Travis Meyer PhD

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Degrees

2008 Ph.D. Neuroscience, Wake Forest University Baptist Medical Center,

Winston-Salem, North Carolina (Dr. Christos Constantinidis)
Thesis: Effects of Training on the Functional Organization of the

Prefrontal Cortex

2002 B.S. Psychobiology, Florida Atlantic University, Boca Raton, Florida

Departmental Honors Advisor (Dr. Steven L. Bressler)

Thesis: Anticipatory Cortical Activity in the Macaque Monkey

Research Experience

Present appointment

2015- Research Associate, Laboratory of Nicole Rust

Department of Psychology

University of Pennsylvania, Philadelphia, PA

Previous appointments

2008-2015 Postdoctoral Fellow, Laboratory of Carl R. Olson

Center for the Neural Basis of Cognition Carnegie Mellon University, Pittsburgh, PA

2002-2008 Graduate Student, Laboratory of Christos Constantinidis

Neuroscience Program

Wake Forest Baptist Medical Center, Winston Salem, NC

2000-2002 Research Assistant, Center for Complex Systems and Brain

Sciences, Florida Atlantic University, Boca Raton Fl

Laboratory of Steven L. Bressler

Honors and Awards

Individual Postdoctoral Recipient, Institutional NRSA, 2008 Student Travel Award, Elsevier/Vision Research, Vision Sciences Society, 2008 Norman M. Sulkin Award in Neuroanatomy, WFU School of Medicine, 2007 Student Travel Award, Fine Science Tools, WFU School of Medicine, 2005 Individual Predoctoral Recipient, Institutional NRSA, 2003

Competitive Grants

2008-2010 Institutional National Research Service Award

National Institute of Neurological Disorders and Stroke

5-T32-NS07391

2003-2005 Institutional National Research Service Award

National Institute on Deafness and Other Communication Disorders

T32-DC00057

Publications

Journal Articles

Ramachandran S, <u>Meyer T</u>, Olson CR. Prediction Suppression in Monkey Inferotemporal Cortex Depends on the Conditional Probability between Images. **Journal of Neurophysiology** (In Press)

Meyer T, Walker C, Cho RY, Olson CR. Image Familiarization Sharpens Response Dynamics of Neurons in Inferotemporal Cortex. **Nature Neuroscience** Oct, 17(10):1388-94 (2014)

Meyer T, Ramachandran S, Olson CR. Statistical Learning of Serial Visual Transitions by Neurons in Monkey Inferotemporal Cortex. **Journal of Neuroscience** Jul 9; 34(28):9332-7 (2014)

Katsuki F, Qi KL, <u>Meyer T</u>, Kostelic PM, Salinas E, Constantinidis C. Differences in Intrinsic Functional Organization Between Dorsolateral Prefrontal and Posterior Parietal Cortex. **Cerebral Cortex** Mar 31 (2013)

Qi XL, <u>Meyer T</u>, Stanfrod TR, Constantinidis C. Neural Correlates of a Decision Variable Before Learning to Perform a Match/Non-Match Task. **Journal of Neuroscience** May2; 32(18):6161-6168 (2012)

Meyer T, Olson CR. Statistical Learning of Visual Transitions in Monkey Inferotemporal Cortex. **Proceedings of the National Academy of Sciences** Nov 29; 108 (48) 19401-19406 (2011)

Qi XL, <u>Meyer T</u>, Constantinidis C. Changes in prefrontal neuronal selectivity after learning to perform a working memory task. **Cerebral Cortex** Dec; 21(12):2722-32 (2011)

Meyer T, Qi XL, Constantinidis C. Stimulus selectivity in dorsal and ventral prefrontal cortex after training in working memory tasks. **Journal of Neuroscience** Apr 27; 31:17 (2011)

Qi XL, Katsuki F, <u>Meyer T</u>, Rawley JB, Zhou X, Douglas KL, Constantinidis C. Comparison of neural activity related to working memory in primate

- dorsolateral prefrontal and posterior parietal cortex. **Frontiers in Systems Neuroscience.** May 14;4:12 (2010)
- Meyer T, Qi XL, Constantinidis C. Persistent discharges in the prefrontal cortex of monkeys naïve to working memory tasks. **Cerebral Cortex** Sep; 17:I70-I76 (2007)
- <u>Meyer T</u>, Constantinidis C. A software solution for the control of visual behavioral experimentation. **Journal of Neuroscience Methods** 142(1):27-34 (2005)

Abstracts

- <u>T. Meyer</u>, N. C. Rust. Signals in IT reflect visual familiarity memories acquired after single image viewings. **Cosyne** (2016)
- <u>T. Meyer</u>, Ramachandran S., C. R. Olson. Divisive normalization in monkey inferotemoral cortex is biased in favor of familiar images. **Society for Neuroscience** Annual Meeting (2015)
- <u>T. Meyer</u>, Ramachandran S., C. R. Olson. Inferotemporal Neurons Respond Distinctively to Familiar Images Even at Novel Locations. **Society for Neuroscience** Annual Meeting (2013)
- <u>T. Meyer</u>, Ramachandran S., C. R. Olson. Temporal constraints on the statistical learning of image sequences in inferotemporal cortex. **Society for Neuroscience** Annual Meeting (2012)
- <u>T. Meyer</u>, C. R. Olson. Making images familiar sharpens response dynamics in monkey inferotemporal cortex. **Society for Neuroscience** Annual Meeting (2011)
- Qi XL, <u>T. Meyer</u>, T. R. Stanford, C. Constantinidis. Neural correlates of a spatial decision before and after training. **Society for Neuroscience** Annual Meeting (2011)
- <u>T. Meyer</u>, C. R. Olson. Inferotemporal neurons signal perceptual prediction errors. **Society for Neuroscience** Annual Meeting (2010)
- Qi XL, <u>T. Meyer</u>, C. Constantinidis. Effects of training to perform a working memory task on regular spiking and fast spiking neurons in the dorsolateral prefrontal cortex. **Society for Neuroscience** Annual Meeting (2009)
- <u>T. Meyer</u>, C. Constantinidis. Effects of training on the organization of spatial and feature visual responses in the lateral prefrontal cortex. **Vision Science Society** Annual Meeting (2008)
- <u>T. Meyer</u>, X. Qi, T. R. Stanford, C. Constantinidis. Training does not decrease domain specificity for features and locations in monkey prefrontal cortex. **Society for Neuroscience** Annual Meeting (2007)

<u>T. Meyer</u>, X. Qi, T. R. Stanford, C. Constantinidis. Functional organization of monkey prefrontal cortex before training in a memory task. **Society for Neuroscience** Annual Meeting (2006)

J. B. Rawley, R. W. West, <u>T. Meyer</u>, C. Constantinidis. Influence of reference frame of attention on neural responses in primate posterior parietal cortex. **Society for Neuroscience** Annual Meeting (2006)

<u>T. Meyer</u>, F. C. Joelving, T. R. Stanford, C. Constantinidis. Neural representation of locations and features in the prefrontal cortex of monkeys prior to training in memory tasks. **Society for Neuroscience** Annual Meeting (2005)

I. Opris, <u>T. Meyer</u>, C. Constantinidis. Dynamic interactions in dorsolateral prefrontal cortex of rhesus monkeys during a visual spatial decision making Task. **Society for Neuroscience** Annual Meeting (2004)

Professional Memberships

American Association for the Advancement of Science, 2000-present Society for Neuroscience, 2002-present Union of Concerned Scientists, 2002-present

Editorial Services

Ad hoc Reviewer for:

Journal of Neuroscience Journal of Neurophysiology Cerebral Cortex PLOS ONE

Teaching Experience

NEU 200 Introduction to Neuroscience (undergraduate course)

Department of Biology, Wake Forest University

Semesters taught: fall 2006, 2007

Role: Instructor for the Neuroanatomy section; designed, taught, and graded.

NEU 201 Neuroscience Laboratory (undergraduate lab)

Department of Biology, Wake Forest University

Semesters taught: fall 2006, 2007

Role: Instructor for the Neuroscience Lab; designed, taught, and graded.

Workshops

Creating Individual Development Plans

Society for Neuroscience Participation year: 2014

Goal: Strategies on how an IDP can be used effectively in career and mentoring.

Survival Skills and Ethics

University of Pittsburgh Medical Center

Participation year: 2009-2010

Goal: To aid in the development of writing grants and research articles.

Teaching Advancement Program

Wake forest Medical School Participation year: 2005-2006

Goal: To aid in the personal development of medical educators.