ARUN ASOK, PhD

Curriculum Vitae

Columbia University | 3227 Broadway | JLG Science Center | New York | New York | 10027 Email: <u>aa3951@columbia.edu</u> | Web: <u>www.aasok.com</u>

PROFESSIONAL EXPERIENCE	
National Institute of Mental Health (NIMH), Bethesda, MD Division of Translational Research Traumatic Stress Research Program Special Volunteer Contact: Susan Borja	7/2021 – 10/2021
Howard Hughes Medical Institute (HHMI), New York, NY Department of Neuroscience Zuckerman Mind Brain & Behavior Institute Research Specialist Laboratory of Eric R. Kandel, MD	7/2021 – Pres.
Columbia University, New York, NY Zuckerman Mind Brain & Behavior Institute Department of Neuroscience Adjunct Associate Research Scientist Laboratory of Eric R. Kandel, MD	1/2021 – Pres.
University of Wisconsin-Milwaukee (UWM), Milwaukee, WI Department of Psychology Assistant Professor (Tenure Track) Asok Laboratory	7/2020 — 6/2021
Columbia University, New York, NY Department of Neuroscience Zuckerman Mind Brain & Behavior Institute Postdoctoral Research Fellow / Scientist Advisor: Eric R. Kandel, MD	4/2018 – 1/2021
Columbia University, New York, NY Department of Neuroscience New York State Psychiatric Institute Postdoctoral Research Scientist Advisor: Eric R. Kandel, MD	1/2017 — 3/2018
Columbia University, New York, NY Department of Neuroscience New York State Psychiatric Institute	6/2016 — 1/2017

Advisor: Eric R. Kandel, MD

Howard Hughes Medical Institute (HHMI) Postdoctoral Fellow

EDUCATION

University of Delaware, Newark, DE
Department of Psychology
PhD, Psychology / Neuroscience
Advisor: Jeffrey B. Rosen, PhD

Temple University, Philadelphia, PA

2016
2016
2017
2018
2019
2019
2019

Department of Psychology
BS, Neuroscience, with Distinction

Advisors: Thomas J. Gould, PhD & Richard G. Heimberg, PhD

RESEARCH INTERESTS

My long-term research goal is to identify how learned and innate fear networks of the brain interact, turn dysfunctional, and can be therapeutically targeted in post-traumatic stress and anxiety disorders. Thus, my work leverages a reductionist approach to answer a key question: How do hard-wired fear networks and nested molecular networks interact to control the emergence of maladaptive defensive behaviors? To answer this question, my research leverages various cutting-edge techniques in viral transgene delivery, in vivo calcium imaging, large-scale ex vivo electrophysiology, optogenetics, next-generation sequencing/informatics, rodent behavior, and network-based analytics.

HONORS AND AWARDS

Pavlovian Society Top Poster Prize	2015
University of Delaware Competitive Dissertation Fellowship	2015 – 2016
University of Delaware Competitive Graduate Research Fellowship	2014 – 2015
International Society of Developmental Psychobiology Travel Award	2013
Delaware Society for Neuroscience Top Poster Prize	2013
University of Delaware Professional Development Award	2011 – 2014
University of Delaware Department of Psychology Travel Award	2011 – 2014
Temple University Neuroscience Research Expo Top Poster Prize	2009
Temple University Psi Chi National Honor Society in Psychology	2009 – 2010

FUNDING

Howard Hughes Medical Institute Grant 2019

Large-scale optical imaging of functional prion aggregation and neural activity in memory networks of the brain

Role: Designed and wrote entire proposal (PI: Eric Kandel)

Total Costs: \$116,270.00

NIMH Postdoctoral National Research Service Award F32-MH114306 2018 – 2021

Ventral hippocampal to hypothalamic circuit control of fear memories

National Institute of Mental Health

Role: Designed and wrote entire proposal (PI: Asok) Total Costs: \$186,426.00 (Scored in the 5th percentile)

Howard Hughes Medical Institute Grant 2018

Micro-electrode array analysis of prion aggregation in large-scale neural networks

Role: Designed and wrote entire proposal (PI: Eric Kandel)

Howard Hughes Medical Institute

Total Costs: \$133,698.67

Howard Hughes Medical Institute Grant

2017

Fiber photometric analysis of neuronal calcium activity and prion aggregation in

distinct hippocampal circuits

Role: Designed and wrote entire proposal (PI: Eric Kandel)

Howard Hughes Medical Institute

Total Costs: \$71,621.37

American Psychological Association Dissertation Research Grant

2015

Optogenetic dissection of an extended amygdala CRF circuit important for fear and anxiety

American Psychological Association

Role: Designed and wrote entire proposal (PI: Asok)

Direct Costs: \$2,500

Center for Science, Ethics & Public Policy

2015

Proper management and storage of scientific data: Ethical concerns and practical

solutions seminar

National Science Foundation EPSCOR

Role: Designed and wrote sub-proposal for seminar (PI: Thomas Powers)

Direct Costs: \$1,200

PUBLICATIONS

Submitted / Preprints

(1/5) **Asok, A.**, Leroy, F., Parro, C., Ford, L., de Solis C. A., Fitzpatrick, M., Rayman, J.B. & Kandel, E.R. (*Under Review*). A multisensory circuit for gating intense aversive experiences. *BioRxiv Preprint*.

Kalmbach, A., Winiger, V., Jeong, N., **Asok A.**, Gallistel, C.R., Balsam, P.D. & Simpson, E.H. (*In Preparation*). Reward availability states are encoded by dopamine signals that do not predict behavior.

Ford, L., **Asok, A.**, Tripp, A., de Solis, C.A., Shafiian, N., Levine, L., Duresso, B., Fitzpatrick, M., Fiorti, L. & Kandel, E.R. (*In Preparation*). The low complexity domain of cytoplasmic polyadenylation element binding protein 3 (CPEB3) is necessary for translation inhibition. *BioRxiv Preprint*.

Published

Leroy, F., De Solis, C., Boyle, L., Bock, T., Olfaro, O., Oliva, A., Buss, E., Morton, S., <u>Asok, A., Kandel, E.R., Siegelbaum, S.A.</u> (Molecular Psychiatry). Enkephalin release by VIP neurons mediates hippocampal CA2 inhibitory plasticity and the formation of CA2-dependent social memory.

Scherma M., Qvist, J.S., **Asok A.**, Huang, S.S.C., Deidda, M., Wei, Y.B., Soni, R.K., Fratta, W., Fadda, P., Kandel, E.R., Kandel, D.B. & Melas, P.A. (2020). Cannabinoid exposure in rat adolescence reprograms the initial behavioral, molecular, and epigenetic response to cocaine. *Proceedings of the National Academy of Sciences*, 117(18), 9991-10002. PMID: 32312805

Asok, A., Hijazi, J., Harvey, L. R., Kosmidis, S., Kandel, E. R., & Rayman, J. B. (2019). Sex differences in remote contextual fear generalization in mice. *Frontiers in behavioral neuroscience*, 13. PMID: 30967765

Leroy, F., Park, J., **Asok, A.**, Brann, D. H., Meira, T., Boyle, L. M., ... Kandel, E.R. & Siegelbaum, S. A. (2018). A circuit from hippocampal CA2 to lateral septum disinhibits social aggression. *Nature*, 564(7735), 213. PMID: 30518859

- **Asok, A.**, Leroy, F., Rayman, J. B., & Kandel, E. R. (2018). Molecular mechanisms of the memory trace. *Trends in neurosciences*. PMID: 30391015.
- **Asok, A.**, Kandel, E. R., & Rayman, J. B. (2018). The neurobiology of fear generalization. *Frontiers in behavioral neuroscience*, 12. PMID: 30697153
- Jablonski, S. A., Robinson-Drummer, P. A., Schreiber, W. B., **Asok, A.**, Rosen, J. B., & Stanton, M. E. (2018). Impairment of the context preexposure facilitation effect in juvenile rats by neonatal alcohol exposure is associated with decreased Egr-1 mRNA expression in the prefrontal cortex. *Behavioral neuroscience*, 132(6), 497. PMID: 30346189
- Dagan, O., **Asok, A.**, Steele, H., Steele, M., & Bernard, K. (2018). Attachment security moderates the link between adverse childhood experiences and cellular aging. *Development and psychopathology*, 30(4), 1211-1223. PMID: 29229013.
- **Asok, A.**, Draper, A., Hoffman, A. F., Schulkin, J., Lupica, C. R., & Rosen, J. B. (2018). Optogenetic silencing of a corticotropin-releasing factor pathway from the central amygdala to the bed nucleus of the stria terminalis disrupts sustained fear. *Molecular psychiatry*, 23(4), 914. PMID: 28439099.
- Blaze, J., **Asok, A.**, Borrelli, K., Tulbert, C., Bollinger, J., Ronca, A. E., & Roth, T. L. (2017). Intrauterine exposure to maternal stress alters Bdnf IV DNA methylation and telomere length in the brain of adult rat offspring. *International journal of developmental neuroscience*, 62, 56-62. PMID: 28330827.
- Murawski, N. J., & **Asok, A.** (2017). Understanding the contributions of visual stimuli to contextual fear conditioning: a proof-of-concept study using LCD screens. Neuroscience letters, 637, 80-84. PMID: 27888041 / BioRxiv Preprint.
- **Asok, A.**, Schulkin, J., & Rosen, J. B. (2016). Corticotropin releasing factor type-1 receptor antagonism in the dorsolateral bed nucleus of the stria terminalis disrupts contextually conditioned fear, but not unconditioned fear to a predator odor. *Psychoneuroendocrinology*, 70, 17-24. PMID: 27153520.
- Chakraborty, T., **Asok, A.**, Stanton, M. E., & Rosen, J. B. (2016). Variants of contextual fear conditioning induce differential patterns of Egr-1 activity within the young adult prefrontal cortex. *Behavioural brain research*, 302, 122-130. PMID: 26778782.
- Blaze, J., **Asok, A.**, & Roth, T. L. (2015). Long-term effects of early-life caregiving experiences on brain-derived neurotrophic factor histone acetylation in the adult rat mPFC. *Stress*, 18(6), 607-615. PMID: 26305287.
- Ayers, L. W., **Asok, A.**, Blaze, J., Roth, T. L., & Rosen, J. B. (2016). Changes in dam and pup behavior following repeated postnatal exposure to a predator odor (TMT): A preliminary investigation in long-evans rats. *Developmental psychobiology*, 58(2), 176-184. PMID: 26394891.
- Rosen, J. B., **Asok, A.**, & Chakraborty, T. (2015). The smell of fear: innate threat of 2, 5-dihydro-2, 4, 5-trimethylthiazoline, a single molecule component of a predator odor. *Frontiers in neuroscience*, 9, 292. PMID: 26379483.
- Blaze, J., **Asok, A.**, & Roth, T. L. (2015). The long-term impact of adverse caregiving environments on epigenetic modifications and telomeres. *Frontiers in behavioral neuroscience*, 9, 79. PMID: 25904853.
- **Asok, A.**, Bernard, K., Rosen, J. B., Dozier, M. & Roth, T. L. (2014). Infant-caregiver experiences alter telomere length in the brain. *PLoS one*, 9(7), e101437. PMID: 24983884.

- Schreiber W. B., **Asok, A.**, Jablonski, S. A., Rosen, J. B. & Stanton, M. E. (2014). Egr-1 mRNA expression patterns in the prefrontal cortex, hippocampus, and amygdala during variants of contextual fear conditioning in adolescent rats. *Brain Research*, 1576, 63-72. PMID: 24976583.
- **Asok, A.**, Ayers, L. W., Awoyemi, B., Schulkin, J. & Rosen, J. B. (2013). Immediate early gene and neuropeptide expression following exposure to the predator odor 2,5-dihydro-2,4,5-trimethylthiazoline (TMT). *Behavioural Brain Research*, 248, 85-93. PMID: 23583519.
- **Asok, A.**, Schreiber W. B., Jablonski, S. A., Rosen, J. B. & Stanton, M. E. (2013). Egr-1 increases in the prefrontal cortex following training in the context preexposure facilitation effect (CPFE) paradigm. *Neurobiology of Learning and Memory*, 106, 145-153. PMID: 23973447.
- Ayers, L.W., **Asok, A.**, Heyward, F. D. & Rosen, J. B. (2013). Freezing to the predator odor 2,4,5 dihydro 2,5 trimethylthiazoline (TMT) is disrupted by olfactory bulb removal but not trigeminal deafferentation. *Behavioural Brain Research*, 253, 54-59. PMID: 23831303.
- **Asok, A.**, Bernard, K., Roth, T. L., Rosen, J. B. & Dozier, M. (2013). Parental responsiveness moderates the association between early-life stress and reduced telomere length. *Development and Psychopathology*, 25(3), 577-585. PMID: 23527512.

PRESENTATIONS

Oral Presentations

- **Asok, A.** (2021). A novel ventral hippocampal circuit for gating leaned and innate aversive experiences. Midwestern Psychological Association Annual Meeting. Virtual. Saturday Live Session (Video Link)
- **Asok**, **A.** (2020). A hippocampal circuit for gating high-intensity aversive experiences. Arizona State University Neuroscience Seminar. Phoenix, AZ.
- **Asok, A.** (2020). A hippocampal circuit for gating high-intensity aversive experiences. Georgetown University Neuroscience Seminar. Washington D.C.
- **Asok**, **A.** (2020). A hippocampal circuit for gating high-intensity aversive experiences. University of Wisconsin-Milwaukee Seminar. Milwaukee, WI.
- **Asok, A.** & Kandel, E.R. (2018). A hippocampal circuit for gating high-intensity aversive experiences. Columbia University / Zuckerman Mind Brain Behavior Institute Postdoctoral Seminar Series. New York, NY.
- **Asok, A.** & Kandel, E.R. (2018). Neural Circuits that Co-Modulate Learned and Innate Predator Odor Fear. Gordon Research Conference: Predator-Prey Interactions. Ventura, CA. Web Link.
- **Asok, A.** & Kandel, E.R. (2017). A Novel Hippocampal Circuit for Modulating Aversive Experiences. 2nd Annual Cohen Veterans Care Summit. Washington, D.C. Web Link.
- Dagan, O., **Asok, A.**, Steele, H., Steele, M. & Bernard, K. (2016). Attachment Security Moderates the Link between Adverse Childhood Experiences and Cellular Aging. Symposium at Society for Research in Child Development, Austin, TX.
- **Asok, A.** (2016). A Neural Pathway that Gates the Expression of Short and Long-Lasting Fears. PTSD Causes, Consequences, & Responses Multidisciplinary Conference. Memorial University of Newfoundland. Newfoundland, Canada.

- **Asok, A. & Powers, T.** (2015). Research Ethics and Integrity. CSEPP Summer Research Scholars Seminar, Newark, DE.
- **Asok, A.** (2014). Preparing abstracts and understanding the publication process. University of Delaware Research Scholars Workshop, Newark, DE.
- **Asok, A.** (2014). Telomeres as a biomarker for measuring the impact of early-life stress. University of Delaware, Newark, DE.
- **Asok, A.** (2013). Early-life stress decreases the length of telomeres in childhood. NERIC IDeA 5th Annual Conference, Newark, DE.
- **Asok, A.** (2013). Egr-1 increases in the prefrontal cortex following training in the CPFE paradigm. Neurobiology of Learning and Memory Annual Conference Data Blitz, Park City, UT.
- Poster Presentations (* designates student presenter)
- Leroy, F., DeSolis, C.A., **Asok., A.** & Siegelbaum, S. (2019). VIP neurons support CA2 input-timing dependent plasticity and social memory. Society for Neuroscience Annual Meeting, Chicago, IL.
- **Asok, A.**, Leroy, F., Parro, C., De Solis, C., Ford, L., Fitzpatrick, M., Kalmbach, A., Neve, R., Rayman, J., Kandel, E.R. (2019). A temporally-selective gating mechanism for aversive experiences. Pavlovian Society Annual Science Meeting, Vancouver, BC & Molecular and Cellular Cognition Society, Chicago, IL.
- *Madhani, A., Rekow, A., Parro, C., Fitzpatrick, M., Moya, N., Kandel, E.R. & **Asok, A.** (2019) The role of NfkB in modulating strong and weak aversive memories. Barnard College Summer Research Institute Symposium, New York, NY.
- **Asok, A.**, Leroy, F., Parro, C., De Solis, C.A., Ford, L., Fitzpatrick, M., Rayman, J.B. & Kandel, E.R. (2019). A temporally-selective gating mechanism for modifying the molecular architecture of an aversive experience. Howard Hughes Medical Institute (HHMI) Annual Science Meeting, Chevy Chase, MD.
- F. Leroy, Boyle, L.M., Park, J., **Asok, A.**, Brann, D.H., Meira, T., Buss, E.W., Kandel, E.R. & Siegelbaum, S.A. (2018). Dual gating by vasopressin of hippocampal CA2 soma and presynaptic terminals in lateral septum. Society for Neuroscience Annual Meeting, San Diego, CA.
- **Asok, A.**, Rayman, J.B. & Kandel, E.R. (2017). A novel circuit that gates high-intensity sensory experiences and modulates fear memories. Howard Hughes Medical Institute (HHMI) Annual Science Meeting, Chevy Chase, MD.
- **Asok, A.** *, Gagliardotto, D.V. *, Hughes, A.M., Schulkin, J. & Rosen, J.B. (2016). Optogenetic analysis of prefrontal contributions to contextual fear memories. Society for Neuroscience Annual Conference, San Diego, CA.
- **Asok, A.** Schulkin, J. & Rosen, J.B. (2015). Optogenetic dissection of corticotropin-releasing-factor cells in the extended amygdala during contextual fear conditioning. Pavlovian Society, Portland OR. Molecular and Cellular Cognition Society and Society for Neuroscience Annual Conference, Chicago, IL.
- Murawski, N.J. * & **Asok**, **A.** * (2015). Digital fear conditioning in rats: utilizing LCD-based visual context manipulations during conditioning. Pavlovian Society, Portland, OR. Society for Neuroscience Annual Conference, Chicago, IL.

- Blaze, J., **Asok, A.**, Tulbert, C.D., Ronca, A.E. & Roth, T.L. (2015). Effects of unpredictable variable prenatal stress (UVPS) on bdnf DNA methylation and telomere length in the adult rat brain. International Society for Developmental Psychobiology, San Sebastian, Spain.
- Moyer, E.L., Blaze, J., **Asok, A.**, Roth, T.L. & Ronca, A.E. (2015). Does unpredictable variable prenatal stress (uvps) alter maternal care and modulate telomore length in adult rat brain? International Society for Developmental Psychobiology, San Sebastian, Spain.
- Hoye, J., **Asok, A.,** Roth, T.L. & Dozier, M. (2015). Intervening Early to Affect Telomere Length. Society for Research in Child Development, Philadelphia, PA.
- **Asok, A.**, Schulkin, J. & Rosen, J. B. (2014). Corticotropin releasing factor type-1 receptor antagonism in the bed nucleus of the stria terminals impairs is necessary for consolidating contextual fear memories. Molecular and Cellular Cognition Society & Society for Neuroscience Annual Conference, Washington. D.C.
- Chakraborty, T., **Asok, A.**, Stanton, M. E. & Rosen, J. B. (2014). Increased Egr-1 expression in the prefrontal cortex correlates with context-shock association in the context pre-exposure facilitation effect (CPFE) in adult rats. Society for Neuroscience Annual Conference, Washington. D.C.
- Jablonski, S. A., Schreiber, W. B., **Asok, A.**, Rosen, J. B., & Stanton, M.E. (2014). Impairment of the context preexposure facilitation effect in juvenile rats by neonatal alcohol exposure is associated with decreased Egr-1 mRNA expression in the prefrontal cortex. Research Society on Alcoholism, Bellvue, WA.
- Ayers, L. W., **Asok, A.**, Blaze, J., Roth, T. L., & Rosen, J. B. (2013). Repeated Exposure to the Predator Odor TMT in Early-Life Alters Behavioral Responses to Subsequent TMT Exposure in Adolescence. Society for Neuroscience Annual Conference, San Diego, CA.
- Chakraborty, T., **Asok, A.**, Jablonski, S. A., Schreiber, W. B., Stanton, M. E. & Rosen, J. B. (2013). Egr-1 Gene Expression in the Prefrontal Cortex, Hippocampus, and Amygdala in the CPFE Fear Conditioning Paradigm. Society for Neuroscience Annual Conference, San Diego, CA.
- Hoye, J., **Asok, A.** & Dozier, M. (2013). Examining telomere length among children adopted internationally: preliminary findings. Delaware Chapter of the Society for Neuroscience, Newark, DE.
- **Asok, A**. Bernard, K., Rosen, J. B., Dozier, M. & Roth, T. L. (2013). The influence of caregiver maltreatment on brain telomere length in a rodent model. Society for Neuroscience Annual Conference & International Society for Developmental Psychobiology, San Diego, CA.
- Ayers, L. W., **Asok, A.**, Heyward, F., O'Connell, K., Agostini, A. & Rosen, J. B. (2013). Freezing to the predator odor 2,5-dihydro-2,4,5-trimethylthiazoline is Disrupted by Olfactory Bulb Removal but not Trigeminal Deafferentation. Society for Neuroscience Annual Conference, New Orleans, LA.
- Schreiber, W. B., **Asok, A.**, Jablonski, S. A., Rosen, J. B., & Stanton, M. E. (2013). Egr-1 mRNA Expression Patterns in The Prefrontal Cortex, Hippocampus, And Amygdala During The Context Pre-Exposure Facilitation Effect In Juvenile Rats. International Society for Developmental Psychobiology, San Diego, CA.
- **Asok, A.**, Jablonski, S. A., Schreiber, W. B., Rosen, J. B., & Stanton, M. E. (2013). Differential Expression of egr-1 mRNA in the prefrontal cortex and hippocampus in the context pre-exposure facilitation effect (CPFE) during adolescence. Society for Neuroscience Annual Conference & Pavlovian Society, Austin, TX.
- **Asok**, Bernard, K., Roth, T.L., Rosen, J. B., & Dozier, M. (2012). Early-Life Stress Decreases the Length of Telomeres in Childhood. Molecular and Cellular Cognition Society Annual Conference, New Orleans, LA.

Asok, A., Ayers, L. W., Awoyemi, B., Domozych, W., & Rosen, J. B. (2011). Innate Fear to the Predator Odor 2,5-dihydro-2,4,5-trimethylthiazoline (TMT) Regulates mRNA Expression of Immediate Early Genes and Neuropeptides. Society for Neuroscience Annual Conference, Washington D.C.

Asok, A., Cordero, K. C., & Gould, T. J. (2010). The potentially modulating effects of nicotine on a food induced conditioned place preference. Temple University Neuroscience Research Expo, Philadelphia, PA.

Service Presentations

Asok, A. (2020). How to Negotiate your Startup Package - Academic Application Boot Camp. Columbia University. New York, NY.

Bowman, C. & Asok, A. (2021). Professional Development Workshop Series. UWM, Milwaukee, WI.

TEACHING AND MENTORING EXPERIENCE

Teaching

Cellular and Molecular Neuroscience, UWM, Instructor (graduate/undergraduate)	2021 – Spring
Neuromodulation, Barnard College, Guest Lecturer (undergraduate)	2019 – Fall
Introduction to Neuroscience, University of Delaware, Guest Lecturer (undergraduate)	2011 – 2015
Introduction to Neuroscience, University of Delaware, Teaching Assistant	2014
Drugs and the Brain, University of Delaware, Guest Lecturer	2013
Introduction to Neuroscience, University of Delaware, Teaching Assistant	2013
Mental Illness: Critical Perspectives, University of Delaware, Teaching Assistant	2012
Introduction to Psychology, University of Delaware, Instructor	2011
Introduction to Neuroscience, University of Delaware, Teaching Assistant	2011

Research Mentorship

Felipe Deihle, University of Wisconsin – Milwaukee, Asoklab technician	2021
Sonya Kummer, University of Wisconsin – Milwaukee, Asoklab undergraduate student	2021
Michelle Fitzpatrick, Columbia University, personal research tech.	2018 – 2020
Nicolette Moya, University of Colorado, HHMI EXROP summer student	2018
Adam Gardi, University of Michigan, undergraduate student	2018
Cameron Parro, Howard Hughes Medical Institute, personal research tech.	2018 – 2020
Anna Rekow, Barnard College, undergraduate student	2018 – 2020
Amsal Madhani, Barnard College, undergraduate student	2017 – 2020
Andrew Redenti, Columbia University, MD graduate student	2017
Myriam Tanguay-Sela, Columbia University, McGill Summer Intern	2017
Adam Draper, University of Delaware, UD Summer Scholar Fellow	2014 – 2015
David Gagliardotto, University of Delaware, Rosen Laboratory	2014 – 2015
Alexander Hughes, University of Delaware, Rosen Laboratory	2014
Patricia Pa, University of Delaware, Rosen Laboratory	2014
Erin Eller, University of Delaware, Summer Scholar Fellow	2013

PROFESSIONAL AND UNIVERSITY SERVICE

Editorial Appointments

Frontiers in Systems Neuroscience, Guest Editor (w/ Eric Kandel)	2019 – 2021
Topic: Brain Modifications After Stress: From Cellular to Circuit Reorganization	

Ad Hoc Reviewing

Translational Psychiatry, Neuropsychopharmacology, Learning & Memory, Scientific Reports, Journal of Affective Disorders, Journal of Pediatrics, Journal of Adolescent Health, Progress in Neuro-Psychopharmacology & Biological Psychiatry, Psychiatry Research, Developmental Psychobiology, Physiology and Behavior, Genes Brain & Behavior, Biomedical Engineering Online, Hormones and Behavior, Neuroscience, Neurobiology of Learning and Memory, Frontiers in Behavioral Neuroscience, Journal of Neuroscience, Neuropharmacology

Grant Reviewing

APA Dissertation Grant Reviewer	2017
APS Student Grant Competition Reviewer	2014 – 2015
APS RISE Research Award Reviewer	2013

Panels

Kavli Institutes in Neuroscience Forum 2020 Program Committee	Canceled
Yale University (New Haven, CT)	
Cohen Veterans Bioscience Alliance for Models of PTSD, Innovative	2016
Technologies, and Uniform Practices (Washington D.C.)	
APA Career Development Focus Group (New York, NY)	2016

University Service

University of Wisconsin – Milwaukee, Shaw Recruitment Advisory Panel Member	2020
Presidential Search Committee, UD, Graduate Focus Group Representative	2015
External Academic Program Review, UD Dept. of Psychological and Brain Sciences	2015

PRESS AND MEDIA

Reflections of a Postdoctoral Journey at Columbia University. Columbia University News and Media. New York, NY (2021). Available on Youtube: https://www.youtube.com/watch?v=ipi2LzINUxI

How we remember aversive memories: Applying optogenetics and pharmacology to decipher the function of CRF. Science Rocks Radio (93.1 FM), Newark, DE (2014).

Childhood telomere work featured in, "The Telomere Effect: A Revolutionary Approach to Living Younger, Healthier, Longer." By Elizabeth Blackburn and Elissa Epel (2017).

CRF work featured in, "The CRF Signal: Uncovering an Information Molecule." By Jay Schulkin (2017).

Molecular Psychiatry Cover Image (2017).

PROFESSIONAL AFFILIATIONS

Pavlovian Society	2010 - Pres.
Society for Neuroscience	2010 – Pres.
Molecular and Cellular Cognition Society	2011 – Pres.
New York Academy of Sciences	2016 – Pres.
American Psychological Association	2010 – Pres.
Association for Psychological Science	2013 – Pres.