approach to understanding the association between ADHD and alcohol problems in college.* NIAAA F31. AA027937.
May 2018—May 2019	Co-PI. *Understanding the role of negative affect in psychosis using multimodal imaging and wearable sensors.* Brain and Behavior Initiative Seed Grant, University of Maryland. XX. $49,880 in total costs.
July 2016—June 2019	PI. *The role of anxiety-related brain circuits in tobacco dependence and withdrawal*. NIDA R21 DA040717. $418,000 in total costs.
July 2015—June 2017	Co-PI. *The role of anxiety-related brain circuits in tobacco dependence and withdrawal*. Dean's Research Initiative Level II Seed Grant. College of Behavioral and Social Sciences, University of Maryland. $20,000 in total costs.
June 2014—July 2015	PI. *Dissecting the functional organization and significance of the neural circuitry of pain*. Dean's Research Initiative Level II Seed Grant. College of Behavioral and Social Sciences, University of Maryland. $19,500 in total costs.

Publications (Google Scholar Metrics | NIH iCite Metrics)

***** equal authorship contribution
† mentored trainee

Book

[1] Fox, A. S., Lapate, R. C., **Shackman, A. J.** & Davidson, R. J. (2018). *The nature of emotion. Fundamental questions* (2nd edition). New York: Oxford University Press. **PDF Amazon**

Peer-Reviewed Articles

[75] Bas-Hoogendam, J. M., Bernstein, R., Benson, B. E., Buss, K. A., Gunther. K. E., Pérez-Edgar, K., Salum, G. A., Jackowski, A. P., Bressan, R. A., Zugman, A., Degnan, K. A., Filippi, C. A., Fox, N. A., Henderson, H. A., Tang, A., Zeytinoglu, S., Harrewijn, A., Hillegers, M. H. J., White, T. J. H., Schwartz, C., Rauch, S. L., Felicione, DeYoung, K. A., **Shackman, A. J.**, Smith, J. F., Tillman, R. M. †, van den Berg, Y. H. M., Cillessen, A. H. N., Roelofs, K., Tyborowska, A., Hill, S. Y., Battaglia, M., Tettamanti. M., Dougherty, L. R., Jin, J., Klein, D. N., Leung, H.-C., Avery, S. N., Blackford, J. U., Clauss, J. A., Hayden, E. P., Liu, P., Vandermeer, M. R. J., Goldsmith, H. H.,

Planalp, E. M., Nichols, T. E., Thompson, P. M., Westenberg, P. M, van der Wee, N. J. A., Groenewold, N. A., Stein, D. J., Winkler, A. M., Pine, D. S., & the ENIGMA-Anxiety Working Group. (*in press*). Structural brain correlates of childhood inhibited temperament: an ENIGMA-Anxiety mega-analysis. ***Journal of the American Academy of Child and Adolescent Psychiatry.*** [NIHMSID2095113] **PDF**

[74] DeYoung, C. G., Martin, E. A., & **The HiTOP Neurobiological Foundations Workgroup** (*in press*). Using the Hierarchical Taxonomy of Psychopathology (HiTOP) for precision psychiatry in clinical neuroscience. ***World Psychiatry.*** **PDF**

[73] Cornwell, B. R., Didier, P. R. †, Grogans, S. E. †, Anderson, A. S. †, Islam, S. †, Kim, H. C. †, Kuhn, M. †, Tillman, R. M. †, Hur, J. †, Scott, Z. S. †, Fox, A. S., DeYoung, K. A., Smith, J. F., & **Shackman, A. J.** (2025). A shared threat-anticipation circuit is dynamically engaged at different moments by certain and uncertain threat. ***Journal of Neuroscience****, 45,* e2113242025*.* **PDF NDA NeuroVault PROCESSED DATA**

[72] **Shackman, A. J.**, Smith, J. F., Orth, R. D., Savage, C. L. G., Didier, P. R. †, McCarthy, J. M., Bennett, M. E., & Blanchard, J. J. (*in press*). Blunted ventral striatal reactivity to social reward is associated with more severe motivation and pleasure deficits in psychosis. ***Schizophrenia Bulletin.*** [NIHMSID2043252] **PDF NDA**

[71] Hur, J. †*, Tillman, R. M. †*, Kim, H. C. †, Didier, P. R. †, Anderson, A. S. †, Islam, S. †, Stockbridge, M. D., De Los Reyes, A., DeYoung, K. A., Smith, J. F., **Shackman, A. J.** (2025). Adolescent social anxiety is associated with diminished discrimination of anticipated threat and safety in the bed nucleus of the stria terminalis. ***Journal of Psychopathology and Clinical Science****, 134,* 41-56. [NIHMSID2005841] **PDF PROCESSED DATA NeuroVault**

[70] Fox, A. S. & Shackman, A. J. (2024). An honest reckoning with the amygdala and mental illness. ***American Journal of Psychiatry****, 181,* 1059-1075. [NIHMSID2028602] **PDF**

[69] Blanchard, J. J., Smith, J. F., Bennett, M. E., Orth, R. D., Savage, C. L. G., McCarthy, J. M., Coan, J. A., & **Shackman, A. J.** (2024). Motivation and pleasure deficits undermine the benefits of social affiliation in psychosis. ***Clinical Psychological Science****, 12,* 1195-1217*.* [NIHMSID1952010] **PDF NDA**

[68] Grogans, S. E. †, Hur, J. †, Barstead, M. G. †, Anderson, A. S. †, Islam, S. †, Kim, H. C. †, Kuhn, M. †, Tillman, R. M. †, Fox, A. S., Smith, J. F., DeYoung, K. A., & **Shackman, A. J.** (2024). Neuroticism/negative emotionality is associated with increased reactivity to uncertain threat in the bed nucleus of the stria terminalis, not the amygdala. ***Journal of Neuroscience****, 44,* e1868232024*.* **PDF NDA PROCESSED DATA NeuroVault PREREGISTRATION**

[67] DeYoung, C. G., Blain, S. D., Latzman, R. D., Grazioplene, R. G., Haltigan, J. D., Kotov, R., Michelini, G., Venables, N. C., Docherty, A. R., Goghari, V. M., Kallen, A. M., Martin, E. A., Palumbo, I. M., Patrick, C. J., Perkins, E. R., **Shackman, A. J.**, Snyder, M. E., Tobin, K. E., & The HiTOP Neurobiological Foundations Workgroup (2024). The Hierarchical Taxonomy of Psychopathology (HiTOP) and the search for neurobiological substrates of mental illness: A review and roadmap for future research. ***Journal of Psychopathology and Clinical Science****, 133,* 697-715. [NIHMSID1963130] **PDF OSF**

[66] Conway, C. C., Grogans, S. E. †, Anderson, A. S. †, Islam, S. †, Craig, L. E. †, Wedlock, J. †, Hur, J. †, DeYoung, K. A. †, **Shackman, A. J.** (2024). Neuroticism is selectively associated with longitudinal changes in broadband internalizing symptoms, but not narrow-band positive affect or anxious arousal in emerging adulthood. ***Clinical Psychological Science****, 12,* 823-839*.* [NIHMSID1932294] **PDF NDA PROCESSED DATA CODE**

[65] Kim, H. C. †, Kaplan, C. M. †, Islam, S. †, Anderson, A. S. †, Piper, M. E., Bradford, D. E., Curtin, J. J., DeYoung, K. A., Smith, J. F., Fox, A. S., & **Shackman, A. J.** (2023). Acute nicotine abstinence amplifies subjective withdrawal symptoms and threat-evoked fear and anxiety, but not extended amygdala reactivity. ***PLoS One****, 18,* e0288544. [PMC10358993] **PDF** **OSF** **NeuroVault**

[64] Grogans, S. E. †, Bliss-Moreau, E., Buss, K. A., Clark, L. A., Fox, A. S., Keltner, D., Cowen, A. S., Kim, J. J., Kragel, P. A., MacLeod, C. A., Mobbs, D., Naragon-Gainey, K., Fullana, M. A., & **Shackman, A. J.** (2023). The nature and neurobiology of fear and anxiety: State of the science and opportunities for accelerating discovery. ***Neuroscience & Biobehavioral Reviews****, 151,* 105237. [NIHMSID1904227] **PDF**

[63] Tiego, J., Martin, E., DeYoung, C. G., Hagan, K., Cooper, S. E., Pasion, R., Satchell, L., **Shackman, A. J.**, Bellgrove, M. A., Fornito, A. & the HiTOP Neurobiological Foundations Work Group (2023). Precision behavioral phenotyping as a strategy for uncovering the biological correlates of psychopathology. ***Nature Mental Health****, 1,* 304-315. [NIHMSID1901527] **PDF** **OSF**

[62] Orth, R. D., Hur, J. †, Jacome, A. M., Savage, C. L. G., Grogans, S. E. †, Kim, Y.-H., Choe, E. K., **Shackman, A. J.**, & Blanchard, J. J. (2022). Understanding the consequences of moment-by-moment fluctuations in mood and social experience for paranoid ideation in psychotic disorders. ***Schizophrenia Bulletin Open****, 3,* sgac064*.* [PMC9642311] **PDF** **DATA**

[61] DeYoung, C. G., Beaty, R. E., Genç, E., Latzman, R. E., Passamonti, L., Servaas, M. N., **Shackman, A. J.**, Smillie, L. D., Spreng, R. N., Viding, E., & Wacker, J. (2022). Personality neuroscience: An emerging field with bright prospects. ***Personality Science****, 3,* e7269*.* [NIHMSID1792441] **PDF**

[60] Alfini, A. J., Won, J., Weiss, L. R., Nyhuis, C. C., Zipunnikov, V., Spira, A. P., Liu-Ambrose, T., **Shackman, A. J.** & Smith, J. C. (2022). Cardiorespiratory fitness as a moderator of sleep-related associations with hippocampal volume and cognition. ***Brain Sciences,*** *12,* 1360*.* [PMC9599432] **PDF**

[59] Bas-Hoogendam, J. M., Bernstein, R., Benson, B. E., Buss, K. A., Gunther. K. E., Pérez-Edgar, K., Salum, G. A., Jackowski, A. P., Bressan, R. A., Zugman, A., Degnan, K. A., Filippi, C. A., Fox, N. A., Henderson, H. A., Tang, A., Zeytinoglu, S., Harrewijn, A., Hillegers, M. H. J., White, T. J. H., Schwartz, C., Rauch, S. L., Felicione, DeYoung, K. A., **Shackman, A. J.**, Smith, J. F., Tillman, R. M. †, van den Berg, Y. H. M., Cillessen, A. H. N., Roelofs, K., Tyborowska, A., Hill, S. Y., Battaglia, M., Tettamanti. M., Dougherty, L. R., Jin, J., Klein, D. N., Leung, H.-C., Avery, S. N., Blackford, J. U., Clauss, J. A., Hayden, E. P., Liu, P., Vandermeer, M. R. J., Goldsmith, H. H., Planalp, E. M., Nichols, T. E., Thompson, P. M., Westenberg, P. M, van der Wee, N. J. A., Groenewold, N. A., Stein, D. J., Winkler, A. M., Pine, D. S., & the ENIGMA-Anxiety Working Group. (2022). Structural brain correlates of childhood inhibited temperament: an ENIGMA-Anxiety mega-analysis [Registered Report]. ***Journal of the American Academy of Child and Adolescent Psychiatry****, 61,* 1182-1188*.* [NIHMSID1819229] **PDF** *Selected as a Best of 2022 article by the Editors of JAACAP (Novins et al. JAACAP 2023)*

[58] Watson, D., Levin-Aspenson, H. F., Waszczuk, M. A., Conway, C. C., Dalgleish, T., Dretsch, M. N., Eaton, N. R., Forbes, M. K., Forbush, K. T., Hobbs, K. A., Michelini, G., Nelson, B. D., Sellbom, M., Slade, T., South, S. C., Sunderland, M., Waldman, I., Witthöft, M., Wright, A. G. C., Kotov, R., Krueger, R. F., & HiTOP Utility Workgroup. (2022). Validity and utility of Hierarchical Taxonomy of Psychopathology (HiTOP): III. Emotional dysfunction superspectrum. ***World Psychiatry****, 21*, 26-54. [PMC8751579] **PDF**

[57] Gee, D. G.*, DeYoung, K. M. †, McLaughlin, K. A., Tillman, R. M. †, Barch, D. M., Forbes, E. E., Krueger, R. F., Strauman, T. J., Weierich, M. A. & **Shackman, A. J.*** (2022). Training the next generation of clinical psychological scientists: A data-driven call to action. ***Annual Review of Clinical Psychology****, 18,* 43-70*.* *equal contributions [NIHMSID1746982] **PDF** **DATA**

[56] Hur, J. †, Kuhn, M. †, Grogans, S. E. †, Anderson, A. S. †, Islam, S. †, Kim, H. C. †, Tillman, R. M. †, Fox, A. S., Smith, J. F., DeYoung, K. A. † & **Shackman, A. J.** (2022). Anxiety-related frontocortical activity is associated with dampened stressor reactivity in the real world. ***Psychological Science****, 33,* 906-924*.* [PMC9343891] **PDF** **NDA** **PROCESSED DATA** **NeuroVault** **ANiC** **ENIGMA**

[55] Conway, C. C., Forbes, M. K., South, S. C., Bornovalova, M., Chan, R., Chmielewski, M., Clark, L. A., Dalgleish, T., Dick, D., Dretsch, M., Eaton, N., Fornito, A., Goghari, V., Haltigan, J. D., Hankin, B., Hopwood, C., Jonas, K., Kotov, R., Krueger, R. F., Latzman, R., Lyman, D., Martin, E., Michelini, G., Miller, J., Moffitt, T. E., Mullins-Sweatt, S., Naragon-Gainey, K., Olino, T., Patrick, C. J., Pincus, A. L., Rodriguez-Seijas, C., Samuel, D., Sellbom, M., **Shackman, A. J.**, Stanton, K., Tiego, J., Waldman, I., Waszczuk, M., Watson, D., Watts, A. L., Waugh, M., Wilson, S., Wright, A. G. C., Young, J. & Zald, D. H. (2022). A Hierarchical Taxonomy of Psychopathology (HiTOP) primer for mental health researchers. ***Clinical Psychological Science****, 10,* 236-258. [NIHMSID1718450] **PDF** **DATA**

[54] Krueger, R. F., Kotov, R., Watson, D., Forbes, M. K., Eaton, N. R., Ruggero, C. J., Simms, L. J., Widiger, T. A., Achenbach, T. M., Bach, B., Bagby, R. M., Bornovalova, M. A., Carpenter, W. T., Chmielewski, M., Cicero, D. C., Clark, L. A., Conway, C., DeClercq, B., DeYoung, C. G., Docherty, A. R., Drislane, L. E., First, M. B., Forbush, K. T., Hallquist, M., Haltigan, J. D., Hopwood, C. J., Ivanova, M. Y., Jonas, K. G., Latzman, R. D., Markon, K. E., Miller, J. D., Morey, L. C., Mullins-Sweatt, S. N., Ormel, J., Patalay, P., Patrick, C. J., Pincus, A. L., Regier, D. A., Reininghaus, U., Rescorla, L. A., Samuel, D. B., Sellbom, M., **Shackman, A. J.**, Skodol, A., Slade, T., South, S. C., Sunderland, M., Tackett, J. L., Venables, N. C., Waldman, I. D., Waszczuk, M. A., Waugh, M. H., Wright, A. G. C., Zald, D. H. & Zimmermann, J. (2021). Les progrès dans la réalisation de la classification quantitative de la psychopathologie. ***Annales Médico-Psychologiques****, 179*, 95-106. [NIHMSID1721484] **PDF**

[53] Doorley, J. D., Goodman, F. R., Disabato, D. J., Kashdan, T. B., Weinstein, J. S. † & **Shackman, A. J.** (2021). The momentary benefits of positive events for individuals with elevated social anxiety. ***Emotion***, *21*, 595-606. [NIHMSID1062502] **PDF** **DATA**

[52] Alfini, A. J., Won, J., Weiss, L. R., Nyhuis, C. C., Spira, A. P., Liu-Ambrose, T., **Shackman, A. J.** & Smith, J. C. (2020). Impact of exercise on older adults' mood is moderated by sleep and mediated by altered brain connectivity. ***Social Cognitive and Affective Neuroscience,*** *15,* 1238-1251. [PMC7745152] **PDF** **NeuroVault**

[51] Hur, J. †, Smith, J. F., DeYoung, K. A. †, Anderson, A. S. †, Kuang, J. †, Kim, H. C. †, Tillman, R. M. †, Kuhn, M. †, Fox, A. S., & **Shackman, A. J.** (2020). Anxiety and the neurobiology of temporally uncertain threat anticipation. ***Journal of Neuroscience,*** *40,* 7949-7964*.* [PMC7548695] **PDF** **NDA** **NeuroVault** **ANiC** **ENIGMA**

[50] Hur, J. †, DeYoung, K. A. †, Islam, S. †, Anderson, A. S. †, Barstead, M. G. †, & **Shackman, A. J.** (2020). Social context and the real-world consequences of social anxiety. ***Psychological Medicine****, 50,* 1989-2000*.* [NIHMS1038817] **PDF** **NDA**

[49] Doorley, J. D., Volgenau, K. M., Kelso, K. C., Kashdan, T. B., & **Shackman, A. J.** (2020). Do people with elevated social anxiety respond differently to digital and face-to-face communications? Two daily diary studies with null effects. ***Journal of Affective Disorders****, 276,* 859-865. [NIHMSID1609452] **PDF** **DATA** **PREREGISTRATION**

[48] Hamilton, K. R., Smith, J. F., Gonçalves, S. F., Nketia, J. A., Tasheuras, O. N., Yoon, M., Rubia, K., Chirles, T. J., Lejuez, C. W. & **Shackman, A. J.** (2020). Striatal bases of temporal discounting in early adolescents. ***Neuropsychologia***, *144*, 107492. [NIHMSID1592542] **PDF** **NeuroVault**

[47] Latzman, R. D., DeYoung, C. G., & The HiTOP Neurobiological Foundations Workgroup [Afzali, M. H., Allen, T. A., Althoff, R. R., DeYoung, C. G., Docherty, A. R., Dretsch, M., Eaton, N. R., Goghari, V. M., Grazioplene, R. G., Hallquist, M. N., Haltigan, J. D., Heller, A. S., Holmes, A. J., Kotov, R., Krueger, R. F., Latzman, R. D., Martin, E. A., Michelini, G., Patrick, C. J., Ruocco, A. C., **Shackman, A. J.**, Tackett, J. L., Treadway, M. T., Venables, N. C., Waldman, I. D., Zald, D. H.] (2020). Using empirically-derived dimensional phenotypes to accelerate clinical neuroscience: The Hierarchical Taxonomy of Psychopathology (HiTOP) framework. ***Neuropsychopharmacology***, *45,* 1083-1085. [PMC7235031] **PDF**

[46] Waszczuk, M. A., Eaton, N. R., Krueger, R. F., **Shackman, A. J.**, Waldman, I. D., Zald, D. H., Lahey, B. B., Patrick, C. J., Conway, C. C., Ormel, J., Hyman, S. E., Fried, E. I., Forbes, M. K., Docherty, A., Althoff, R. R., Bach, B., Chmielewski, M., DeYoung, C. G., Forbush, K. T., Hallquist, M., Hopwood, C. J., Ivanova, M., Jonas, K. G., Latzman, R. D., Markon, K. E., Mullins-Sweatt, S. N., Pincus, A. L., Reininghaus, U., South, S. C., Tackett, J. L., Watson, D., Wright, A. G. C. & Kotov, R. (2020). Redefining phenotypes to advance psychiatric genetics: Implications from the Hierarchical Taxonomy of Psychopathology. ***Journal of Abnormal Psychology***, *129*, 143-161. [NIHMSID1051067] **PDF**

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[7] Vilajosana, E. Battaglia, S., Chavarría-Elizondo, P., Martínez-Zalacaín, I., Juaneda-Seguí, A., Saiz-Masvidal, C., De la Peña-Arteaga, V., **Shackman, A. J.**, Raduà, J., Soriano-Mas, C. & Fullana, M. A. (*under review*). Fear learning in unmedicated patients with anxiety disorders: a comparison of delay conditioning, fear reversal, and trace conditioning. **PDF**

[6] Didier, P. R., Grogans, S. E., Harring, J. R., DeYoung, K. A., Anderson, A. S., Islam, S., Craig, L. E., Wedlock. J. Conway, C. C., Wright, A. G. C., & **Shackman, A. J.** (*under review*). Real-world emotional experience is associated with future internalizing symptoms. **PDF PreReg Raw Data Code**

[5] Grogans, S. E., DeYoung, K. A., Hur, J., Anderson, A. S., Islam, S. Kim, H. C., Wedlock, J., Craig, L. E., Tillman, R. M., Das, S. J., Kuhn, M., Conway, C. C., Fox, A. S., Smith, J. F., & **Shackman, A. J.** (*under review*). Heightened subcortical reactivity to uncertain threat is associated with future internalizing symptoms, conditional on stress exposure. **PDF PreReg Raw Data NeuroVault Code**

[4] Kwon, M., Bo, K., Botvinik-Nezer, R., Kragel, P. A., Van Oudenhove, L., Wager, T. D., & **The Affective Neuroimaging Consortium**. (*under review*). Convergent and selective representations of pain, appetitive processes, aversive processes, and cognitive control in the insula. **PDF**

[3] **ENIGMA-Fear Conditioning Workgroup.** (*under review*). Neural correlates of human fear conditioning and sources of variability: An fMRI mega-analysis and normative modelling study of 2,199 individuals. **PDF NeuroVault Code**

[2] **Shackman, A.J.**, Kaplan, C. M. †, Kim, H. C. †, Islam, S. †, Anderson, A. S. †, Tillman, R. M. †, Kuhn, M. †, Hur, J. †, Grogans, S. E. †, Fox, A. S., DeYoung, K. A. & Smith, J. F. (*under review*). The central nucleus of the amygdala and bed nucleus of the stria terminalis show equivalent selectivity for certain-versus-uncertain threat—Implications for prominent double-dissociation models. **PDF NeuroVault Code**

[1] DeYoung, K. A. & **Shackman, A. J.** (*under review*). Graduate school confers heightened risk for mental illness and suicide: Evidence from 630,948 U.S. adults. **PDF**

Manuscripts in Preparation

[2] Kim, H. C. †, Mann, N. S. †, Minker, D. †, Biskach, M. †, & **Shackman, A. J.** Unlocking the secrets of the anxious brain.

[1] **Shackman, A. J.**, Furman, A. J., Keaser, M. L., Payano Sosa, J. S., Stockbridge, M. D. **†,** Padmala, S., Fox, A. S., Pessoa,

L., Smith, J. F., Woo, C.-W., Wager, T. D., & Seminowicz, D. A. The integration of negative affect, pain and cognitive control in the midcingulate cortex.

File Drawer

[3] Baez, L., DeYoung, K. A. †, Anderson, A. S. †, Islam, S. †, Grogans, S. E. †, Conway, C. C., **Shackman, A. J.*** & Heller, A. S.* Momentary emotional fingerprints of internalizing symptom facets. * contributed equally. **PREPRINT** **NDA PROCESSED DATA**

[2] Fox, A. S. *, Lapate, R. C., Davidson, R. J., & **Shackman, A. J. *** (2018). Challenges and opportunities for the affective sciences. **PREPRINT**

[1] Smith, J. F., Hur, J. †, Kaplan, C. M. † & **Shackman, A. J.** (2018). The impact of spatial normalization for functional magnetic resonance imaging data analyses revisited. ***Preprint available at bioRxiv.org*** **PREPRINT**

Blog Post

Shackman, A. J. (2015). The importance of respecting variation in cingulate anatomy: Comment on Lieberman & Eisenberger 2015 and Yarkoni. ***Archived at FigShare.*** **PDF**

Honors, Awards, and Fellowships

2024	Excellence in Research Award, College of Behavioral and Social Sciences, University of Maryland
2023	On-Field Recognition of Scientific Contributions (Maryland vs. Indiana Game), University of Maryland Athletics
2020	Fellow, Association for Psychological Science
2014	Career Development Leadership Program Fellowship, Anxiety & Depression Association of America
2013	NIH-Sponsored Summer Institute in Cognitive Neuroscience Fellowship (*declined*)
2012	NIH-Sponsored Conference on the *Determinants of Executive Function & Dysfunction* Poster Award, University of Colorado (M. Banich, Director)
2012	NIH-Sponsored Conference on the *Determinants of Executive Function & Dysfunction* Travel Award, University of Colorado (M. Banich, Director)
2011	NIH-Sponsored Summer Institute in Cognitive Neuroscience ('Brain Camp') Fellowship (M. Gazzaniga and G.R. Mangun, Directors)
2006	Graduate Student Mentoring Award, Graduate School, University of Wisconsin
2001—2003	NIH Predoctoral Fellowship, Training Program in Emotion Research (T32-MH018931)
1998—2001	NSF Graduate Research Fellowship (NSF-GRF)
1997—1998	Distinguished Graduate Fellowship, Graduate School, University of Wisconsin

1996—1997 Hilldale Senior Thesis Research Fellowship, College of Letters & Sciences, University of Wisconsin

1996 Phi Beta Kappa

Editorial Duties and Scientific Merit Review

Guest Editor

[4] Co-Editor of a Special Issue of ***Clinical Psychological Science***, "Multidisciplinary clinical psychological science: Progress, challenges, and opportunities," (2024) Jennifer Tackett (Northwestern), Shirley Wang (Yale), and **Alexander J. Shackman**.

[3] Co-Editor of a Special Issue of ***Neuroscience and Biobehavioral Reviews***, "Neurobiology of human anxiety," (2023) Miquel Fullana (Universitat Autònoma, Barcelona) and **Alexander J. Shackman**.

[2] Co-Editor of a Special Issue of ***Neuroscience Letters***, "Functional imaging of the emotional brain," (2019) Tor Wager (Boulder) and **Alexander J. Shackman**.

[1] Co-Editor of a Special Issue of ***Frontiers in Human Neuroscience***, "The neurobiology of emotion-cognition interactions," (2015) Talma Hendler (Tel Aviv University), Hadas Okon-Singer (University of Haifa and the Max Planck Institute for Human Cognitive and Brain Sciences), Luiz Pessoa (University of Maryland), and **Alexander J. Shackman**.

Associate Journal Editor

2023— *Journal of Psychopathology and Clinical Science (*formerly *Journal of Abnormal Psychology)*

2019—2022 *eLife* (Board of Reviewing Editors)

2019—2021 *Scientific Reports* (Board of Handling Editors)

2018—2022 *Neuropsychologia (Section Editor, Emotion and Social Neuroscience)*

2014—2019 *Frontiers in Psychology*

2013—2022 *Cognition and Emotion*

2013—2015 *Frontiers in Human Neuroscience*

Editorial Board

2019—2022 *Affective Science* (Member of the founding Editorial Board)

2017—2021 *Personality Neuroscience* (Member of the founding Editorial Board)

2015—2019 *Frontiers in Human Neuroscience*

2014—2017 *Emotion*

2013—2022 *Cognitive, Affective & Behavioral Neuroscience*

2013—2019 *Frontiers in Neuropsychiatric Imaging and Stimulation*

2012—2019 *Frontiers in Integrative Neuroscience*

Reviewer

Journals

Acta Psychologica; Affective Science; Alcoholism: Clinical and Experimental Research; American Journal of Psychiatry (AJP); Basic and Applied Social Psychology; Behavioral Neuroscience; Biological Psychiatry; Biological Psychology: Cognitive Neuroscience and Neuroimaging; Biological Psychology; BMC Psychiatry; Brain and Neuroscience Advances; Brain Research Bulletin (BRB); Brain Topography; Canadian Journal of Experimental Psychology/Revue canadienne de psychologie expérimentale; Cerebral Cortex; Clinical Psychological Science (CPS); Clinical Psychology Review (CPR); Cognitive, Affective, and Behavioral Neuroscience (CABN); Cognition and Emotion; Computational Psychiatry; Computers in Biology and Medicine; Cortex; Current Biology; Depression and Anxiety; eLIFE; Emotion; Developmental Cognitive Neuroscience (DCN); Developmental Psychobiology; Developmental Science; Development and Psychopathology; European Neurology; Frontiers in Human Neuroscience; Frontiers in Integrative Neuroscience; Harvard Review of Psychiatry (HRP); Human Brain Mapping (HBM); IEEE Journal of Biomedical and Health Informatics; Imaging Neuroscience; International Journal of Psychophysiology (IJP); JAMA Psychiatry; Journal of Abnormal Psychology; Journal of Affective Disorders; Journal of Applied Developmental Psychology; Journal of Chemical Neuroanatomy; Journal of Clinical Child and Adolescent Psychology (JCCAP); Journal of Cognitive Neuroscience (JCN); Journal of Cognitive Psychology; Journal of Consulting and Clinical Psychology (JCCP); Journal of Neuroscience; Journal of Neuroscience Methods; Journal of Personality and Social Psychology (JPSP); Journal of Pharmaceutical Technology & Drug Research; Journal of Physiology (Paris); Journal of Psychopathology and Clinical Science (JPCS); Journal of Visualized Experiments (JoVE); Laterality; Nature; Nature Communications; Nature Human Behaviour; Neural Computing and Applications; Neurocase; Neuroimage; Neuroimage: Clinical; Neuroinformatics; Neuropsychologia; Neuropsychology; Neuropsychopharmacology; Neuroscience & Biobehavioral Reviews (NBR); Neuroscience Letters; The Neuroscientist; Personality Disorders: Theory, Research, and Treatment; Physiology & Behavior; Perspectives on Psychological Science; Philosophical Transactions of the Royal Society B; Plos Biology; Plos ONE; PNAS USA; Progress in Neurobiology (PIN); Psychological Medicine; Psychological Review; Psychological Science; Psychology of Addictive Behaviors; Psychoneuroendocrinology; Psychonomic Bulletin & Review (PB&R); Psychophysiology; Quarterly Journal of Experimental Psychology (QJEP); Science; Science Advances; Scientific Reports; Social Cognitive and Affective Neuroscience (SCAN); Social Neuroscience; Trends in Cognitive Sciences (TiCS)

Funders

National Institutes of Health (NIH)

- *Standing*
  - Adult Lifespan Psychopathology (ALP), 2024-2025
  - Adult Psychopathology and Disorders of Aging (APDA), 2021-2024
- *Ad hoc*
  - Mechanisms of Emotion, Stress and Health Study Section (MESH)
  - Neural Basis of Psychopathology, Addictions and Sleep Disorders (NPAS)
  - Special Emphasis Panels
    - Biobehavioral and Behavioral Processes (ZRG1 BBBP-Y)
    - Collaborative Applications: Clinical Studies of Mental Illness (ZRG1 BBBP-S-60-C)
    - Development of Psychosocial Therapeutic and Preventive Interventions for Mental Disorders (ZMH1 ERB-D)

- Early-Phase Clinical Trials of Natural Products (ZAT1 SH-01 and ZAT1 SH-04)
- Fellowships: Learning and Memory, Language, Communication and Related Neurosciences (ZMH1 ERB-L-02 R)
- Mechanistic Studies to Optimize Mind and Body Interventions (ZAT1 PJ-02)
- Methodology and Measurement in the Behavioral and Social Sciences (ZRG1 PSE-A)

National Science Foundation (NSF)
European Research Council (ERC)
Wellcome Trust
Deutsche Forschungsgemeinschaft (DFG), German Research Foundation
Israeli Science Foundation (ISF)
Medical Research Council (MRC)
Arizona Institute for Mental Health Research
Brain and Behavior Institute Seed Grant Program, University of Maryland
Center for Translational and Basic Research, Hunter College, City University of New York
Commonwealth of Kentucky Science and Engineering Foundation
Dean's Research Initiative, College of Behavioral and Social Sciences, University of Maryland
MPower Seed Grant Program, University of Maryland
Neurological Foundation of New Zealand
San Antonio Life Sciences Institute
Undergradate Researcher of the Year Award, University of Maryland
U.S. Army Research Office
Waterloo Foundation, Cardiff, Wales
UMD-UMB Research and Innovation Seed Grant Program, University of Maryland

Faculty Tenure and Promotion

Boston University
Ohio State University
Reichman University
University of Pittsburgh
University of Southern California

Publishers

Harvard University Press
Oxford University Press
Sinauer Associates

Societies

Anxiety and Depression Association of America (ADAA) Annual Meeting
Organization for Human Brain Mapping (OHBM) Annual Meeting
Society of Biological Psychiatry (SOBP) Annual Meeting

Invited Lectures and Colloquia

[42] Shackman, A. J. (March 7, 2025). The nature and neurobiology of anxiety. ***Maryland Psychiatric Research Center.***

[41] Shackman, A. J. (February 15, 2024). The nature and neurobiology of anxiety. *Department of Psychological & Brain*

Sciences, ***Texas A&M.***

[40] Shackman, A. J. (October 10, 2023). The nature and neurobiology of anxiety. *Department of Psychology,* ***University of Washington.***

[39] Shackman, A. J. (September 19, 2023). The nature and neurobiology of anxiety. *Conte Center,* ***University of California, Irvine.***

[38] Shackman, A. J. (June 29, 2023). The nature and neurobiology of anxiety. ***California National Primate Center***.

[37] **Shackman, A. J.** (May 4, 2023). The nature and neurobiology of anxiety. *School of Medicine and Health Sciences,* ***George Washington University.***

[36] **Shackman, A. J.** (November 3, 2022). The nature and neurobiology of anxiety. ***Laureate Institute for Brain Research*** *(Tulsa, OK).*

[35] **Shackman, A. J.** (May 5, 2022). The nature and neurobiology of anxiety. *Department of Psychology,* ***Brock University*** *(St. Catherine's, Ontario, Canada).*

[34] **Shackman, A. J.** (November 30, 2021). The nature and neurobiology of anxiety. ***Central Institute of Mental Health*** *(Mannheim, Germany).*

[33] **Shackman, A. J.** (October 26, 2021). The nature and neurobiology of anxiety. *Brain Health Research Institute****,*** ***Kent State University.***

[32] **Shackman, A. J.** (August 18, 2021). The nature and neurobiology of anxiety. *Center for Neuromodulation in Depression and Stress, Perelman School of Medicine,* ***University of Pennsylvania.***

[31] **Shackman, A. J.** (April 16, 2021). The nature and neurobiology of anxiety. ***Maryland Psychiatric Research Center.***

[30] **Shackman, A. J.** (March 25, 2021). The nature and neurobiology of anxiety. *Department of Psychology,* ***Uppsala University (Uppsala, Sweden).***

[29] **Shackman, A. J.** (March 24, 2021). The nature and neurobiology of anxiety. *Department of Psychology,* ***University of Oslo (Oslo, Norway).***

[28] **Shackman, A. J.** (August 5, 2020). The nature and neurobiology of anxiety. ***National Institute of Mental Health.***

[27] **Shackman, A. J.** (March 6, 2020). The nature and neurobiology of anxiety. *Department of Psychology,* ***Rutgers University.***

[26] **Shackman, A. J.** (January 31, 2020). The nature and the neurobiology of anxiety. *Interdisciplinary workshop on 'Threat perception in dangerous times: Conflicts, climate change, and worry,'* ***Philipps-Universität (Marburg, Germany).***

[25] **Shackman, A. J.** (October 30, 2019). The neurobiology of anxiety. *Department of Psychology,* ***American***

University.

[24] **Shackman, A. J.** (June 19, 2019). The neurobiology of anxiety. *Donders Center for Cognitive Neuroimaging,* ***Radboud University (Nijmegen, The Netherlands).***

[23] **Shackman, A. J.** (December 14, 2018). The neurobiology of dispositional negativity. *Department of Psychology,* ***University of Arizona.***

[22] **Shackman, A. J.** (March 29, 2018). The neurobiology of dispositional negativity. *Department of Psychology,* ***Vanderbilt University.***

[21] **Shackman, A. J.** (January 25, 2018). The neurobiology of dispositional negativity. *Department of Psychology and Neuroscience,* ***Duke University.***

[20] **Shackman, A. J.** (November 17, 2017). The neurobiology of dispositional negativity. *Department of Psychology Neuroscience Seminar Series,* ***Yale University.***

[19] **Shackman, A. J.** (October 27, 2017). The neurobiology of dispositional negativity. *Department of Psychological and Brain Sciences,* ***University of Iowa.***

[18] **Shackman, A. J.** (April 14, 2016). Anxiety, pain, and cognition are integrated in the brain. Fifth annual Maryland Neuroimaging Retreat (*Pain Neuroimaging—Advances & Controversies*), ***University of Maryland, Baltimore.***

[17] **Shackman, A. J.** (November 30, 2016). The neurobiological bases of dispositional negativity—*Implications for psychopathology*. *Counseling Center Research and Development Seminar Series,* ***University of Maryland, College Park.***

[16] **Shackman, A. J.** (June 15, 2016). The neurobiology of dispositional anxiety. ***McLean Hospital/Harvard Medical School.***

[15] **Shackman, A. J.** (March 18, 2016). The neurobiology of dispositional anxiety. *Department of Psychology,* ***University of Virginia*.**

[14] **Shackman, A. J.** (February 23, 2016). The neurobiology of early-life anxiety. *Department of Psychiatry and Behavioral Sciences,* ***Johns Hopkins University*.**

[13] **Shackman, A. J.** (December 4, 2015). The neurobiology of dispositional anxiety. *Department of Psychology,* ***North Dakota State University*.**

[12] **Shackman, A. J.** (September 8, 2015). The role of the extended amygdala in early-life anxiety. ***National Institute of Mental Health*.**

[11] **Shackman, A. J.** (August 8, 2014). Understanding the neurobiology of dispositional anxiety. NIDA-sponsored symposium, *At the intersection of neuroscience and addictions: Treatment development,* ***University of Maryland, College Park.***

[10] **Shackman, A. J.** (February 24, 2014). Understanding the neurobiology of dispositional anxiety. *Center for*

Addictions, Personality, and Emotion Research; Department of Psychology, ***University of Maryland, College Park.***

[9] **Shackman, A. J.** (February 5, 2014). Understanding the neurobiology of dispositional anxiety. *Center for Children, Relationships, and Culture and NICHD Training Program in Social Development, Department of Human Development,* ***University of Maryland, College Park.***

[8] **Shackman, A. J.** (December 6, 2013). Anxiety and the brain. *Department of Psychology,* ***University of Virginia***.

[7] **Shackman, A. J.** (November 26, 2013). Dissecting the neurobiology of dispositional anxiety. *Department of Neural Pain Sciences, School of Dentistry,* ***University of Maryland, Baltimore.***

[6] **Shackman, A. J.** (November 20, 2013). Dissecting the neurobiology of dispositional anxiety. *Developmental Area Group, Department of Psychology,* ***University of Maryland, College Park.***

[5] **Shackman, A. J.** (October 4, 2013). Dissecting the neurobiology of dispositional anxiety*, Neuroscience and Cognitive Science Program Annual Retreat,* ***University of Maryland, College Park****.*

[4] **Shackman, A. J.** (December 6, 2012). Dissecting the neurobiology of dispositional anxiety*, Department of Psychology,* ***University of Maryland, College Park****.*

[3] **Shackman, A. J.** (November 13, 2012). The neurobiology of individual differences in anxious temperament*, Department of Medicine,* ***University of Wisconsin School of Medicine and Public Health****.*

[2] **Shackman, A. J.** (March 28, 2012). Individual differences reveal the deep structure of anxiety and its neurobiology*, Department of Psychology,* ***University of Alabama at Birmingham****.*

[1] **Shackman, A. J.** (November 21, 2011). The interaction and integration of anxiety and cognition. *Department of Human Development,* ***Cornell University****.*

Conference Presentations

Chaired Conference Symposia and Panels

[13] **Shackman, A. J.** & Kalin, N. H. (2025). A multidisciplinary perspective on the neurocomputational architecture of fear and anxiety: From cell types to clinically relevant circuits. Panelists: Yumeya Yamamori, Lisa Williams, Lindsey Halladay & **Alexander Shackman**. Symposium co-chaired at the annual meeting of the Society of Biological Psychiatry, Toronto, Ontario, Canada.

[12] **Shackman, A. J.** & Pine, D. S. (2023). A multidisciplinary perspective on the neurocomputational architecture of threat and safety: From anxiety-related cell types to circuits. Panelists: Mario Penzo, Andrew Fox, **Alexander Shackman**, & Sarah Tashjian. Symposium co-chaired at the annual meeting of the ***Society of Biological Psychiatry***, San Diego, CA***.***

[11] **Shackman, A. J.** (2022). Neuronosology: Convergence of Nosology and Neuroscience. Panelists: Lianne Schmaal, Deanna Barch, & David Zald. Symposium chaired at the annual meeting of the ***Hierarchical Taxonomy of Psychopathology (HiTOP) Consortium.***

[10] Larson, C. L. & **Shackman, A. J.** (2019). New frontiers in negative affect: From microcircuits in mouse to machine learning-derived macrocircuits in humans. Panelists: Luke Chang, Jonathan Fadok, Christine Larson, Daniel Pine, Daniela Schiller, & **Alexander Shackman**. Symposium co-chaired at the annual meeting of the ***Association for Psychological Science***, Washington, DC.

[9] **Shackman, A. J.** (2018). New frontiers in anxiety: From basic neurogenetic mechanisms to psychopathology. Panelists: Robin Aupperle, Dylan Gee, Antonia Kaczkurkin, & **Alexander Shackman**. Symposium chaired at the annual meeting of the ***Society for Research in Psychopathology***, Indianapolis, IN.

[8] **Shackman, A. J.** & Gee, D. (2018). Training the next generation of clinical scientists: Challenges and opportunities. Panelists: Deanna Barch, Michelle Craske, Erika Forbes, Bob Krueger, Tim Strauman, and Bob Levenson (Moderator). Roundtable discussion chaired at the annual of the ***Society for Research in Psychopathology***, Indianapolis, IN.

[7] **Shackman, A. J.** (2018). Transdiagnostic neuromarkers of emotion: From bench to bedside, across species & development. Panelists: Dylan Gee, **Alexander Shackman**, Wani Woo, Conor Liston, and Amit Etkin (Discussant). Symposium chaired at the annual meeting of the ***Society of Biological Psychiatry***, New York, NY.

[6] **Shackman, A. J.** (2018). New frontiers in early-life anxiety: From basic neurogenetic mechanisms to pediatric psychopathology. Panelists: Jennifer Blackford, Dylan Gee, **Alexander Shackman**, Lisa Williams, and Ned Kalin (Discussant). Symposium chaired at the annual meeting of the ***Anxiety and Depression Association of America***, Washington, DC.

[5] **Shackman, A. J.** & Etkin, A. (2016). New frontiers in adaptive control: From basic mechanisms to novel therapeutics. Panelists: **Alexander Shackman**, Amit Etkin, Robert Reinhart, and Tor Wager. Symposium co-chaired at the annual meeting of the ***Society of Biological Psychiatry***, Atlanta, GA.

[4] **Shackman, A. J.** (2015). Adaptive control: Neuro-computational substrates and implications for understanding neuropsychiatric disorders. Panelists: James Cavanagh, Clay Holroyd, Greg Hajcak, and Amitai Shenhav. Symposium chaired at the annual meeting of the ***Society for Psychophysiological Research***, Seattle, WA.

[3] Fox, A.S., **Shackman, A. J.**, & Koob, G. F. *(*2015). Extended amygdala circuits in anxiety and addiction: cross-species molecular, anatomical, and functional insights. Panelists: Andrew Fox, **Alexander Shackman**, Julie Fudge, Thomas Kash, and George Koob (Discussant). Symposium co-chaired at the annual meeting of the ***Society of Biological Psychiatry***, Toronto, Canada.

[2] **Shackman, A. J.** & Kalin, N.H. (2014). The neurobiology of pervasive anxiety: The role of circuits centered on the extended amygdala. Panelists: Talma Hendler, Ned Kalin, Luiz Pessoa, **Alexander Shackman** & Leah Somerville. Symposium co-chaired at the annual meeting of the ***Society of Biological Psychiatry***, New York, NY.

[1] **Shackman, A. J.** & Fox, A. S. (2014). The neurobiology of early-life anxiety. Panelists: Jennifer Blackford, Andrew Fox, Ned Kalin & Daniel Pine, **Alexander Shackman**, and Nim Tottenham. Symposium co-chaired at the annual meeting of the ***Anxiety and Depression Association of America***, Chicago, IL.

Invited Conference Presentations

[8] **Shackman, A. J.** (2021). The nature and neurobiology of anxiety. Annual meeting of the ***Social & Affective Neuroscience Society.***

[7] **Shackman, A. J.** (2021). The nature and neurobiology of anxiety. ***Progress in Psychoradiology and Cognitive / Affective Neuroscience (PiPCAN)*** [online meeting] organized by Q. Gong (Huaxi Magnetic Resonance Research Center, Sichuan University) and B. Becker (University of Electronic Science and Technology of China, Chengdu).

[6] **Shackman, A. J.** (2019). Fearful and anxious states, traits, and disorders. Annual meeting of the ***Association for Psychological Science***, Washington, DC. Symposium on *New frontiers in negative affect: From microcircuits in mouse to machine learning-derived macrocircuits in humans* organized by C. Larson & **A.J. Shackman**.

[5] Barstead, M. G. † & **Shackman, A. J.** (2019). A roadmap for linking dispositional risk for psychopathology to momentary emotional experience. Annual meeting of the ***Association for Psychological Science***, Washington, DC. Symposium on *Novel analytic approaches to clinical science data over time* organized by E. Page-Gould and J. Tackett.

[4] **Shackman, A. J.** (2015). The integration of emotion and cognition in the brain. Annual meeting of the ***Society for Psychophysiological Research***, Seattle, WA.

[3] **Shackman, A. J.** (2015). The integration of emotion and cognition in the brain. Annual meeting of the ***Social & Affective Neuroscience Society***, Boston, MA.

[2] **Shackman, A. J.** (2015). The integration of emotion and cognition in the brain. Annual meeting of the ***Society for Affective Science***, San Francisco, CA.

[1] **Shackman, A. J.** (2013). Dissecting the neurobiology of dispositional anxiety. Annual DFG Symposium on *Fear, Anxiety & Anxiety Disorders* (sponsored by the German National Research Foundation [DFG] and organized by C. Buechel and H.-C. Pape), *Institute for Systems Neuroscience & Center for Experimental Medicine*, ***University of Hamburg, Germany***.

Discussant/Panelist

[5] **Shackman, A. J.** (2024). Social media for science communication: Challenges and opportunities. Panelists: J. David Jentsch, Hilary Marusak, & Alexander J. Shackman. Panel discussion at the annual meeting of the ***Society of Biology Psychiatry***, Austin, TX.

[4] Rogers, C. & Thompson, W. (2022). Quo vadis: The implications of small effect sizes in population neuroimaging studies. Panelists: Cynthia Rogers, Wesley Thompson, Damien Fair, Roman Kotov, **Alexander J. Shackman**, Hae Kyung Im, & Monica Rosenberg. Panel discussion ('Study Group') at the annual meeting of the ***American College of Neuropsychopharmacology***, Phoenix, AZ.

[3] Hur, J. † (2019). New directions in fear and anxiety. Panelists: Juyoen Hur †, Tina Lonsdorf, Christine Larson & Martin Paulus (replaced by George Buzzell due to flooding in Oklahoma); Discussant: **Alexander J. Shackman**. Symposium at the annual meeting of the ***Association for Psychological Science***, Washington, DC.

[2] **Shackman, A. J.** (2018). Authorship models. Roundtable discussion (Chair). Annual meeting of the ***Hierarchical***

Taxonomy of Psychopathology Consortium, Indianapolis, IN.

[1] **Shackman, A. J.** (2018). Predicting psychopathology using large-scale brain imaging datasets. Panelists: Hugh Garavan, Aaron Heller, Hedy Kober, Helen Mayberg & **Alexander Shackman**. ***Clinical Neuroscience Pre-Conference***. Annual meeting of the ***Social & Affective Neuroscience Society***, New York, NY.

Regular Conference Presentations

[21] **Shackman, A. J.** (2025). The nature, neurobiology, and clinical relevance of human fear and anxiety. Talk presented at the annual meeting of the Society of Biological Psychiatry (Symposium on *A multidisciplinary perspective on the neurocomputational architecture of fear and anxiety: From cell types to clinically relevant circuits,* chaired **A. J. Shackman** & N. H. Kalin), Toronto, Ontario, Canada.

[20] **Shackman, A. J.** (2023). The neurobiology of human fear and anxiety. Talk presented at the annual meeting of the Society of Biological Psychiatry (Symposium on *A multidisciplinary perspective on the neurocomputational architecture of threat and safety—From anxiety-related cell types to circuits*, chaired by **A. J. Shackman** & D. S. Pine), San Diego, CA*.*

[19] **Shackman, A. J.** (2019). Neurogenetic bases of dispositional negativity and extreme anxiety. Talk presented at the annual meeting of the ***Society for Psychophysiological Research*** (Symposium on *Fear and loathing in D.C.—The psychophysiology of various reasons of maladaptive threat processing*, chaired by E. Müller & M. Wieser), Washington, DC.

[18] **Shackman, A. J.** (2019). The neurobiology of fear and anxiety. Talk presented at the annual meeting of the ***Dutch Neuroscience Society*** (Symposium on *The extended amygdala: on the interface of anxiety and (generalized) fear,* chaired by D. van der Geugten & J. M. P. Baas, Lunteren, The Netherlands.

[18] **Shackman, A. J.** (2018). Neurogenetic bases of extreme anxiety. Talk presented at the annual meeting of the ***Society for Research in Psychopathology*** (Symposium on *New frontiers in anxiety: From basic neurogenetic mechanisms to psychopathology,* chaired by **A. J. Shackman**), Indianapolis, IN.

[17] **Shackman, A. J.** (2018). Neurogenetic bases of extreme early-life anxiety. Talk presented at the annual meeting of the ***Society of Biological Psychiatry*** (Symposium on *Transdiagnostic neuromarkers of emotion: From bench to bedside, across species & development,* chaired by **A. J. Shackman**), New York, NY.

[16] **Shackman, A. J.** (2018). Neural bases of extreme early-life anxiety. Talk presented at the annual meeting of the ***Anxiety and Depression Association of America*** (Symposium on *New Frontiers in Early-Life Anxiety: From basic neurogenetic mechanisms to pediatric psychopathology,* chaired by **A. J. Shackman**), Washington, DC.

[15] **Shackman, A. J.** (2017). Neural systems underlying extreme early-life anxiety. Talk presented at the annual meeting of the ***Society for Social Neuroscience*** (Symposium on *Anxiety and responding to threat: Neurobiological and contextual contributions to development,* chaired by H. Meffert and K. Michalska), Washington, DC.

[14] **Shackman, A. J.** (2017). The neurobiology of dispositional negativity. Talk presented at the first bi-annual meeting of the ***World Association for Stress-Related and Anxiety Disorders*** (Symposium on *Stress, fear, and individual differences in negative emotionality—Human research,* chaired by C. Büchel and T. Lonsdorf),

Würzburg, Germany.

[13] **Shackman, A. J.** (2017). Brain bases of individual differences in dispositional negativity. Talk presented at the annual meeting of the ***Association for Research in Personality*** (Symposium on *Personality among the primates: A phylo-genetic and neurobiological excursion,* chaired by R. Latzman and C. DeYoung), Sacramento, CA.

[12] **Shackman, A. J.** (2017). Dispositional negativity in the wild: Social context governs momentary emotional experience. Talk presented at the annual meeting of the ***Association for Psychological Science*** (Symposium on New Directions on the *Affective consequences of interpersonal relationships: mechanisms, individual differences, and relationship characteristics*, chaired by E. P. Lemay & R. Venaglia), Boston, MA.

[11] **Shackman, A. J.** (2016). Neurobiological bases and markers of early-life anxiety. Talk presented at the annual meeting of the ***Society for Psychophysiological Research*** (Symposium on *Biomarkers for anxiety*, chaired by A. Kaczkurkin & J.J.B. Allen), Minneapolis, MN.

[10] **Shackman, A. J.** (2016). The neural bases and translational relevance of adaptive control. Talk presented at the annual meeting of the ***Society of Biological Psychiatry*** (Symposium on *New frontiers in adaptive control: From basic mechanisms to novel therapeutics*, chaired by **A.J. Shackman** & A. Etkin), Atlanta, GA.

[9] **Shackman, A. J.** (2015). Neural mechanisms underlying similarities and differences in the presentation of early-life anxiety. Talk presented at the annual meeting of the ***Society for Psychophysiological Research*** (Symposium on *Using biobehavioral profiles to decrease heterogeneity, improve specificity and prediction of risk,* chaired by K. Buss), Seattle, WA.

[8] **Shackman, A. J.**, Fox, A. S., Oler, J. A., Weinstein, J. S., Martinez-Cancino, R., Oakes, T. R., Shelton, S. E., Smith, J. F., Pessoa, L., Gamer, M., Davidson, R. J. & Kalin, N. H. (2015). The extended amygdala is a key substrate for sustained anxiety. Talk presented at the annual meeting of the ***Society of Biological Psychiatry*** (Symposium on *Extended amygdala circuits in anxiety and addiction: cross-species molecular, anatomical, and functional insights,* chaired by A. S. Fox, **A. J. Shackman,** & G. F. Koob), Toronto, Canada.

[7] **Shackman, A. J.** (2015). The central extended amygdala is a key substrate for early-life anxiety. Talk presented at the annual meeting of the ***Anxiety and Depression Association of America*** (Symposium on *Imaging the anxious brain at rest*, chaired by A. Roy), Miami, FL.

[6] **Shackman, A. J.** (2014). The integration of emotion, pain, and cognition in the brain. Talk presented at the annual meeting of the ***Society for Neuroscience*** (Mini-symposium on *Characterizing the roles of fronto-cingulo-subcortical circuits in pain, emotion, and cognition,* chaired by D. Seminowicz), Washington, DC.

[5] **Shackman, A. J.**, Fox, A. S., Oler, J. A., Birn, R. M., Williams, L. E., Oakes, T. R., Shelton, S. E., Davidson, R. J. & Kalin, N. H. (2014). The extended amygdala is a key substrate for extreme anxiety early in life. Talk presented at the annual meeting of the ***Society of Biological Psychiatry*** (Symposium on *The neurobiology of pervasive anxiety: The role of circuits centered on the extended amygdala,* chaired by **A. J. Shackman** & N. H. Kalin), New York, NY.

[4] **Shackman, A. J.**, Fox, A. S., Oler, J. A., Birn, R. M., Williams, L. E., Oakes, T. R., Shelton, S. E., Davidson, R. J. & Kalin, N.

H. (2014*).* The extended amygdala is a key substrate for extreme anxiety early in life. Talk presented at the annual meeting of the ***Anxiety and Depression Association of America*** (Symposium on *The neurobiology of early-life anxiety,* chaired by **A. J. Shackman** & A. S. Fox), Chicago, IL.

[3] **Shackman, A. J.**, Fox, A. S., Oler, J. A., Shelton, S. E., Davidson, R. J. & Kalin, N. H. (2012). A common neural phenotype underlies diversity in the expression of anxiety. Talk presented at the annual meeting of the ***Society for Neuroscience*** (Nanosymposium on *Neural mechanisms underlying pain perception and anxiety,* chaired by I. Strigo), New Orleans, LA.

[2] **Shackman, A. J.,** Maxwell, J. S., McMenamin, B. W., Fox, A. S., Greischar, L. L. & Davidson, R. J. (2011). Neural circuitry mediating the impact of anxiety on cognition. ***Psychophysiology****, 48*, S8. (Symposium on the *Interaction between anxiety and cognition: Behavioral, psychophysiological, and neural perspectives,* chaired by C. Grillion).

[1] **Shackman, A. J.**, Maxwell, J. S., Skolnick, A. J., Schaefer, H. S. & Davidson, R. J. (2003). Exploiting individual differences in the prefrontal asymmetry of approach-related affect: Hemodynamic, electroencephalographic, and psychophysiological evidence. Program No. 444.6. Abstract Viewer/Itinerary Planner. Washington, DC: ***Society for Neuroscience***.

Posters and Co-Authored Talks

† indicates mentored trainee

[122] Bas-Hoogendam, J. M., Bernstein, R., Benson, B. E., Buss, K. A., Gunther. K. E., Pérez-Edgar, K., Salum, G. A., Jackowski, A. P., Bressan, R. A., Zugman, A., Degnan, K. A., Filippi, C. A., Fox, N. A., Henderson, H. A., Tang, A., Zeytinoglu, S., Harrewijn, A., Hillegers, M. H. J., White, T. J. H., Schwartz, C., Rauch, S. L., Felicione, DeYoung, K. A., **Shackman, A. J.**, Smith, J. F., Tillman, R. M. †, van den Berg, Y. H. M., Cillessen, A. H. N., Roelofs, K., Tyborowska, A., Hill, S. Y., Battaglia, M., Tettamanti. M., Dougherty, L. R., Jin, J., Klein, D. N., Leung, H.-C., Avery, S. N., Blackford, J. U., Clauss, J. A., Hayden, E. P., Liu, P., Vandermeer, M. R. J., Goldsmith, H. H., Planalp, E. M., Nichols, T. E., Thompson, P. M., Westenberg, P. M, van der Wee, N. J. A., Groenewold, N. A., Stein, D. J., Winkler, A. M., Pine, D. S., & the ENIGMA-Anxiety Working Group. (2025). Structural brain correlates of childhood inhibited temperament: results from a pre-registered ENIGMA-Anxiety mega-analysis in 3,803 individuals. Poster presented at the annual meeting of the ***European College of Neuropsychopharmacology***, Amsterdam, The Netherlands.

[121] Liu, E. †, Hemphill, L., Davis, B. L., Todd, I. , Orth, R. D., Bennett, M. E., **Shackman, A. J.**, Blanchard, J. J. & Smith, J. F. (2025). Understanding the neural underpinnings of paranoid ideation in psychosis. Poster presented at the annual ***Department of Psychology Research Fair***, University of Maryland, College Park, MD.

[120] MacMillan, J., Raghavan, P., Zhang, A., **Shackman, A. J.** & Xie, W. (2025). Tracking neurophysiological responses to anticipatory threat through the eye. Poster presented at the annual ***Department of Psychology Research Fair***, University of Maryland, College Park, MD.

[119] Drzewiecki, C. M., Kalinova, K. N. †, DeYoung, K. A., Smith, J. F., **Shackman, A. J.** & Fox, A. S. (2025). Dissociating the neurocomputational architecture of threat processing by manipulating distinct facets of uncertainty. Poster presented at the annual meeting of the ***Society of Biological Psychiatry***, Toronto, ON.

[118] Grogans, S. E. †, Hur, J. †, Didier, P. R. †, Das, S. †, Anderson, A. S. †, Islam, S. †, Kim, H. C. †, Kuhn, M. †, Fox, A. S.,

Smith, J. F., DeYoung, K. A., & **Shackman, A. J.** (2025). Increased reactivity to uncertain-threat anticipation in the bed nucleus of the stria terminalis and periaqueductal gray is associated with longitudinal worsening of internalizing symptoms, conditional on stress exposure. Poster presented at the annual meeting of the ***Anxiety and Depression Association of America***, Las Vegas, NV.

[117] Grogans, S. E. †, Hur, J. †, Didier, P. R. †, Das, S. †, Anderson, A. S. †, Islam, S. †, Kim, H. C. †, Kuhn, M. †, Fox, A. S., Smith, J. F., DeYoung, K. A., & **Shackman, A. J.** (2025). Increased reactivity to uncertain-threat anticipation in the bed nucleus of the stria terminalis and periaqueductal gray is associated with longitudinal worsening of internalizing symptoms, conditional on stress exposure. Poster presented at the annual meeting of the ***Anxiety and Depression Association of America***, Las Vegas, NV.

[116] Didier, P. R. †, Grogans, S. E. †, Harring, J. R., Conway, C. C., Wright, A. G. C., DeYoung, K. A., & **Shackman, A. J.** (2025). Real-world emotion dynamics are associated with current and future internalizing symptoms. Poster presented at the annual meeting of the ***Anxiety and Depression Association of America***, Las Vegas, NV.

[115] Grogans, S. E. †, Hur, J. †, Didier, P. R. †, Das, S. †, Anderson, A. S. †, Islam, S. †, Kim, H. C. †, Kuhn, M. †, Fox, A. S., Smith, J. F., DeYoung, K. A., & **Shackman, A. J.** (2025). Increased reactivity to uncertain-threat anticipation in the bed nucleus of the stria terminalis and periaqueductal gray is associated with longitudinal worsening of internalizing symptoms, conditional on stress exposure. Poster presented at the annual meeting of the ***Society of Biological Psychiatry***, Toronto, ON.

[114] Grogans, S. E. †, Hur, J. †, Barstead, M. G. †, Anderson, A. S. †, Islam, S. †, Kim., H. C. †, Kuhn, M. †, Tillman, R. M. †, Fox, A. S., Smith, J. F., DeYoung, K. A., & **Shackman, A. J.** (2025). The neural systems and real-world mood dynamics underlying dispositional risk for internalizing illness. Talk presented at the annual meeting of the ***Society for Research in Psychopathology***, Montreal, Quebec.

[113] Cunneen, J. †, Kalinova, K. N. †, Islam, S. †, Anderson, A. S. †, DeYoung, K. A., & **Shackman, A. J.** (2025). Perceived social support is associated with current and future social anxiety symptoms in at-risk adults. Poster presented at the annual meeting of the ***Association for Psychological Science***, Washington, DC.

[112] Ewing, D. †, Didier, P. R. †, Grogans, S. E. †, Anderson, A. S. †, Islam, S. †, Craig, L. E. †, Wedlock, J. †, Hur, J. †, DeYoung, K. A., & Shackman, A. J. (2024). Loneliness and internalizing symptoms of anxiety and depression over time. Poster presented at the annual meeting of the ***Association for Behavioral and Cognitive Therapies***, Philadelphia, PA.

[111] Yao, Y., Liu, C. Y., Furman, A., Keaser, M., **Shackman, A. J.**, Seminowicz, D. (2024). Brain connectivity patterns differ during pain, negative affect & cognitive control tasks. Poster presented at the ***Human Pain Seminar Series Summit***, Toronto, Ontario.

[110] Grogans, S. E. †, Hur, J. †, Barstead, M. G. †, Anderson, A. S. †, Islam, S. †, Kim, H. C. †, Kuhn, M. †, Tillman, R. M. †, Fox, A. S., Smith, J. F., DeYoung, K. A., & **Shackman, A. J.** (2024). The neural system and real-world mood dynamics underlying dispositional risk for internalizing illness. Poster presented at the annual ***Wisconsin Symposium on Emotion***, Madison, WI.

[109] Liu, E. †, Earp, J. †, Li, E. C. †, Patel, N. †, Hemphill, L. A., Orth, R. D., Todd, I. A., Bennett, M. E., Blanchard, J. J., **Shackman, A. J.**, & Smith, J. F. (2024). Moment-by-moment ratings of emotional films and their associations with neuroimaging-derived markers of negative affect: Part one of a three-part study. Poster presented at the annual ***Department of Psychology Research Fair***, University of Maryland, College Park, MD.

[108] Earp, J. †, Liu, E. †, Li, E. C. †, Patel, N. †, Hemphill, L. A., Orth, R. D., Todd, I. A., Bennett, M. E., Blanchard, J. J., **Shackman, A. J.**, & Smith, J. F. (2024). Pupillometry during viewing of a suspenseful film and its relation to behavioral and neuroimaging-derived markers of negative affect: Part two of a three-part study. Poster presented at the annual ***Department of Psychology Research Fair***, University of Maryland, College Park, MD.

[107] Li, E. C., † Patel, N. †, Earp, J. †, Liu, E. †, Hemphill, L.A., Orth, R. D., Todd, I. A., Bennett, M. E., Blanchard, J. J., **Shackman, A. J.**, & Smith, J. F. (2024). Skin conductance response during viewing of a suspenseful film and its relation to behavioral and neuroimaging-derived markers of negative affect: Part three of a three-part study. Poster presented at the annual ***Department of Psychology Research Fair***, University of Maryland, College Park, MD. ****** Recipient of the 2024 Research Gold Award, the highest honor conferred by the Department of Psychology to undergraduate researchers ******

[106] Kwon, M., Bo, K., Botvinik-Nezer, R., Kragel, P., Van Oudenhove, L., Wager, T. D. & **The Affective Neuroimaging Consortium** (2024). Poster presented at the annual meeting of the ***Society for Affective Science***, New Orleans, LA.

[105] Drzewiecki, C. M., Oler, J. A., Birn, R. M., **Shackman, A. J.**, Alexander, A. L., Kalin, N. H. & Fox, A. S. (2024) Functional connectivity of the prefrontal cortex and its relationship to anxious temperament in rhesus macaques. Poster presented at the annual meeting of the ***Society of Biological Psychiatry***, Austin, TX.

[104] Didier, P. †, Blanchard, J. J., Bennett, M. E., Orth, R.D., Savage, C. L. G., Smith, J. F., & **Shackman, A. J.** (2024). Transdiagnostic motivation and pleasure deficits are associated with reduced ventral striatum reactivity to social, not monetary, reward. Poster presented at the annual meeting of the ***Society of Biological Psychiatry***, Austin, TX.

[103] Grogans, S. E. †, Hur, J., Barstead, M. G., Anderson, A. S. †, Islam, S. †, Kim, H. C. †, Kuhn, M., Tillman, R. M. †, Fox, A. S., Smith, J. F., DeYoung, K. A., & **Shackman, A. J.** (2024). The neural systems and real-world mood dynamics underlying dispositional risk for internalizing illness. Poster presented at the annual meeting of the ***Society of Biological Psychiatry***, Austin, TX.

[102] Didier, P. †, Cornwell, B., Grogans, S. E. †, Anderson, A. S. †, Islam, S. †, Kim, H. C. †, Tillman, R. M. †, Hur, J., Fox, A. S., DeYoung, K. A., Smith, J. F., & **Shackman, A. J.** (2024). A shared threat-anticipation circuit is dynamically engaged at different moments by temporally uncertain and certain threat. Poster presented at the annual meeting of the ***Society of Biological Psychiatry***, Austin, TX.

[101] Castro, G. B. †, Stockbridge, M. D., Kuhn, M., Kaplan, C. M. †, Hur, J., Kim, H. C. †, Bradford, D. E., Curtin, J. J., Smith, J. F., & **Shackman, A. J.** (2023). Understanding the impact of acute alcohol administration on fear and anxiety circuitry: Study overview and preliminary behavioral results. Poster presented at the annual meeting of the ***NIH Blueprint Enhancing Neuroscience Diversity through Undergraduate Research Education Experiences (ENDURE) Consortium***, Washington, DC.

[100] Castro, G. B. †, Stockbridge, M. D., Kuhn, M., Kaplan, C. M. †, Hur, J., Kim, H. C. †, Bradford, D. E., Curtin, J. J., Smith, J. F., & **Shackman, A. J.** (2023). Understanding the impact of acute alcohol administration on fear and anxiety circuitry: Study overview and preliminary behavioral results. Poster presented at the annual ***Mid-Atlantic Neuroscience Diversity Scholars (MiNDS) Retreat***, Temple University.

[99] Mann, N. S. †, Smith, J. F., Orth, R. D., Todd, I. A., McNichol, B., Moh, A., Savage, C. L. G., Bennett, M. E., **Shackman, A. J.**, & Blanchard, J. J. (2023). Influence of motivation and pleasure on social regulation of anxiety in individuals with psychosis: A heart rate variability study. Poster presented at the annual ***PSYC Terp Research Fair***, College Park, MD.

[98] Shi, T. †, Grogans, S. E. †, Smith, J. F., & **Shackman, A. J.** (2023). Understanding the role of extended amygdala

reactivity in intolerance of uncertainty & loneliness. Poster presented at the annual ***PSYC Terp Research Fair***, College Park, MD.

[97] Kwon, M., Kragel, P., Van Oudenhove, L., Halchenko, Y., T. D. Wager, & the **Affective Neuroimaging Consortium**. (2023). Evaluating predictive models of mental processes using a large-scale, multi-study fMRI data. Poster presented at the annual meeting of the ***Organization for Human Brain Mapping***, Montreal, Quebec.

[96] Kwon, M., Kragel, P., Van Oudenhove, L., Halchenko, Y., T. D. Wager, & the **Affective Neuroimaging Consortium.** (2023). The Affective Neuroimaging Consortium (ANiC). Poster presented at the annual meeting of the ***Social and Affective Neuroscience Society***, Santa Barbara, CA.

[95] Didier, P. †, Cornwell, B., Grogans, S. E. †, Anderson, A. S. †, Islam, S. †, Kim, H. C. †, Tillman, R. M. †, Hur, J. †, Fox, A. S., DeYoung, K. A., Smith, J. F., **Shackman, A. J.** (2023). Decomposing the neural dynamics of threat anticipation. Poster presented at the annual meeting of the ***Society of Biological Psychiatry***, San Diego, CA.

[94] Grogans, S. E. †, Hur, J. †, Kuhn, M. †, Anderson, A. S. †, Islam, S. †, Kim, H. C. †, Tillman, R. M. †, Fox, A. S., Smith, J. F., DeYoung, K. A., & **Shackman, A. J.** (2023). Attenuated safety-related vmPFC activation is associated with pervasively elevated real-world distress. Talk presented at the annual meeting of the ***Society of Biological Psychiatry***, San Diego, CA.

[93] Grogans, S. E. †, Hur, J. †, Barstead, M. G. †, Anderson, A. S. †, Islam, S. †, Kim, H. C. †, Kuhn, M. †, Tillman, R. M. †, Fox, A. S., Smith, J. F., DeYoung, K. A., & **Shackman, A. J.** (2023). Neuroticism is associated with increased reactivity to uncertain threat—but not 'threat-related' emotional faces—in the bed nucleus of the stria terminalis. Poster presented at the annual meeting of the ***Society of Biological Psychiatry***, San Diego, CA.

[92] Grogans, S. E. †, Conway, C. C., Anderson, A. S. †, Islam, S. †, Craig, L. E. †, Wedlock, J. †, Hur., J. †, DeYoung, K. A., & **Shackman, A. J.** (2023). Neuroticism is selectively associated with longitudinal increases in broadband internalizing symptoms, but not anhedonia or anxious arousal, in emerging adulthood. Poster presented at the annual meeting of ***Anxiety and Depression Association of America***, Washington, DC.

[91] Kwon, M., Bo, K., Kragel, P. A., Van Oudenhove, L., Wager, T. D. & The Affective Neuroimaging Collaboratory [Davey, C. G., Fullana, M. A., Harrison, B. J., Harrison, O., Jamieson, A., Klein, S., Knutson, B., Koban, L., Kober, H., Lonsdorf, T. B., Merz, C. J., Pattinson, K., Plassmann, H., Schiller, D., **Shackman, A. J.**, Small, D., Soriano-Mas, C., Stark, R., Vervliet, B.] (2022). Common and selective representations of pain, appetitive process, aversive process, and cognitive control in the insula. Poster presented at the annual meeting of the ***Organization for Human Brain Mapping***.

[90] Bikach, M. †, Grogans, S. E. †, Kim, H. C. †, DeYoung, K. A. & **Shackman, A. J.** (2022). Exploring the role of substance use on the relationship between behavioural inhibition, social anxiety, and loneliness. Poster presented at the annual campus-wide ***Undergraduate Research Day, University of Maryland***.

[89] Kwon, M., Kragel, P. A., Van Odenhove, L., Bo, K., Wager, T. D., & The Affective Neuroimaging Collaboratory [Davey, C. G., Fullana, M. A., Harrison, B. J., Harrison, O., Jamieson, A., Klein, S., Knutson, B., Koban, L., Kober, H., Lonsdorf, T. B., Merz, C. J., Pattinson, K., Plassmann, H., Schiller, D., **Shackman, A. J.**, Small, D., Soriano-Mas, C., Stark, R., Vervliet, B.] (2022). Common and selective representations of pain, appetitive process, aversive process, and cognitive control in the insula. Poster presented at the annual meeting of the ***Cognitive Neuroscience Society***.

[88] Grogans, S. E. †, Hur, J. †, Smith, J. F., DeYoung, K. A., & **Shackman, A. J.** (2022). The neurobiology of neuroticism/negative emotionality. Flash talk presented at the annual meeting of the ***Association for Psychological Science***, Chicago, IL.

[87] Grogans, S. E. †, Hur, J., † Kuhn, M. †, Anderson, A. S. †, Islam, S. †, Kim, H. C. †, Tillman, R. M. †, Fox, A. S., Smith, J. F., DeYoung, K. A., & **Shackman, A. J.** (2022). Diminished vmPFC safety signaling is associated with pervasively elevated real-world negative affect. Poster presented at the annual meeting of the ***Society of Biological Psychiatry***, New Orleans, LA.

[86] Grogans, S. E. †, Hur, J. †, Barstead, M. G. †, Anderson, A. S. †, Islam, S. †, Kim, H. C. †, Kuhn, M. †, Tillman, R. M. †, Fox, A. S., Smith, J. F., DeYoung, K. A., & **Shackman, A. J.** (2021). Neuroticism/negative emotionality is associated with increased reactivity to uncertain threat in the bed nucleus of the stria terminalis. Poster presented at the annual meeting of the ***Society for Social Neuroscience.***

[85] Grogans, S. E. †, Hur, J. †, Kuhn, M. †, Anderson, A. S. †, Islam, S. †, Kim, H. C. †, Tillman, R. M. †, Fox, A. S. Smith, J. F., DeYoung, K. A, & **Shackman, A. J.** (2022). Diminished vmPFC safety signaling is associated with pervasively elevated real-world negative affect. Poster presented at the annual meeting of the ***Society of Biological Psychiatry***, New Orleans, LA.

[84] Kwon, M., Van 't Hof, S., Botvinick-Nezer, R., Amini, M., Bango, C., Hunt, B., Murphy, E., Christian, D., Davey, C. G., Fullana, M., Harrison, B. J., Harrison, O., Jamieson, A. J., Klein, S., Jamieson, A. J., Klein, S., Knutson, B. D., Koban, L., Kober, H., Lonsdorf, T. B., Martiniez-Zalacain, I., Merz, C., Mortazavi, L., Pattinson, K., Plassmann, H., Schiller, D., **Shackman, A. J.**, Small, D., Soriano-Mas, C., Stark, R., Sung, J., Vervliet, B., Kragel, P. A., Van Oudenhove, L. & Wager, T. D. (2021). The Affective Neuroimaging Collaboratory (ANiC): Towards a better understanding of the neural architecture of affective processes. Poster presented at the annual meeting of the ***Society for Neuroscience***.

[83] Grogans, S. E. †, Hur, J. †, Barstead, M. G., Anderson, A. S. †, Islam, S. †, Kim, H. C. †, Kuhn, M. †, Tillman, R. M. †, Fox, A. S., Smith, J. F., DeYoung, K. A., & **Shackman, A. J.** (2021). Neuroticism/negative emotionality is associated with increased reactivity to uncertain threat in the bed nucleus of the stria terminalis. Poster presented at the annual meeting of the ***Society for Neuroscience***.

[82] Kim, H. C. †, Smith, J. F., Islam, S. †, Anderson, A. S. †, Kaplan, C. M. †, DeYoung, K. A., Grogans, S. E. †, Fox, A. S., Bradford, D. E., Curtin, J. J., & **Shackman, A. J.** (2021). The role of the central extended amygdala in acute nicotine abstinence. Poster presented at the annual meeting of the ***Society for Neuroscience***.

[81] Anderson, A. S. †, DeYoung, K. A., Grogans, S. E. †, Wedlock, J. †, Islam, S. †, Barstead, M. G., **Shackman, A. J.** (2021). BIPOC undergraduate students' experiences with microaggressions and discrimination: Prevalence and associations with mental illness. Poster presented at the annual meeting of the ***Society for Research in Psychopathology***.

[80] Anderson, A. S. †, Grogans, S. E. †, Wedlock, J. †, DeYoung, K. A. †, **Shackman, A. J.** (2021). Microaggressions experienced by Black undergraduates across the United States: Risk and resilience. Poster presented at the annual meeting of the ***Association for Behavioral and Cognitive Therapies.***

[79] Baez, L., Grogans, S. E. †, Craig, L. E. †, Wedlock, J. C. †, Anderson, A. S. †, Islam, S. †, DeYoung, K. A., Conway, C. C.,

Heller, A. S., & **Shackman, A. J.** (2021). Using affective dynamics to predict dysphoria over 30 months: A partial least squares regression analysis. Poster presented at the annual meeting of the ***Wisconsin Symposium on Emotion.***

[78] Grogans, S. E. †, Hur, J., Anderson, A. S. †, Islam, S. †, Kim, H. C. †, Kuhn, M. †, Tillman, R. M. †, Fox, A. S., Smith, J. F., DeYoung, K. A., & **Shackman, A. J.** (2021). Neuroticism/Negative Emotionality is associated with elevated activation in the bed nucleus of the stria terminalis during uncertain-threat anticipation. Poster presented at the annual meeting of the ***Wisconsin Symposium on Emotion.***

[77] Newsome, P. †, Grogans, S. E. †, Barstead, M. G., Wedlock, J. †, DeYoung, K. A., & **Shackman, A. J**. (2021). Dispositional negativity and intolerance of uncertainty: The real-world consequences of temperament. Poster presented at the annual meeting of the ***Association for Psychological Science.***

[76] Anderson, A. S. †, Grogans, S. E. †, Wedlock, J. †, DeYoung, K. A. †**,** & **Shackman, A. J.** (2021). Microaggressions experienced by black undergraduates across the United States: Risk and resilience. Poster presented at the annual meeting of the ***Association for Behavioral and Cognitive Therapies.***

[75] Boumaiz †, Y. Rogers †, M., Grogans †, S., Kim †, H. C. & **Shackman, A. J.** (2020). Neuroticism predicts negative reinforcement tobacco smoking motives. ***Annual Undergraduate Research Day. Maryland Center for Undergraduate Research***, College Park, MD.

[74] Kuhn, M.* †, Kaplan, C. M.* †, Hur, J. †, Bradford, D. E., Fox, A. S., Curtin, J. J., Smith, J. F., & **Shackman, A. J.** (*meeting canceled*). Neural systems underlying the anxiolytic effects of ethyl alcohol in humans. Poster presented at the annual ***European Meeting of Human Fear Conditioning***, Bochum, Germany.

[73] Wedlock, J. C. †, Craig, L. E. †, Hur, J. †, Grogans, S. E. †, DeYoung, K. A. †, & **Shackman, A. J.** (2020). The mediating effect of social support on the relationship between intolerance of uncertainty and social anxiety. Poster presented at the annual meeting of the ***American Psychological Association***, Washington, DC.

[72] Hur, J. †, Smith, J. F., DeYoung, K. A. †, Kuang, J. †, Anderson, A. A. †, Tillman, R. M. †, Kim, H. C. †, & **Shackman, A. J.** (2019). The neurobiological substrates of uncertain and certain threat. Poster presented at the annual meeting of the ***Society of Biological Psychiatry***, Chicago, IL.

[71] Kim, H. C. †, Hur, J. †, Smith, J. F., DeYoung, K. A. †, Kuang, J. †, Anderson, A. A. †, Tillman, R. M. †, & **Shackman, A. J.** (2019). Neurobiological reactivity to uncertain and certain threat. Poster presented at the annual meeting of the ***Social and Affective Neuroscience Society***, Miami, FL.

[70] Hur, J. †, Smith, J. F., DeYoung, K. A. †, Kuang, J. †, Anderson, A. A. †, Tillman, R. M. †, Kim, H. C. †, & **Shackman, A. J.** (2019). The neurobiology of anticipating uncertain and certain threat. Poster presented at the annual meeting of the ***Anxiety and Depression Association of America***, Chicago, IL.

[69] Blanchard, J. B., Choe, E. K., Andrea, A. M., DeYoung, K. A. †, Orth, R. D., Smith, J. F., Bennett, M., Anticevic, A., Kim, Y.-H., Chundury, P. & **Shackman, A. J.** (2018). Understanding the role of negative affect in psychosis using multimodal imaging and wearable sensors. Talk presented at the annual ***Brain and Behavior Institute Seed Grant Symposium***, College Park, MD.

[68] Hur, J. †, Smith, J. F., DeYoung K. A. †, Kuang, J. †, Anderson, A. A. †, Tillman, R. M. †, Kim, H. C. †, & **Shackman, A. J.**

(2018). The neurobiology of anticipating uncertain and certain threat. Poster presented at the annual meeting of the ***Anxiety and Depression Association of America***, Washington, DC.

[67] Anderson, A. S. †, Barstead, M. G. †, DeYoung, K. A. † & **Shackman, A. J.** (2018). Risky patterns of alcohol use alter the emotional impact of daily events in the real world. Poster presented at the annual meeting of the ***Association for Behavioral and Cognitive Therapies***, Washington, DC.

[66] Islam, S. †**,** Hur, J. †, Anderson, A. A. †**,** Limon, D. †, DeYoung, K. A. †, Barstead, M. G. †, & **Shackman, A. J.** (2018). Social context as a key determinant of socially anxious individuals' real-world emotion. Poster presented at the annual meeting of the ***Association for Behavioral and Cognitive Therapies***, Washington, DC.

[65] Waszczuk, M. A., Eaton, N. R., Krueger, R. F., **Shackman, A. J.**, Waldman, I. D., Zald, D. H., Lahey, B. B., The HiTOP Consortium & Kotov, R. (2018). Redefining phenotypes to advance psychiatric genetics: Implications from Hierarchical Taxonomy of Psychopathology. Talk presented at the annual meeting of the ***Behaviour Genetics Association***, Boston, MA.

[64] Islam, S. †, DeYoung, K. A. †, Barstead, M. G. †, Kim, H. C. †, & **Shackman, A. J.** (2018). Perceived social support and coping self-efficacy predict depression in first-year university students. Poster presented at the annual meeting of the ***Anxiety and Depression Association of America***, Washington, DC.

[63] Hur, J. †, Kaplan, C. M. †, Bradford, D. E., Curtin, J. J., Smith, J. F., & **Shackman, A. J.** (2018). Acute alcohol administration dampens threat-related activation in the central extended amygdala. Poster presented at the annual meeting of the ***Anxiety and Depression Association of America***, Washington, DC.

[62] Stockbridge, M. D. †, Furman, A. J., Keaser, M. L., Sosa, J. S. P., Padmala, S., Fox, A. S., Pessoa, A. S., Smith, J. F., Seminowicz, D. A. & **Shackman, A. J.** (2017). Negative affect, pain, and cognition are integrated in the cingulate cortex. Poster presented at the annual meeting of the ***Society for Neuroscience***, Washington, DC.

[61] Doorley, J. D., Kashdan, T. B., Weinstein, J. S. † & **Shackman, A. J.** (2017). Dissecting the lives of people with social anxiety disorder: Assessing the best and worst of every hour using ecological momentary assessment. Talk presented at the annual meeting of the ***Association for Behavioral and Cognitive Therapies***, San Diego, CA.

[60] Anderson, A. S. †, Barstead, M. G. †, DeYoung, K. D. † & **Shackman, A. J.** (2017). Ecological momentary assessment provides new insights into the interaction of neuroticism and daily events. Poster presented at the annual meeting of the ***Association for Behavioral and Cognitive Therapies***, San Diego, CA.

[59] Kovner, R., Souaiaia, T., Lu, J., Dong, Y. Fathi, A., Tao, Y., French, D., Roseboom, P., **Shackman, A. J.**, Oler, J. A., Fudge, J., Bhattacharyya, A., Zhang, S.-C., Knowles, J., Kalin, N. H. (2017). Neuroplasticity in the primate central amygdala: regional distribution and physiological effects of neurotrophic kinase receptor, type 3. Poster presented at the annual ***Wisconsin Alumni Research Foundation Discovery Challenge*** meeting, Madison, WI.

[58] Tillman, R. M. †, Stockbridge, M. D. †, Nacewicz, B. M., Smith, J. F. & **Shackman, A. J.** (2017). Functional architecture of central extended amygdala networks. ***Biological Psychiatry****, 81*, S52. [NIHMS876194]

[57] Fox, A. S., Oler, J. A., **Shackman, A. J.**, Birn, R. M., Alexander, A. L., Davidson, R. J. & Kalin, N. H. (2017). The neural substrates of anxious temperament in young rhesus monkeys. Talk presented at the biennial meeting of the

Society for Research in Child Development (Symposium on *rarly risk factors for the development of internalizing and externalizing symptomatology*, chaired by K. Roelofs & H. Niermann), Austin, TX.

[56] Kaplan, C. M. †, Brinkman, M. †, Pessoa, L., Smith, J. F. & **Shackman, A. J.** (2016). The neurobiology of fear and anxiety: Circuits engaged by certain and uncertain threat. Poster presented at the annual meeting of the ***Society for Neuroscience***, San Diego, CA.

[55] Kaplan, C. M. †, Brinkman, M. †, Pessoa, L., Smith, J. F. & **Shackman, A. J.** (2016). Understanding the neurobiology of fear and anxiety. Poster presented at the annual meeting of the ***Society for Research in Psychopathology***, Baltimore, MD. ***** selected for a poster/travel Award***

[54] Fox, A. S., Birn, R. M., **Shackman, A. J.**, Oler, J. A., Raveendran, M., Alexander, A. L., Davidson, R. J., Rogers, J. & Kalin, N.H. (2016). Heritability of functional connectivity between components of the extended amygdala in young non-human primates. Poster presented at the annual meeting of the ***Society of Biological Psychiatry***, Atlanta, GA.

[53] Fox, A. S., Birn, R. M., **Shackman, A. J.**, Oler, J. A., Raveendran, M., Alexander, A. L., Davidson, R. J., Rogers, J. & Kalin, N. H. (2015). Heritability of functional connectivity between components of the extended amygdala in young non-human primates. Poster presented at the ***Cold Spring Harbor Laboratory meeting on Behavior & Neurogenetics of Nonhuman Primates***, Cold Spring Harbor, NY.

[52] Fox, A. S., **Shackman, A. J.**, Oler, J. A., Birn, R. M., Alexander, A. A., Shelton, S. E., Davidson, R.J. & Kalin, N. H. (2015). The neural substrates of anxious temperament in young rhesus monkeys. Talk presented at the annual meeting of the Society for Neuroscience, Chicago, IL.

[51] Stout, D. M., **Shackman, A. J.**, Johnson, J. S., Miskovich, T. A. & Larson, C. L. (2014). Deficits gating threat from working memory in anxiety. Poster presented at the annual meeting of the ***Society for Research in Psychopathology***, Evanston, IL.

[50] **Shackman, A.J.** & Cavanagh, J. F. (2014). The role of rostral cingulate cortex in anxiety and the adaptive control of action. Poster presented at the annual meeting of the ***Society for Affective Science***, Washington DC.

[49] Stout, D. M., **Shackman, A. J.**, Miskovich, T. & Larson, C. L. (2014). Unnecessary storage of threat in working memory: A proximal mechanism underlying anxiety and worry. Poster presented at the annual meeting of the ***Society for Affective Science***, Washington DC .

[48] **Shackman, A.J.** & Cavanagh, J. F. (2013). The role of rostral cingulate cortex in anxiety and the adaptive control of action. Poster presented at the ***Heidelberg University meeting on Neural Circuits Underlying Nociception and Pain and Their Plasticity*** (organized by Herta Flor and Rohini Kuner), Heidelberg, Germany.

[47] Fox, A. S., Tromp, D. P. M., Oler, J. A., **Shackman, A. J.**, Shelton, S. E., McKay, D. R., Davidson, R. J., Oakes, T. R., Blangero, J., Rogers, J. & Kalin, N. H. (2013). The structural and functional neural systems underlying increased genetic risk for anxiety in a large sample of nonhuman primates. ***Behavior & Neurogenetics of Nonhuman Primates Meeting*** (organized by Jeff Rogers & Nelson Freimer), Cold Spring Harbor, NY.

[46] Fox, A. S., **Shackman, A. J.**, Tromp, D. P. M., Birn, R. M., Oler, J. A., Adluru, N., Nanda, S. A., Shelton, S. E.,

Alexander, A. L., Davidson, R. J. & Kalin, N. H. (2013). Amygdala-prefrontal connectivity predicts anxious temperament and gene expression in the primate dorsal amygdala. Poster presented at the annual meeting of the ***Society of Biological Psychiatry***, San Francisco, CA.

[44] Williams, L. E., Tromp, D. P. M., McFarlin, D. R., Birn, R. M., **Shackman, A. J.**, Rogers, G. M., Taft, W. M., Jesson, M. A. L., Slattery, M. J., Davidson, R. J., Oler, J. A. & Kalin, N. H. (2013). Amygdala-prefrontal connectivity is altered in childhood anxiety. *Poster presented at the annual **Wisconsin Symposium on Emotion**, Madison, WI.*

[44] Kovner, R., Oler, J. A., **Shackman, A. J.**, French, D. A., Nanda, S. A., Fox, A. S., Roseboom, P. H. & Kalin, N. H. (2013). Distribution of NTRK3 and IRS2 within the primate amygdalae: Implications for novel anxiety treatments. *Poster presented at the annual **Wisconsin Symposium on Emotion**, Madison, WI.*

[43] Pedersen, W. S., **Shackman, A. J.**, Blaisdell, J. A., Belleau, E. L., Stout, D. M. & Larson, C. L. (2013). Posterior parietal cortex activation predicts working memory capacity for faces. Poster presented at the annual meeting of the ***Cognitive Neuroscience Society***, San Francisco, CA.

[42] Bocinova, A., Stout, D. M., **Shackman, A. J.**, Larson, C. L. & Johnson, J. S. (2013). Do anxious individuals have difficulty gating threat-related information from working memory? *Poster presented at the annual **Red River Psychology Conference***, Fargo, ND.

[41] Fox, A. S., Oler, J. A., **Shackman, A. J.**, Shelton, S. E., Davidson, R. J. & Kalin, N. H. (2012). The neural substrates of anxious temperament in 592 young rhesus monkeys. Talk presented at the annual meeting of the ***Society for Neuroscience*** (Nanosymposium on *Neural mechanisms underlying pain perception and anxiety*), New Orleans, LA.

[40] Tromp, D., Oler, J. A., Fox, A. S., **Shackman, A. J.**, Davidson, R. J., Birn, R. M., Alexander, A. L. & Kalin, N. H. (2012). Structural and functional connectivity of the extended amygdala in newborn monkeys. Talk presented at the annual meeting of the ***Society for Neuroscience*** (Nanosymposium on *Neural mechanisms underlying pain perception and anxiety*), New Orleans, LA.

[39] Roseboom, P. H., Oler, J. A., Nanda, S. A., Fox, A. S., Oler, J. A., **Shackman, A. J.**, Shelton, S. E. & Kalin, N. H. (2012). Serotonin 2c receptor gene expression in the rhesus amygdala predicts anxious temperament. Poster presented at the annual meeting of the ***Society for Neuroscience***, New Orleans, LA.

[38] Stout, D. M., **Shackman, A. J.**, Wamboldt, M. M. & Larson, C. L. (2012). Neural measures indicate that threat's privileged access to working memory reflects reduced attentional filtering. Poster presented at the annual meeting of the ***Society for Psychophysiological Research***, New Orleans, LA.

[37] Fox, A. S., Oler, J. A., Tromp, D. P, M., **Shackman, A. J.**, Alexander, A. L., Davidson, R. J. & Kalin, N. H. (2012). Cortisol predicts decreased cerebral cortical volume in 592 young non-human primates. Poster presented at the annual meeting of the ***International Society of Psychoneuroendocrinology***, New York, NY.

[36] Roseboom, P. H., Nanda, S. A., Fox, A. S., Oler, J. A., **Shackman, A. J.**, Shelton, S. E. & Kalin, N. H. (2012). Neuropeptide Y system gene expression in the nonhuman primate amygdala is associated with anxious temperament. ***Biological Psychiatry**, 71*, 104S.

[35] Oler, J. A., Tromp, D., Fox, A. S., **Shackman, A. J.**, Davidson, R. J., Alexander, A. L., Birn, R. M. & Kalin, N. H. (2012). Connectivity of the extended amygdala in newborn rhesus monkeys. Poster presented at the annual ***Wisconsin Symposium on Emotion***, Madison, WI.

[34] **Shackman, A. J.**, Fox, A. S., Oler, J. A., Van Valkenberg, H. C., Shelton, S. E., Davidson, R. J., & Kalin, N. H. (2012). A common neural phenotype underlies diversity in the presentation of anxiety. Poster presented at the annual ***Wisconsin Symposium on Emotion***, Madison, WI.

[33] **Shackman, A. J.** & Cavanagh, J. F. (2012). The role of rostral cingulate cortex in the adaptive control of action. Poster presented at the annual ***Wisconsin Symposium on Emotion***, Madison, WI.

[32] **Shackman, A. J.**, Shackman, J. E., Salomons, T. V., Slagter, H. A., Fox, A. S., Winter, J. J., Jenness, J. L., Pollak, S. D. & Davidson, R. J. (2012). Anxiety and adaptive control in rostral cingulate cortex. ***University of Colorado at Boulder Annual Conference****: Determinants of executive function & dysfunction*. **** Selected as one of the top five posters.**

[31] Starr, M. J., Bradford, D. E., **Shackman, A. J.** & Curtin, J. J. (2011). An empirical comparison of commonly used methods of quantifying startle potentiation. ***Psychophysiology****, 48*, S53.

[30] Guller, Y., Ferrarelli, F., Sarasso, S., **Shackman, A. J.**, Meyerand, M. E., Tononi, G. & Postle, B. R. (2011). Disrupted TMS-evoked response in the thalamus of patients with schizophrenia as measured with fMRI. ***Biological Psychiatry****, 69*, S951.

[29] Weng, H. Y., Fox, A. S., **Shackman, A. J.**, Stodola, D. E., Caldwell, J., Olson, M. C., Rogers, G. & Davidson R. J. (2011). Alterations in neural responses to suffering after compassion training predict increased altruistic redistribution. Poster presented at the annual ***Wisconsin Symposium on Emotion***, Madison, WI.

[28] **Shackman, A. J.**, Guller, Y., Riggall, A. C., Johnson, J. S. & Postle, B. R. (2011). The role of frontal eye fields in spatial working memory and attention: A concurrent TMS-fMRI approach. Poster presented at the annual meeting of the ***Cognitive Neuroscience Society***, San Francisco, CA.

[27] Guller, Y., **Shackman, A. J.**, Feredoes, E., Ferrarelli, F., Tononi, G., Meyerand, E. M. & Postle, B. R. (2010). Using simultaneous TMS-fMRI to probe the integrity of cortico-thalamic circuits. Talk presented at the annual meeting of the ***Society for Neuroscience*** (Nanosymposium on *Genetics and Brain Imaging in Psychiatric Illness*), San Diego, CA.

[26] Guller, Y., Feredoes, E., **Shackman, A. J.**, Acheson, D. J., Riggall, A. C., Ferrarelli, F., Tononi, G., Meyerand, E. M. & Postle, B. P. (2010). Using combined TMS-fMRI to probe the integrity of the thalamic reticular nucleus. Poster presented at the annual meeting of the ***Organization for Human Brain Mapping***, Barcelona, Spain.

[25] Fox, A.S., Shelton, S.E., Alexander, A.L., Oakes, T.R., **Shackman, A. J.**, Davidson, R.J. & Kalin, N.H. (2009). Diffusion tensor imaging (DTI) demonstrates that prefrontal-amygdala white-matter tracts relate to anxious temperament and amygdala metabolism. Poster presented at the annual meeting of the ***Organization for Human Brain Mapping***, San Francisco, CA.

[24] Salomons, T.V., **Shackman, A. J.**, Winter, J., Nacewicz, B., & Davidson, R.J. (2008). Dorsal ACC is involved in

affective processing: Examining the functional subdivisions of anterior cingulate cortex using quantitative meta-analysis. Poster presented at the annual meeting of the ***Society for Neuroscience***, Washington, DC.

[23] Nusslock, R., **Shackman, A. J.**, McMenamin, B.W., Greischar, L.L., Kovacs, M. & Davidson, R.J. (2008). Anxiety moderates relations between frontal EEG alpha asymmetry and depression. ***Psychophysiology****, 45*, S77.

[22] **Shackman, A. J.**, Maxwell, J.S., McMenamin, B.W., Fox, A.S., Greischar, L.L. & Davidson, R.J. (2008). Parietal cortex mediates the selective disruption of spatial working memory by threat-induced anxiety. Poster presented at the annual meeting of the ***Cognitive Neuroscience Society***, San Francisco, CA.

[21] Nusslock, R., **Shackman, A. J.**, Greischar, L.L, McMenamin, B.W., Kovacs, M. & Davidson, R.J. (2007). Frontal EEG alpha asymmetry in depression: The role of clinical state and emotion regulation. ***Psychophysiology****, 44*, S7.

[20] Maxwell, J.S., Slagter, H.A., **Shackman, A. J.** & Davidson, R.J. (2007). Cognitive and emotional influences in dorsal anterior cingulate cortex. Poster presented at the annual meeting of the ***Cognitive Neuroscience Society***, New York, NY.

[19] Slagter, H.A., Beets, I.A.M., Johnstone, T., **Shackman, A. J.**, Van Reekum, C.M. & Davidson R.J. (2007). Threat-evoked anxiety modulates attentional resource distribution. Poster presented at the annual meeting of the ***Cognitive Neuroscience Society***, New York, NY.

[18] Maxwell, J.S., **Shackman, A. J.**, McMenamin, B.W., Greischar, L.L., Nacewicz, B.M. & Davidson, R.J. (2007). Detecting high-stakes deception. Poster presented at the ***Intelligence Community Postdoctoral Research Fellowship Colloquium***, Chantilly, VA.

[17] Norris, C. J., van Reekum, C. M., Greischar, L. L., Lapate, R. C., **Shackman, A. J.**, McMenamin, B. W., & Davidson, R. J. (2007). Activation of the ventromedial prefrontal cortex predicts psychological well-being and emotion regulation: A source localization study. Poster presented at the 2nd annual preconference on Emotion preceding the 8th annual meeting of the ***Society for Personality and Social Psychology***, Memphis, TN.

[16] Norris, C. J., van Reekum, C. M., Greischar, L. L., Lapate, R. C., **Shackman, A. J.**, McMenamin, B. W., Beguhn, G. M., Rawlings, N. B., & Davidson, R. J. (2006). Ventromedial prefrontal activation at baseline and in response to affective pictures predicts positive affective style: A source localization study. ***Psychophysiology****, 43*, S72.

[15] Nusslock, R., Coan, J.A., **Shackman, A. J.**, Abramson, L.Y., Harmon-Jones, E., Alloy, L.B., & Hogan, M.E. (2006). Frontal EEG asymmetry predicts cognitive vulnerability to depression. Poster presented at the annual meeting of the ***Society for Research in Psychopathology***, San Diego, CA.

[14] Nusslock, R., Coan, J.A., **Shackman, A. J.**, Abramson, L.Y., Harmon-Jones, E., Alloy, L.B., & Hogan, M.E. (2006). Frontal EEG Asymmetry predicts cognitive vulnerability to depression. ***Psychophysiology****, 43*, S72.

[13] Maxwell, J. S., **Shackman, A. J.**, McMenamin, B. W., Greischar, L. L. & Davidson, R. J. (2005). Threat-induced anxiety alters the visual processing of non-emotional targets. ***Psychophysiology****, 42*, S86.

[12] **Shackman, A. J.**, Maxwell, J. S. & Davidson, R. J. (2005). Measuring the impact of threat-evoked anxiety on working memory and prefrontal cortex. Poster No. E116. Abstract Viewer/Itinerary Planner. Davis,

CA: ***Cognitive Neuroscience Society***.

[11] Maxwell, J. S., **Shackman, A. J.**, McMenamin, B.W. & Davidson, R. J. (2005). Threat evoked anxiety biases the visual-cognitive processing of non-emotional information. Program No. B123. Abstract Viewer/Itinerary Planner. Davis, CA: ***Cognitive Neuroscience Society***.

[10] Maxwell, J. S., **Shackman, A. J.** & Davidson, R. J. (2004). Threat evoked anxiety biases the early visual processing of non-emotional stimuli. Program No. 547.11. Abstract Viewer/Itinerary Planner. Washington, DC: ***Society for Neuroscience***.

[9] **Shackman, A. J.**, Maxwell, J. S. & Davidson, R. J. (2004). Prefrontal EEG asymmetry, corrugator EMG and self-report measures of threat-evoked anxiety. ***Psychophysiology****, 41*, S59.

[8] **Shackman, A. J.**, Maxwell, J. S. & Davidson, R. J. (2004). Predicting individual differences in threat-evoked anxiety using resting prefrontal EEG asymmetry and self-report measures of affective style. ***Psychophysiology****, 41*, S59.

[7] Greischar, L.L., Springborn, K.D., **Shackman, A. J.** & Davidson, R. J. (2004). Using independent component analysis to remove eye artefacts from high-density (256 channel) EEG recordings. ***Psychophysiology****, 41*, S99.

[6] Pizzagalli, D., Schaefer, H. S., Hendrick, A. M., Horras, K. A., **Shackman, A. J.**, Anderle, M. J., Pederson, A. J. C., Lavric, A., Sarinopoulos, I., Zhang, R. and Davidson, R.J. (2001). Amygdalar activation during acquisition of aversive conditioning is modulated by stimulus contingencies: An event-related fMRI study. ***Psychophysiology****, 38*, S77.

[5] Larson, C.L., Irwin, W., Nitschke, J.B., Navin, S.D., Ruffalo, D., **Shackman, A. J.**, & Davidson, R.J. (2000). Self-report correlates of reactivity to visual affective stimuli indexed with affect-modulated startle: specificity of a new measure. ***Psychophysiology****, 37*, S62.

[4] **Shackman, A. J.**, Slagter, H. A., Lavric, A., Irwin, W., Sarinopoulos, I., Oakes, T. R. & Davidson, R. J. (2000). Hemispheric asymmetry of verbal and spatial working memory in prefrontal cortex. Poster presented at the annual meeting of the ***Society for Neuroscience***, New Orleans, LA.

[3] Lavric, A., **Shackman, A. J.**, Sarinopoulos, I., Pederson, A. J. C. & Davidson, R. J. (2000). Effects of threat-of-shock on verbal and spatial working memory. ***Psychophysiology****, 37*, S62.

[2] **Shackman, A. J.** & Davidson, R. J. (1999). Characterizing the inhibition of anxiety: An emotion-modulated startle study. ***Psychophysiology****, 36*, S105.

[1] Sutton, S. K., **Shackman, A. J.** & Davidson, R. J. (1998). Monetary incentive and working memory load modulate anterior brain activity. ***Psychophysiology****, 35*, S81.

Workshops/Public Outreach

[4] **Shackman, A. J.** (May 18, 2025). The nature and neurobiology of positive affect. Association of Practicing Psychologists of Montgomery and Prince George's Counties, Maryland. *Note: A 2-module, 3-hour continuing education workshop for practicing mental healthcare providers.*

[3] **Shackman, A. J.** (April 3, 2025). Mock interviewer. Mt Hebron High School, Ellicott City, Maryland. *Note: A 5-hour workshop for high school juniors preparing to enter university or the workforce.*

[2] **Shackman, A. J.** (April 14, 2024). The nature and neurobiology of negative affect: *States, traits, and disorders.* Association of Practicing Psychologists of Montgomery and Prince George's Counties, Maryland. *Note: A 2-module, 3-hour continuing education workshop for practicing mental healthcare providers.*

[1] **Shackman, A. J.** (May 21, 2023). The nature and neurobiology of negative affect: *States, traits, and disorders.* Association of Practicing Psychologists of Montgomery and Prince George's Counties, Maryland. *Note: A 2-module, 3-hour continuing education workshop for practicing mental healthcare providers.*

Research Consortia

Affective Neuroimaging Collaboratory

The aim of this consortium is to curate, analyze, and openly share a large, comprehensive, and high-quality database of single-subject fMRI/PET data that systematically samples key emotional and motivational domains, enabling precise and reproducible determination of shared and unique neural circuitry. **WEB**

ENIGMA Consortium (Anxiety, Behavioral Inhibition, and Task-Based fMRI Workgroups)

The overarching mission of this international consortium is to pool structural and functional neuroimaging data acquired from psychiatric patients and healthy controls, enabling well-powered tests of subtle differences in brain structure/function and molecular underpinnings. **WEB**

Hierarchical Taxonomy of Psychopathology (HiTOP) Consortium (Utility and Neurobiology Workgroups)

The aim of this multi-disciplinary international consortium is to nothing short of the development and dissemination of a reliable, usable dimensional model of mental illness, with the aim of improving research, diagnosis, prognosis, and treatment **WEB**

Extramural Service

Society Service

2025—2027	Member, Program Planning Committee Society for Neuroscience
2018	Mentor, Alies Muskin Career Development Leadership Program Anxiety and Depression Association of America
2018	Participant, Neural Circuit Dysregulation Group (Chaired by Amit Etkin, Israel Liberzon, & Mohammed Milad) State of the Science Summit: Diagnosis of Trauma-Related Disorders Brain Trauma Blueprint Initiative, Cohen Veterans Bioscience
2018—2019	Member, Education Committee Society of Biological Psychiatry
2014—2017	Member, Program Planning Committee Society of Biological Psychiatry

Professional Development and Mentorship Roundtables

2016—2017 Mentor, Society of Biological Psychiatry Annual Meeting

2015 Mentor, Society for Psychophysiological Research Annual Meeting

Other Professional Service

2024—2026 Co-Chair, Program Planning Committee
RichieFest 2026—A celebration of the career and contributions of Dr. Richard J. Davidson
University of Wisconsin—Madison

2023—2028 Member, Data Safety Monitoring Board
"Mapping links between real-world diversity, positive emotion, and neural dynamics in anhedonia"
(R01-MH133693; A. Heller, PI)
University of Miami

2022—2027 Member, Data Safety Monitoring Board
"Novel electric-field modelling approach to quantify changes in resting state functional connectivity following theta burst stimulation" (U01-MH130447; N. Balderston, PI)
Perelman School of Medicine, University of Pennsylvania

2019—2024 Member, Data Safety Monitoring Board
"Examining the mechanisms of anxiety regulation using a novel, sham-controlled, fMRI-guided rTMS protocol and a translational laboratory model of anxiety" (K01-MH121777; N. Balderston, PI)
Perelman School of Medicine, University of Pennsylvania

Intramural Service

2025 Member, BSOS Faculty & Staff Recognition Awards Review Committee
College of Behavioral and Social Sciences

2024 Reviewer, Seed Grant Program
Brain and Behavior Institute (BBI)

2024 Member, AI for Student Success Task Force
Ecological Momentary Assessment Workgroup
College of Behavioral and Social Sciences and Clark School of Engineering

2024— Member, Colloquium Committee
Neuroscience and Cognitive Science (NACS) Program

2024—2026 Member, Executive Board
Neuroscience and Cognitive Science (NACS) Program

2022— Member, Open Science Committee
Department of Psychology

2021—2024 Member, Graduate Admissions Committee
Neuroscience and Cognitive Science (NACS) Program

2021—2022 Chair, Faculty Search Committee (Human Computational Neuroscience)
Department of Psychology

2021—2023 Faculty Liaison, Social Committee
Clinical Psychology Program
Department of Psychology

2021 Chair, Assistant Research Scientist Promotion Committee (Dr. J. Smith)
Department of Psychology

2021 Reviewer, Chair's Open Science Seed Award
Department of Psychology

2021 Member, Appointment, Promotion, and Tenure Policy Committee
Department of Psychology
Note: Developed the first revision of Department policy since 2006, with the aim of incorporating best-practices, mitigating known biases, encouraging rigorous and open scientific approaches, and facilitating the tenure and promotion of women and BIPOC faculty. The resulting policies for promotion to Associate Professor (with tenure) and for promotion to Full Professor have been informally shared with colleagues at many other institutions and adopted as a best-practices template by the Higher Education Leadership Initiative for Open Scholarship (HELIOS) consortium.

2020— Director, NeuroIMaging Back-Up Server (NIMBUS)
NIMBUS provides secure off-site back-up data storage for a number of UMD neuroimaging investigators (Drs. Bernat, Blanchard, Fox, Gard, Hamilton, Redcay, Riggins, Shackman, and Smith. NIMBUS represents a collaborative partnership between Dr. Shackman, the Division of Information Technology (DIT), and the Office of Academic Computing Services (OACS)

2019—2019 Member, Open Science Work Group
Department of Psychology

2019 Member, Faculty Search Committee (Developmental Psychology)
Department of Psychology

2019 Chair, Ad Hoc Committee to Enhance Graduate Student Interviews
Clinical Psychology Program
Department of Psychology

2019 Chair, Ad Hoc Committee to Enhance Weekly Area Group Meetings
Clinical Psychology Program
Department of Psychology

2019 Judge, Data Challenge 2019 Research Showcase
College of Information Studies

2019 Member, Caramello Distinguished Dissertation Award Committee
College of Behavioral and Social Sciences

2018—2019	Member, Graduate Studies Committee Department of Psychology	
2018—	Member, Institutional Review Board Committee Department of Psychology	
2016—2017	Member, Faculty Search Committee (Behavioral Neuroscience) Department of Psychology	
2015—2018	Member, Executive Board Neuroscience and Cognitive Science (NACS) Program	
2015—2018	Member, Faculty Hiring Strategic Planning Committee Department of Psychology	

Teaching Experience

Regular Courses

Fall 2024	*The Nature and Biological Bases of Emotion [Hybrid]*	Psychology 489A (3 credits)	22 undergraduates
Fall 2024	*Emotion: From Biological Foundations to Contemporary Debates in the Psychological Sciences [Hybrid]*	Psychology 614 (3 credits)	16 graduates
Fall 2023	*The Nature and Biological Bases of Emotion [Hybrid]*	Psychology 489A (3 credits)	33 undergraduates
Fall 2023	*Emotion: From Biological Foundations to Contemporary Debates in the Psychological Sciences [Hybrid]*	Psychology 614 (3 credits)	18 graduates
Fall 2022	*The Nature and Biological Bases of Emotion [Hybrid]* *Note: Newly prepared upper-division undergraduate adaptation of my graduate seminar on emotion (Psychology 614). Aside from Psychology, 489A has been formally incorporated into the Neuroscience major curriculum.*	Psychology 489A (3 credits)	38 undergraduates
Fall 2022	*Emotion: From Biological Foundations to Contemporary*	Psychology 614 (3 credits)	23 graduates

	Debates in the Psychological Sciences [Hybrid]		
Spring 2022	*A Gentle Introduction to Temperament & Personality*	Psychology 210 (3 credits)	114 undergraduates
Fall 2021	*Emotion: From Biological Foundations to Contemporary Debates in the Psychological Sciences*	Psychology 614 (3 credits)	8 graduates
Spring 2021	*A Gentle Introduction to Temperament & Personality [Distance-Learning]*	Psychology 210 (3 credits)	104 undergraduates
Fall 2020	*Emotion: From Biological Foundations to Contemporary Debates in the Psychological Sciences [Distance-Learning]* *Note: Slides, syllabi, and other materials developed for this course have been shared with dozens of colleagues around the world, including Aarhus University (Denmark), Boston University, Brown, Camilo José Cela University UCJC (Spain), Charité Universitätsmedizin Berlin (Germany), Dartmouth, Denver University, Emory, Fordham, Georgia Tech, Haifa (Israel), Harvard, Hebrew University (Israel), Hong Kong University, ISTC-CNR (Italy), Indian Institute of Technology, Institute of Biophysics of the Chinese Academy of Sciences, Johns Hopkins, King's College London, Lake Forest, Mannheim (Germany), Max Planck Center for Human Development (Germany), McGill (Canada), Medical University Vienna (Austria), NIMH, Norwegian University of Science and Technology (Norway), Otago (New Zealand), Pittsburgh, Reading (UK), Southern Arizona VA Health Care System, Stanford, Stockholm University (Sweden), Temple, Texas A&M, UC Berkeley, UC Davis, UC Riverside, UC San Francisco, UC Santa Barbara, UCLA, UNC-Chapel Hill, Universitat Autònoma (Spain), University Medical Center Hamburg-Eppendorf (Germany), University of Arizona, University of Arkansas, University of Bari Aldo Moro (Italy), University of Bielefeld (Germany), University of British Columbia (Canada), University of Dundee (UK), University of East Anglia (UK), University of Geneva (Switzerland), University of Guelph (Canada), University of Iowa, University of Konstanz (Germany), University of Miami, University of Michigan, University of Nottingham (UK), University of Pavia (Italy), University of Toronto Mississauga, University of Utah, University of Vienna (Austria), University of Virginia, University of Wisconsin—Madison,*	Psychology 614 (3 credits)	20 graduates, including 2 students from American University

	Universität zu Lübeck (Germany), Uppsala University (Sweden), and Virginia Tech		
Fall 2020	*Advanced Seminar in Temperament & Personality [Distance-Learning]*	Psychology 435 (3 credits)	67 undergraduates
Fall 2019	*A Gentle Introduction to Temperament & Personality*	Psychology 210 (3 credits)	91 undergraduates
Fall 2018	*Affective Science Perspectives on Temperament & Personality*	Psychology 612 (3 credits) Cross-listed through NACS	17 graduates
Fall 2018	*Advanced Seminar in Temperament & Personality*	Psychology 435 (3 credits)	48 undergraduates
Spring 2018	*A Gentle Introduction to Temperament & Personality*	Psychology 210 (3 credits)	84 undergraduates
Fall 2017	*Affective Science Perspectives on Temperament & Personality*	Psychology 612 (3 credits) Cross-listed through NACS	11 graduates
Fall 2016	*Graduate Seminar in Temperament & Personality*	Psychology 612 (3 credits) Cross-listed through NACS	14 graduates
Fall 2016	*Advanced Seminar in Temperament & Personality*	Psychology 435 (3 credits)	67 undergraduates
Spring 2016	*A Gentle Introduction to Temperament & Personality*	Psychology 210 (3 credits)	84 undergraduates
Fall 2015	*Graduate Seminar in Temperament & Personality*	Psychology 612 (3 credits) Cross-listed through NACS	21 graduates
	Advanced Seminar in Temperament & Personality	Psychology 435 (3 credits)	75 undergraduates
Spring 2015	*A Gentle Introduction to Temperament & Personality*	Psychology 210 (3 credits)	109 undergraduates
Fall 2014	*Graduate Seminar in Temperament & Personality*	Psychology 612 (3 credits) Cross-listed through NACS	8 graduates
Spring 2014	*A Gentle Introduction to Temperament & Personality*	Psychology 210 (3 credits)	71 undergraduates
Fall 2013	*Graduate Seminar in Temperament & Personality*	Psychology 612 (3 credits) Cross-listed through NACS	18 graduates

Guest Lectures

Fall 2024	*The brain bases and public health relevance of fear and anxiety* NACS 641, Introduction to Neuroscience J. Herberholz, Instructor
Fall 2023	*The brain bases and public health relevance of fear and anxiety* NACS 641, Introduction to Neuroscience J. Herberholz, Instructor
Spring 2023	Scientific sense and scientific tomfoolery. *Reproducibility, big data, reliability, and more!* PSYC 625, Clinical Assessment: Psychometric Principles, Testing, and Behavior A. De Los Reyes, Instructor
Fall 2022	*The brain bases and public health relevance of fear and anxiety* NACS 641, Introduction to Neuroscience J. Herberholz, Instructor
Fall 2021	*The brain bases and public health relevance of fear and anxiety* NACS 641, Introduction to Neuroscience J. Herberholz, Instructor
Fall 2020	*The brain bases and public health relevance of fear and anxiety* NACS 641, Introduction to Neuroscience J. Herberholz, Instructor
Fall 2019	*The brain bases and public health relevance of fear and anxiety* NACS 641, Introduction to Neuroscience J. Herberholz, Instructor
Fall 2018	*The neurobiology of dispositional negativity* NACS 641, Introduction to Neuroscience J. Herberholz, Instructor
Fall 2017	*Fear, anxiety, and the central extended amygdala* NACS 640, Foundational readings in Neuroscience and Cognitive Science E. Glasper, Instructor
Fall 2014	*The integration of emotion and cognition in the midcingulate cortex* NACS 640, Foundational readings in Neuroscience and Cognitive Science E. Glasper, Instructor

Continuing Professional Development

Fall 2020	*Lesson Plans for Synchronous Sessions* Teaching & Learning Transformation Center, University of Maryland
Fall 2018	*Active Learning at Scale: Techniques for Large (and Small) Classes* Teaching & Learning Transformation Center, University of Maryland
Winter 2016	*Teaching Portfolio Workshop* Teaching & Learning Transformation Center, University of Maryland
Spring 2016	*Improvisation for Scientists Workshop* Alan Alda Center for Communicating Science Note: 1 of 6 faculty nominated by the Dean of the College of Behavioral and Social Sciences, University of Maryland
Winter/Spring 2015	*New Faculty Teaching Workshop Series* College of Behavioral and Social Sciences, University of Maryland

Research Supervision and Professional Mentorship

Staff Supervision

Staff/Consulting Scientist

J. Smith, 2014-
M. Barstead, 2019
B. Cornwell, 2022-2023

Postdoctoral Fellows

J. Hur, 2017-2020
Associate Professor, Department of Psychology, Yonsei University, Seoul, South Korea. Yonsei is is 1 of the 3 SKY universities, generally considered the most prestigious in Korea.

M. Kuhn, 2019-2020
Director, Neuroimaging and Instrumentation Core, and Instructor, Department of Psychiatry, McLean Hospital, Harvard Medical School | Scientist, Charité Universitätsmedizin, Berlin

Masters-Level Project/Data Manager

K. DeYoung, 2016-

Post-Baccalaureate Fellow/Project Coordinator

A. Anderson, 2017-2018
Currently a postdoctoral fellow at Brown University

S. Islam, 2017-2019
Currently a postdoctoral fellow at Children's Hospital of Philadelphia

L. Craig, 2018-2019
Currently a project coordinator at George Mason University with Dr. Todd Kashdan

J. Wedlock, 2019-2020
Currently a Research Administrator at the University of Massachusetts, Amherst

L. Hemphill, 2020-2024
Currently a clinical Ph.D student at the University of Wyoming with Dr. Kasey Stanton
Z. Scott, 2022-2024
J. Hassani, 2023-2024
D. Ewing, 2023-
J. Cunneen, 2024-
N. Moussa, 2025-

Graduate Student Research Supervision

Ph.D. Supervisor

C. Kaplan (*clinical*), 2014-2017 (graduated 2021)
Currently a neuropsychologist in private practice
R. Tillman (*clinical*), 2014-2021
Currently a neuropsychologist in private practice
H. Kim (*neuroscience*), 2019- (co-Supervised with Dr. Arianna Gard)
S. Grogans (*clinical*), 2019-2025
Currently a clinical intern in the Psychiatry Department at Ohio State University
P. Didier (*clinical*), 2022-
K. Kalinova (*clinical*), 2024-

Ph.D. Co-Supervisor

M. Stockbridge, Department of Hearing and Speech Sciences, 2014-2018
Currently an Assistant Professor in the Neurology Department, School of Medicine, Johns Hopkins University

M. Barstead, Department of Human Development and Quantitative Methodology, 2015-2018
Currently a Data Science Manager at Capital One

Masters Co-Supervisor

K. DeYoung, Department of Family Science, 2018-2020

Neuroscience and Cognitive Science Certificate (Ph.D. Minor) Supervisor

M. Barstead, Department of Human Development and Quantitative Methodology, 2015-2018
D. Ampofo, Department of Psychology, 2017-2018

Ph.D. Committees

J. McCarthy (J. Blanchard, PI), Department of Psychology, 2013-16
D. Bryden (M. Roesch, PI), Neuroscience and Cognitive Science Program, 2015
J. Chrabaszcz (M. Dougherty, PI), Department of Psychology, 2016
A. Umemoto (C. Holroyd, PI), Department of Psychology, University of Victoria, BC, Canada, 2016
A. Alfini (J. C. Smith, PI), Department of Kinesiology, 2016-2017
K. Bradshaw (J. Blanchard, PI), Department of Psychology, 2016-2018
M. Stockbridge (R. Newman, PI), Department of Hearing and Speech Sciences, 2016-2018
R. Gentry (M. Roesch, PI), Neuroscience and Cognitive Science Program, 2017
O. Harari-Dahan (A. Bernstein, PI), Department of Psychology, University of Haifa, Israel, 2017-2018
M. Barstead (K. Rubin, PI), Department of Human Development and Quantitative Methodology, 2018
R. Tillman (A. J. Shackman, PI), Department of Psychology, 2018-2021
J. Ellis (E. Bernat, PI), Department of Psychology, 2018-2019

M. Hamberger (S. Iso-Ahola, PI), Department of Kinesiology, 2018-withdrew
T. Karjalainen (L. Nummenmaa, PI), Department of Psychology, University of Turku, Finland, 2019
L. Weiss (J. C. Smith, PI), Department of Kinesiology, 2019-2020
L. Oddo (A. Chronis-Tuscano, PI), Department of Psychology, 2021-
C. Savage (J. Blanchard, PI), Department of Psychology, 2022-2023
C. Powelson (R. Ray, PI), Department of Sociology, 2022-2024
K. Pietro (B. Hatfield, PI), Department of Kinesiology, 2022-
J. Merchant (E. Redcay, PI), Department of Psychology, 2022-2023
S. Grogans (A. J. Shackman, PI), Department of Psychology, 2023-2025
E. Varga (A. Fox & E. Boorman, Co-PIs), Department of Psychology, UC-Davis, 2023-
Z. Atak (T. Haydar, PI), Neuroscience and Cognitive Science Program, 2024-
R. Orth (J. Blanchard, PI), Department of Psychology, 2024-2025
B. Kommula (J. C. Smith, PI), Department of Kinesiology, 2024-
I. Todd (J. Blanchard, PI), Department of Psychology, 2024-

Ph.D. *Cum Laude* Committee

B. Bramson (K. Roelofs, PI), Faculty of the Social Sciences, Radboud University, The Netherlands, 2020

Masters Committees

M. Lipton, Department of Psychology, 2013-2014
L. Anderson, Department of Psychology, 2014-2016
R. Tillman, Chair, Department of Psychology, 2015-2016 (Chair)
M. Stockbridge, Department of Hearing and Speech Sciences, 2015-2017
N. Wolf, Department of Psychology, 2015-2017
C. Kaplan, Chair, Department of Psychology, 2015-2017 (Chair)
M. Ahmadi, Department of Psychology, 2017
M. Arenson, Department of Psychology, 2019
K. DeYoung, Department of Family Science, School of Public Health, 2020 (Co-Chair)
S. Grogans, Department of Psychology, 2020-2021 (Chair)
S. Walker, Neuroscience and Cognitive Science Program, 2021
R. Orth, Department of Psychology, 2021
P. Didier, Department of Psychology, 2023-2024 (Chair)
P. Mannava, Department of Psychology, 2023-2024

Qualifying Examination Committees

Various, Clinical Psychology Program, Department of Psychology, 2013-2019
A. Alfini, Department of Kinesiology, 2015
M. Stockbridge, Department of Hearing and Speech Sciences, 2015
K. Crowley, iSchool, 2016-2017
K. Castellanos, Department of Government and Politics, 2017
L. Weiss, Neuroscience and Cognitive Science (NACS) Program, 2017
M. Hamberger, Department of Kinesiology, 2020
D. Holley, Department of Psychology, UC-Davis, 2020
J. Merchant, Neuroscience and Cognitive Science (NACS) Program, 2020
H. Kim, Neuroscience and Cognitive Science (NACS) Program, 2021 (Co-Chair with A. Gard)
S. Grogans, Clinical Psychology TIE Project, 2021-22 (Chair)
N. Marsh, Clinical Psychology TIE Project, 2022-24

R. Orth, Clinical Psychology TIE Project, 2022-23
E. Varga, Department of Psychology, UC-Davis, 2023
Z. Atak, Neuroscience and Cognitive Science (NACS) Program, 2023
E. Roche, Neuroscience and Cognitive Science (NACS) Program, 2024
I. Todd, Clinical Psychology TIE Project, 2024
P. Didier, Clinical Psychology TIE Project, 2025 (Chair)

Neuroscience and Cognitive Science (NACS) Student Committees

M. Ahmadi, Department of Psychology, 2016-2017
S. Walker, Department of Psychology, 2017-2018
J. Merchant, Department of Psychology, 2018-2020
H. Kim, Department of Psychology, 2019-present (Co-Chair with A. Gard)
K. Morrow, Department of Psychology, 2020-2021
Z. Atak, Department of Biology, 2021-2022
C. Yoo, Department of Psychology, 2024-

Portfolio Committee, Department of Human Development

K. Smith, Department of Human Development and Quantitative Methodology, 2018-2019

Veterans Administration Clinical Research Internship Supervision

Intern Supervisor

S. Cooper, 2018-2019
Currently an Assistant Professor in the Department of Psychiatry, University of Texas, Austin

Visiting Foreign Ph.D. Students

Supervisor

M. Chen, 2024 (Department of Psychology, Universität Würzburg)

Trainee and Staff Mentored Fellowships and Awards

Advanced Training in Methodology and Statistics Award, Department of Psychology, University of Maryland

S. Grogans, 2019
S. Grogans, 2023

Alies Muskin Career Development Leadership Program, Anxiety and Depression Association of America

J. Hur, 2019
S. Grogans, 2025

Ann G. Wylie Dissertation Fellowship, University of Maryland

R. Tillman, 2019-2020
S. Grogans, 2023 (*declined)*

Computation and Mathematics for Biological Networks (COMBINE) Fellowship, National Science Foundation-Supported Research Traineeship Program (DGE-1632976; M. Girvan, PI)

H. Kim, 2020-2022 (2-year program / 1-year stipend)

Flagship Fellowship, University of Maryland

S. Grogans, 2019-2024
P. Didier, 2022-2027
W. Kim, 2023 (*declined*)

Goldhaber Award, Graduate School, University of Maryland

R. Tillman, 2017
S. Grogans, 2022
S. Grogans, 2023

Graduate Research Fellowships, National Science Foundation (NSF)

R. Tillman (*Honorable Mention*), 2015
C. Kaplan, 2016-19
S. Grogans (*Honorable Mention*), 2019
S. Grogans (*Honorable Mention*), 2020

Graduate Student Clinical Excellence Award, Clinical Psychology Program, University of Maryland

R. Tillman, 2019-2020

Graduate Student Research Excellence Award, Clinical Psychology Program, University of Maryland

S. Grogans, 2021-2022
S. Grogans, 2023-2024

International Conference Student Support Award, Graduate School, University of Maryland

S. Grogans, 2024

Jeanette Spier Beavers Endowed Memorial Scholarship, School of Public Health, University of Maryland

K. DeYoung, 2019

Jennifer Becker-Carswell Award, Department of Family Science, School of Public Health, University of Maryland

K. DeYoung, 2020

McNair Graduate Fellowship

D. Sambrano, 2017 (*declined*)

NIH 'High Five' Recognition (Outstanding Service/Volunteer work)

S. Grogans, 2023

Open Science Award, Department of Psychology, University of Maryland

S. Grogans, 2024
P. Didier, 2025

Pelczar Award for Excellence in Graduate Study, Graduate School, University of Maryland
S. Grogans, 2025

President's Fellowship, University of Maryland
P. Newsome, 2023 (*declined*)

Provost's Excellence Award for Professional Track Faculty
J. Smith, 2023

Reproducible Science Award, **Society for Social Neuroscience (S4SN)**
S. Grogans, 2021

Society of Biological Psychiatry (SoBP) Travel Award
S. Grogans, 2025

Society for Research in Psychopathology (SRP) Travel Award
C. Kaplan, 2016

Tools of Trade Workshop: Human Neuroimaging Methods and Best Practices (Sponsored by the NIH and Stanford Center for Reproducible Neuroscience), Travel Award
R. Tillman, 2017

Wisconsin Symposium on Emotion Travel Award
S. Grogans, 2024

Regular Undergraduate/Master's Student Research Supervision at the University of Maryland

† indicates co-author on a manuscript or publication
†† indicates co-author on a conference presentation
***** indicates student enrolled in the Master of Professional Studies (MPS) in Clinical Psychological Science Program

2024-25 (22 students)
N. Abd-Elmoniem, S. Bagni, Z. Balhis, E. Bernstein *, B. Borgstede, G. Castro †, J. Earp, E. Isaac, L. Garner, M. Ghimire, B. Harris, J. Kaushal, K. Kotoulek, E. Li, E. Liu, N. Mamba, D. Moses, N. Okyere, N. Patel, J. Patty, B. Turner, E. Zirkle

2023-24 (14 students)
Z. Balhis, E. Bernstein *, G. Castro, E. Cheraghpour, J. Earp, E. Li, B. Lin, E. Liu, S. Okotcha, N. Okyere, A. Panickar, N. Patel, E. Sheth, R. Silvinsky

2022-23 (20 students)
Z. Balhis, N. Bui, M. Chacona, G. Castro, E. Cheraghpour, S. Das†† (University of Pittsburgh, Visiting Scholar), J. Earp, C. Gagnon, E. Li, E. Liu, C. Loi, C. Moreland, A. Mouangue (Wellesley College, Visiting Scholar), N. Okyere, N. Patel, E. Sheth, T. Shi, R. Silvinsky, N. Mann *, C. Tower *

2021-22 (12 students)
M. Biskach, N. Bui, M. Chacona, K. Landry, T. Mattikalli, D. Mbulaiteye, D. Minker, N. Reddy, T. Shi, A. Ternovskaia, A. Vaysman, M. Zwally

2020-21 (17 students)

M. Biskach, M. Chacona, J.Y. Choi, J. Dixon, E. Fogam, A. Graninger, A. Kunvar, K. Landry, T. Mattikalli, D. Mbulaiteye, D. Minker, P. Newsome ††*, M. Rogers, D. Shah, T. Shi, A. Ternovskaia, S. Turna

2019-20 (8 students)

Y. Boumaiz, J. Dixon, A. Graninger, D. Mbulaiteye, M. Rogers, J. Sandoval, L. Shapiro, H. Zawitoski

2018-19 (10 students)

M. Albedi, Y. Boumaiz, R. Hum, D. Limon, N. Kelso, G. Kim ††, M. Rogers, J. Sandoval, M. Shinnick, H. Zawitoski

2017-18 (11 students)

A. Antonacci, Y. Boumaiz, J. Furcolo, C. Grubb, R. Hum, H. Johnson, G. Kim ††, C. Okeke, J. Robinson, R. Surasinghe, M. Vogel

2016-17 (15 students)

A. Anderson †, A. Antonacci, K. Bohlke, M. Chen, M. Dib, M. Hawley, R. Hum, A. Frederique, C. Grubb, J. Furcolo, G. Kim ††, J. Kuang, J. Stimely, M. Skibniewska, M. Vogel

2015-16 (12 students)

J. Aepfelbacher, C. Bloomer, K. Bohlke, V. Bonetti, M. Brinkman ††, J. Kang, A. Silver, M. Skibniewska, J. Stimely, J. Swayambunathan, J. Vadhan, C. Zacarias

2014-15 (13 students)

J. Aepfelbacher, D. Ansah, C. Bloomer †, A. Dizik, A. Fredman, J. Kang, J. Myers (doctoral student at Howard University), S. Shah, J. Stimely, J. Swayambunathan, J. Vadhan, J. Weinstein †

2013-14 (12 students)

D. Ansah, L. Bjorkman (post-baccalaureate); C. Bloomer †, A. Dizik, T. Fedechko, A. Fredman, S. Hudja (post-baccalaureate; now a doctoral student in economics at Purdue) †, J. Kau, A. Malone, E. Qi, M. Sood, J. Weinstein †

Specialized Undergraduate Student Research Supervision at Maryland

Biological Sciences Honors Intern

A. Dizik, 2014

Global Public Health Scholars Program, Practicum

E. Liu, 2023

Integrated Life Sciences (ILS) Honors Program

J. Kang, 2014
M. Chen, 2017
Y. Boumaiz, 2018
M. Vogel, 2018

NIH-Sponsored Mid-Atlantic Neuroscience Diversity Scholars (MiNDS) Program (URM Accelerator)

G. Castro, 2023-

Psychology Research Empowerment Program (PREP) Scholar (URM Accelerator)
J. Sandoval, 2019

Research Internship in Science and Engineering (RISE) Scholar
J. Kau, 2013-2014

Senior Honors Thesis, Department of Biology
R. Hum, 2018-2019
T. Shi, 2021-2023

Senior Honors Thesis, Department of Psychology
E. Liu, 2024-

Smith Undergraduate Research Engagement (SURE) Fellow (Senior Thesis/Capstone Project)
A. Graninger, 2021
A. Seevers, 2022-2023

Summer Research Initiative (SRI) Fellow (URM Accelerator)
S. Bermudez-Cruz, 2015

Wellseley College Career Education Program (Visiting Scholar)
A. Mouangue, 2023

Specialized Undergraduate Student Research Supervision at Wisconsin

NASA Summer Scholar
U. Amadi, 2005

Research Scholars Program
S. Austin, 2005
M. Dick, 2005

Senior Theses
J. Nichols, 2004
K. Petersen, 2004
M. Long, 2004
K. Springborn, 2004
S. Blume, 2006
A. Eggleston, 2006
E. Eggleston, 2006
B. Kosobucki, 2006
B. Kelly, 2007
J. Winter, 2007

Mentored Undergraduate/Postbaccalaureate Fellowships and Awards at Maryland

Clinical Psychology Doctoral Program Visit Day Travel Award, University of Delaware

A. Anderson, 2017
D. Ewing, 2024

Diversity in Psychology Symposium/Workshop Travel Award, University of Minnesota
A. Anderson, 2017
S. Islam, 2018
D. Ewing, 2024

Diversity in Psychology Workshop Travel Award, University of Michigan
S. Islam, 2018

Graduate Research Fellowships, National Science Foundation (NSF)
T. Shi, 2025-28

Maryland Summer Scholars Award, Maryland Center for Undergraduate Research
H. Kim, 2018-2019
T. Shi, 2022

Research Gold Award, Department of Psychology, University of Maryland
E. Li, N. Patel, J. Earp & E. Liu, 2024

Student Wellness and Mental Health Advocacy Award, University of Maryland
T. Shi, 2023

Study Abroad Grant, Phi Kappa Phi
T. Shi, 2022

Undergraduate Researcher of the Year, College of Behavioral and Social Science
J. Weinstein, 2015

Mentored Undergraduate Fellowships and Awards at Wisconsin

Hilldale Senior Thesis Research Fellowships
J. Nichols, 2003
M. Long, 2004
B. Kosobucki, 2005

Media Coverage

April 8, 2024: https://bsos.umd.edu/featured-content/celebrating-2024-faculty-staff-bsos-spring-award-winners
March 8, 2024: https://podcasters.spotify.com/pod/show/neurofelicity {Neurofelicity podcast}
July 26, 2023: https://bsos.umd.edu/featured-content/31m-nih-award-supports-study
July 26, 2023: https://today.umd.edu/3-1m-nih-award-supports-study-of-anxiety-fueled-alcohol-misuse
March 24, 2023: https://www.bbc.co.uk/programmes/w3ct3j8d {BBC podcast}
November 18, 2022: https://www.psycom.net/anxiety/anticipatory-anxiety
November 9, 2022: https://www.healthing.ca/wellness/mental-health/why-are-we-more-afraid-in-the-dark

August 17, 2022: https://today.umd.edu/brain-study-ventures-into-fear-of-the-unknown
June 9, 2022: https://today.umd.edu/study-combines-wearable-tech-brain-imaging-to-innovate-treatments-for-paranoia
June 1, 2022: https://www.heliosopen.org/news/university-of-maryland-department-of-psychology-leads-the-way-in-aligning-open-science-with-promotion-amp-tenure-guidelines
January 5, 2021: https://www.theravive.com/today/post/understanding-the-neurobiology-of-anxiety-0004680.aspx
November 3, 2020: https://www.smithsonianmag.com/science-nature/anxious-about-results-heres-whats-happening-your-brain-you-wait-180976191/
October 20, 2020: https://www.technologynetworks.com/neuroscience/news/imaging-study-suggests-fear-and-anxiety-are-not-orchestrated-by-distinct-neural-networks-341806
October 20, 2020: https://www.pourquoidocteur.fr/Articles/Question-d-actu/34191-La-peur-l-anxiete-emotions-jumelles-cerveau
October 19, 2020: https://www.sciencedaily.com/releases/2020/10/201019164939.htm
October 19, 2020: https://www.earth.com/news/fear-and-anxiety-share-a-common-network-in-the-brain/
October 12, 2020: https://today.umd.edu/articles/uncovering-shared-roots-fear-and-anxiety-1a369190-8961-4077-9b77-56c9d743f578
October 1, 2020: https://www.axios.com/anxiety-uncertainty-brain-a53b5f3c-00b6-4888-b40f-da986fad4987.html
September 24, 2020: https://www.lescienze.it/mind/2020/09/24/news/paura_ansia_circuiti_cerebrali-4802441/
September 22, 2020: https://infosurhoy.com/science/contradicting-previous-theories-neuroscientists-find-overlap-between-fear-and-anxiety-brain-circuits/
September 21, 2020: https://scitechdaily.com/contradicting-previous-theories-neuroscientists-find-overlap-between-fear-and-anxiety-brain-circuits/
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