**JENNIFER BARREDO, PH.D.**

Providence VA Medical Center

830 Chalkstone Ave, Bldg. 32, Providence, RI 02908

Telephone: (401) 273-7100 x16290

Email: Jennifer\_Barredo@brown.edu; Jennifer.Barredo@va.gov

<https://vivo.brown.edu/display/jbarredo>

ORDid 0000-0003-4932-2433

EDUCATION

|  |  |  |
| --- | --- | --- |
| Undergraduate |  | University of Washington, Psychology |
|  |  | Bachelor of Science (B.S.), 2006 |
|  |  | *Mary Gates Research Fellow* |
| Graduate |  | Brown University, Neuroscience |
|  |  | Doctor of Philosophy (Ph.D.), 2013 |
|  |  | *Ruth L. Kirschstein Predoctoral Fellow* |
| Postdoctoral |  | Brown University, Neuroscience |
|  |  | Postdoctoral Research Associate, 2013-2014 |

POSTGRADUATE HONORS AND AWARDS

2021 Senior Travel Award Fellow, American College of Neuropsychopharmacology

2020-22 Brain Behavior Foundation (NARSAD) Young Investigator

2019-24 VA Clinical Science Career Development Awardee

2019 Athina Markou Travel Award, American College of Neuropsychopharmacology

2016 Research Day Award, VA Providence Health System (VAPHS) Research Day

MILITARY SERVICE

None

PROFESSIONAL LICENSES AND BOARD CERTIFICATION

None

ACADEMIC APPOINTMENTS

2021- Director, Clinical Neuroimaging Research Core, Brown University, Psychiatry and Human Behavior.

2017- Assistant Professor (Research), Brown University, Psychiatry and Human Behavior.

2014- Research Affiliate, Brown University, Carney Institute for Brain Sciences.

HOSPITAL APPOINTMENTS

2020- Director, MRI Research Core, Center *for* Neurorestoration and Neurotechnology, VAPHS

2020- Co-Director, Suicide Prevention Research Innovation Group (SPRING), VAPHS

2019- Co-Director, Design & Analysis Core, COBRE Center for Neuromodulation, Butler Hospital

2018- Research Scientist, Center for Neurorestoration and Neurotechnology, VAPHS

2015-18 Health Science Specialist, Center for Neurorestoration and Neurotechnology, VAPHS

OTHER APPOINTMENTS

EDITORIAL BOARDS

*Frontiers in Psychiatry: Neurostimulation and Neuroimaging*

AD HOC PEER-REVIEW

*European Archives of Psychiatry and Clinical Neuroscience; Journal of Cognitive Neuroscience; Journal of Motor Behavior; NeuroImage; NeuroImage: Clinical; Psychiatry Research; Scientific Reports; Brain Connectivity; Frontiers in Psychiatry; Journal of Affective Disorders; The Journal of Clinical Psychiatry; Military Psychology; PLOS One.*

AD HOC GRANT REVIEW

2021 VA RR&D Merit Review Subcommittee (Behavioral Health & Social Reintegration-Fall)

2022 VA RR&D Merit Review Subcommittee (Behavioral Health & Social Reintegration-Winter)

2022 Irish Research Council Starting and Consolidator Laureate Awards

HOSPITAL COMMITTEES

2021- Member, CfNN Professional Development Subcommittee

2020- Member, CfNN Executive Council, VAPHS

2020- Member, Institutional Review Board, VAPHS

2020- VA ORD National Scientific Computing Pilot Projects

UNIVERSITY COMMITTEES

2021- Member, Brown University MRI Research Facility, Executive Council

2021- Faculty Moderator, MindBrain Research Day, Brown University

2020- Education Committee, Consortium for Research in Suicide Prevention (CRISP), Brown University

2018- Core Member, Consortium for Research in Suicide Prevention (CRISP), Brown University

MEMBERSHIP IN SOCIETIES

Society of Biological Psychiatry

PUBLICATIONS IN PEER-REVIEWED JOURNALS

*\**Denotes equal authorship*. Italicized authors are mentees.*

* 1. Arulpragasam AR, van 't Wout Frank M, **Barredo J**, Faucher CR, Greenberg BD, Philip NS. Low intensity focused ultrasound for non-invasive and reversible deep brain neuromodulation: a paradigm shift in psychiatric research. (2022). Accepted by Frontiers in Psychiatry.
  2. *Gonsalves MA*, Beck Q, *Fukuda AM*, Tirrell E, Kokdere F, Kronenberg EF, Iadarola ND, Hagberg S, Carpenter LL, **Barredo J**. Mechanical Affective Touch Therapy (MATT) for Anxiety Disorders: Effects on Functional Connectivity and Cortical Thickness. (2021). *Accepted by Neuromodulation.*
  3. Primack JM, Bozzay ML, Armey MA, **Barredo J**, Schatten HS. (2021). Feasibility and acceptability of the Mobile Application for the Prevention of Suicide (MAPS). *Military Psychology,* DOI: 10.1080/08995605.2021.1962187.
  4. **Barredo, J**., Berlow, Y., Swearingen, H. R., Greenberg, B. D., Carpenter, L. L., & Philip, N. S. (2021). Multimodal Elements of Suicidality Reduction After Transcranial Magnetic Stimulation. *Neuromodulation.* Jul;24(5):930-937. doi: 10.1111/ner.13376. Epub 2021 Mar 1. PMID: 33650209.
  5. **Barredo J\***, Bozzay ML\*, Primack J, Armey M, Schatten HS, Carpenter LL, Philip NS. (2021). Translating neuroscience to suicide – it’s about time. *Biological Psychiatry.* Jun 1;89(11):1073-1083. doi: 10.1016/j.biopsych.2021.01.013. Epub 2021 Feb 1. Review. PMID: 33820628.
  6. Holman CS, Bozzay ML, **Barredo J**, Lenger KA, Primack J. (2020). Suicide prevention within the Veterans Health Administration. *The Behavior Therapist.* 43(8):305-309.
  7. Bozzay ML, Primack JM, *Swearingen HR*, **Barredo J**, Philip NS. (2020). Combined transcranial magnetic stimulation and brief cognitive behavioral therapy for suicide: study protocol for a randomized controlled trial in veterans. *Trials.* 2020 Nov 12;21(1):924. doi: 10.1186/s13063-020-04870-6. PubMed PMID: 33183345.
  8. Zandvakili A\*, **Barredo J\***, Aiken E, Carpenter LL, Greenberg BD, Philip NS. (2020). Mapping PTSD symptoms to Brain Networks: A Machine Learning Study. *Translational Psychiatry.* 10(1):195. doi: 10.1038/s41398-02000879-2. PMID: 32555146.
  9. Bozzay ML, Primack J, **Barredo J**, Philip NS (2020). Transcranial magnetic stimulation to reduce suicidality – A review and naturalistic outcomes. *Journal of Psychiatric Research.* 125:106-112. doi:

10.1016/j.jpsychires.2020.03.016. Epub 2020 Mar 28. Review. PMID: 32251917.

* 1. Petrosino NJ, Wout-Frank MV', Aiken E, *Swearingen HR*, **Barredo J**, Zandvakili A, Philip NS. One-year clinical outcomes following theta burst stimulation for post-traumatic stress disorder. *Neuropsychopharmacology*. 2020 May;45(6):940-946. doi: 10.1038/s41386-019-0584-4. Epub 2019 Dec 3. PubMed PMID: 31794974; PubMed Central PMCID: PMC7162862.
  2. **Barredo J**, *Bellone JA, Edwards M*, Correia S, Carpenter LL, Philip NS. (2019). White Matter Integrity and Responsiveness to Transcranial Magnetic Stimulation in Individuals with Posttraumatic Stress Disorder and Depression. *Depression and Anxiety.* 36(11):1047-1057. doi: 10.1002/da.22952. PMID: 31475432.
  3. Philip NS, **Barredo J**, Aiken E, Larson V, Jones RN, Shea MT, Greenberg BD, van 't Wout-Frank M. (2019). Theta-Burst Transcranial Magnetic Stimulation for Posttraumatic Stress Disorder. *Am J Psychiatry.* 176(11):93848. DOI:10.1176/appi.ajp.2019.18101160. PMID: 31230462.
  4. **Barredo J**, Aiken E, Carpenter LL, Greenberg BD, Philip NS. (2019). Neuroimaging Correlates of Suicidality in Decision-Making Circuits in Posttraumatic Stress Disorder. *Frontiers in Psychiatry.* Feb 12;10:44. DOI:10.3389/fpsyt.2019.00044. PMID: 30809160.
  5. **Barredo J**, Aiken E, van ‘t Wout-Frank M, Greenberg BD, Carpenter LL, Philip NS. (2018)**.**Network Functional Architecture and Aberrant Functional Connectivity in Posttraumatic Stress Disorder: A Clinical Application of Network Convergence.*Brain Connectivity.* 8(9):549-557. DOI:10.1089/brain.2018.0634. PMID: 30398386.
  6. Philip NS, **Barredo J**, Aiken E, Carpenter L. (2018). Neuroimaging mechanisms of therapeutic transcranial magnetic stimulation for major depressive disorder. *Biological Psychiatry: Cognitive Neuroscience and Neuroimaging.* 3(3):211-222. DOI:10.1016/j.bpsc.2017.10.007. PMID: 29486862.
  7. Philip NS, **Barredo J**, van 't Wout-Frank M, Tyrka AR, Price LH, Carpenter LL. (2018). Network mechanisms of clinical response to transcranial magnetic stimulation in posttraumatic stress disorder and major depressive disorder. *Biological Psychiatry.* 83(3):263-272. DOI:10.1016/j.biopsych.2017.07.021. PMID: 28886760.
  8. Jaywant A, **Barredo J**, Ahearn D, Resnik L. (2018). Neurological assessment without upper limb involvement: a systematic review of oral adaptations of the Trail Making Test and Symbol-Digit modalities test.

*Neuropsychological Rehabilitation.* 28(7):1055-1077. DOI:10.1080/09602011.2016.1240699. PMID: 27756192.

* 1. **Barredo J**, Acluche F, Resnik L. (2017). Appropriateness of Advanced Upper Limb Prosthesis Prescription for a Patient with a History of TBI with cognitive impairment: A Case Study. *Disability and Rehabilitation: Assistive Technology.* 12(6):647-656. DOI: 10.1080/17483107.2016.1201155. PMID: 27434169.
  2. Hancock L, Correia S, Ahern D, **Barredo J**, Resnik L. (2017). Cognitive predictors of skilled performance with an advanced upper limb multifunction prosthesis: a preliminary analysis. *Disability and Rehabilitation: Assistive Technology.* 12(5):504-511. DOI:10.3109/17483107.2016.1158326. PMID: 27049235.
  3. **Barredo J**, Verstynen T, Badre D. (2016). Organization of cortico-cortical pathways supporting memory retrieval across subregions of the left ventrolateral prefrontal cortex. *Journal of Neurophysiology.* 116(3):920-937. DOI:10.1152/jn.00157.2016. PMID: 27281745.
  4. **Barredo J**, Öztekin I, Badre D. (2013). Ventral fronto-temporal pathway supporting cognitive control of episodic memory retrieval. *Cerebral Cortex.* 25(4):1004-1019. DOI:10.1093/cercor/bht291. PMID: 24177990.
  5. Smith DM, **Barredo J**, and Mizumori SJY. (2011). Complimentary Roles of the Hippocampus and Retrosplenial Cortex in Contextual Learning. *Hippocampus.* 22(5):1121-1133. DOI:10.1002/hipo.20958. PMID: 21630374.
  6. Furtak SC, Cho CE, Kerr KM, **Barredo JL**, Alleyne JE, Patterson YR, Burwell RD. (2009). The Floor Projection Maze: A novel behavioral apparatus for presenting visual stimuli to rats. *Journal of Neuroscience Methods.* 181(1):82-88. DOI: 10.1016/j.jneumeth.2009.04.023. PMID: 19422855.

**PUBLICATIONS – SUBMITTED AND IN PREPARATION**

*\**Denotes equal authorship. *Italicized authors are mentees.*

* 1. *Gonsalves MA*, White TL, Joyce HE, *Fukuda AM*, Harris AD, **Barredo J**, Brown JC, Carpenter LL. Repetitive Transcranial Magnetic Stimulation Increases Neocortical Metabolites in Major Depression: A Systematic Review. *Submitted to Neuroimage: Clinical.*
  2. *Swearingen HR*, Bozzay ML, Primack JM, Philip NS, **Barredo J**. Neuroimaging of Veterans at Risk for Suicide: Study Protocol. *In preparation for submission to BMJ Open.*
  3. *Kudinova A*, *DeLuca E*, Bozzay ML, **Barredo J**. Neuroimaging of Cyberball across clinical populations: A meta-analysis. *In preparation.*
  4. *Fukuda A*, *DeLuca EA*, Carpenter LL, **Barredo J**. Perivascular Inclusions: A Potential Biomarker for Depression Subtypes. *In preparation.*
  5. Zandvakili A, Barredo J, *Gonsalves MA*, *Fukuda A*, Carpenter LL. Mapping depression symptoms to Neuromodulation Outcomes. *In preparation.*

**ABSTRACTS & POSTERS**

*Italicized authors are mentees.*

* 1. *Gonsalves, M.A., Fukuda A.F*., **Barredo J**., Carpenter L.L., White T.A. *Aberrant Connectivity Across Functional Networks Relates to Levels of Glutamatergic Metabolites in Major Depression.* To be presented at the 2022 Annual Meeting for the Society of Biological Psychiatry, New Orleans, LA.
  2. *Kudinova, A.Y*, *DeLuca, E*., **Barredo, J.L.** (2022, April). *Neural Correlates of Social Exclusion in a Transdiagnostic Sample: A Meta-Analysis.* To be presented at the 2022 Annual Meeting for the Society of Biological Psychiatry, New Orleans, LA.
  3. **Barredo J.**, *DeLuca E.A.*, *Kudinova A.Y.* Neural Correlates of Social Exclusion in a Transdiagnostic Sample: A Meta-Analysis. American College of Neuropsychopharmacology Annual Meeting, 2021.
  4. Hughes, C.D., Armey M.A., Schatten, H., Nugent N., Wells A., **Barredo, J.**, Burke, T. *Predicting suicide risk using non-obvious/indirect methods.* Panel presented at the 55th annual meeting of the Association for Behavioral and Cognitive Therapy, New Orleans, LA.
  5. *Gonsalves M.A.*, Beck Q.D., *Fukuda A.K.*, Tirrell E., Kokdere F., Kronenberg E.F., Iadarola N.D., Hagberg S., Carpenter L.L., **Barredo J**. Mechanical Affective Touch Therapy (MATT) for Anxiety Disorders: Effects on Resting State Functional Connectivity. Society of Biological Psychiatry Annual Meeting, 2021.
  6. **Barredo J**., Berlow Y.A., *Swearingen H.R.*, Carpenter L.L., Philip, N.S. A Strong Foundation: Structure-Function Relationships and Neuromodulation for Depression and Anxiety. Society of Biological Psychiatry Annual Meeting, 2021.
  7. Bozzay, M.L., **Barredo, J.**, Weinstock, L., Schatten, H., & Primack, J. *Navigating barriers to suicide treatment and research among high-risk populations during critical care transitions.* Panel presented at the 54th annual meeting of the Association for Behavioral and Cognitive Therapy, Philadelphia, PA.
  8. **Barredo J**, *Swearingen HR*, Greenberg BD, Carpenter LL, Philip NS. Neuroimaging of Transcranial Magnetic Stimulation for Suicidality. American College of Neuropsychopharmacology Annual Meeting, 2019.
  9. **Barredo J**, Carpenter LL, Greenberg BD, Philip NS. Neuroimaging of Transcranial Magnetic Stimulation for Suicidality. Biannual VA/DoD Suicide Prevention Conference, 2019.
  10. Zandvakili A, **Barredo J**, Aiken E, Carpenter LL, Greenberg BD, Philip NS. A Computational Approach to Predict Clinical Features of PTSD: An fMRI and Machine Learning Study. American College of Neuropsychopharmacology Annual Meeting, 2018.
  11. Philip NS, **Barredo J**, Aiken EA, Larson V, Jones RN, Shea MT, Greenberg BD, and van ’t Wout-Frank M. Theta Burst Stimulation for Posttraumatic Stress Disorder. American College of Neuropsychopharmacology Annual Meeting, 2018.
  12. **Barredo J**, Aiken E, Carpenter LL, Greenberg BD, Philip NS. Interactions Between Cognitive Control and Decision-Making Networks: A Potential Biomarker of Suicidality. Society of Biological Psychiatry Annual Meeting, 2018.
  13. Greenberg BD, McLaughlin N, **Barredo J**, Blanchette B, Rasmussen S, Philip NS, Carpenter LL. Effects of Cathodal tDCS Over Pre-SMA on Functional Connectivity in OCD. Society of Biological Psychiatry Annual Meeting, 2018.
  14. Philip NS, **Barredo J**, Aiken E, van ‘t Wout M, Greenberg BD, Carpenter LL. Therapeutic transcranial magnetic stimulation improves cortical information flow in posttraumatic stress disorder. American College of Neuropsychopharmacology Annual Meeting, 2017.
  15. Philip NS, **Barredo J**, Almeida J, Tyrka AR, Price LH, Carpenter LL. Network mechanisms of clinical response to TMS in Posttraumatic stress and major depressive disorders. Brain Stimulation: Basic, Translational, and Clinical Research in Neuromodulation 2017.
  16. **Barredo J**, Carpenter LL, van ’t Wout-Frank M, Aiken E, Dunlap C, Greenberg BD, and Philip NS. Early Life Stress and PTSD Impacts Functional Network Organization: A Novel Application of Convergence Analysis. Society of Biological Psychiatry Annual Meeting, 2017.
  17. Philip NS, **Barredo J**, Almeida J, Tyrka AR, Price LH, Carpenter LL. Network Mechanisms of Clinical Response to Transcranial Magnetic Stimulation in Posttraumatic Stress and Major Depressive Disorders.Society of Biological Psychiatry Annual Meeting, 2017.
  18. **Barredo J**, Carpenter LL, van ’t Wout-Frank M, Aiken E, Dunlap C, Greenberg BD, and Philip NS. Early Life Stress and PTSD Impacts Functional Network Organization: A Novel Application of Convergence Analysis. VA Research Day, Providence VA Medical Center, 2017.
  19. Philip NS, **Barredo J**, Albright S, Frank M, Ridout S, Ridout KL, Almeida J, Tyrka AR, Price LH and Carpenter LL. Repetitive Transcranial Magnetic Stimulation Corrects Network Pathology in Patients with Comorbid Posttraumatic Stress Disorder and Major Depressive Disorder. Society of Biological Psychiatry, 2016.
  20. Philip NS, **Barredo J**, van ‘t Wout M, Almeida JR, Tyrka AR, Price LH, Carpenter LL. Network Mechanisms of 5Hz Repetitive Transcranial Magnetic Stimulation in Patients with Comorbid Posttraumatic Stress and Major Depressive Disorders. American College of Neuropsychopharmacology Annual Meeting, 2016.
  21. **Barredo J**, Acluche F, Resnick, L. Considerations for prescription of advanced upper limb prostheses: A preliminary model. Providence VA Medical Center Research Day, 2016.
  22. Philip NS, **Barredo J**, Albright S, Frank M, Ridout S, Ridout KL, Almeida J, Tyrka AR, Price LH, Carpenter LL. Repetitive transcranial magnetic stimulation corrects network pathology in patients with comorbid posttraumatic stress disorder and major depressive disorder. Society of Biological Psychiatry, 2016.
  23. Waugh R, **Barredo J**, Unger K, Worden M. Attention Effects in Early Visual Cortex Related to Conflict Adaptation. Poster presentation, Cognitive Neuroscience Society Annual Meeting, 2016.
  24. Albright S, **Barredo J**, Frank M, Ridout S, Ridout K, Almeida J, Tyrka A, Price L, Carpenter L, Philip NS. Repetitive transcranial magnetic stimulation corrects neural network pathology in patients with comorbid posttraumatic stress and major depressive disorders. MindBrain Research Day, Brown University, 2016.
  25. Jaywant A, **Barredo J**, Ahern DC, Resnik L. Neuropsychological assessment without upper limb involvement: systematic review of oral adaptations of the trail making test and symbol digit modalities test. Archives of Physical Medicine and Rehabilitation, 2016.
  26. McLaughlin N, Philip NS, **Barredo J**, Rasmussen S, Greenberg BD. Resting state functional connectivity networks of the internal capsule in healthy adults: relation to ablative neurosurgery for intractable OCD. Poster presentation. MindBrain Research Day, Brown University, 2016.
  27. Fasoli S, Bédard P, **Barredo J**, Resnik L, Sanes J. Plasticity associated with learning to use an advanced upper limb prosthetic device. Archives of Physical Medicine and Rehabilitation, 2015.
  28. Bédard P, Fasoli S, **Barredo J**, Resnik L, Sanes J. Limb Substitution-Related Neuroplasticity Induced by Learning to Use the DEKA Arm. Poster presentation, MindBrain Research Day, Brown University, 2015.
  29. **Barredo J**, Badre D. Diffusion spectrum imaging evidence of distinct white matter pathways in ventrolateral prefrontal cortex. Cognitive Neuroscience Society Annual Meeting, 2013.
  30. **Barredo J**, Öztekin I, Badre D. Network dynamics supporting the cognitive control of memory retrieval. Charles River Association for Memory Spring Meeting, 2012.
  31. **Barredo J**, Öztekin I, Badre D. Network dynamics supporting the cognitive control of memory retrieval. Society for Neuroscience Annual Meeting, 2011.
  32. **Barredo J**, Öztekin I, Badre D. Prefrontal-medial temporal lobe interactions supporting the cognitive control of episodic retrieval. Society for Neuroscience Annual Meeting, 2010.
  33. **Barredo J**, Badre D, & Burwell RD. A novel task shifting paradigm for rats to be used for the comparative analysis of executive function in rodents and humans. Society for Neuroscience Annual Meeting, 2008.

INVITED PRESENTATIONS

*National*

11/19/2021 *Predicting suicide risk using non-obvious/indirect methods.* Panel presented at the 55th annual meeting of the Association for Behavioral and Cognitive Therapy, New Orleans, LA.

04/30/2021 Society for Biological Psychiatry Annual Meeting.*“A Strong Foundation: Structure-Function Relationships and Neuromodulation for Depression and Anxiety.”*

03/11/2021 Psychiatric Research Society, Park City, Utah.*“Cognitive Mapping and Connectomics-Based Approaches to Understanding Transcranial Magnetic Stimulation.”*

11/21/2020 Association for Behavioral and Cognitive Therapy, Philadelphia, PA. “*Navigating barriers to suicide treatment and research among high-risk populations during critical care transitions.”*

08/27/2019 VA/DoD National Suicide Prevention Conference, Nashville, Tennessee. *“Neuroimaging of Transcranial Magnetic Stimulation for Suicidality.”*

*Regional*

08/03/2020 Junior Faculty Group, Psychiatry and Human Behavior, Brown University, Providence, RI

*“Neuroimaging resources for DPHB faculty”*

07/28/2020 CfNN, Providence VA Medical Center, Providence RI. *“Translating Interventional Neuroscience to Suicide – It’s About Time.”*

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| 05/16/2019 | VA Research Week Suicide Prevention Panel. VAPHS, Providence, RI |
| 02/28/2019 | VISN1 Healthcare System Mini-Management Advisory Council, Providence, RI |
| 01/24/2019 | Suicide Prevention Discussion Panel. Providence VA Medical Center, Providence, RI |

GRANTS

*Current Research Support:*

* 1. CSR&D Career Development-2 Award (IK2 CX001824-01A1). *“Identification of Veterans At-Risk for Suicide: A Multidisciplinary Approach.”* **Role: PI.** CM:12.0. 01/01/2019-12/31/2023. Direct costs: $1,019,270.This award supports the establishment of my independent VA-based research program centered on improving risk assessment and treatment optimization for Veterans with suicidal thoughts and behaviors.
  2. Brain Behavior Research Foundation Young Investigator Grant. *“Mechanisms of a neurostimulation-augmented psychosocial intervention for suicidality: a neuroimaging study.”* **Role: PI.** CM: In-Kind. 01/01/2020-12/31/2022. Direct costs: $70,000.This award supports post-treatment neuroimaging of Veterans completing a combined transcranial magnetic stimulation and brief cognitive behavioral therapy intervention for the treatment of suicidality.
  3. NIMH U01MH123427. *“Low intensity focused ultrasound: a new paradigm for depression and anxiety.”* **Role: Co-I**. CM: 1.2. 06/01/2021-03/31/2025. This grant supports a first in human study to develop low-intensity focused ultrasound as a next-generation treatments for depression and anxiety.
  4. NIGMS-COBRE (P20 GM130452, PI: Greenberg). *“COBRE Center for Neuromodulation.”* **Role: Design and Analysis Core Co-Leader.** CM: In-Kind. 03/01/2019- 02/28/2024. Direct costs: $1,611,857. This COBRE center will develop next generation neuromodulatory treatments for neuropsychiatric illness. I codirect the Design and Analysis Core, helping project leaders develop skills in the design, analysis, and management of neuroimaging studies.
  5. NIMH (5H23MH122587, PI: Kudinova). *“Neural Mechanisms Underlying Self-Critical Rumination and Self-Reassurance and Suicidal Thoughts and Behavior in Youth.”* **Role: Mentor**. 01/04/20-03/31/25. Direct costs: $995,000. This K23 career development award seeks to advance what is known about the brain/behavior mechanisms underlying self-critical rumination ─ defined as persistent negative-self- evaluation ─ and self-reassurance ─ providing compassion to self, in a sample of 12-15 year-old girls.

*Pending Research Support:*

1. NIMH (R01 MH130443-01, PI: Barredo*). “Ecological Phenotypes and the Positive Valence System.”* **Role: PI.** CM=4.8, 29% TPE. 07/01/2022-06/31/2027. Direct costs: $2,268,184. This study maps ecological momentary assessment-derived temporal variability in suicidal ideation and affect to the circuitry of the positive valence system to explore the underlying biology of potential phenotypes.
2. NIMH (R014625474, PI: van ‘t Wout-Frank). *“Non-invasive brain stimulation for PTSD: Identifying new targets for intervention.”* **Role: Co-I.** CM=1.8, 11% TPE. 07/01/2022-06/31/2027. Direct costs: $1,730,039. This study investigates new posterior parietal targets to engage with theta-burst modulation for posttraumatic stress disorder.
3. NIMH (R61/R33, PI: McLaughlin). *“Cannabis Use and Inhibitory Control in Young Adults: Effects of Modulation.”* **Role: Co-I.** CM=1.4 8.5% TPE. 07/01/2022-06/31/2027. Direct costs: $1,200,000. This study investigates differences in inhibitory control circuit function in young adults that are heavy cannabis users and evaluates changes in inhibitory control after theta-burst modulation with transcranial magnetic stimulation.
4. NIMH (UG3/UH3, PI: McLaughlin)*. “Using noninvasive brain stimulation to probe neural circuits of inhibitory control in young adults with heavy drinking.”* CM=1.4 8.5% TPE. 08/01/2022-07/31/2027. **Role: Co-I**. CM=1.4 8.5% TPE. 07/01/2022-06/63/2027. Direct costs: $1,200,000. This study investigates differences in inhibitory control circuit function in young adults that are heavy drinkers and evaluates changes in inhibitory control after transcranial direct stimulation.
5. VA RR&D Merit (PI: Eaton). *“Mindful Self-Compassion vs. Present Centered Group Therapy for combat deployed Veterans with Moral Injury and Posttraumatic Stress Disorder: A Randomized Controlled Trial.”* **Role: Co-I.** CM=1.4 8.5% TPE. 09/01/2022-08/31/2026. The goal of this proposal is to conduct a randomized control trial of Mindful Self-Compassion (MSC) vs. Present Centered Group Psychotherapy (PCGP) with combat veterans with PTSD who endorse moral injury and evaluates changes in post-traumatic guilt, shame, suicidal ideation/suicidal behaviors (SI/SB), and fMRI brain activation.
6. NIMH K23 (PI: Fukuda). *“The Role of Gliovascular Proteins in Transcranial Direct Stimulation Treatment for Depression.”* **Role: Mentor.** CM=1.4 8.5% TPE. 09/15/2022-08/14/2027. The goal of this proposal is to characterize the role of gliovascular protein accumulation in persons with depression, as well as changes in glial signatures correlated with response to non-invasive stimulation treatment.
7. VA RR&D CDA-2 (PI: Lin). *“Deconstructing Post-Stroke Hemiparesis for Precision Neurorehabilitation.”* **Role: Content Mentor.** This mentored award will provide the candidate, a talented neurologist, with essential training in neuroimaging and non-invasive stimulation methods. His research goal is to use both modalities to identify distinct imaging and neurophysiological signs that can be used to guide prescription and optimize therapeutic outcomes for Veterans recovering from stroke.
8. NIMH F31 (PI: Gonsalves). *“Repetitive Transcranial Magnetic Stimulation for Major Depression: Effects on Neocortical Metabolites.”*

*Completed Research Support:*

* 1. Ruth L. Kirschstein NRSA Individual Predoctoral Fellowship (1F31MH090755), “PFC-MTL Interactions During Controlled Episodic Retrieval.” **Role: PI**. CM: 12.0. 11/16/2010-11/15/2012, Direct costs: $83,612.
  2. Internal, Providence VAMC Center for Neurorestoration and Neurotechnology (CfNN) Seed Grant. **Role: PI**. CM: 6.0. 2/2015-2/2016.

UNIVERSITY TEACHING, ADVISING, & MENTORING

*Teaching*

2020- Lecturer, General Psychiatry Residency Program, Alpert Medical School of Brown University.

2008 Graduate Teaching Assistant, Brown University, Dept. of Neuroscience. Structure of the Nervous System.

*Faculty Mentorship*

2021- Anastacia L. Kudinova, Ph.D. K23 Co-Mentor

2021- Jessica R. Peters, Ph.D. K23 Co-Mentor

*Postdoctoral Mentorship & Training*

2020-21 Olivier Barthelemy, PhD, Postdoctoral Fellow, Brown University, Psychiatry & Human Behavior.

2017-18 John Bellone, PhD, Neuropsychology Postdoctoral Fellow, Brown University.

1. Melissa Edwards, PhD, Clinical Psychology Intern, Brown University.

*Doctoral Mentorship & Training*

2019- Megan Goncalves, MSc., Dissertation Committee, Brown University, Neuroscience.

*Master’s and Post-Baccalaureate Mentorship & Training*

2021- Emily DeLuca, MSc., Brown University, Psychiatry & Human Behavior

1. Justine Centeno, Brown University, Master’s Candidate, Public Health, Policy & Practice.

2014 Rebecca Waugh, MSc., Research Associate, Brown University, Dept. of Neuroscience.

HOSPITAL TEACHING, ADVISING, & MENTORING

*Teaching*

2020 Workshop in Applied Data Analysis for MRI.

2020 Biweekly COBRE and CfNN training seminar for research support staff.

*Faculty Mentorship & Advising*

2021- David J. Lin, M.D., Ph.D. VA Career Development Award Mentorship Committee

*Postdoctoral and Resident Mentorship & Advising*

2021- Andrew Fukuda, M.D., Ph.D. K23 Mentorship Committee

2021- Chelsie Benca-Bachman, Ph.D. K23/CDA Mentorship Committee

*Master’s and Post-Baccalaureate Mentorship & Advising*

2021- Jake Winter, B.A., Research Assistant, Providence VA Medical Center.

2021- Paul Kornman, MSc., Research Assistant, Butler Hospital.

2018- Hannah Swearingen, BSc., Research Assistant, Providence VA Medical Center.

1. Matthew Thompson, B.S., Research Assistant, Providence VA Medical Center.

2018-19 Morgan Talbot, B.S., Research Assistant, Providence VA Medical Center.

PRE-COLLEGE TEACHING

2009-14From Brain to Sensation: The Neuroscience of Perception. SPARK Middle School Science@Brown

2014 High-Level Vision. Summer@Brown Pre-College Program, Brown University.

2014 Neuroanatomy: A Case Study Approach. Summer@Brown Pre-College, Brown University.