Matthew F. Panichello

CONTACT

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Stanford University
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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

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

SERVICE & OUTREACH

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

AD-HOC REVIEWER

Journal of Neuroscience, Cerebral Cortex, Scientific Reports, Cortex, Psychonomic Bulletin & Review

TECHNICAL PROFICIENCIES

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

PUBLICATIONS AND MANUSCRIPTS

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.

CONFERENCE PRESENTATIONS

Panichello, M.F. & Buschman, T.J. (2021). Neural mechanisms of selection in visual working memory. Poster presented at the 18th meeting for Computational and Systems Neuroscience (CoSyNe), Virtual Conference.

Panichello, M.F. & Buschman, T.J. (2020). Selective control of working memory in prefrontal, parietal, and visual cortex. Talk presented at the 1st annual Virtual Working Memory Symposium.

Panichello, M.F. & Buschman, T.J. (2020). Neural mechanisms of selection in visual working memory. Poster presented at the 17th meeting for Computational and Systems Neuroscience (CoSyNe), Denver, Colorado.

Panichello, M.F. & Buschman, T.J. (2019). Neural mechanisms of retrospective selection in visual working memory. Talk presented at the 49th meeting of the Societal for Neuroscience, Chicago, Illinois.

Panichello, M.F. & Buschman, T.J. (2019). Retrospective and prospective selection in visual working memory. Poster presented at the 19th meeting of the Vision Sciences Society, St. Pete Beach, Florida.

Yu, Q., Panichello, M.F., Cai, Y., Postle, B.R., & Buschman, T.J. (2019). Persistent neural activity in parietal cortex tracks attractor dynamics in visual working memory. Poster presented at the 26th meeting of the Cognitive Neuroscience Society, San Francisco, California.

Panichello, M.F., DePasquale, B., Pillow, J.W., & Buschman, T.J. (2018). Memory load modulates the dynamics of visual working memory. Talk presented at the 18th meeting of the Vision Sciences Society, St. Pete Beach, Florida.

Panichello, M.F., DePasquale, B., Pillow, J.W., & Buschman, T.J. (2017). Memory load modulates the dynamics of visual working memory. Poster presented at the 47th meeting of the Society for Neuroscience, Washington, D.C.

Musslick, S., Jang, S.J., Panichello, M.F., Bustamante, L., Shenhav, A., & Cohen, J.D. (2017). Constraints associated with cognitive control and the stability-flexibility dilemma. Talk presented at the 47th meeting of the Society for Neuroscience, Washington, D.C.

Panichello, M.F., & Turk-Browne, N.B. (2016). Fusion of expectations with sensory information during perception. Talk presented at the 4th Manhattan Area Memory Meeting, Columbia University, New York City, New York.

Panichello, M.F., & Turk-Browne, N.B. (2015). Neural fusion of sensation and expectation. Poster presented at the 45th Meeting of the Society for Neuroscience, Chicago, Illinois.

Panichello, M.F., & Turk-Browne, N.B. (2014). Sensory and expectation cues are fused during perception. Poster presented at the 14th meeting of the Vision Sciences Society, St. Pete Beach, Florida.

Panichello, M.F., Chaumon, M., Kveraga, K., Bar, M., & Barrett, L.F. (2012). Negative affect speeds up the propagation of visual information during perception. Poster presented at the 42nd meeting of the Society for Neuroscience, New Orleans, Louisiana.

Cheung, O.S., Gagnon, S.A., Panichello, M.F., & Bar, M. (2012). Dissociating contextual and semantic priming in object recognition. Poster presented at the 12th meeting of the Vision Sciences Society, St. Pete Beach, Florida.

Panichello, M.F., Chaumon, M., & Barrett, L.F. (2011). Mood affects top-down and bottom-up processing during object recognition. Poster presented at the annual Boston College Psychology Undergraduate Research Conference.