

Teal S. Eich, PhD

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ACADEMIC APPOINTMENTS

Assistant Professor	University of Southern California Davis School of Gerontology (Secondary appointments in Psychology and Neuroscience)	2019-
Associate Research Scientist	Columbia University Medical Center Cognitive Neuroscience Division Department of Neurology	2017- 2019

EDUCATION and TRAINING

Postdoctoral Fellow	Columbia University Medical Center NIH NRSA T32 in Geriatric Psychiatry Advisor: Yaakov Stern	2014-2017
PhD (Psychology)	Columbia University Advisor: Edward E. Smith Committee: Kevin Ochsner, Daphna Shohamy, Dean Mobbs, BJ Casey, Gerard Bruder	2014
MPhil (Psychology)	Columbia University	2012
MA (Psychology)	Columbia University	2010
MA (Cognitive Psychology)	University of California, Los Angeles Advisors: Alan Castel, Barbara Knowlton, Robert Bjork	2008
BA (Philosophy, French)	Columbia University	2002

PEER REVIEWED ARTICLES (Mentee/student co-authors are underlined>)

1. **Eich, T. S.**, Gazes, Y., Langfield, C., Habeck, C., & Stern, Y. (In Prep). Common and distinct neural networks are associated with age-related local costs in task switching.
2. **Eich, T. S.**, Kelm, L., Gazes, Y. & Stern, Y. (In Prep). Brain network integrity trumps age: a latent class analysis of working memory difficulty in younger and older adults.

3. **Eich, T. S.**, Lau, P. & Anderson, M. C. (Under Review). Cortical thinning in the right Inferior Frontal Gyrus mediates age- related performance differences on an item-method directed forgetting task. *Neurobiology of Aging*.
4. **Balado, J.**, Igwe, K., Buyukturkoglu, K., Guo, J., Brickman, A., Irimia, A. & **Eich, T. S** (Under review). Lower hippocampal γ -aminobutyric acid is associated with poorer episodic memory in older women: A pilot study. *Frontiers in Psychiatry*, Special Issue: "Magnetic Resonance Spectroscopy of GABA and Glutamate in Mental Health"
5. **Siegel, A.** & **Eich, T.S** (Under review). Age, Sex, and Inhibitory Control: Identifying A Specific Impairment in Memorial, But Not Perceptual, Inhibition in Older Women. *Psychology and Aging*.
6. **Balado, J.** & **Eich, T. S.** (Under review). GABAergic dysfunction, neural network hyperactivity and memory impairments in human aging and Alzheimer's Disease. *Seminars in Cell and Developmental Biology*. Special Issue: "Aging in the nervous system"
7. Metcalfe, J., **Eich, T. S.**, Towner, E. & Vuorre, M. (Under review). High confidence errors are associated with increased curiosity even when people are not told that they are wrong. *Journal of Experimental Psychology: General*.
8. Metcalfe, J., Schwartz, B. & **Eich, T.S.** (2020) Epistemic Curiosity and the Region of Proximal Learning. *Current Opinion in Behavioral Sciences*.
9. **Eich, T.S.**, Parker, D., Gazes, Y., Razlighi, Q., Habeck, C., & Stern, Y. (2020). Towards an ontology of cognitive processes and their neural substrates: A structural equation modelling approach. *PLOSOne*.
10. Habeck, C., **Eich, T.S.**, Gu, Y & Stern, Y. (2020). Occupational Patterns of Structural Brain Health: Independent Contributions Beyond Age, Gender, Intelligence, and Education. *Frontiers Human Neuroscience*.
11. **Eich, T. S.**, Tsapanou, A., & Stern, Y. (2019). When time's arrow doesn't bend: *APOE- ϵ 4* influences episodic memory before old age. *Neuropsychologia*. Special Issue: "Endel Tulving"
12. Metcalfe, J. & **Eich, T.S.** (2019). Memory and truth: correcting errors with true feedback versus overwriting correct answers with errors. *Cognitive Research: Principles and Implications*, 4(1), 4.
13. Habeck, C., **Eich, T.S.**, Razlighi, Q., Gazes, Y. & Stern, Y. (2018). Reference ability neural networks and behavioral performance across the adult life span. *NeuroImage*. 172, 51-63.
14. **Eich, T. S.** Razlighi, Q. & Stern, Y. (2017). Perceptual and memory inhibition are associated with region-specific, doubly dissociable patterns of cortical thinning in clinically healthy older adults. *Behavioral Neuroscience*, 131(3), 220-5.
15. Razlighi, Q., Oh, H., Habeck, C., O'Shea, D., Gazes, Y., **Eich, T.**, Parker, D., Lee, S. & Stern, Y. (2017). Dynamic patterns of brain structure-behavior correlation across the life span. *Cerebral Cortex*. 27(7), 3586-99.
16. **Eich, T. S.**, MacKay-Brandt, A., Stern, Y & Gopher, D. (2016). Age-based differences in task switching performance costs are moderated by dissociable executive control demands. *Journal of Gerontology B: Psychological Sciences*, 73 (6), 954-63.
17. **Eich, T. S.** Parker, D., Liu, D., Oh, H., Razlighi, Q., Gazes, Y., Habeck, C. & Stern, Y. (2016). Functional brain and age-related changes associated with congruency in task switching. *Neuropsychologia*, 91, 211-21.

18. **Eich, T. S.** & Castel, A. D. (2016). The cognitive control of emotional versus value-based information in younger and older adults. *Psychology & Aging*.
19. **Eich, T. S.**, Gonçalves, B., Razlighi, Q., Nee, D. E, Jonides, J. & Stern, Y. (2016). Attentional and memorial inhibitory selection mechanisms in clinically healthy older and younger adults. *Journal of Gerontology B: Psychological Sciences*, 73(4), 612-21.
20. Tsapanou, A., Gu, Y., O'Shea, D., **Eich, T.**, Tang, M-X., Schupf, N., Manly, J., Scarmeas, N. & Stern, Y. (2016). Daytime somnolence as an early sign of cognitive decline in a community-based study of elderly. *International Journal of Geriatric Psychiatry*, 31 (3), 247-55.
21. **Eich, T. S.**, Rakitin, B.C. & Stern, Y. (2015). Response-conflict moderates the cognitive control of episodic and contextual load in older adults. *Journal of Gerontology B: Psychological Sciences*, 71 (6), 995-1003.
22. **Eich, T. S.**, Murayama, K., Castel, A. & Knowlton, B. (2014). The Dynamic Effects of Age-Related Stereotype Threat on Explicit and Implicit Memory Performance in Older Adults. *Social Cognition*, 32 (6), 559-70.
23. Ahmari, S., **Eich, T.**, Cebenoan, D., Smith, E. E. & Simpson, B. H. (2014) Assessing neurocognitive function in psychiatric disorders: a roadmap for enhancing consensus. *Neurobiology of Learning and Memory*, 115, 10-20. PMID: 24994503
24. **Eich, T. S.**, Nee, D., Insel, K., Malapani, C. & Smith, E. E. (2014). Neural correlates of impaired control over working memory in Schizophrenia. *Biological Psychiatry*, 76(2), 146-53. PMID: 24239131
25. **Eich, T. S.** & Smith, E. E. (2014). Schizophrenia and emotional rubbernecking. *Cognitive, Affective & Behavioral Neuroscience*, Special Issue: "Edward Smith", 14(1), 202-8. PMID: 24150903, PMCID: PMC4581430
26. Metcalfe, J, **Eich, T. S.** & Miele, D. (2013). Metacognition of agency: Proximal action and distal outcome. *Experimental Brain Research*, 229, 485-96. PMID: 23358706
27. **Eich, T. S.**, Metcalfe, J. & Stern, Y. (2012). The hypercorrection effect in younger and older adults. *Aging, Neuropsychology, and Cognition*, 20, 511-21. PMID: 23241028; PMCID: PMC3604148
28. **Eich, T. S.** & Smith, E. E. (2012). Cognitive Neuroscience. *Oxford Bibliographies Online*. DOI: 10.1093/OBO/9780199828340-0015
29. Smith, E. E., **Eich, T. S.**, Cebenoan, D. & Malapani, C. (2011). Intact and impaired cognitive control processes in schizophrenia. *Schizophrenia Research*, 126, 132-7. PMID: 21211945
30. Metcalfe, J., **Eich, T. S.**, & Castel, A. D. (2010) Metacognition of agency across the lifespan: Similar and differential effects in college students, older adults and children. *Cognition*, 116(2), 267- 282. PMID: 20570251
31. Kornell, N., Castel, A. D., **Eich, T. S.**, & Bjork, R. A. (2010). Spacing as the friend of both memory and induction in younger and older adults. *Psychology and Aging*, 25, 498-503. PMID: 20545435
32. **Eich, T. S.** & Metcalfe, J. (2009). Effects of the stress of marathon running on implicit and explicit memory. *Psychological Bulletin & Review*, 16, 475-479. PMID: 19451371

AWARDS, HONORS & FELLOWSHIPS

2017	Fellow, Psychonomic Society
2016	NIMH Summer Research Institute Fellowship in Geriatric Mental Health, Weill Cornell Medical College
2015	Rising Star, Association for Psychological Science
2014	Association for Psychological Science Travel Award
2008-2012	Faculty Fellow, Columbia University
2002	BA <i>cum laude</i>
1999-2002	Dean's Honor List, Columbia University

FUNDING / RESEARCH SUPPORT

2017-2022	National Institute on Aging (NIH), Pathway to Independence Award, K99/R00 (NIH NIA 1K99AG055684-01). Initial submission score=10. Total Award: \$1,006,901.00 USD
2015	fMRI Pilot Award, Taub Institute for research on Alzheimer's Disease and the Aging Brain, \$20,000 USD
2014	Dr. Rita Rudel Prize for Research in Developmental Neuropsychology, \$10,000 USD
2014-2017	Ruth L. Kirshcstein National Research Service Award (NIH) T32 (MH020004) Postdoctoral Fellowship in Geriatric Psychiatry, Total Award: \$136,500 USD.
2012-2013	Richard Christie Memorial Fellowship, Columbia University
2007	Summer Graduate Research Mentorship Award, UCLA
2006-2008	University Graduate Fellowship, UCLA
2006-2007	Edwin W. Pauley Distinguished Fellowship, UCLA, Total Award \$40,000 USD (accepted \$20,000).

TEACHING**Instructor: USC Davis School of Gerontology**

- Neuroaffective Disorders of Aging (Gerontology 415): Fall 2020
- Advanced Overview of Neurosciences II (NSCI 525): Spring 2021
- A Journey into the Mind (Gerontology 315): Spring 2021

Instructor: Columbia University Psychology Department

- Cognitive Neuroscience of Aging (Psychology G4222): Fall 2016, 2017
- Cognition: Mind and Brain (Psychology 2215): Spring 2012

Teaching Assistant: Columbia University Psychology Department

- Mind, Brain and Behavior (Psychology 1010): Fall 2012
- The Science of Psychology (Psychology 1001): Fall 2010 and 2013
- Cognition: Mind & Brain (Psychology 2215): Spring 2010, 2009, 2005

Teaching Assistant: UCLA Psychology Department

- Cognitive Psychology (Psychology 120A): Spring 2008
Responsible for 4 Lab Sections (25 students each)
- Social Psychology Laboratory (Psychology 136B): Winter 2008
- Cognitive Psychology Laboratory (Psychology 121): Fall 2007

SELECTED INVITED TALKS

November, 2019	<i>The role of inhibition in cognitive aging.</i> USC Department of Psychology Colloquium Series.
December, 2017	Cognitive Aging: Mechanisms of Memory Impairment. Department of Psychology Colloquium Series, Brandeis University
April, 2016	<i>Age-based dissociations in neural networks associated with task-switching based conflict resolution.</i> Kavli Neuro Technology Center Neurolunch Seminar.
June, 2015	<i>Evidence of preserved and deficient memorial abilities in older adults.</i> The Taub Institute, Department of Neurology Summer Program, Columbia University.
May, 2015	<i>Cognitive control in healthy older adults at different points in the memory processing stream.</i> Cognitive Neuroscience Division Seminar, Department of Neurology, Columbia Univ.
September, 2014	<i>Cognitive control in older adults.</i> Cognitive Neuroscience Division Seminar, Department of Neurology, Columbia University.
February, 2014	<i>Cognitive control in schizophrenia and Alzheimer's Disease.</i> Cognitive Neuroscience Division Seminar, Department of Neurology, Columbia University.
December, 2013	<i>Optimizing learning in older adults.</i> Department of Psychiatry, Westchester Division, Weill Cornell Medical College.
December, 2013	<i>Working memory deficits in schizophrenia.</i> Cognitive Neuroscience Divisional Meeting, New York State Psychiatric Institute.

PROFESSIONAL AFFILIATIONS/SERVICE

- Cognitive Neuroscience Society
- Society for Neuroscience
- Society for Biological Psychiatry
- Women in Cognitive Science
- Association for Psychological Science
- Psychonomic Society
- American Psychological Association, Division 3, Division 20

- Columbia University Graduate Student Advisory Council (2009-2011)
- Columbia University Student Health Advisory Committee (2009-2010)
- USC Tenure and Tenure Track Senate Committee (2020-)

AD HOC REVIEWER

Aging, Neuropsychology, and Cognition
Asian Journal of Social Psychology
Cognitive, Affective, and Behavioral Neuroscience
European Psychiatry
Journal of Geriatric Psychiatry and Neurology
Journal of Gerontology B: Psychological Sciences
Journal of the International Neuropsychological Society
Journal of Gerontology: Psychological Sciences
Journal of Neuroscience
International Journal of Geriatric Psychiatric
Nature Neuroscience
Neuropsychologia
Neurorehabilitation and Neural Repair
PLOS
Psychiatry Research
Psychological Science
Psychology & Aging
Quarterly Journal of Experimental Psychology
Schizophrenia Research
Scientific Reports
SAGE Publishers