

CURRICULUM VITAE

Tracy H. Wang, Ph.D.

Department of Psychology
The University of Texas at Austin
108 East Dean Keeton Stop A8000
Austin, TX 78712-1043

telephone: 818.667.8626
email: tracy.wang@utexas.edu
website: www.twangcog.com

Education

Ph.D., The University of Texas at Dallas (2011-2013)

School of Behavioral and Brain Sciences, Cognition and Neuroscience

Advisor: Dr. Michael D. Rugg

Dissertation Title: Investigations of age-related effects on the neural correlates of recollection and familiarity.

M.S., University of California, Irvine (2006-2010)

Department of Neurobiology & Behavior, Neurobiology, focus in Cognitive Neuroscience

Advisor: Dr. Michael D. Rugg

Topic: Effects of age on the neural correlates of recollection and familiarity

B.A., Claremont McKenna College (2000-2004)

Joint Sciences Department, Honors in Major for Neuroscience, Cognitive Emphasis

Advisor: Dr. Richard Lewis, Pomona College

Thesis Title: Cerebral Lateralization of Scalp Activation during Two Dimensional and Three Dimensional Mental Rotation Tasks using High Density Event Related Potentials

Professional Appointments

The University of Texas at Austin, Department of Psychology (2014- Present)

Postdoctoral Research Fellow, Dr. Jarrod Lewis-Peacock (2014-2016)

NRSA F32 Postdoctoral Research Affiliate, Dr. Jarrod Lewis Peacock (2017-Present)

Dr. Alison Preston and Dr. James Sulzer (co-sponsored)

Project Title: "Investigating the contributions of neural competition to intentional forgetting and real-time neurofeedback"

The University of Texas at Dallas, School of Behavioral and Brain Sciences (2011-2013)

University of California, Irvine, Department of Neurobiology & Behavior (2006-2010)

Graduate Research Fellow, Dr. Michael D. Rugg

Washington University in St. Louis (2004-2006)

Department of Psychology

Research assistant, Dr. Randy L. Buckner

Pomona College (2001-2004)

Department of Psychology

Undergraduate research assistant, Dr. Richard S. Lewis

Teaching and Mentorship

The University of Texas at Austin

Lecturer

Introduction to Cognitive Psychology
PSY 305 (Summer 2016)

The University of Texas at Austin

Guest Lecturer

By request of Dr. Jarrod-Lewis Peacock
Research Design and Statistics, PSY 418 (9/8/2015, 9/10/2015)
By request of Dr. Alison Preston
Introduction to Cognitive Neuroscience (4/17/17)

University of California, Irvine

Department of Neurobiology & Behavior

Lecturer

Biological Sciences 113L: Laboratory course in Neurobiology (Fall 2006, Winter 2007)

The University of Texas at Austin

Undergraduate research assistant supervision

- Supervised and trained part-time undergraduate RAs for recruitment, implementation and data analysis of experiments.
- Founded and supervised an undergraduate journal club that focuses on critical analysis and presentation of scientific studies.
- Anna Hebel (2014-2015), Morgan Harnois (2014-2015), Ellen Crowe (2015-current), Stephanie Jeanneret (2015-current)

University of California, Irvine/University of Texas at Dallas

Undergraduate and Post-Baccalaureate research assistant (RA) supervision

- Supervised and trained part-time undergraduate RAs and full-time RAs for recruitment, implementation and data analysis of experiments.
- UCI: Brooke Rosen (2007), Matt Grilli (2008), Shahab Motamedinia (2007-2009, post-bacc), Brain Minton (2009-2010, post-bacc)
- UTD: Hannah Stanton (2011-2012, post-bacc), Sofanit Berhane (2012-2013, post-bacc) , Brian Donley (2012-2014, post-bacc)

Awards/Support

- Ruth L. Kirschstein National Research Service Award from National Institute on Neurological Disorders and Stroke F32 NS096962 (2017-2019) awarded to Tracy Wang.
- Cajal Advanced Neuroscience Training Programme (Federation of European Neuroscience Societies, FENS) – Cajal Brain Prize Course –The Hippocampus from Circuits to Cognition – support from the journal Hippocampus awarded to Tracy Wang.
- National Institute on Aging training grant 5T32 AG00096-25 (2007-2009) awarded to the Institute of Brain Aging and Dementia (now known as the Institute for Memory Impairments and Neurological Disorders).
- Undergraduate Departmental Award for ‘Best Thesis in Neuroscience’ (2004)

Publications and Manuscripts

Wang, T.H., Chiu, YC., *(co-first authorship), Beck DM, Lewis-Peacock, J.A., Sahakyan, L. (submitted) Neural separation of items from their context predicts successful directed forgetting.

Wang, T.H., Placek K, Lewis-Peacock, J.A. (2019). More is less: increased processing of unwanted memories facilitates forgetting. *Journal of Neuroscience*. doi: 10.1523/JNEUROSCI.2033-18.2019.

Wang, T.H., Rugg, M.D. (in preparation) Neural correlates of recollection and familiarity in young and old adults as revealed by fMRI.

Thakral., P.P., **Wang, T.H.**, Rugg, M.D. (2019). Effects of age on across-participant variability of cortical reinstatement effects. *Neuroimage*. 5;191:162-175. PMID: 30731244.

King, D. de Chastelaine, M., Elward, R. **Wang, T.H.**, Rugg, M.D. (2018). Dissociation between the neural correlates of recollection and familiarity in the striatum and hippocampus: across-study convergence. *Behavioral Brain Research*.

de Chastelaine, M., Mattson, J.T., **Wang, T.H.**, Donley, B., Rugg, M. (2017) Independent contributions of fMRI familiarity and novelty effects to recognition memory and their stability across the adult lifespan. *Neuroimage*. 156:340-351. PMID: 28528847.

Thakral., P.P., **Wang, T.H.**, Rugg, M.D. (2017) Decoding the content of recollection within the core recollection network and beyond. *Cortex*. 91:101-113. PMID: 28077212

Wang, T.H., Johnson, J.D., deChastelaine, M., Donley, B., Rugg, M.D. (2016). The effects of age on the neural correlates of recollection success, recollection-related cortical reinstatement and post-retrieval monitoring. *Cerebral Cortex*. 26:1698-714. PMID:25631058

de Chastelaine, M., Mattson, J.T., **Wang, T.H.**, Donley, B., Rugg, M. (2016). The relationships between age, associative memory performance and the neural correlates of successful associative memory encoding. *Neurobiology of Aging*. 42:162-76. PMID:27143433

de Chastelaine, M., Mattson, J.T., **Wang, T.H.**, Donley, B., Rugg, M. (2016). The neural correlates of recollection and retrieval monitoring: relationships with age and recollection performance. *Neuroimage*. 35(4):1763-72. PMID: 27155127

de Chastelaine, M., Mattson, J.T., **Wang, T.H.**, Donley, B., Rugg, M. (2015) Sensitivity of Negative Subsequent Memory and Task-Negative Effects to Age and Associative Memory Performance. *Brain Research*. 1612:16-29. PMID: 25264353

Thakral., P.P., **Wang, T.H.**, Rugg, M.D. (2015) Cortical reinstatement and the confidence and accuracy of source memory. *Neuroimage*.109:118-29. PMID: 25264353

King, D. de Chastelaine, M., Elward, R. **Wang, T.H.**, Rugg, M.D. (2015). Recollection-related increases in functional connectivity predict individual differences in memory accuracy. *J Neurosci*. 35(4):1763-72. PMID: 25632149

Mattson, J.T., **Wang, T.H.**, de Chastelaine, M., and Rugg MD (2014). Effects of age on negative subsequent memory effects associated with the encoding of item and item-context information. *Cerebral Cortex*, 24(12):3322-33. PMID: 23904464

Wang, T.H., de Chastelaine, M., Minton B., and Rugg M.D. (2012). Effects of age on the neural correlates of familiarity as indexed by event related potentials. *Journal of Cognitive Neuroscience*. (24):1055-68. PMID: 21878056

De Chastelaine, M., **Wang T.H.**, Minton, B., Muftuler, L.T., Rugg, M.D. (2011). The effects of age, memory performance, and callosal integrity on the neural correlates of successful associative encoding. *Cerebral Cortex* 21 (9): 2166-76. PMID: 21282317

Wang, T.H., Kruggel, F., Rugg, M.D. (2009). Effects of advanced aging on the neural correlates of recognition memory. *Neuropsychologia*. 47(5): 1352-1361. PMID: 19428399

Marcus, D.S., **Wang, T.H.**, Parker, J., Olsen, T., Ramaratnam, M., Csernansky, J.G., Morris, J.C., Buckner, R.L. Open Access Structural Imaging Series (OASIS): Cross-Sectional Data Across the Adult Lifespan. *Journal of Cognitive Neuroscience*. 19(9): 1498-507. PMID: 17714011

Lewis, R.S., Weekes, N.Y., and **Wang, T.H.** (2007) The Relationship Among a Naturalistic Stressor, Frontal EEG Asymmetry, Stress, and Health. *Biological Psychology*.75(3):239-47. PMID: 17512106

A full list of my publications can be found in MyBibliography at:

<https://www.ncbi.nlm.nih.gov/sites/myncbi/1n11cKDYoTuQo/bibliography/48442582/public/?sort=date&direction=descending>

Selected Presentations and Invited Talks

Wang, T.H., Placek and Lewis-Peacock, J.A. (2017) Intentional Forgetting via memory weakening in sensory cortex. **Selected Abstract Awardee Talk at the Austin Conference on Learning and Memory.**

Wang, T.H. and Rugg, MD (2011). Dissociating the neural correlates of recollection and familiarity in older and younger adults: evidence from event-related potentials and functional magnetic resonance imaging. **Invited Symposia Talk at the Association for Psychological Science Annual Meeting.**

Wang, T.H., Chiu, YC., *(co-first authorship), Beck DM, Lewis-Peacock, J.A., Sahakyan, L. (2019) Separation of items from their context observed via fMRI pattern analysis of item-method directed forgetting. Will be presented at the Context and Episodic Memory Symposium in Philadelphia, PA.

Wang, T.H., Chiu, YC., *(co-first authorship), Beck DM, Lewis-Peacock, J.A., Sahakyan, L. (2018) Separation of items from their context observed via fMRI pattern analysis of item-method directed forgetting. Presented at the Society for Neuroscience Annual Meeting, Washington D.C.

Wang, T.H., Placek K, Lewis-Peacock, J.A. (2016). Forgetting is more work than remembering. To be presented at the Cognitive Neuroscience Society Annual Meeting, New York City.

Wang, T.H., Placek, K., Murkerji, A., Lewis-Peacock, JA.(2014). Contributions of memory competition on intentional forgetting. Presented at the Society for Neuroscience Annual Meeting, Washington D.C.

Wang, T.H., de Chastelaine, M., Johnson, J.D., Rugg M.D. (2014) The neural correlates of post-retrieval monitoring predict recollection performance in older and younger adults. Presented at the Cognitive Aging Conference, Atlanta.

Wang, T.H., Johnson, J.D. Sakoglu, U. Rugg, M.D. (2013). Content-selective cortical reinstatement effects in older and younger adults. Presented at the Cognitive Neuroscience Society Meeting, San Francisco.

Wang, T.H., Sakoglu, U. and Rugg, M.D. (2012). Differential sensitivity of GLM and MVPA approaches to the identification of cortical reinstatement effects in memory retrieval. Presented at the Society for

Neuroscience Annual Meeting, New Orleans.

Wang, T.H., Johnson, J.D. Rugg, M.D. (2011). Cortical reinstatement of auditory and visually presented contextual information as indexed by multi-voxel pattern classification. Presented at the Cognitive Neuroscience Society Meeting, San Francisco.

Wang, T.H., Mattson, J.T, Rugg, M.D. (2009). Neural correlates of recollection and familiarity in young and old subjects as revealed by fMRI. Presented for at the Society for Neuroscience Annual Meeting, Chicago.

Wang, T.H., Kruggel, F., and Rugg, M.D. (2008). Preserved repetition suppression effects in advanced age as revealed by fMRI. Presented at the Society for Neuroscience Annual Meeting, Washington D.C.

Wang, T.H., Grilli, M.D. and Rugg, M.D. (2008). Effects of advanced aging on the neural correlates of recognition memory. Presented at the Cognitive Neuroscience Society Meeting, San Francisco.

Wang, T.H. Duverne, S., Rugg M.D. (2007). Overlap between recollection- and novelty-sensitive activity as revealed by fMRI. Presented at the Society for Neuroscience Annual Meeting, San Diego.

Wang, T.H., Patel, F., Chang, D., Garrison- Jakel, J., Dayberry, K., Lewis, R.S., and Weekes, N.Y. (2006). Effects of naturalistic stressors on prefrontal EEG asymmetry. Presented at the Cognitive Neuroscience Society Annual Meeting in San Francisco.

Marcus, D.S., **Wang, T.H.***sponsoring author, Morris, J.C., Buckner, R.L. (2005). The OASIS Project: a publicly available human brain imaging data resource. Program No. 92.4. 2005 Abstract Viewer/Itinerary Planner. Washington, DC: Society for Neuroscience, 2005. Online

Membership in Scientific Societies

- American Association for the Advancement of Science
- Cognitive Neuroscience Society
- Society for Neuroscience
- Association for Psychological Science

Ad-Hoc Journal Reviewing

Cerebral Cortex
Cognitive, Affective and Behavioral Neuroscience
Journal of Neuroscience
Journal of Cognitive Neuroscience
Neuropsychologia
Neurobiology of Aging
PLoS One

References

Michael D. Rugg
Director for the Center of Vital Longevity.
Distinguished Chair in Behavioral and Brain
Sciences
The University of Texas at Dallas
972-883-3725 mrugg@utdallas.edu

Denise C. Park
Director of Research
Distinguished Chair in Behavioral and Brain
Sciences
The University of Texas at Dallas
972-883-3255 denise@utdallas.edu

Alison R. Preston
Director of the Biomedical Research Center
Dr. A. Wilson Nolle and Sir Raghunath P.
Mahendroo Professor
The University of Texas at Austin
512-745-7855 apreston@utexas.edu

Jarrold A. Lewis-Peacock
Assistant Professor
The University of Texas at Austin
512-232-2149 jalewpea@utexas.edu

letters available on request