

Research Positions / Employment	Associate Research Scientist Columbia University Advisor: Dr. Richard Axel	2020-
	Postdoctoral Research Fellow Columbia University Advisor: Dr. Richard Axel Parental leaves in Spring 2014 and Spring 2018	2014-2019
	Graduate Fellow Rockefeller University Advisor: Dr. Leslie Voss hall	2008-2014
	Graduate Rotation Student Rockefeller University Advisors: Dr. Robert Roeder, Dr. Robert Darnell, Dr. Charles Gilbert	2007-2008
	Associate Consultant ZS Associates management consulting firm	2006-2007
	Business Associate ZS Associates management consulting firm	2004-2005
	Honors thesis undergraduate researcher University of Chicago Advisor: Dr. Bruce Lahn	2000-2004
	Summer Research Intern University of South Carolina Advisor: Dr. Vicki Vance	1999
Education	Rockefeller University Ph.D. in Biological Sciences	2014
	The University of Chicago A.B. in Biological Sciences with Specialization in Cellular and Molecular Biology, Minor in French	2004
Honors, Fellowships, Grants, and Awards	Best Talk Award, Society for Neuroeconomics	2025
	NIMH Conte Center for Research in OCD (P50-MH106435) Young Investigator OCD Grant Activity, \$50,000	2023-2025
	Intersections Science Fellow	2023
	Simons Foundation Society of Fellows Junior Fellowship	2015-2018
	Women in Science Fellowship, Rockefeller University	2007-2013

Maroon Key Society, advisory council to the Dean of the College, highest honor for service to the College	2004
University of Chicago Academic Honors, equivalent to <i>summa cum laude</i>	2004
University of Chicago College Honors Scholar, full-tuition academic merit scholarship	2000-2004

Grants scored but not funded

BRAIN Initiative Advanced Postdoctoral Career Transition Award to Promote Diversity (K99/R00), March 2020 (resubmission), impact score 48

Publications

Peer-reviewed Articles

Bussell, J.J., Badman, R.P., Márton, C.D., Bromberg-Martin, E.S., Abbott, L.F., Rajan, K., & Axel, R. (2026) Representations of the intrinsic value of information in mouse orbitofrontal cortex. Accepted for publication, *Nature Neuroscience*.

Clowney, E. J., Iguchi, S., **Bussell, J. J.**, Scheer, E. & Ruta, V. (2015) Multimodal Chemosensory Circuits Controlling Male Courtship in *Drosophila*. *Neuron* 87, 1036–1049. <https://doi.org/10.1016/j.neuron.2015.07.025>

Bussell, J.J., Yapici, N., Zhang, X., Dickson, B.J., and Vosshall, L.B. (2014) *Abdominal-B* neurons control *Drosophila* virgin female receptivity. *Current Biology* 24, 1584-1595. <https://doi.org/10.1016/j.cub.2014.06.011>

Press coverage: *Neuron* preview, *Current Biology* dispatch, *The Scientist*, AAAS *EurekAlert!*, *BBC Science in Action*

Bussell, J.J., Pearson, N.M., Kanda, R., Filatov, D.A. and Lahn, B.T. (2006). Human polymorphism and human-chimpanzee divergence in pseudoautosomal region correlate with local recombination rate. *Gene* 368, 94-100. <https://doi.org/10.1016/j.gene.2005.10.020>

Preprint

Bussell, J.J., Badman, R.P., Márton, C.D., Bromberg-Martin, E.S., Abbott, L.F., Rajan, K., & Axel, R. (2024) Representations of the intrinsic value of information in mouse orbitofrontal cortex. *bioRxiv*. <https://doi.org/10.1101/2023.10.13.562291>

Peer-Reviewed Conference Proceedings

Bussell, J.J., Bromberg-Martin, E.S., Badman, R.S., Rajan, K., Abbott, L.F & Axel, R. (2023) Representations of information value in mouse orbitofrontal cortex during information seeking. *Cosyne Computational and Systems Neuroscience 2023*. <https://doi.org/10.57736/3cea-a8b0>

Invited Reviews

Bussell, J.J. and Vosshall, L.B. (2012) Behavioral neuroscience: learning to suckle with signature odor. *Curr Biol* 22, R907-909. <https://doi.org/10.1016/j.cub.2012.09.034>

Bussell, J.J. and Vosshall L.B. (2010). Chemical ecology: Reprogramming a termite monarchy. *Nat Chem Biol* 6, 637-638. <https://doi.org/10.1038/nchembio.428>

Selected Presentations and Seminars	Cosyne Computational and Systems Neuroscience. <i>Selected poster.</i>	2026
	Society for Neuroeconomics. <i>Selected talk.</i>	2025
	Curiosity, Information Seeking, & Exploration. <i>Selected talk.</i>	
	Society for Philosophy and Neuroscience. <i>Invited talk.</i>	
	Mechanisms of Foraging. <i>Invited talk.</i>	2024
	Society for Neuroscience Nanosymposium. <i>Selected talk.</i>	
	Orbitofrontal Cortex Quadriennial Meeting. <i>Selected poster.</i>	
	Cosyne Computational and Systems Neuroscience. <i>Selected poster.</i>	
	Society for Neuroeconomics. <i>Invited talk.</i>	2023
	Curiosity, Creativity, and Complexity. <i>Selected poster.</i>	
	Harvard INCEPT external postdoc series. <i>Invited talk.</i>	
	UCLA SYNCS external postdoc series. <i>Invited talk.</i>	
	Cosyne Computational and Systems Neuroscience. <i>Selected poster.</i>	
	ZIPS internal postdoc series. <i>Selected talk.</i>	2022
	Gordon Research Conference Neurobiology of Cognition. <i>Selected talk.</i>	
	Simons Foundation Global Brain Postdoc Meeting. <i>Invited talk</i>	
	Howard Hughes Medical Institute Science Meeting. <i>Poster.</i>	2021
	Society for Neuroscience Nanosymposium. <i>Selected talk.</i>	2020
	Princeton University PDP Neuroscience Seminar. <i>Invited talk.</i>	2019
	Gordon Research Conference Neurobiology of Cognition. <i>Poster.</i>	2018
	Cold Spring Harbor <i>Drosophila</i> Neurobiology Meeting. <i>Invited talk.</i>	2011
	Howard Hughes Medical Institute Science Meeting. <i>Poster.</i>	
Teaching and Mentorship	Guest speaker, Columbia+ Neuroscience of Curiosity Course	2025
	Research Assistant post-baccalaureates	
	Rhea Singh	2024-
	Maya Sharma Campbell, next position academic tutor	2022-2023
	Ashwin Viswanathan, next position Columbia University MD-PhD	2020-2022
	Deniz Bingul, next position University of California Berkeley PhD	2018-2020
	Theodore Hannah, next position Icahn School of Medicine Mt. Sinai MD	2016-2018
	Adamu Awak, next position Morehouse School of Medicine MD	2015-2016
	Isabel Guitierrez, next position lab manager at Albert Einstein College of Medicine	2010-2012
	PhD Student	
	Jennifer Scribner, Columbia University	2018-2019
	Undergraduate Thesis and Summer Research Students	
	Alexander Knue, Columbia University	2023-
	Leon Zhou, Columbia University	2022
	Sara Lanclos, Barnard College	2016-2019
	Stephen Zhang, Grinnell College	2012
	Summer High School Student Mentor	2009,2010, 2015,2019
	Rockefeller University Summer Neuroscience Program lecturer	2009

Service and Outreach

Zuckerman Institute Trainee Advisory Committee founding member	2019-
Chair STEAM56 school science outreach day for 400 people	2018-2023
PS56 Brooklyn public School Leadership Team / PTA Science Chair	2018-2022
Reviewer for <i>Nature</i> , <i>Cell</i> , <i>Neuron</i> , <i>Current Biology</i>	2008-
Moderator, Niarchos Brain Insight Lecture: Embracing Uncertainty	2023
Columbia Neuroscience Seminar Series selection committee	2019-2021
Speaker, <i>Studying Curiosity in Animals</i> CU Center for Science & Society	2019
Alumni Association President, SC Governor's School Science/Math	2012-2013
Student Representative, Faculty and Students Club Board of Directors	2009-2014
Representative, Rockefeller University Student Representative Council	2011-2012
Founding Board Member, Chicago Biological Investigator	2004
News Editor, Science Editor, <i>The Chicago Maroon</i>	2000-2003

Additional Training and Professional Affiliations

Crawford Bias Reduction Training monthly workshop series	2021
Mentoring Up mentorship training workshop series	2021
Academics for Black Lives Zuckerman Institute Accountability Group	2020
Society for Neuroeconomics	2020-
Society for Neuroscience	2016-
New York Academy of Sciences	2015-