

Aakash Basu

Current Position: Department of Psychiatry
Yale University
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Education:

08/2017-05/2020 B.S. Vanderbilt University (Summa Cum Laude)
08/2020-ongoing Ph.D. Yale University (Dr. Alfred Kaye, advisor)

Positions Held:

09/2017-05/2020 Undergraduate Researcher with Dr. Danny Winder, Vanderbilt University
06/2018-08/2018 Summer Student with Dr. Akira Yoshii, University of Illinois at Chicago
06/2019-08/2019 Intern, Neuroscience Division, Merck and Co.
08/2020-02/2021 Rotation Student with Drs. Marina Picciotto, Yong-hui Jiang, Alex Kwan, Ralph DiLeone, Yale University
03/2021-ongoing Graduate Researcher with Dr. Alfred Kaye, Yale University

Teaching:

09/2021-12/2021 Teaching Fellow, Neurobiology (NSCI 320), Yale University
02/2024-05/2024 Teaching Fellow, Principles of Cell Biology (BIOL 102), Yale University

Honors and Awarded Funding:

2017-2020 Dean's List, Vanderbilt University
2019 Barry M. Goldwater Scholarship
2022 NSF Graduate Research Fellowship – Honorable Mention
2022-2023 NINDS T32, “Neurobiology of Cortical Systems” Training Grant
2024 Molecular Psychiatry Association Meeting Young Investigator Travel Award
2024-2026 NIMH F31, MH138088, “Norepinephrine and second messenger encoding of temporal threat proximity” (18th percentile)

Selected Posters and Oral Presentations:

Time uncertainty in threat prediction explains prefrontal norepinephrine release. Poster Presented at Society for Neuroscience Meeting 2023, Washington, DC.
Time uncertainty in threat prediction explains prefrontal norepinephrine release. Poster Presented at CoSyNe Meeting 2023. Montreal, QC, CA.
Norepinephrine as a threat prediction error: A new computational role in traumatic memory retrieval. Presented to PTSD Brain Bank Animal Models Workgroup, 2023.
Prefrontal norepinephrine represents a threat prediction error under uncertainty. Presented during Norepinephrine Minisymposium at Society for Neuroscience Meeting 2022. San Diego, CA.
Norepinephrine as a threat prediction error: A new computational role in traumatic memory retrieval. Presented during NC-PTSD Research Seminar, 2022.

Publications:

Basu, A., Yang, J.-H., Yu, A., Glaeser-Khan, S., Rondeau, J. A., Feng, J., Krystal, J. H., Li, Y., & Kaye, A. P. (2024). Frontal norepinephrine represents a threat prediction error under uncertainty. *Biological Psychiatry*,
Melchior, J. R., Perez, R. E., Salimando, G. J., Luchsinger, J. R., Basu, A., & Winder, D. G. (2021). Cocaine Augments Dopamine-Mediated Inhibition of Neuronal Activity in the Dorsal Bed Nucleus of the Stria Terminalis. *Journal of Neuroscience*, 41(27), 5876–5893.
Perez, R. E., Basu, A., Nabit, B. P., Harris, N. A., Folkes, O. M., Patel, S., & Gilsbach, R. (2020). α 2A -adrenergic heteroreceptors are required for stress-induced reinstatement of cocaine conditioned place preference. *Neuropsychopharmacology*, February, 1–9.
Fetterly, T. L., Basu, A., Nabit, B. P., Awad, E., Williford, K. M., Centanni, S. W., Matthews, R. T., Silberman, Y., & Winder, D. G. (2019). α 2A-Adrenergic Receptor Activation Decreases Parabrachial Nucleus Excitatory Drive onto BNST CRF Neurons and Reduces Their Activity In Vivo. *Journal of Neuroscience*, 39(3), 472–484.