Matthew F. Panichello

CONTACT

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EDUCATION

PhD | Princeton University 2020
Neuroscience
Advisors: Tim Buschman & Nick Turk-Browne

BS | Boston College 2011
Psychology, *summa cum laude*
Programs: Premedical; Western Philosophy

RESEARCH POSITIONS

Postdoctoral Fellow, Stanford University 2021-
Advisor: Tirin Moore

Research Coordinator, Massachusetts General Hospital (MGH) 2011-2013
Advisor: Moshe Bar

Undergraduate Researcher, MGH & Boston College 2008-2011
Advisor: Lisa Feldman Barrett

Advanced Study Grant Fellow, Columbia University 2009
Advisor: Tor Wager

FELLOWSHIPS AND GRANTS

National Defense Science and Engineering Graduate Fellowship 2015-2018
McDonnell Fellow in Neuroscience, *Princeton University* 2014-2015
Undergraduate Research Fellowship, *Boston College* 2008-2010
Advanced Study Grant, *Boston College* 2009

ACADEMIC HONORS

Best Poster, *Princeton Neuroscience Annual Retreat* 2019
Peter Gray Award for Creative Achievement in Psychology, *Boston College* 2011
Phi Beta Kappa, *Boston College* 2011
Scholar of the College, *Boston College* 2011

Order of the Cross and Crown, *Boston College*	2011
Arts & Science Honors Program, *Boston College*	2007-2011
Psychology Honors Program, *Boston College*	2010-2011

TEACHING

NSUR 249: Experimental Immersion in Neuroscience, Guest Lecturer	2021
PSY 255: Cognitive Psychology, Preceptor	2015
NEU 258: Fundamentals of Neuroscience, Preceptor	2014
Foundation Academy Charter School, Volunteer Tutor	2013-2014
Let's Get Ready (free SAT prep), Volunteer Instructor	2008

STUDENTS ADVISED

Rio Naka, undergraduate (Stanford University)	2024
Jin Oh, post-bacc (Stanford University)	2020-2023
David Mitchell, undergraduate (Princeton University)	2017-2018
Timothy Baum, undergraduate (Princeton University)	2017
Christian Wawrzonek, undergraduate (Princeton University)	2015-2016
David Waldinger, undergraduate (MGH)	2012

SERVICE & OUTREACH

Stanford Community College Outreach Program	2024
Princeton Neuroscience Curriculum Committee	2014-2015
Princeton Neuroscience Graduate Student Committee, Chair	2014-2015
Psi Chi Psychology Honors Society, Boston College	
President	2010-2011
Member	2008-2010

INVITED TALKS

UC Berkeley, Knight Lab Meeting	2023
UC Davis, Vision Journal Club	2021
Ruhr University Bochum, Rose Lab Meeting	2021
UC Riverside, Zagha Lab Meeting	2021

AD-HOC REVIEWER

elife, Nature Communications, PNAS, Journal of Neuroscience, Cerebral Cortex, Scientific Reports, Cortex, Psychonomic Bulletin & Review

TECHNICAL PROFICIENCIES

Python, PyTorch, MATLAB, Unix, SLURM, JavaScript, HTML, R

PUBLICATIONS AND MANUSCRIPTS

Panichello, M.F., Jonikaitis, D., Oh, J., Zhu, S., Trepka, E.B., & Moore, T. (2023). Cue-specific neuronal ensembles span intermittent rate coding of working memory. *bioRxiv*

Alleman, M., Panichello, M.F., Buschman, T.J., & Johnston, W.J. (2024). The neural basis of swap errors in working memory. *PNAS*, 121(3)

Apostel, A., Panichello, M.F, Buschman, T.J., & Rose, J. (2023). Corvids optimize working memory by categorizing continuous stimuli. *Communications Biology*, 6(1), 1122.

Panichello, M.F, & Buschman, T.J. (2021). Shared mechanisms underlie the control of working memory and attention. *Nature, 592*, 601-605.

Panichello, M.F, & Turk-Browne, N. (2021). Behavioral and neural fusion of expectation with sensation. *Journal of Cognitive Neuroscience, 33*(5), 814-825.

Yu, Q., Panichello, M.F., Cai, Y., Postle, B.R., & Buschman, T.J. (2020). Delay-period activity in frontal, parietal, and occipital cortex tracks noise and biases in visual working memory. *PLOS Biology, 18*(9).

Panichello, M.F., DePasquale, B., Pillow, J.W., & Buschman, T.J. (2019). Error-correcting dynamics in visual working memory. *Nature Communications*, *10*(1).

Panichello, M.F., Kveraga, K., Chaumon, M., Bar, M., & Barrett, L.F. (2017). Internal valence modulates the speed of object recognition. *Scientific Reports*, *7*, 361.

Panichello, M.F., Cheung, O.S., & Bar, M. (2013). Predictive feedback and conscious visual experience. *Frontiers in Psychology*, *3*, 620.