Jennifer J. Bussell, PhD

843.610.9835 jjb2201@columbia.edu

Education

Rockefeller University 2014
Ph.D. in Biological Sciences

The University of Chicago 2004
A.B. in Biological Sciences with Specialization in Cellular and Molecular Biology, Minor in French

Research Positions / Employment

Associate Research Scientist 2020-
Columbia University
Advisor: Dr. Richard Axel

Postdoctoral Research Fellow 2014-2019
Columbia University
Advisor: Dr. Richard Axel
Parental leaves of absence in 2014 and 2018

Graduate Fellow 2008-2014
Rockefeller University
Advisor: Dr. Leslie Vosshall

Graduate Rotation Student 2007-2008
Rockefeller University
Advisors: Dr. Robert Roeder, Dr. Robert Darnell, Dr. Charles Gilbert

Associate Consultant 2006-2007
ZS Associates management consulting firm

Business Associate 2004-2005
ZS Associates management consulting firm

Honors thesis undergraduate researcher 2000-2004
University of Chicago
Advisor: Dr. Bruce Lahn

Summer Research Intern 1999
University of South Carolina
Advisor: Dr. Vicki Vance

Honors, Fellowships, Grants, and Awards

NIMH Conte Center for Research in OCD (P50-MH106435) Young Investigator OCD Grant Activity, independent laboratory transition grant $50,000 over 2 years 2023-

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 *summa cum laude* — 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

Preprint, currently under peer review at Nature Neuroscience
Bussell, J.J., Badman, R.P., Márton, C.D., Bromberg-Martin, E.S., Abbott, L.F., Rajan, K., & Axel, R. (2023) Representations of the intrinsic value of information in mouse orbitofrontal cortex. *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

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

Mechanisms of foraging, Lyon, France. *Invited Speaker.* — 2024
Society for Neuroscience Nanosymposium. *Selected talk.*
Orbitofrontal Cortex Quadriennial Meeting. *Selected poster*.
Cosyne Computational and Systems Neuroscience. *Selected poster*. — 2023
Society for Neuroeconomics. *Invited Talk*.
Curiosity, Creativity, and Complexity. *Selected poster*.
Harvard INCEPT external postdoc series. *Invited Talk*.

	UCLA SYNCS external postdoc series. *Invited Talk*.	
	Cosyne Computational and Systems Neuroscience. *Selected poster*.	2022
	ZIPS internal postdoc series. *Selected Talk*.	
	Gordon Research Conference Neurobiology of Cognition. *Invited Talk*.	
	Simons Foundation Global Brain Postdoc Meeting. *Invited talk*	2021
	Howard Hughes Medical Institute Science Meeting. *Poster*.	2020
	Society for Neuroscience Nanosymposium*. Selected talk*.	2019
	Princeton University PDP Neuroscience Seminar. *Invited talk*.	
	Gordon Research Conference Neurobiology of Cognition. *Poster*.	2018
	Cold Spring Harbor *Drosophila* Neurobiology Meeting. *Invited talk*.	2011
	Howard Hughes Medical Institute Science Meeting. *Poster*.	

Mentorship and Teaching

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-
PS56 Brooklyn public School Leadership Team / PTA Science Chair	2018-
Chair STEAM56 school science outreach day for 400 people	2018-
Reviewer for *Nature, Cell, Neuron, Current Biology*	2008-
Moderator, Niarchos Brain Insight Lecture: Embracing Uncertainty	2023
Columbia Neuroscience Seminar Series selection committee	2019-2021
Speaker, *Studying Curiosity in Animals* 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, *The Chicago Maroon*	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-