DIONNET L BHATTI

PhD Candidate in Neuroscience, Harvard University

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EDUCATION

2019 - Present **PhD in Neuroscience**
Harvard University, Cambridge MA

2011-2015 **BS in Biology and Psychology**
University of Georgia, Athens GA

POSITIONS

2019 - Present **Graduate student**, Harvard Medical School, Department of Neurobiology
Advisors: Gord Fishell, PhD and Todd E. Anthony, PhD

2017-2019 **Research assistant,** The Rockefeller University, Laboratory of Molecular and Cellular Neuroscience
Advisors: Paul Greengard, PhD and Yong Kim, PhD
Focus: Cellular and molecular basis of stress-induced behavioral adaptations

2015-2017 **Research technician**, Washington University in St. Louis, Department of Anesthesiology
Advisor: Michael Bruchas, PhD
Focus: Neural circuits and motivated behavior

2014-2015 **Undergraduate research assistant**, University of Georgia, Department of Psychology
Advisor: Philip V. Holmes, PhD
Thesis: *Acute galanin administration into the prelimbic cortex reduces expression of conditioned contextual threat and prevents threat-related plasticity in rats*

HONORS, AWARDS, AND FELLOWSHIPS

2022 - 2023 **NIMH Diversity Supplement Awardee** (R01MH117421-04S1)
2021 **Selected attendee**, IBRO-RIKEN CBS Summer Program 2021, Japan (Virtual due to COVID19)
2020 **Travel Award**, International Behavioral Neuroscience Society Conference, Glasgow (Cancelled due to COVID19)
2019 - 2022 **NSF GRFP**, National Science Foundation Graduate Research Fellowship
2019 - 2022 **Neuroscience Scholar Program (NSP) Fellowship**, Society for Neuroscience
2019 - 2021 **Graduate Prize Fellowship**, Harvard University
2015 **CURO Research Scholar**, University of Georgia
2014 **Summer Undergraduate Research Fellowship**, New York University - Center for Neural Science; Neurobiology of Cognition Laboratory; PI: André Fenton
2014 **CURO Research Assistantship Award,** University of Georgia
2011-2015 **HOPE Scholarship**, Georgia Student Finance Commission
2011-2015 **Broad Prize Scholarship**, The Broad Foundation

MEMBERSHIPS AND SERVICE

2021 - 2023 **Co-president**, Underrepresented Scholars in Neuroscience (USN), Harvard University
2020 - 2022 **Diversity and Inclusion Core Committee Member**, Dept. of Neurobiology, Harvard Medical School
2021 - 2022 **Graduate Student Interviewer**, Program in Neuroscience Admissions Committee, Harvard University
2020 **Ad-hoc Reviewer**, Behavioural Brain Research
2020, 2021 **Reviewer**, Society for Advancement of Chicanos/Hispanics and Native Americans in Science (SACNAS) Conference
2020, 2021 **Member**, International Behavioral Neuroscience Society (IBNS)
2019 – Present **Executive Board Member**, Underrepresented Scholars in Neuroscience (USN), Harvard University
2014 - Present **Member**, Society for Neuroscience (SfN)

TEACHING AND MENTORSHIP

Fall 2021, 2022	**Teaching Fellow**, Neuro80 - Neurobiology of Behavior, Harvard College
2022 - 2023	**Laboratory mentor**, Amanda Pasqualini; Research assistant, Boston Children's Hospital
2020 - 2021	**Laboratory mentor**, Beatrice Castillo-Sahugan; Undergraduate, Harvard College
2016 - 2017	**Laboratory mentor**, Hannah Oden-Brunson; Undergraduate, Washington University
2016 - 2017	**Laboratory mentor**, Kate Kimbell; Undergraduate, Washington University

PUBLICATIONS (* indicates equal contribution)

2022 13. **Bhatti DL**, Medrihan L, Chen MX, Jin J, McCabe KA, Wang W, Azevedo EP, Ledo JH, Kim Y. Molecular and cellular adaptations in hippocampal parvalbumin neurons mediate behavioral responses to chronic social stress. 2022;15. *Frontiers in Molecular Neuroscience*

2021 12. Luskin AT*, **Bhatti DL***, Mulvey B, Pedersen CE, Girven KS, Oden-Brunson H, Kimbell K, Blackburn T, Sawyer A, Gereau IV RW, Dougherty JD, Bruchas MR. Extended amygdala-parabrachial circuits alter threat assessment and regulate feeding. 2021 Feb 26;7(9):eabd3666. * equal contribution *Science Advances*

2020 11. Jin J, **Bhatti DL,** Lee KW, Medrihan L, Cheng J, Wei J, Zhong P, Yan Z, Kooiker C, Song C, Ahn JH, Obermair GJ, Lee A, Gresack J, Greengard P, Kim Y. Ahnak scaffolds p11/Anxa2 complex and L-type voltage-gated calcium channel and modulates depressive behavior. 2020 May;25(5):1035-49. *Molecular Psychiatry*

2019 10. Hooversmith JM, **Bhatti DL**, Holmes PV. Galanin administration into the prelimbic cortex impairs consolidation and expression of contextual fear conditioning. 2019 Dec 16;375:112160. *Behavioural Brain Research*

9. Parker KE*, Pedersen CE*, Gomez AM*, Spangler SM, Walicki MC, Feng SY, Stewart SL, Otis JM, Al-Hasani R, McCall JG, Sakers K, **Bhatti DL,** Copits BA, Gereau RW, Jhou T, Kash TJ, Dougherty JD, Stuber GD, Bruchas MR. A paranigral VTA nociceptin circuit that constrains motivation for reward. 2019 Jul 25;178(3):653-71. *Cell*

8. Massaly N, Copits BA, Wilson-Poe AR, Hipólito L, Markovic T, Yoon HJ, Liu S, Walicki MC, **Bhatti DL**, Sirohi S, Klaas A, Walker BM, Neve R, Cahill CM, Shoghi KI, Gereau RW, McCall JG, Al-Hasani R, Bruchas MR, Moron JA. Pain-induced negative affect is mediated via recruitment of the nucleus accumbens kappa opioid system. 2019 May 8;102(3):564-73. *Neuron*

2018 7. Mulvey B, **Bhatti DL,** Gyawali S, Lake AM, Kriaucionis S, Ford CP, Bruchas MR, Heintz N, Dougherty JD. Molecular and functional sex differences of noradrenergic neurons in the mouse locus coeruleus. 2018 May 22;23(8):2225-35. *Cell Reports*

6. Lu L*, Gutruf P*, Xia L*, **Bhatti DL*,** Wang X, Vazquez-Guardado A, Ning X, Shen X, Sang T, Ma R, Pakeltis G. Wireless optoelectronic photometers for monitoring neuronal dynamics in the deep brain. 2018 Feb 13;115(7):E1374-83. * equal contribution *PNAS*

2017 5. McCall JG*, Siuda ER*, **Bhatti DL,** Lawson LA, McElligott ZA, Stuber GD, Bruchas MR. Locus coeruleus to basolateral amygdala noradrenergic projections promote anxiety-like behavior. Elife. 2017 Jul 14;6:e18247. *eLife*

2016 4. Park SI, Shin G, McCall JG, Al-Hasani R, Norris A, Xia L, Brenner DS, Noh KN, Bang SY, **Bhatti DL**, Jang KI, Kang SK, Mickle AD, Dussor G, Price TJ, Gereau RW, Bruchas MR, Rogers JA. Stretchable multichannel antennas in soft wireless optoelectronic implants for optogenetics. 2016 Dec 13;113(50):E8169-77. *PNAS*

3. Seo DO*, Funderburk SC*, **Bhatti DL**, Motard LE, Newbold D, Girven KS, McCall JG, Krashes M, Sparta DR, Bruchas MR. A GABAergic projection from the centromedial nuclei of the amygdala to ventromedial prefrontal cortex modulates reward behavior. 2016 Oct 19;36(42):10831-42. *Journal of Neuroscience*

2. Siuda ER, Al-Hasani R, McCall JG, **Bhatti DL**, Bruchas MR. Chemogenetic and optogenetic activation of gαs signaling in the basolateral amygdala induces acute and social anxiety-like states. 2016 Jul;41(8):2011-23. *Neuropsycho-pharmacology*

2015 1. Simone J, Bogue EA, **Bhatti DL,** Day LE, Farr NA, Grossman AM, Holmes PV. Ethinyl estradiol and levonorgestrel alter cognition and anxiety in rats concurrent with a decrease in tyrosine hydroxylase expression in the locus coeruleus and brain-derived neurotrophic factor expression in the hippocampus. 2015 Dec 1;62:265-78. *Psychoneuro-endocrinology*

PRESENTATIONS (* indicates equal contribution)

12. D.L. Bhatti and T.E. Anthony (2021). Encoding of learned threat and avoidance by lateral septum Crfr2 neurons. Lab Results Seminar, Harvard Medical School/ Boston Children's Hospital, Kirby Neurobiology Center.
11. D.L. Bhatti and T.E. Anthony (2021). Experience-dependent encoding of threat stimuli by lateral septum Crfr2 neurons. Virtual Poster, IBRO-Riken CBS Summer Program, Tokyo, Japan. (Virtual due to COVID19)
10. D.L. Bhatti, A. Luskin, ... , R.W. Gereau, J.D. Dougherty, M.R. Bruchas. (2019). Extended amygdala-parabrachial circuits alter threat assessment and control feeding. Poster, Society for Neuroscience Diversity Session, Chicago.
9. D.L. Bhatti A. Luskin, C.E. Pedersen, K. Kimbel, H. Oden-Brunson, R.W. Gereau, M.R. Bruchas. (2018). Extended amyg-dala-parabrachial circuits alter threat perception and encode feeding behavior. Poster, Society for Neuroscience, San Diego.
8. D.L. Bhatti, L. Lu, L. Xia, P. Gutruf, J.A. Rogers, M.R. Bruchas (2016). Wireless photometry for in vivo behavioral studies of neural circuit function. BRAIN Initiative Investigators Meeting, Bethesda, MD.
7. D.L. Bhatti, M.R. Bruchas (2016). The role of extended amygdala input to the locus coeruleus in motivated behaviors. Poster, Society for Neuroscience, San Diego.
6. D.L. Bhatti, Robert W. Gereau, M.R. Bruchas (2016). Extended amygdala input to the locus coeruleus drives motivated behaviors. Poster, WashU Neuroscience Retreat.
5. D.L. Bhatti, J.M. Smith, P.V. Holmes. (2015). Galanin administration intra-vmPFC suppresses expression of conditioned contextual fear and modulates plasticity during fear extinction. Poster, Society for Neuroscience, Chicago.
4. D.L. Bhatti, F.T. Sparks, A.A. Fenton (2014). Cognitive Flexibility in the Autism Spectrum Disorder Fmr1-KO Mouse Model. Poster, Summer Student Conference at NYU, New York, NY.
3. D.L. Bhatti(2015). Acute intra-vmPFC injections of galanin reduce expression of conditioned contextual threat and prevent threat-related plasticity in rats. Talk, UGA CURO Symposium, Athens, GA.
2. D.L. Bhatti (2014). Cognitive Flexibility in the Fmr1-KO Mouse Model of Autism Spectrum Disorder. Talk, NYU/CNS Summer Undergraduate Research Symposium.
1. D.L. Bhatti, J. Simone, P.V. Holmes (2014). Ethinyl Estradiol and Levonorgrestrel Impair Novel Object Recognition Memory in Female Rats. Poster, Southeast Neuroscience Conference, Augusta, GA.