# Katherine M. Nautiyal, PhD

6207 Moore Hall Hanover, NH 03755

Educatio				
Degree	Institution	Field of Study		Completed
Postdoc	Columbia University Medical Center	Psychiatry and Neuroso	cience	2018
Ph.D.	Columbia University	Psychology (Behaviora	l Neuroscience)	2011
M.A.	Columbia University	Psychology (Behaviora	l Neuroscience)	2008
B.A.	University of Pennsylvania	Psychology		2004
B.S.	University of Pennsylvania	Cognitive and Compute	er Science	2004
Research	Positions			
Integrati	Professor nent of Psychological and Brain Sciences ive Neuroscience at Dartmouth uth College		:	2018-curren
Mentor: Departm	ral Fellow, Assistant Professor of Clinical N Dr. René Hen nent of Psychiatry, Columbia University Me of Integrative Neuroscience, New York Sta	dical Center		2012-2018
Mentor:	Research Fellow Dr. Rae Silver nent of Psychology, Columbia University			2005-2011
Mentor:	Assistant, Technician Dr. Harvey Grill Systems Neuroscience Laboratory, Unive	rsity of Pennsylvania		2003-2005
	Assistant : Drs. Aravind Joshi and Lila Gleitman for Research in Cognitive Science, Univer	sity of Pennsylvania		2001-2003
Research	n Grants and Fellowships			
Se	126178 (PI) rotonin modulation of the development of n vard processing and impulsivity in adolesce	, ,	\$2,901,583	2021-2026
Dis	IIMH106731 secting serotonergic and dopaminergic co cuits underlying impulsive behavior	ntributions to the neural	\$1,006,729	2015-2021
Analytics F	004 Supplement for Advancing Computation Relevant to Mental Health <i>putational modeling of the neural encoding</i>	-	\$93,190	2019-2021
Co	ompX Faculty Grant mputational approaches to understanding pulsivity	the neural basis of	\$20,000	2019-2020
	Young Investigator Award, BBRF rotonin modulation of the development of in	mpulsivity in mice and men	\$70,000	2016-2018
	stitute Award secting the role of the serotonin 1B recept	or in aggression	\$50,000	2015-2016

Early Stage Investigator Award, National Center for Responsible Gaming Developing a mouse model of pathological gambling using an inducible and tissue specific serotonin 1B receptor knock-out	\$147,706	2013-2015
Post-doctoral NRSA Fellowship, NIH F32 MH100888 Using genetic and optogenetic models to study the role of the serotonin 1B receptor in aggression	\$106,132	2013-2015
Post-doctoral NRSA Institutional Training Grant, NIH T32 MH015174	\$45,264	2012-2013
Pre-doctoral NRSA Fellowship, NIH F31 MH084384 Beyond allergy: Mast cells mediate brain-behavior-immune interactions	\$57,781	2009-2011
Honors and Awards		
Guarini Graduate Faculty Mentoring Award Class of 1962 Faculty Fellowship, Dartmouth College NIMH Biobehavioral Research Award for Innovative New Scientists Election to Associate Membership of American College of Neuropsychopharma Winter Conference on Brain Research (WBBR) Panel Travel Fellowship American College of Neuropsychopharmacology (ACNP) Travel Award Sackler Institute Young Investigator Award Best Poster Award, National Center for Responsible Gaming Annual Conference Travel Award for the International Society of Serotonin Research NIDA Award, Genetics of Addiction Course, Jackson Laboratory MBL/USP Award, Joint Course in Neural Systems and Behavior Trainee Scholar Award, Psychoneuroimmunology Research Society SfN Graduate Student Travel Award, Society for Neuroscience Faculty Fellowship, Columbia University		2022 2021 2021 2020 2017 2015 2015 2014 2014 2013 2012 2009, 2011 2010 2005-2009
Teaching and Mentoring		
Psychological and Brain Sciences, Dartmouth College		2022W, 2023F 2020F 2022F,2024F 2023F, 2024F
Psychological and Brain Sciences, Dartmouth College Behavioral Neuroscience (PSYC 37) 20 Neuroscience of Stress (PSYC 50.12) SfN Annual Meeting Bucci Fellows Seminar (PSYC 86.04)	2022F, 201	2020F 2022F,2024F
Psychological and Brain Sciences, Dartmouth College Behavioral Neuroscience (PSYC 37) 20 Neuroscience of Stress (PSYC 50.12) SfN Annual Meeting Bucci Fellows Seminar (PSYC 86.04) Advanced Techniques in Neuroscience (IND 103) Department of Psychology, Columbia University Topics in Neurobiology and Behavior (Seminar) Mind, Brain and Behavior (Intro course)	2022F, 201 201	2020F 2022F,2024F 2023F, 2024F 12, 2014, 2015 11, 2012, 2015

Undergraduate Students for Thesis or Independent Research Study 25 at Dartmouth College 10 at Columbia University and Barnard College	2018 - current 2006-2018
Postdoctoral Fellows and Research Assistants at Dartmouth	
Catherine Fengler, Research Assistant	2024-current
Ruth Albert-Lyons, Research Assistant	2022-2024
Mitch Spring, PhD, Postdoctoral Fellow	2021-current
Ka Ng, PhD, Postdoctoral Fellow	2020-current
Min Oh, Research Assistant	2019-2020
Jun Ho Lee, Research Assistant	2018-2020

#### **Publications and Presentations**

#### Work in Progress

Fleury, S.\*\*, **Nautiyal K.M.** The non-hallucinogenic serotonin 1B receptor is necessary for the antidepressant-like effects of psilocybin in mice. bioRxiv Oct 2024 [Under Revision for Molecular Psychiatry]

#### Peer-reviewed publications

- Dutton A\*\*, Patel CD, Taylor SA, Garland CR, Turnbaugh EM\*\*, Alers-Velazquez R, Mehrbach J, **Nautiyal KM**, Leib DA. (2025) Asymptomatic neonatal herpes simplex virus infection in mice leads to persistent CNS infection and long-term cognitive impairment. <u>PLoS Pathog</u> PLoS Pathog 21(2): e1012935.
- Albert-Lyons, R.<sup>+</sup>, Desrochers, S.S.<sup>\*\*</sup>, Fengler, C.<sup>+</sup>, **Nautiyal, K.M**. (2025) Fractionating impulsivity and reward-related phenotypes in adolescent mice. <u>Behavioural Brain Research</u> 480:115396
- Spring, M.G.<sup>#</sup>, **Nautiyal, K.M.** (2024) Striatal serotonin release signals reward value. <u>Journal of Neuroscience</u>. 44(41):e0602242024
- Albert-Lyons, R.<sup>+</sup>, Capan, S.<sup>\*</sup>, Ng, K.H.<sup>#</sup>, **Nautiyal, K.M**. (2024) Reward value and internal state differentially drive impulsivity and motivation. <u>Behavioural Brain Research</u> 471:115073.
- **Nautiyal K.M.**, Yaden D.B. (2023) Does the trip matter? Investigating the role of the subjective effects of psychedelics in persisting therapeutic effects. <u>Neuropsychopharmacology</u>. 48(1):215-216
- Carazo Arias, C., Nguyen, P.T., Kass, M.D., Jee, H.J., **Nautiyal, K.M.**, Magalong, V.<sup>\*</sup>, Coie, L.A., Andreu, V.<sup>+</sup>, Gergues, M.M., Khalil, H., Akil,H., Arcego, D.M., Meany, M.J., Anacker, C., Samuels, B.A., Pintar, J.E., Morozova, I., Kalachikov, S., Hen, R. (2022) Contribution of the opioid system to the antidepressant effects of fluoxetine. <u>Biological Psychiatry</u>. 92(12):952-963.
- Li, L., Wyler, S., Leon-Mercado, L., Xu, B., Oh, Y., Chen, X., Wan, R., Arnold, A.G., Jia, L., Nautiyal, K., Hen, R., Sohn, J.-W., Liu, C. (2022) Delineating a serotonin receptor pathway for appetite suppression in mice. Journal of Experimental Medicine. 219(8):e20212307
- Desrochers, S.S.\*\*, Spring, M.G.<sup>#</sup>, **Nautiyal, K.M.** (2022) A role for serotonin in modulating opposing drive and brake circuits of impulsivity. <u>Frontiers in Behavioral Neuroscience</u> 16:791749.
- Desrochers, S.S.\*\*, **Nautiyal, K.M.** (2022) Serotonin 1B receptor effects on response inhibition are independent of inhibitory learning. <u>Neurobiology of Learning and Memory</u>. 187:107574.
- Han, J.\*\*, Andreu, V.\*, Langreck, C., Pekarskaya, E.A., Grinnell, S.G., Magalong, V.M.\*, Pintar, J., Kieffer, B.L., Harris, A.Z., Javitch, J.A., Hen, R., Nautiyal, K.M. (2021) Mu Opioid Receptors on Hippocampal GABAergic Interneurons are Critical for the Antidepressant Effects of Tianeptine. <u>Neuropsychopharmacology</u>. 47(7):1387-1397.

<sup>&</sup>lt;sup>\*</sup>undergraduate student advisee, <sup>\*\*</sup>graduate student advisee, <sup>+</sup>Postbaccalaureate advisee, <sup>#</sup>Postdoctoral advisee

- Li, Y., Simmler, L.D., Zessen, R.V., Flakowski, J., Wan, J.-X., Deng, F., Li, Y.-L., Nautiyal, K.M., Pascoli, V., and Lüscher, C. (2021). Synaptic mechanism underlying serotonin modulation of transition to cocaine addiction. <u>Science</u> 373, 1252-1256.
- Desrochers, S.S.\*\*, Lesko, E.M.\*, Magalong, V.M.\*, Balsam, P.D., **Nautiyal, K.M.** (2021) A role for reward valuation in the serotonergic modulation of impulsivity. <u>Psychopharmacology</u>. doi: 10.1007/s00213-021-05944-2. PMID: 34390360.
- Lee, J.H.<sup>+</sup>, Capan, S.<sup>\*</sup>, Lacefield, C., Shea, Y.M.<sup>\*</sup>, **Nautiyal, K.M** (2020) DIY-NAMIC Behavior: A High-Throughput Method to Measure Complex Phenotypes in the Homecage. <u>eNeuro</u> 7(4)
- Nautiyal, K.M., Okuda, M., Hen, R., Blanco, C. (2017) Gambling Disorder: An integrative review of animal and human studies. <u>Ann N Y Acad Sci</u> 1394(1):106-127.
- Zike, I.D., Chohan, M.O., Kopelman, J.M., Krasnow, E., Flicker, D.\*, Nautiyal, K.M., Bubser, M., Kellendonk, C., Jones, C.K., Stanwood, G.D., Tanaka, K.F., Moore, H., Ahmari, S.E., Veenstra-VanderWeele, J. (2017) OCD candidate gene SLC1A1/EAAT3 impacts basal ganglia-mediated activity and stereotypic behavior. <u>Proc Natl Acad Sci U S A</u> 114(22):5719-5724
- Samuels, B.A.<sup>®</sup>, **Nautiyal, K.M.**<sup>®</sup>, Kruegel, A. C., Levinstein, M.R., Magalong, V.M.\*, Gassaway, M.M., Grinnell, S.G., Han, J.\*\*, Ansonoff, M.A., Pintar, J.E., Javitch, J.A., Sames, D., Hen, R. (2017) The behavioral effects of the antidepressant tianeptine require the mu-opioid receptor. <u>Neuropsychopharmacology</u> 42(10):2052-2063 <sup>®</sup>co-first authors
- Nautiyal, K.M., Hen, R. (2017) Serotonin receptors in depression: From A to B. <u>F1000 Faculty Reviews</u> 6:123.
- Nautiyal, K.M., Wang, S., Wall, M.W., Ahmari, S.E., Balsam, P.D., Blanco, C., Hen, R. (2017) Genetic and modelling approaches reveal distinct components of impulsive behavior. <u>Neuropsychopharmacology</u> 42(6):1182-1191.
- Nautiyal, K.M., Tritschler, L., Ahmari, S.E. David, D.J., Gardier, A.M., Hen, R. (2016) A lack of serotonin 1B autoreceptors results in a decrease in anxiety and depression-related behaviours. <u>Neuropsychopharmacology</u> 41(12):2941-2950.
- Nautiyal, K.M., Tanaka, K.F., Barr, M.M.\*, Tritschler, L., LeDantec, Y., David, D.J., Gardier, A.M., Blanco, C., Hen, R., Ahmari, S.E. (2015) Distinct circuits underlie the effects of serotonin 1B receptors on aggression and impulsivity. <u>Neuron</u> 86(3):813-26.
- Knolhoff, A.M., Nautiyal, K.M., Nemes P., Kalachikov, S., Morozov, I., Silver, R., Sweedler, J.V. (2013) Combining small-volume metabolomic and transcriptomic approaches for assessing brain chemistry. <u>Anal Chem</u> 85(6):3136-43.
- Donaldson, Z.R., **Nautiyal, K.M.,** Ahmari, S.E., Hen, R. (2013) Genetic approaches for understanding the role of serotonin receptors in mood and behavior. <u>Curr Opin Neurobiol</u> 23:1-8.
- Nautiyal, K.M., Dailey, C., Jahn, J.L.\*, Rodriguez, E., Sweedler, J.V., Silver, R. (2012) Serotonin of mast cell origin contributes to hippocampal function. <u>Eur J Neurosci</u> 36(3):2347-59.
- Nautiyal, K.M., Liu, C.\*, Dong, X., Silver, R. (2011) Blood-borne donor mast cell precursors migrate to mast cell-rich brain regions in the adult mouse. <u>J Neuroimmunol</u> 240-241:142-6
- Nautiyal, K.M., McKellar, H., Silverman, A.J., Silver, R. (2009) Mast cell involvement in the hypothermic response to sepsis. <u>Am J Physiol</u> 296(3):R595-602
- Nautiyal, K.M., Ribeiro, A., Pfaff, D.W., Silver, R. (2008) Brain mast cells link the immune system to anxiety-like behavior. <u>Proc Natl Acad Sci U S A</u>; 105(46): 18053-57.

<sup>&</sup>lt;sup>\*</sup>undergraduate student advisee, <sup>\*\*</sup>graduate student advisee, <sup>+</sup>Postbaccalaureate advisee, <sup>#</sup>Postdoctoral advisee

**Nautiyal, K.M.**, Dailey, M., Brito, N., Brito, M.N., Harris, R.B, Bartness, T.J., Grill, H.J. (2008) Energetic responses to cold temperatures in rats lacking forebrain-caudal brainstem connections. <u>Am J Physiol</u> 295(3):R789-98.

Chapters and Editorials

K.M. Nautiyal. (2019) Paid Family Leave for Postdocs. Scientific American.

**K.M. Nautiyal**. (2012) Immune cells in the brain. In: <u>Neuroscience in the 21<sup>st</sup> Century</u>, Ed. Donald Pfaff, Springer Link.

#### Selected Invited Lectures

UMass Amherst, Neuroscience Colloquium	Oct 2024
National Institutes of Health, Center on Compulsive Behaviors	May 2024
University of Calgary, Hotchkiss Brain Institute	Feb 2024
Columbia University, Division of Integrative Neuroscience, Dept of Psychiatry	Aug 2023
University of Washington, NAPE Center	July 2023
Annual Interdisciplinary Conference, Jackson Hole	Feb 2023
Dartmouth Hitchcock, Grand Rounds in Psychiatry	Jan 2023
University of Vermont, Department of Psychological Science	April 2022
Sai University, Chennai, India	Dec 2021
Center for Addiction Research Seminar, University of Texas, Medical Branch	Oct 2021
Amherst College, Department of Biology Seminar	Mar 2021
Fordham University, Department of Biology Colloquium	Feb 2021
Pavlovian Society	Sept 2020
International Society for Serotonin Research [rescheduled due to COVID-19]	July 2020
Eastern Psychological Association Annual Meeting [cancelled due to COVID-19]	Mar 2020
Neuroscience Day, Dartmouth College	April 2019
Center for Cognitive Neuroscience Annual Retreat, Dartmouth College	Oct 2018
International Society of Serotonin Research	July 2018
Barrow Neurological Institute, Neuroscience Seminar	April 2018
American Psychiatric Association Annual Meeting	May 2017
University of Pennsylvania, Department of Psychiatry	Mar 2017
University of Connecticut, Department of Psychology	Feb 2017
Fordham University, Department of Biology	Feb 2017
Dartmouth College, Department of Psychological and Brain Sciences	Jan 2017
Mt. Sinai School of Medicine, Department of Neuroscience	Dec 2016
Vassar College, Department of Psychology	Dec 2016
International Society for Serotonin Research	July 2014
Psychoneuroimmunology Research Society	June 2011
Society for the Study of Ingestive Behavior Annual Meeting	July 2005
Recent Conference Talks	

Recent Conference Talks

Winter Brain Conference on Brain Research Serotonin modulates striatal reward circuits Lake Tahoe, CA; January 2025

Winter Brain Conference on Brain Research Regional differences in serotonin release across the reward circuitry encode different aspects of reward processing

Lake Tahoe, CA; January 2025

## American College of Neuropsychopharmacology

Serotonin 1B receptors are involved in the Behavioral Effects and Mechanisms of Actions of Psilocybin Tampa, FL; Dec 2023

## International Society for Serotonin Research

Using serotonin biosensors to understand the role of serotonin in rewarded behavior Cancun, MX; April 2023

Annual Interdisciplinary Conference What is serotonin actually doing in the brain? Jackson, WY; February 2023
Winter Brain Conference on Brain Research Serotonin modulates dorsal striatal medium spiny neurons during reward anticipation Snowbird, UT; January 2023
Eastern Psychological Association [cancelled due to COVID-19] Behavioral and neural substrates of behavioral inhibition Boston, MA; March 2020
Winter Conference on Brain Research A role for reward sensitivity in the serotonergic modulation of impulsivity Big Sky, MO; January 2020
American College of Neuropsychopharmacology <i>I Can't Wait: Challenges and Successes in Translational Research on Impulsivity.</i> Hollywood, FL; December 2018
International Society for Serotonin Research A lack of serotonin 1B autoreceptors results in decreased anxiety and depression-related Behaviours. Cork, Ireland; July 2018
<u>Chaired Symposia</u> : Winter Conference on Brain Research (Chair), January 2025 <i>Tutorials for Using Reinforcement Learning and Sequential Sampling Models</i>
Winter Conference on Brain Research (Chair), January 2024 Using preclinical models to study the neurobiological mechanisms of psychedelics in anxiety and depressive disorders
American College of Neuropsychopharmacology (Chair), Dec 2023 Exploring the mechanisms of the Persisting Effects of Psilocybin
International Society for Serotonin Research (Chair), April 2023 Towards a better understanding of how serotonin modulates impulsivity
Winter Conference on Brain Research (Chair), January 2023 Serotonin in learning and reward
Winter Conference on Brain Research (Chair), January 2020 It's not all dopamine: The role of serotonin in the modulation of impulsive behavior
American College of Neuropsychopharmacology (Co-chair, speaker), December 2018 I Can't Wait: Challenges and Successes in Translational Research on Impulsivity.
Winter Conference on Brain Research (Co-chair), January 2017 Novel Approaches to identifying monoamine circuits in aggression
Society for Neuroscience Minisymposium (Chair, speaker), October 2009 Behavioral Neuroimmunology: Linking the immune system to emotionality and cognition
Recent Lab Poster Presentations (within last 5 years with underlined author as presenter)
Spring, M. & <b>Nautiyal, K.M.</b> . Striatal serotonin release signals reward value Winter Conference on Brain Research, Lake Tahoe, CA. Jan 2025
Fleury, S. & <u>Nautiyal, K.M.</u> The non-hallucinatory serotonin 1B receptor is necessary for the persisting anti- depressant effects of psilocybin. Winter Conference on Brain Research, Lake Tahoe, CA. Jan 2025

Fleury, S. & <u>Nautiyal, K.M.</u> The non-hallucinatory serotonin 1B receptor is necessary for the persisting antidepressant effects of psilocybin. Annual Meeting of the American College of Neuropsychopharmacology, Phoenix, AZ. Dec 2024

<u>Spring, M</u>. & **Nautiyal, K.M.** *Striatal serotonin release signals reward value*. Society for Neuroscience, Chicago, IL. Oct 2024

<u>Fleury, S</u>. & **Nautiyal, K.M.** The non-hallucinogenic serotonin 1B receptor is involved in the persisting behavioral effects and neural mechanisms of psilocybin in mice. Society for Neuroscience, Chicago, IL. Oct 2024

<u>Fleury, S</u>. & **Nautiyal, K.M.** The non-hallucinatory serotonin 1B receptor is necessary for the persisting anti-depressant effects of psilocybin. Winter Conference on Brain Research, Breckenridge, CO Jan 2024 \*also selected for a conference talk

<u>Spring, M</u>. & **Nautiyal, K.M.** Serotonin is released in the dorsal striatum in anticipation of reward. Annual Meeting of the American College of Neuropsychopharmacology, Tampa, FL Dec 2023

<u>Albert-Lyons, R</u>., Ng, K., **Nautiyal, K.M**. Charting the trajectory of impulsivity and motivated behavior across adolescent development in mice. Society for Neuroscience, Washington D.C. Nov 2023

<u>Sharma, A.</u>, Ng, K., Desrochers, S.D., Manning, J., **Nautiyal, K.M**. Serotonin modulates the neural representation of action selection in the dorsomedial striatum during goal directed behavior. Society for Neuroscience, Washington D.C. Nov 2023

<u>Dutton, A</u>., Patel, C., Taylor, S., Garland, C., Alers-Valazquez, R., Mehrbach, J, Leib, D., **Nautiyal, KM.** Neonatal herpes simplex virus infection leads to Alzheimer's-like cognitive decline and autophagy-mediated neurodegeneration in adult mice. Society for Neuroscience, Washington D.C. Nov 2023

Spring, M. & <u>Nautiyal, K.M</u>. Serotonin encodes anticipatory reward value in the dorsal striatum. Annual Conference of the Pavlovian Society. Austin, TX. Sept 2023

<u>Spring, M</u>. & **Nautiyal, K.M.** *G*-protein coupled receptor activation based (GRAB) photometry reveals serotonin release during reward consumption in the dorsal striatum. Winter Conference for Brain Research. Snowbird, UT. Jan 2023

Ng, K.H., Sharma, A., Spring, M., <u>Nautiyal, K.M.</u> Serotonin Modulates Dorsal Striatal Medium Spiny Neurons During Reward Anticipation. Annual Meeting of the American College of Neuropsychopharmacology Phoenix, AZ Dec 2022

<u>Fleury, S</u>. & **Nautiyal, K.M.** Investigating altered consciousness and the role of serotonin receptors in the therapeutic effects and mechanisms of actions of psilocybin. Society for Neuroscience. San Diego, CA Nov 2022

<u>Desrochers, S.S.</u>, Compaore, D., **Nautiyal, K.M.** *Decreasing reward value ameliorates pathological impulsivity in mice lacking the serotonin 1B receptor.* Society for Neuroscience. San Diego, CA Nov 2022

<u>Spring, M</u>. & **Nautiyal, K.M.** *G*-protein coupled receptor activation based (GRAB) photometry reveals serotonin release during reward consumption in the dorsal striatum. Society for Neuroscience. San Diego, CA Nov 2022

<u>Desrochers, S.S</u>. & **Nautiyal, K.M.** Serotonin 1B receptor mediated impulsivity is associated with increased subjective reward valuation. Society for Neuroscience. (virtual) Dec 2021

<u>Desrochers, S.S.</u> & **Nautiyal, K.M.** Increased conditioned responding and taste reactivity is associated with impulsivity in mice lacking the serotonin 1B receptor. Annual Meeting of the Pavlovian Society (Virtual) Sept 2021

Desrochers, S.S., Lesko, E.M., Magalong, V.M., Balsam, P.D., <u>Nautiyal, K.M</u>. A Role for Reward Sensitivity in the Serotonergic Modulation of Impulsivity. American College of Neuropsychopharm. (Virtual) Dec 2020.

<u>Desrochers, S.S</u>., & **Nautiyal, K.M.** Mice lacking the serotonin 1B receptor have deficits in response inhibition despite intact inhibitory learning. Annual Meeting of the Pavlovian Society (virtual) Sept 2020.

# Society Membership, Service, and Outreach

Society Membership American College of Neuropsychopharmacology Pavlovian Society International Society for Research on Impulsivity International Society for Serotonin Research Psychoneuroimmunology Research Society Society for Neuroscience	2020-current 2018-current 2017-2022 2014-current 2006-2011 2005-current
Society and Conference Leadership North American Councilor, International Society for Serotonin Research Board of Directors, Winter Conference for Brain Research Executive Committee, Pavlovian Society Women's Task Force, American College of Neuropsychopharmacology Executive Committee of the International Society for Research on Impulsivity Winter Conference for Brain Research Mentor	2023-current 2023-current 2023-current 2022-current 2021-2022 2020-2023
Reviewing Service Ad hoc manuscript reviewer for: Molecular Psychiatry, Neuropsychopharmacology; European Journal of Neuroscience; Psychopharmacology; Hormones and Behavior; Genes, Brain, and Behavior, Biological Reviewing editor for Frontiers in Behavioral Neuroscience Member of the Editorial Board of Motivation and Reward	
Grant Review Panels: NIH Review Panel, Neurobiology of Motivated Behavior Study Section NIH Review Panel 2022/04 ZRG IFCN-U (02) NIH Special Emphasis Panel 2022/01 ZMH1 ERB-Q (02) R Swiss National Science Foundation Collaborative Incentive Research Grant from CUNY National Center for Responsible Gaming	2023 2022 2022 2020 2019 2016-2022
Dartmouth Service Integrative Neuroscience at Dartmouth, Council Member (Guarini) Graduate Committee (Psychological and Brain Sciences) Search Committee for Two TT Positions in BN (Psychological and Brain Sciences) Search Committee for TT Position in BN (Psychological and Brain Sciences) Inclusivity, Diversity, and Culture Committee (Psychological and Brain Sciences) Developed PBS Liftoff Fellowship to support incoming URM PhD students Neuroscience Day Planning Committee (College, Guarini, Giesel & DHMC) EE Just Scholar Mentor Committee on the Faculty (Arts and Sciences)	2023-current 2023-current 2023-2024 2022-2023 2021-2022 2020, 2024 2020-2023 2019-2020 9-2020, 2022-2023 2018-current
Other Outreach Dartmouth Deep Questions Seminar Brain Bee Keynote Lecture STEM @ The Nugget Faculty of 1000, Associate Faculty Member Invited press conference participant, Society for Neuroscience	2024 2019 2019 2017-2022 2009, 2013, 2022