

Education	2014	Rockefeller University Ph.D. in Biological Sciences
	2004	The University of Chicago A.B. in Biological Sciences with Specialization in Cellular and Molecular Biology, Minor in French
	2000	South Carolina Governor's School for Science and Mathematics Diploma with Honors
Research Positions / Employment	2020-2023	Associate Research Scientist Columbia University Advisor: Dr. Richard Axel
	2014-2019	Postdoctoral Research Fellow Columbia University Advisor: Dr. Richard Axel
	2008-2014	Graduate Fellow Rockefeller University Advisor: Dr. Leslie Vosshall
	2007-2008	Graduate Rotation Student Rockefeller University Advisors: Dr. Robert Roeder, Dr. Robert Darnell, Dr. Charles Gilbert
	2004-2007	Associate Consultant, Business Associate ZS Associates management consulting firm
	2000-2004	Honors thesis undergraduate researcher University of Chicago Advisor: Dr. Bruce Lahn
	1999	Summer Research Intern University of South Carolina Advisor: Dr. Vicki Vance
Honors, Fellowships, and Awards	2023	NIMH Conte Center for Research in OCD Young Investigator OCD Grant Activity (YOGA), part of P50-MH106435, \$50,000 over 2 years
	2023	Intersections Science Fellow
	2015-2018	Simons Foundation Society of Fellows Junior Fellowship
	2007-2013	Women in Science Fellowship, Rockefeller University
	2004	Maroon Key Society, advisory council to the Dean of the College, highest non-academic honor
2004	University of Chicago Academic Honors, equivalent to <i>summa cum laude</i>	
2000-2004	University of Chicago College Honors Scholarship, full-tuition academic scholarship	

Publications

Preprint

Bussell, J.J., Badman, R.P., Márton, C.D., Bromberg-Martin, E.S., Abbott, L.F., Rajan, K., & Axel, R. (2023) Representations of information value in mouse orbitofrontal cortex during information seeking. *bioRxiv*. <https://doi.org/10.1101/2023.10.13.562291>

Peer-reviewed Articles

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>

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>

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

Bussell, J.J., Badman, R.P., Márton, C.D., Bromberg-Martin, E.S., Abbott, L.F., Rajan, K., & Axel, R. Representations of information value in mouse orbitofrontal cortex during information seeking. Society for Neuroeconomics. *Invited Talk* October 2023.

Bussell, J.J., Bromberg-Martin, Badman, R.P., Rajan, K., E.S., Abbott, L.F & Axel, R. Representations of information value in mouse orbitofrontal cortex during information seeking. Curiosity, Creativity, and Complexity. *Selected poster* May 2023.

Bussell, J.J., Bromberg-Martin, E.S., Abbott, L.F & Axel, R. Representations of information value in mouse orbitofrontal cortex during information seeking. Harvard INCEPT external postdoc series. *Invited Talk* April 2023.

Bussell, J.J., Bromberg-Martin, E.S., Abbott, L.F & Axel, R. Representations of information value in mouse orbitofrontal cortex during information seeking. UCLA SYNCS external postdoc series. *Invited Talk* April 2023.

Bussell, J.J., Bromberg-Martin, Badman, R.S., Rajan, K., E.S., Abbott, L.F & Axel, R. Representations of information value in mouse orbitofrontal cortex during information seeking. Cosyne Computational and Systems Neuroscience. *Selected poster* March 2023.

Bussell, J.J., Bromberg-Martin, E.S., Abbott, L.F & Axel, R. Representations of information value in mouse orbitofrontal cortex during information seeking. ZIPS internal postdoc series. *Selected Talk* 2022.

Bussell, J.J., Bromberg-Martin, E.S., Abbott, L.F & Axel, R. Representations of information value in mouse orbitofrontal cortex during information seeking. Gordon Research Conference on the Neurobiology of Cognition. *Invited Talk* 2022.

Bussell, J.J., Bromberg-Martin E.S., & Axel, R The desire to know: non-instrumental information seeking in mice. Howard Hughes Medical Institute Investigators Meeting. *Poster* 2020.

Bussell, J.J., Bromberg-Martin E.S., & Axel, R. Information seeking in mice: a behavioral paradigm and imaging studies of neural circuits for the desire to know. Society for Neuroscience Nanosymposium. *Invited talk* 2019.

Bussell, J.J., Bromberg-Martin E.S., & Axel, R Orbitofrontal representations of information in mice desiring to know. Princeton University PDP Neuroscience Seminar. *Invited talk* 2019.

Bussell, J.J., Yapici, N., Dickson, B.J. and Vosshall, L.B. "Neurons controlling virgin female receptivity to mating." Cold Spring Harbor *Drosophila* Neurobiology Meeting. *Invited talk* 2011.

Bussell, J.J., Yapici, N., Dickson, B.J. and Vosshall, L.B. "Neurons controlling virgin female receptivity to mating." Howard Hughes Medical Institute Science Meeting. *Poster* 2011.

Mentorship and Teaching

2022-	<i>Research Assistant post-baccalaureates</i>
2020-2022	Maya Sharma Campbell
2018-2020	Ashwin Viswanathan, next position Columbia University MD-PhD
2016-2018	Deniz Bingul, next position University of California Berkeley PhD
2015-2016	Theodore Hannah, next position Icahn School of Medicine Mt. Sinai MD
	Adamu Awak, next position Morehouse School of Medicine MD

2018-2019 *PhD Student*
Jennifer Scribner, Columbia University

Undergraduate Thesis and Summer Research Students

2022 Leon Zhou, Columbia University
2016-2019 Sara Lanclos, Barnard College
2012 Stephen Zhang, next position Harvard University Ph.D.

2009,2010,
2015,2019 *Summer High School Student Mentor*

2009 *Rockefeller University Summer Neuroscience Program lecturer*

Service and Outreach

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

Additional Training and Affiliations

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