Rob Woodry

Department of Psychology
New York University
6 Washington Place
New York, NY 10003

Email: rfw256@nyu.edu
Home: rwoodry.github.io
ORCID: 0000-0002-6406-3495

Education

2021- **New York University**, New York, NY
Ph.D. in Psychology (Cognition & Perception), expected 2026
Quantitative Specialization
Thesis Title: How Visual Cortex Supports Memory
Advisor: Jonathan Winawer
Committee: Clayton Curtis, Wei Ji Ma, Grace Lindsay, Serra Favila

2021-2025 **New York University,** New York, NY
M.Phil. in Psychology

2015-2018 **Loyola University New Orleans,** New Orleans, LA
B.S. in Psychological Sciences, Honors Program, *Cum Laude*

Research positions

2019-2021 **University of California Irvine**, Irvine, CA
Lab Manager (Junior Research Specialist I-II)
Advisor: Liz Chrastil

2018-2019 **Loyola University New Orleans**, New Orleans, LA
Undergraduate Research Assistant (Honors Thesis)
Advisor: Kate Yurgil

Grants and awards

2025	*Summer Course Travel Grant,* Marine Biological Laboratory	$4,200
2025	*NEI Early Career Scientist Travel Grant,* Vision Sciences Society	$1,000
2025	*Martin Braine Fellowship,* New York University	$2,000
2024-2025	*Computational Neuroscience Training Grant*, NIH T90 (through New York University)	$28,224
2023-2025	*Pilot Grants,* Center for Brain Imaging, New York University (funded Woodry, Winawer, & Favila 2025, *bioRxiv*)	$28,000
2022	*Pilot Grants,* Center for Brain Imaging, New York University (partially funded Woodry, Curtis, & Winawer 2025, *J Neurosci*)	$5,000
2021-2026	*Dean's Diversity Fellowship*, New York University	$10,000/yr
2021-2026	*MacCracken Fellowship,* New York University	$35,000/yr
2019	*Outstanding Research Award*, Loyola University New Orleans	$100
2019	*Research Travel Award,* Loyola University New Orleans	$1,200
2019	*Oral Presentation Finalist (2nd)*, Louisiana Academy of Sciences	
2018	*Summer Research Fellowship,* Loyola University New Orleans	$1,500
2018	*Dean's List,* Loyola University New Orleans	
2016	*Dean's List*, Loyola University New Orleans	

Publications

Preprints & Manuscripts

Woodry R, Winawer J, & Favila S. (2025). Memory responses in visual cortex track recall success after single-trial encoding. bioRxiv

Woodry R, Curtis C, Winawer J, Lindsay G. (in prep). A network model that flexibly controls the tuning width of visual responses during perception and memory

Ward E, Woodry R, Carlson J, Chrastil E. (in prep). Brain network connectivity and dynamics of navigational learning and memory

Peer-reviewed Articles

Woodry R, Curtis C, Winawer J (2025). Feedback scales the spatial tuning of cortical responses during both visual working memory and long-term memory. Journal of Neuroscience

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Presentations

Talks

Woodry R, Curtis C, Winawer J, & Lindsay G. (May 2024) A network model that flexibly controls the tuning width of visual responses during perception and memory. *Symposium in Computational Neuroscience, New York University*

Woodry R, Curtis C, & Winawer J (Nov 2023) Feedback scales the spatial tuning of cortical responses during visual memory. *Nanosymposia presentation, Society for Neuroscience*

Woodry R, Curtis C, & Winawer J (June 2023) The spatial tuning of cortical responses during perception and memory. *Virtual Talk*

Woodry R & Yurgil K (Mar 2019) Evidence for a hierarchy of prediction errors: vMMNs in response to deviation and omission. *Undergraduate Talk. Louisiana Academy of Sciences*

Posters

Woodry R, Winawer J, & Favila S. (May 2025) The multiple roles of early visual cortex in single-shot episodic memory: encoding, retrieval, and recall. *Vision Sciences Society*

Ward E, **Woodry R**, Carlson J, Chrastil E. (Nov 2023). Brain network connectivity and dynamics of navigational learning and memory. *Society for Neuroscience*

Woodry R, Curtis C, & Winawer J. (July 2023) Feedback scales the spatial tuning of cortical responses during perception and memory. *NYU Minds, Brains, and Machines*

Woodry R, Curtis C, & Winawer J. (May 2023) The spatial tuning of cortical responses during visual memory. *Vision Sciences Society*

Woodry R & Chrastil E (2021) Functional connectivity profiles predict trial-by-trial success in a navigation task. *Virtual. Society for Neuroscience & Open Human Brain Mapping*

Woodry R & Yurgil K (Mar 2019) Evidence for a hierarchy of prediction errors: vMMNs in response to deviation and omission. *Cognitive Neuroscience Society*

Relevant Training

Summer Schools

2025 *Methods in Computational Neuroscience*, Marine Biological Laboratory
Organizers: Stefano Fusi & Roozbeh Kiani

2021 *Neuromatch Deep Learning*, neuromatch.io

2019 *MINDCore,* University of Pennsylvania

Workshops

2024 *Opinion Piece Writing Bootcamp,* New York University
Led by Allison Silver (NY Times, LA Times, Culture & Travel)

2022 *Scientific Communication Podcast Workshop*, New York University
Led by Pat Walters (Radiolab)

2020 *Neurohackademy,* University of Washington

Graduate coursework

2025	*Neural Network Models of the Brain and Mind*	Grace Lindsay & Marcelo Mattar
2025	*Neural Statistics* (audit)	Alex Williams
2024	*Visual Neuroscience* (audit)	Tony Movshon & Bob Shapley
2023	*Introduction to Theoretical Neuroscience* (taken for credit at Columbia University)	Larry Abbott
2023	*Computational Cognitive Modeling*	Brenden Lake & Todd Gureckis
2023	*Learning & Memory*	Cate Hartley & Todd Gureckis
2022	*MathTools II: Simulation & Data Analysis*	Larry Maloney
2022	*fMRI Lab*	Jonathan Winawer
2022	*Behavioral Cognitive Neuroscience*	Clay Curtis & Roozbeh Kiani
2021	*Perception*	David Heeger
2021	*MathTools for Neural and Cognitive Science*	Eero Simoncelli & Mike Landy

Certificates

2020 *DeepLearning.AI TensorFlow Developer Certificate*, Coursera
2020 *Deep Learning Specialization Certificate*, Coursera
2020 *Machine Learning*, Stanford University, Coursera
2020 *Computational Neuroscience,* University of Washington, Coursera
2018 *Statistical Inference,* Johns Hopkins University, Coursera
2018 *Exploratory Data Analysis,* Johns Hopkins University, Coursera
2018 *Getting and Cleaning Data,* Johns Hopkins University, Coursera
2018 *R Programming,* Johns Hopkins University, Coursera

Teaching

2025 Instructor, *Perception*
Undergraduate Course, NYU

2025 Team Instructor, *Undergraduate Math & Coding Bootcamp*
Undergraduate Workshop, NYU

2024 Course Assistant, *MathTools for Neural Science and Cognitive Science*
Graduate Course, NYU (instructed by Eero Simoncelli & Mike Landy)

2024 Team Instructor, *Undergraduate Math & Coding Bootcamp*
Undergraduate Workshop, NYU

2023 Course Assistant, *Illusions to Inference*
Undergraduate Course, NYU (Instructed by Wei Ji Ma)

Supervision

2025- Adi Narayan, Undergraduate Student, New York University

2023 Macy Frost, Undergraduate Student, New York University

Service

2025- *Community Building and Outreach Committee*
Joint Neural Science and Psychology Departments, New York University

2024 *Diversity, Equity, and Inclusion Committee*
Department of Psychology, New York University

2022-2024 *Vision Journal Club*
Co-host, New York University