

ELLYN BUTLER, M.S.

butellyn.github.io ◊ (773) 255-5739 ◊ ellynrbutler@gmail.com ◊ ellynbutler2027@u.northwestern.edu

EDUCATION

Northwestern University, Evanston, IL GPA: 3.96 September 2021 - present

Doctor of Philosophy in Clinical Psychology — Master of Science in Applied Statistics

Concentration in Developmental Science

- Principal Investigators: Robin Nusslock, Ph.D. & Noelle Samia, Ph.D.
- APA and PCSAS Accredited
- Dissertation Proposal: *Personalized network approaches and causal inference methods for developmental psychopathology and human neuroscience*
- Dissertation Committee: Robin Nusslock, Ph.D., Noelle Samia, Ph.D., Catherine Insel, Ph.D., Liza Suárez, Ph.D. & Amanda Mejia, Ph.D.
- Dissertation Defense Date (expected): May 2026
- Psychology Master's Thesis: *Neuroimmune mechanisms connecting violence with internalizing symptoms: A high-dimensional multi-modal mediation analysis*
- Statistics Master's Thesis: *Sex differences in response to violence: Role of salience network expansion and connectivity on depression*

Oberlin College & Conservatory, Oberlin, OH GPA: 3.96

August 2013 - May 2018

Bachelor of Arts in Psychology — Bachelor of Music in Flute Performance

Concentration in Statistical Modeling — Minor in Law & Society

FELLOWSHIPS

Ruth L. Kirschstein National Research Service Award

Recommended for funding

National Institute of Mental Health Individual Predoctoral Fellowship (F31)

- Title: Sex differences in response to threat: Role of the salience network in the development of depression across adolescence (Impact score: 22 — Percentile: 5)
- Funding (proposed): \$117,265
- Objective: Features of the salience network might help explain sex differences in response to threat, and could ultimately help explain the fact that females tend to suffer from more severe depression than males. The proposed study will examine the hypotheses that salience network connectivity, amygdala betweenness centrality, and expansion 1) show sex differences across development; 2) change in response to threatening events; and 3) are mechanisms connecting threat with depression.

National Science Foundation Graduate Research Fellowship

September 2022 - present

- Title: Delineating neuroimmune mechanisms of emotion dysregulation in maltreated youth
- Funding: \$148,000

TRAVEL FUNDING

University of Michigan, Ann Arbor, Michigan

June 2023

- Genomics for Social Scientists Epigenetics Workshop
- Funding: \$1,200

TECHNICAL SKILLS

Programming Languages

R, Python, Bash, MATLAB, \LaTeX

Version Control

GitHub, Docker, Singularity, Flywheel

Neuroimaging Software

fMRIPrep, Workbench, NiLearn, ANTs, FSL, AFNI, Freesurfer

1. Halchenko, Y. O., Goncalves, M., Ghosh, S., Velasco, P., di Castello, M. V. O., Salo, T., ... **Butler, E.R.**, ... & Kennedy, D. N. (2024). HeuDiConv—flexible DICOM conversion into structured directory layouts. *Journal of Open Source Software*, *9*(99), 5839. <https://bit.ly/3VMH4Xi>
2. **Butler, E.R.**, Samia, N., White, S., Gratton, C., & Nusslock, R. (2024). Neuroimmune mechanisms connecting violence with internalizing symptoms: A high-dimensional multimodal mediation analysis. *Human Brain Mapping*, *45*(2), e26615. bit.ly/30tRqZi
3. Scott, J.C.*, Moore, T.M.*, Roalf, D.R., Satterthwaite, T.D., Wolf, D.H., Port, A.M., **Butler, E.R.**, Ruparel, K., Nievergelt, C.M., Risbrough, V.B., Baker, D.G., Gur, R.E., & Gur, R.C. (2023). Development and application of novel performance validity metrics for computerized neurocognitive batteries. *Journal of the International Neuropsychological Society*, *29*(8), 789-797. bit.ly/48VbzPR
4. Adebimpe, A., Bertolero, M., Douli, S., Cieslak, M., Murtha, K., Baller, E., **Butler, E.R.**, Cook, P., Colcombe, S., Covitz, S., Davatzikos, C., Davila, D., Flounders, M., Elliott, M.A., Franco, A., Gur, R.E., Gur, R.C., Jaber, B., McMillian, C., Milham, M., Mutsaerts, H., Oathes, D.J., Olm, D., Phillips, J., Tackett, W., Roalf, D.R., Tapera, T.M., Tisdall, M.D., Esteban, O., Poldrack, R., Detre, J.A., & Satterthwaite, T.D. (2022). ASLPrep: a platform for processing of arterial spin labeled MRI and quantification of regional brain perfusion. *Nature Methods*, *19*(6), 683-686. bit.ly/425zUQL
5. Tapera, T.M., Cieslak, M., Bertolero, M., Adebimpe, A., Aguirre, G.K., **Butler, E.R.**, Cook, P.A., Davila, D., Elliott, M.A., Linguiti, S., Murtha, K., Tackett, W., Detre, J.A., & Satterthwaite, T. (2021). FlywheelTools: data curation and manipulation on the Flywheel platform. *Frontiers in neuroinformatics*, *15*, 678403. bit.ly/3TXAwfL
6. **Butler, E.R.**, Chen, A., Ramadan, R., Le, T.T., Ruparel, K., Moore, T.M., Satterthwaite, T.D., Zhang, F., Shou, H., Gur, R.C., Nichols, T.E.*, & Shinohara, R.T.* (2021). Pitfalls in brain age analyses. *Human brain mapping*, *42*(13), 4092-4101. bit.ly/3U5dTzA
7. Moore, T.M.*, Calkins, M.E.*, Rosen, A.F.G., **Butler, E.R.**, Ruparel, K., Fusar-Poli, P., Koutsouleris, N., McGuire, P., Cannon, T.D., Gur, R.C., & Gur, R.E. (2021). Development of a probability calculator for psychosis risk in children, adolescents, and young adults. *Psychological medicine*, *52*(14), 3159-3167. bit.ly/38PhepB
8. Gur, R.C., **Butler, E.R.**, Moore, T.M., Rosen, A.F.G., Ruparel, K., Satterthwaite, T.D., Roalf, D.R., Gennatas, E.D., Bilker, W.B., Shinohara R.T., Port, M., Elliott, M.A., Verma, R., Davatzikos, C., Wolf, D.H., Detre, J.A., & Gur, R.E. (2021). Structural and functional brain parameters related to cognitive performance across development: Replication and extension of the parieto-frontal integration theory in a single sample. *Cerebral cortex*, *31*(3), 1444-1463. bit.ly/3aEgN7Z
9. Moore, T.M., **Butler, E.R.**, Scott, J.C., Port, A.M., Ruparel, K., Njokweni, L.J., Gur, R.E., & Gur, R.C. (2020). When CAT is not an option: Complementary methods of test abbreviation for neurocognitive batteries. *Cognitive neuropsychiatry*, *26*(1), 35-54. bit.ly/3nAtVOZ
10. Morean, M.E. & **Butler, E.R.** (2019). The Medical Cannabis Expectancy Questionnaire: Adult medical marijuana users' expectancies associated with combustible, vaporized, and edible cannabis use for medical purposes. *Cannabis*, *2*, 1-18. bit.ly/2NTGLYX
11. Morean, M.E., L'Insalata, A., **Butler, E.R.**, McKee, A., & Krishnan-Sarin, S. (2018). Age at drinking onset, age at first intoxication, and delay to first intoxication: Assessing the concurrent validity of measures of drinking initiation with alcohol use and related problems. *Addictive behaviors*, *79*, 195-200. bit.ly/30wIhoE
12. Morean, M. E., **Butler, E. R.**, Bold, K. W., Kong, G., Camenga, D. R., Cavallo, D. A., Simon, P., & Krishnan-Sarin, S. (2018). Preferring more e-cigarette flavors is associated with e-cigarette use frequency among adolescents but not adults. *PloS one*, *13*(1), e0189015. bit.ly/2NyJBST

MANUSCRIPTS: UNDER REVIEW

1. **Butler, E.R.**, Samia, N., Mejia, A., Pham, D., Pines, A., & Nusslock, R. (under review). Sex differences in response to violence: Role of salience network expansion and connectivity on depression. <https://bit.ly/4hoTbCN>
2. Calkins, M.E., **Butler, E.R.**, White, L.H., Larsen, B., Satterthwaite, T.D., Moore, T.M., Ered, A., Taylor, J., Barzilay, R., Ruparel, K., Shahriar, S., Dietterich, T., Roalf, D., Wolf, D.H., Gur, R.C., & Gur, R.E. (under review). Longitudinal trajectories of clinical features in community youth with recurrent psychosis spectrum symptoms: Findings from the Philadelphia Neurodevelopmental Cohort.

MANUSCRIPTS: IN PREPARATION

1. **Butler, E.R.**, Alloy, L., Insel, C., Suárez, L., Samia, N., Mejia, A., & Nusslock, R. (in preparation). Uncontrollability and unpredictability differentially put males and females at risk for depression through brain network expansion and connectivity.
2. **Butler, E.R.**, Alloy, L., Pham, D., Samia, N., Nusslock, R. & Mejia, A. (in preparation). Utility and validity of group atlas versus personalized functional network approaches.
3. **Butler, E.R.**, Tipton, E., Samia, N., Suárez, L., Insel, C., & Nusslock, R. (in preparation). Causal inference in developmental psychopathology and human neuroscience.

CONFERENCE POSTER PRESENTATIONS

1. **Butler, E.R.**, Samia, N., Mejia, A., Pham, D., Pines, A., & Nusslock, R. (September 2024). Sex differences in response to violence: role of the salience network in the development of depression. Poster presented at the annual meeting of Flux, Baltimore, MD.
2. **Butler, E.R.**, Chen, R., Miller, G.E., & Nusslock, R. (July 2023). Sex differences in response to violence: potential role of the ventral attention network. Poster presented at the annual meeting of the Organization for Human Brain Mapping, Montreal, Canada.
3. **Butler, E.R.**, Miller, G.E., Samia, N., & Nusslock, R. (June 2022). Violence and internalizing symptoms association explained by inflammation and amygdala connectivity. Poster presented at the annual meeting of the Organization for Human Brain Mapping, Glasgow, Scotland.
4. Adebimpe, A., Bertolero, M., Douli, S., Cieslak, M., Murtha, K., Baller, E., **Butler, E.R.**, Cook, P., Colcombe, S., Covitz, S., Davatzikos, C., Davila, D., Flounders, M., Elliott, M.A., Franco, A., Gur, R.E., Gur, R.C., Jaber, B., McMillian, C., Milham, M., Mutsaerts, H., Oathes, D.J., Olm, D., Phillips, J., Tackett, W., Roalf, D.R., Tapera, T.M., Tisdall, M.D., Esteban, O., Poldrack, R., Detre, J.A., & Satterthwaite, T.D. (June 2021). ASLPrep: A generalizable workflow for processing of arterial spin labeled MRI and quantification of brain perfusion. Poster presented at the annual meeting of the Organization for Human Brain Mapping, Virtual.
5. Calkins, M.E., **Butler, E.R.**, Moore, T.M., Ruparel, K., Wolf, D.H., Satterthwaite, T.D., Gur, R.C., & Gur, R.E. (April 2021). Longitudinal trajectories of psychosis spectrum symptoms in community youth: findings from the Philadelphia Neurodevelopmental Cohort (PNC). Poster presented at the annual meeting of the Society of Biological Psychiatry, Virtual.
6. Scott, J.C., Moore, T.M., Roalf, D.R., Satterthwaite, T.D., Wolf, D.H., Port, A.M., **Butler, E.R.**, Ruparel, K., Nievergelt, C.M., Risbrough, V.B., Baker, D.G., Gur, R.E., & Gur, R.C. (February 2021). Development and application of novel, data-driven performance validity metrics for computerized neurocognitive batteries. Talk presented at the International Neuropsychological Society Annual Conference, San Diego, CA (virtual).
7. **Butler, E.R.**, Chen, A., Ramadan, R., Ruparel, K., Moore, T.M., Zhang, F., Shou, H., Gur, R.C., Nichols, T.E.*, & Shinohara, R.T.* (June 2020). Statistical pitfalls in brain age analyses. Poster presented at the annual meeting of the Organization for Human Brain Mapping, Virtual.

8. Morean, M.E., **Butler, E.R.**, Bold, K., Kong, G., Camenga, D., Cavallo, D., Simon, P. & Krishnan-Sarin, S. (March 2017). Preference for more e-cigarette flavors is associated with e-cigarette use frequency among youths but not adults. Poster presented at the annual meeting of the Society for Research on Nicotine and Tobacco.
9. Morean, M.E., **Butler, E.R.**, Bold, K., Kong, G., Camenga, D., Cavallo, D., Simon, P. & Krishnan-Sarin, S. (November 2016). Preference for more e-cigarette flavors is associated with e-cigarette use frequency among youths but not adults. Poster presented at the annual Tobacco Regulatory Science Conference.

* Denotes equal contribution

CLINICAL WORK

Ann & Robert H. Lurie Children's Hospital of Chicago

Starting July 2025

Trauma and Suicidality Practicum

- Supervisor: Anthony Vesco, Ph.D.
- Supervision: Weekly individual and group supervision.
- Primary patient populations: Children and adolescents with a history of exposure to traumatic experiences or suicidal ideation and behaviors.
- Implement the Structured Psychotherapy for Adolescents Responding to Chronic Stress (SPARKS), a group therapy based on Dialectical Behavioral Therapy (DBT) for adolescents who have had traumatic experiences, and the Collaborative Assessment and Management of Suicidality (CAMS) intervention for adolescents who are suffering from serious thoughts of self-harm.

The Urban Youth Trauma Center, University of Illinois at Chicago

July 2024 - present

Anxiety, Trauma, and Substance Abuse Practicum

- Supervisor: Liza Suárez, Ph.D.
- Supervision: Weekly individual, clinical psychology group, and interdisciplinary team supervision, each lasting one hour.
- Primary patient populations: Children and adolescents (ages 7-18) with a history of exposure to traumatic experiences or anxiety disorders from low-income and minoritized backgrounds (e.g., Black, Latino/a, LGBTQIA). Primary diagnoses included Post-Traumatic Stress Disorder, Generalized Anxiety Disorder, Social Anxiety Disorder, and Separation Anxiety Disorder. Co-morbidities included intellectual disabilities, specific learning disorders, Autism Spectrum Disorder, Major Depressive Disorder, substance use disorders, Attention-Deficit/Hyperactivity Disorder, and Oppositional Defiant Disorder.
- Implement Trauma-Focused Cognitive Behavioral Therapy (TF-CBT) and Trauma Systems Therapy - Substance Abuse (TST-SA) with children and adolescents who have been exposed to trauma, and other CBT-based interventions for cases of anxiety and depression such as Parent Management Training and the Unified Protocol for Children and Adolescents. Cover content such as safety planning, psychoeducation, behavioral activation, motivational interviewing, ARC (antecedent, response, consequence), emotion identification, grounding, coping skills, cognitive flexibility, exposures, trauma narratives, interpersonal effectiveness (from DBT), and positive reinforcement programs. Conduct intake assessments using the Columbia-Suicide Severity Rating Scale (C-SSRS), the UCLA PTSD Reaction Index, and the Anxiety and Related Disorders Interview Schedule for DSM-5 (ADIS). Write mental health evaluations and treatment plans based on intake assessments to aid in the treatment process. Consult with an interdisciplinary team of clinical psychologists, psychiatrists, and social workers. Refer patients to be assessed for developmental disabilities and communication disorders. Work with an interpreter to speak with patients' parents. Present on designing exposures and exposure hierarchies for triggers resulting from traumatic experiences. Use measurement-based care across interventions, presenting results to an interdisciplinary team.

The Family Institute, Northwestern University

September 2023 - June 2024

Project Strengthen

- Supervisors: Greg Friedman, Ph.D., Richard Zinbarg, Ph.D. & Shari Rogers, LCSW
- Supervision: Weekly individual supervision lasting 30 minutes per case.
- Primary patient populations: Adolescents and adults (ages 17-30) with a history of exposure to traumatic experiences from low-income or minoritized backgrounds (e.g., Black, LGBTQIA). Diagnoses included Post-Traumatic Stress Disorder, Major Depressive Disorder, Social Anxiety Disorder, Generalized Anxiety Disorder, specific phobias, Bipolar II Disorder, and Depersonalization/Derealization Disorder.
- Implemented the Unified Protocol and humanistic approaches to address concerns related to traumatic stress, anxiety, and depression using a co-therapy model with supervisors. Covered content such as psychoeducation, behavioral activation, motivational interviewing, ARC, emotion identification, coping skills, cognitive flexibility, exposures, and interpersonal effectiveness.

The Family Institute, Northwestern University

September 2023 - June 2024

Child Cognitive Behavioral Therapy Practicum

- Supervisor: Benjamin Rosen, Ph.D.
- Supervision: Weekly group supervision for one hour.
- Primary patient populations: Children and adolescents (ages 9-16) with a history of exposure to traumatic experiences or behavioral problems.
- Implemented modules from Cognitive Behavioral Therapy and Parent-Child Interaction Therapy. Covered content such as Special Time, emotion identification, and emotion regulation.

The Family Institute, Northwestern University

September 2022 - June 2024

Adult Cognitive Behavioral Therapy Practicum

- Supervisor: Jonathan Sutton, Ph.D.
- Supervision: Weekly group supervision for 3 hours.
- Primary patient populations: Adults (ages 22-65) from low-income and minoritized backgrounds (e.g., Black, Latino, LGBTQIA). Diagnoses included Major Depressive Disorder, Persistent Depressive Disorder, Social Anxiety Disorder, Generalized Anxiety Disorder, Separation Anxiety Disorder, Panic Disorder, specific phobias, Bipolar II Disorder, and Depersonalization/Derealization Disorder.
- Implemented the Unified Protocol for cases of anxiety and depression. Covered content such as safety planning, psychoeducation, behavioral activation, motivational interviewing, ARC (antecedent, response, consequence), emotion identification, coping skills, cognitive flexibility, exposures, and interpersonal effectiveness.

Department of Psychology, Northwestern University

August 2022 - September 2023

Assessment Practicum

- Supervisors: Richard Zinbarg, Ph.D. & Vijay Mittal, Ph.D.
- Supervision: Weekly group supervision for 2-3 hours.
- Primary patient populations: Adults (ages 21-65) from low-income and minoritized backgrounds (e.g., Black, Latino, LGBTQIA). Diagnoses included Major Depressive Disorder, Persistent Depressive Disorder, Social Anxiety Disorder, Generalized Anxiety Disorder, Separation Anxiety Disorder, Panic Disorder, Post-Traumatic Stress Disorder, Specific Phobia, Hoarding Disorder, Alcohol Use Disorder, and Attention-Deficit/Hyperactivity Disorder.
- Diagnosed mental disorders using the Structured Clinical Interview for DSM-5 (SCID-5); interpreted the Minnesota Multiphasic Personality Inventory-2-Restructured Form (MMPI-2-RF) and the Shipley-2; wrote integrative reports; assessed for psychosis risk using the Structured Interview for Psychosis-Risk Syndromes (SIPS) and the Negative Symptom Inventory-Psychosis Risk (NSI-PR); and conducted neurocognitive tests (i.e., WRAT4, HVLIT, BACS).

CERTIFICATIONS

- Trauma-Focused Cognitive Behavioral Therapy (TF-CBT)** July 2024 - present
- Supervisors: Liza Suárez, Ph.D. & Susana Rivera, Ph.D.
 - Completed the TF-CBT training course and currently in the TF-CBT supervision as required by the TF-CBT Certification Program.
- Structured Interview for Psychosis-Risk Syndromes (SIPS)** August 2022
- Supervisor: Vijay Mittal, Ph.D.
 - Completed SIPS/SOPS training in accordance with the standards established by the PRIME Research Clinic at Yale University.

TEACHING EXPERIENCE

- Northwestern University, Evanston, IL** March 2024 - June 2024
Instructor — Research Methods in Psychology
- Co-Instructor: Diana Perez Rivera, M.S.
 - Responsibilities: Designed and taught a course for 21 undergraduate students. We focused on how to formulate research questions and report scientific results, and covered different aspects of designing experiments, including how to select participants, choose independent and dependent variables, control for confounding variables, and consider ethical and equitable research practices. Students were evaluated via multiple choice quizzes, paper writing, and presentations.
- Northwestern University, Evanston, IL** March 2022 - June 2022
Teaching Assistant — Psychopathology
- Supervisor: Vijay Mittal, Ph.D.
 - Responsibilities: Graded and provided feedback on papers and tests, and held office hours and review sessions.
- Northwestern University, Evanston, IL** January 2022 - March 2022
Teaching Assistant — Evaluating Evidence
- Supervisors: Onnie Rogers, Ph.D. & Mary McGrath, Ph.D.
 - Responsibilities: Graded and provided feedback on lecture questions, quizzes, and qualitative and quantitative data collection and analysis.
- Northwestern University, Evanston, IL** September 2021 - December 2021
Teaching Assistant — Statistical Methods in Psychology
- Supervisor: Michael Bailey, Ph.D.
 - Responsibilities: Graded, provided feedback on, and helped with statistics and JMP.

INVITED TALKS

1. *Traumatic Experiences: From Neurobiology to Interventions* for University of Illinois at Chicago's Psychiatry Grand Rounds March 2025
2. *Trauma Focused - Cognitive Behavioral Therapy* for Northwestern's Undergraduate Cognitive Behavioral Therapy course March 2025
3. *Psychology: Inside Diagnosis and Treatment* for Northwestern Pre-College August 2024
4. *Creating your academic online presence* for psychology graduate students January 2024
5. *Clinical Psychology Research* for undergraduate Research Methods course January 2023
6. *Neuroimmune mechanisms: violence and internalizing symptoms* for ADAPT lab January 2023
7. *Statistical Computing in R* for The Emory-Tibet Science Initiative October 2022
8. *Medical Cannabis Expectancies Questionnaire* for Oberlin Senior Symposium April 2018

REVIEWING EXPERIENCE

1. Ad hoc reviewer for the *Journal of the American Statistical Association* March 2023
2. Ad hoc reviewer for *eLife* March 2023
3. Ad hoc reviewer for *Brain and Behavior* June 2022
4. Ad hoc reviewer for *Human Brain Mapping* February 2022
5. Ad hoc reviewer for *Neurobiology of Aging* August 2021
6. Ad hoc reviewer for *Biological Psychiatry* February 2021
7. Ad hoc reviewer for *The American Journal of Psychiatry* January 2021
8. Ad hoc reviewer for *Substance Use and Misuse* November 2017

PROFESSIONAL SERVICE

Flux Society, Remote January 2025 - present
Member - Trainee Committee

- Supervisors: Jessica Cohen, Ph.D. & Nim Tottenham, Ph.D.
- Responsibilities: Plan events and workshops for trainees at the annual Flux conference. Co-organize the grant writing panel, which involves identifying and inviting guest speakers, coordinating content, ensuring relevance to an international audience, and moderating the event.

Northwestern University, Evanston, IL September 2022 - present
Volunteer - Psychology Department

- Supervisor: Jennifer Tackett, Ph.D., Robin Nusslock, Ph.D. & Dan Mroczek, Ph.D.
- Responsibilities: Organize social events among graduate students and postdoctoral fellows to foster a sense of community for the Clinical Area Social Engagement Committee; provide mentorship to Clinical Psychology PhD students through the First Year Mentorship program; and provide feedback on the Department of Psychology graduate students' statistics sequence and redesign the Quantitative Certificate requirements as part of the Statistics Evaluation Committee.

Northwestern University, Evanston, IL September 2021 - June 2022
Member - Developmental Science Research Resources Workgroup

- Supervisor: Lauren Wakschlag, Ph.D.
- Responsibilities: Collaborated with students, postdocs and faculty across departments working on developmental science to identify research resources that will help foster interdisciplinary research.

Northwestern University, Evanston, IL April 2022
Reviewer - Sneak Peak

- Supervisor: Jennifer Tackett, Ph.D.
- Responsibilities: Reviewed applications for a program designed to provide information and access to resources that are helpful in pursuing graduate programs in psychology.

Application Statement Feedback Program, Remote September 2021
Editor

- Supervisor: Peter Sokol-Hessner, Ph.D.
- Responsibilities: Provided feedback on under-represented students' statements for applications to Ph.D. programs in psychology and neuroscience.

HONORS AND AWARDS

1. Honorable Mention from the NSF Graduate Research Fellowship Program March 2021
2. Nominated member of Phi Beta Kappa April 2018
3. Nominated member of Sigma Xi, The Scientific Research Society March 2018
4. Nominated member of Pi Kappa Lambda, The National Music Honor Society February 2018

COURSEWORK

Neuroscience & Psychology

Biological and Cognitive Bases of Behavior, Clinical Assessment, Health Bases of Psych., Responsible Conduct of Research, Cognitive Neuroscience of Memory, Psychopathology, Personality, Psychotherapy, Research Methods in Clinical Psych., Child and Adolescent Development, Social Emotional Brain

Statistics

Multivariable Calculus, Discrete Mathematics, Linear Algebra, Probability Theory, Mathematical Statistics, Bayesian Data Analysis, Statistical Theory and Methods I-III, Regression, Psychometric Theory, Generalized Linear Models, Causal Inference, Nonparametric Statistics, Social Network Analysis

WORK EXPERIENCE

University of Pennsylvania, Philadelphia, PA

June 2018 - August 2021

Data Analyst — Brain Behavior Laboratory

- Principal Investigator: Ruben Gur, Ph.D.
- Mission \Rightarrow The lab aims to characterize clinical, cognitive and neurobiological trajectories of youth on the psychosis spectrum, and to uncover the biological bases of behavior more broadly in part through improving the measurement of pertinent domains.
- Statistics, Visualization and Communication \Rightarrow Translated research questions into testable hypotheses, utilized machine learning and Bayesian methods for prediction, communicated results to investigators using informative graphics, and wrote methods and results sections for manuscripts.
- Neuroimaging \Rightarrow Pre-processed T1-weighted, diffusion, and functional images using a variety of software packages, and built a series of Docker images to process longitudinal structural data.
- Psychometrics \Rightarrow Utilized factor analysis and item response theory to explore psychometric properties and score cognitive and clinical assessments, and assessed the validity of various administration strategies for the Penn Computerized Neurocognitive Battery.
- Management \Rightarrow Organized meetings to discuss data and teach junior staff about data analysis.

Momentum@Work, Austin, TX

December 2019 - January 2020

Consulting Statistician

- Collaborator: Allison Brenner, M.A.
- Responsibilities: Performed psychometric analyses and wrote summary of results to help determine efficacy of evaluation for potential Foreign Service members.

Oberlin College, Oberlin, OH

August 2017 - December 2017

Grader — Introduction to Biostatistics, Mathematics Department

- Supervisor: Jeffrey Witmer, Ph.D.
- Responsibilities: Graded and provided feedback on biostatistics homework.

Children's Hospital of Philadelphia, Philadelphia, PA

June 2016 - August 2016

NSF REU Intern — Center for Injury Research and Prevention

- Principal Investigator: Joel Fein, M.D., M.P.H.
- Responsibilities: Conducted research with Dr. Nancy Kassam-Adams on parent-child PTSD symptom agreement and severity. Shadowed Violence Intervention Program case managers and reviewed surveillance data to identify incidents of assaults on school property. Wrote a blog post on the mental health needs of children with incarcerated parents: <https://bit.ly/3bkgU5V>

Oberlin College, Oberlin, OH

February 2016 - May 2016

Teaching Assistant — Research Methods II, Psychology Department

- Supervisor: Travis Wilson, Ph.D.
- Responsibilities: Held office hours, graded daily quizzes, and assisted students during lab.

Oberlin College, Oberlin, OH

October 2015 - December 2017

Tutor — Student Academic Services

- Courses: Introduction to Neuroscience, Statistical Modeling, Calculus I-III, Research Methods I-II, Aural Skills 1-IV, Music Theory I-IV

COMMUNITY SERVICE

Oberlin College, Oberlin, OH

October 2018 - present

Alumni Volunteer

- Responsibilities: Interview prospective students, attend recruitment events, provide career counseling for current students, and plan events for alumni in the Chicago area.

RefugeeOne, Chicago, IL

February 2022 - May 2024

Mentor

- Supervisor: Jamie Corliss, M.A.
- Responsibilities: 1) Mentor teenagers who are refugees from Afghanistan and Sudan by helping with homework, and integrating them into the community; 2) Organized a panel for refugees on graduate school spanning clinical psychology, medicine, statistics, engineering and computer science; and 3) Provided mentorship to refugees as they are considering whether to attend graduate school.

Tutoring Chicago, Chicago, IL

September 2021 - November 2021

Mentor

- Supervisor: Greer Hengesbaugh, M.Ed.
- Responsibilities: Helped a low-income minority student in 5th grade develop studying skills across disciplines, and to learn essential social and emotional skills.

Collective Success Network, Philadelphia, PA

October 2020 - December 2020

Mentor

- Supervisor: Alice Ginsberg
- Responsibilities: Helped a low-income, first-generation college student achieve their academic and career aspirations through providing advice and resources on preparing for graduate school.

Mighty Writers, Philadelphia, PA

October 2018 - June 2021

Mentor

- Supervisor: Christina Rissell
- Responsibilities: Helped a student from 7th through 9th grade develop writing and studying skills, and thrive through the transition to high school.

Oberlin Community Services, Oberlin, OH

February 2014 - May 2018

Tutor — America Counts

- Responsibilities: Tutored a student from 4th through 8th grade in mathematics, and provided mentorship for the student through difficult peer and familial circumstances.

MENTORSHIP

Kang Hyun Ki

July 2022 - February 2023

Northwestern University undergraduate student

- Worked on managing and pre-processing fMRI data.

Bukola Ajanaku

September 2020 - June 2021

BS, University of Pennsylvania — MD PhD student, Mount Sinai

- Worked on cleaning medical data from the Philadelphia Neurodevelopmental Cohort using R.

RESEARCH REFERENCES

Robin Nusslock, Ph.D.

Associate Professor of Psychology
Department of Psychology
Northwestern University

(847) 467-4148
nusslock@northwestern.edu

Noelle Samia, Ph.D.

Associate Professor of Statistics and Data Science
Ad Hoc MS in Applied Statistics Program Director
NSF-Simons SkAI Institute Senior Personnel
Department of Statistics and Data Science
Northwestern University

(847) 491-5772
n-samia@northwestern.edu

Amanda Mejia, Ph.D.

Associate Professor of Statistics
Department of Statistics
Indiana University Bloomington

(812) 856-7814
afmejia@iu.edu

Russell Takeshi Shinohara, Ph.D.

Professor of Biostatistics and Epidemiology
Director, Penn Statistics in Imaging and Visualization Center
Department of Biostatistics and Epidemiology
University of Pennsylvania

(215) 746-1090
rshi@penntestmed.upenn.edu

Theodore D. Satterthwaite, M.D., M.A.

Associate Professor of Psychiatry
Director, Penn Lifespan Informatics and Neuroimaging Center
Department of Psychiatry
University of Pennsylvania

(215) 615-3606
sattertt@penntestmed.upenn.edu

CLINICAL REFERENCES

Liza Suárez, Ph.D.

Associate Professor of Clinical Psychiatry
Director, Pediatric Stress and Anxiety Disorders Clinic
Co-Director, Urban Youth Trauma Center
Department of Psychiatry
University of Illinois at Chicago

(312) 413-4628
lmsuarez@uic.edu

Kelley Volpe, M.D.

Assistant Clinical Professor
Medical Director, Pediatric Stress and Anxiety Disorders Clinic
Program Director, Child and Adolescent Psychiatry Fellowship
Department of Psychiatry
University of Illinois at Chicago

(312) 996-0434
kwilli45@uic.edu

Jonathan Sutton, Ph.D.

Director of Cognitive Behavioral Therapies Program
The Family Institute
Northwestern University

(857) 389-2148
jsutton@family-institute.org

Richard Zinbarg, Ph.D.

Professor of Psychology
Department of Psychology
Northwestern University

(847) 467-2290
rzinbarg@northwestern.edu