

## Curriculum Vitae Thomas J. Palmeri

### Address

Department of Psychology  
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### University Experience

Associate Professor, Department of Psychology, Vanderbilt University, 2002-present  
Director of Graduate Studies, Department of Psychology, Vanderbilt University, 2006-present  
Executive Committee Member of the Temporal Dynamics of Learning Center, 2005-present  
Associate Director, Learning Sciences Institute, Vanderbilt University, 2003-2007  
Associate Professor, Neuroscience Graduate Program, Vanderbilt University, 2002-present  
Investigator, Vanderbilt Center for Integrative and Cognitive Neuroscience, 2000-present  
Assistant Professor, Department of Psychology, Vanderbilt University, 1995-2002  
Associate Instructor, Department of Psychology, Indiana University, 1993  
Graduate Research Assistant, Department of Psychology, Indiana University, 1990-1995  
Research Programmer, Robotics Institute, Computer Vision Lab, Carnegie Mellon, 1986-1987

### Education

NSF Workshop on Mathematical Psychology, University of California at Irvine, 1997  
Indiana University, Ph.D. in Cognitive Psychology (Cognitive Science Minor), 1995  
Carnegie Mellon University, B.S. in Cognitive Science with University Honors (highest honor), 1987

### Research Interests

Categorization and Concept Formation; Perceptual Expertise; Object Recognition; Human Learning and Memory; Automaticity; Similarity; Mathematical, Computational, and Neural Modeling

### Honors and Awards

APA Division of Experimental Psychology New Investigator Award, 1998  
Member of *Gesellschaft für Unendliche Versuche*, 1997-2005  
Irving J. Saltzman Award for Outstanding Graduate Achievement, Indiana University, 1996  
J.R. Kantor Fellow Graduate Award, Indiana University, 1995  
Indiana University Cognitive Science Fellowship, 1990  
B.S. with University Honors (highest honor conferred), Carnegie Mellon University, 1987  
Senior University Scholar, Carnegie Mellon University, 1987  
Wayne Rawley Merit Scholarship (2 years), Carnegie Mellon University, 1985  
Carnegie Institute of Technology College Scholar, Carnegie Mellon University, 1984

University President's Award for Top 100 Student, Carnegie Mellon University, 1984

### **Editorial Service**

Grant Reviewer for:

*Air Force Office of Scientific Research (external), The Israel Science Foundation (external), Katholieke Universiteit Leuven (external), Louisiana Board of Regents (external), National Science Foundation (external), New York University Office of Sponsored Programs (external), NIMH Conte Center Grants (panel)*

Editorial Board Member:

*Journal of Experimental Psychology: Learning, Memory, and Cognition (1999-2000)*

Ad Hoc Reviewer for:

*Australian Journal of Psychology, Behavioral and Brain Sciences, Brain Research, Cahiers de Psychologie Cognitive, Cerebral Cortex, Cognition, CABN, Cognitive Neuropsychology, Cognitive Psychology, Cognitive Science, Current Biology, European Journal of Cognitive Psychology, Journal of Experimental Psychology: Human Perception and Performance, Journal of Experimental Psychology: General, Journal of Experimental Psychology: Learning, Memory, and Cognition, Journal of General Psychology, Journal of Mathematical Psychology, Journal of Memory and Language, Journal of Neuroscience, Memory & Cognition, Neuropsychologia, Perception & Psychophysics, Psychological Review, Psychological Science, Psychonomic Bulletin & Review, Quarterly Journal of Experimental Psychology, TICS, Vision Research*

Book Reviewer for:

*Blackwell Publishers, Oxford University Press, Sage Publishing, Oxford University Press, Springer, Wadsworth Publishing Company, Worth Publishers*

### **Professional Service**

Local Nashville Liaison and Program Committee for the 29<sup>th</sup> Annual Meeting of the Cognitive Science Society, Nashville, 2006

Board of GUVernors of *Gesellschaft für Unendliche Versuche*, 1999-2005

Co-organizer of the 31<sup>st</sup> Annual Meeting of the Society for Mathematical Psychology, Department of Psychology, Vanderbilt University, 1998

Panel member on *Mentoring and Teaching Research Ethics*, Indiana University, 1995

### **College and University Service**

Vanderbilt Graduate School Excalibur User's Group, 2008-present

Committee on Graduate Education, College of Arts and Science, 2008-present

ACCRC Faculty Advisory Group, 2007-present

Graduate Faculty Delegate Assembly, 2006-2008

Vanderbilt University Medical Center Basic Science Planning Committee, 2007-2008

Associate Director, Learning Sciences Institute, 2003-2007

Learning Sciences Institute Advisory Board (ex officio), 2005-2007

Undergraduate Premajor Advisor, 2005-2007

GradSTEP Panelist, 2007

ACCRC Study Group, 2006-2007

College of Arts and Science Junior Ad Hoc Review Committee, 2003-2004

## Departmental Service

Director of Graduate Studies, Department of Psychology, 2006-present  
 Chair of Cognition and Cognitive Neuroscience Faculty Search Committee, 2007-2008  
 Head of Cognition and Cognitive Neuroscience Area Group, 2004, 2008  
 Committee to decide the Distinguished Alumnus Lecture award, 2007  
 Psychological Sciences Web Site Development Committee, 2004-2006  
 Departmental Ad-Hoc Pretenure Review Committee, 2005, 2006  
 Departmental Ad-Hoc Tenure Review Committee, 2003  
 Graduate Studies Committee, 2004, 2006-present  
 Chair of ERP Faculty Search Committee, 2003-2004  
 Departmental Faculty-Staff Campaign Coordinator, 2003  
 Undergraduate Studies Committee, 1997-2006  
 Psychology Department Web Site Coordinator, 1996-2000, 2003-2007  
 Organizer of Cognitive Brown Bag Seminar, 1996-1998

## Grants

*Adoption of the iRODS Protocol for Permissions and Policy in a Logistical Networking Based Solution for Data Intensive Collaboration within the TDLC*, National Science Foundation, \$114,291, TDLC collaborator (P. Sheldon PI).

*Temporal Dynamics of Learning Center*, SBE-0542013, National Science Foundation, \$15,500,000, PI on Vanderbilt subcontract (Year 1: \$236,749 total, Year 2: \$455,559 total, Year 3: \$877,556, Years 4-5 est. \$850,000 per year total), (G. Cottrell, Center PI), 10/2006-9/2011.

*Research Network on Expertise in Object Perception*, James S. McDonnell Foundation, \$1,518,481, co-PI (I. Gauthier PI), 01/2006-12/2008.

*Understanding Conceptual and Cultural Change: The Role of Expertise and Flexibility in Folk Medicine*, HSD-DHBS05, National Science Foundation, \$646,075, co-PI (N. Ross PI), 10/2005-9/2008.

*National Research Service Award (NRSA) Postdoctoral Fellowship for Leanne Boucher*, National Eye Institute, \$42,000, co-Sponsor with Jeffrey Schall, 03/2005-02/2008.

*CRCNS: Stochastic Models of Executive Control in Monkeys and Humans*, BCS-0218507. National Science Foundation, \$756,181, co-PI (G.D. Logan PI). 05/2003-04/2007.

*Small Grant for the Purchase of Equipment for Transmagnetic Stimulation (TMS)*. Funded through NIH GCRC Grant M01 RR00095, \$9100, recipient, 10/2003.

*Incorporating a Personal Response System into the Undergraduate Curriculum*. The Vanderbilt University College of Arts and Science Venture Fund, \$19,614, PI, 06/2002-05/2004.

*Research Network on Expertise in Object Perception*, James S. McDonnell Foundation, \$1,509,154, co-PI (I. Gauthier PI), 01/2001-12/2005.

*Training in Fundamental Neuroscience*, NIH 5T32 MH64913, National Institute of Mental Health. Training Faculty Member (E. Sanders-Bush, PI), 07/2001-06/2011.

*Interdisciplinary Collaborative Consortium on the Cognitive Neuroscience of Category Learning*. James S. McDonnell Foundation, \$310,000, co-Investigator (M. Gluck PI), 09/2002-08/2005.

*fMRI Studies of Perceptual Categorization*. Vanderbilt University Discovery Grants Program, \$48,127, PI, 05/2001-12/2005.

- Functional Brain Imaging of Cognitive Processes: Studies of “Perceptual” and “Probabilistic” Category Learning.* Vanderbilt GCRC Project #1054 funded through NIH GCRC Grant M01 RR00095, approximately \$10,000 (20 fMRI sessions), PI, 07/2001-06/2003.
- Rules and Instances in Perceptual Categorization,* R01 MH61370. National Institute of Mental Health. \$258,742, PI, 06/2000-05/2004.
- Perceptual Categorization and Memory,* BCS-9910756. National Science Foundation. \$108,387, PI, 05/2000-04/2004.
- Acquisition of Instrumentation for Cognitive Neuroscience Brain Imaging (Major Research Instrumentation Grant),* NSF 0079579.Y. National Science Foundation, \$234,772. Investigator (R. Blake PI), 09/2000-08/2002.
- An Exemplar-Based Random Walk Model of Visual Attention.* Vanderbilt University Research Council Direct Research Support Grant. \$2,465, PI, 07/1998-06/1999.
- Vanderbilt University Research Council Small Grants Award for travel to the Interdisciplinary Workshop on Similarity and Categorisation,* Edinburgh, Scotland. \$1,000 travel support, PI, 11/1997.
- Speeded Perceptual Categorization.* Vanderbilt University Research Council Direct Research Support Grant. \$1,425, PI, 07/1997-06/1998.
- Perceptual Categorization and Automaticity.* Vanderbilt University Research Council Direct Research Support Grant. \$4,303, PI, 07/1996-06/1997.

## Publications

- Mack, M.L., & **Palmeri, T.J.** (2008). Dissociating detection and categorization: As soon as you know it is there you don't necessarily know what it is. Manuscript in preparation.
- Palmeri, T.J.**, & Mack, M.L. (2008). Automaticity. *Invited peer-reviewed manuscript in preparation to appear in WIREs: Cognitive Science.*
- Mack, M.L., Wong, A.C.-N., Gauthier, I., Tanaka, J.W., **Palmeri, T.J.** (2008). Time-course of visual object categorization: Fastest does not necessarily mean first. *Manuscript in preparation.*
- Wong, A.C.-N., **Palmeri, T.J.**, & Gauthier I. (2008). Conditions for face-like expertise with objects: Becoming a Ziggerin expert – but which type? *Manuscript under review.*
- Pouget, P., Logan, G.D., **Palmeri, T.J.**, Boucher, L., & Schall, J.D. (2008). Neural basis of adaptive response time adjustment. *Manuscript in preparation.*
- Boucher, L., Logan, G.D., **Palmeri, T.J.**, & Schall, J.D. (2008). Stopping and stepping saccades: Further evidence for cognitive control of eye movements. *Manuscript under revision.*
- Palmeri, T.J.**, & Cottrell, G. (2008). Modeling perceptual expertise. To appear in D. Bub, M. Tarr, & I. Gauthier (Eds.), *Perceptual Expertise: Bridging Brain and Behavior.* Oxford University Press.
- Mack, M.L., Richler, J.J., **Palmeri, T.J.**, Gauthier, I. (in press). Categorization. To appear in G.G. Berntson & J.T. Cacioppo (Eds.), *Handbook of Neuroscience for the Behavioral Sciences.*
- Cheung, O.S., Richler, J.J., **Palmeri, T.J.**, & Gauthier, I. (2008). Revisiting the role of spatial frequencies in the holistic processing of faces. *Journal of Experimental Psychology: Human Perception and Performance.*
- Mack, M.L., Gauthier, I., Sadr, J., & **Palmeri, T.J.** (2008). Object detection and basic-level categorization: Sometimes you know it is there before you know what it is. *Psychonomic Bulletin & Review.*
- Richler, J.J., Gauthier, I., Wenger, M., & **Palmeri, T.J.** (2008). Holistic processing of faces. *Journal of Experimental Psychology: Learning, Memory, and Cognition.*

- Palmeri, T.J.**, & Tarr (2008). Object recognition and long-term visual memory for objects. In S. Luck & A. Hollingsworth (Eds.), *Visual Memory*. Oxford University Press.
- Richler, J.J., Mack, M.L., Gauthier, I., **Palmeri, T.J.** (2007). Distinguishing between perceptual and decisional sources of holism in face processing. *Proceedings of the Twenty-Ninth Annual Meeting of the Cognitive Science Society*.
- Mack, M.L., Wong, A.C.-N., Gauthier, I., Tanaka, J.W., & **Palmeri, T.J.** (2007). Unraveling the time-course of perceptual categorization: Does fastest mean first? *Proceedings of the Twenty-Ninth Annual Meeting of the Cognitive Science Society*.
- Camalier, C.R., Gotler, A., Murthy, A., Thompson, K.G., Logan, G.D., **Palmeri, T.J.**, Schall, J.D. (2007). Dynamics of saccade target selection: Race model analysis of double step and search step saccade production in human and macaque. *Vision Research*.
- Boucher, L., **Palmeri, T.J.**, Logan, G.D., Schall, J.D. (2007). Inhibitory control in mind and brain: An interactive race model of countermanding saccades. *Psychological Review*.
- Boucher, L., Stuphorn, V., Logan, G.D., Schall, J.D., & **Palmeri, T.J.** (2007). Stopping eye and hand movements: Are the processes independent? *Perception & Psychophysics*, 69, 785-801.
- Luhmann, C., Ahn, W.-K., & **Palmeri, T.J.** (2006). Theory-based categorization under speeded conditions. *Memory & Cognition*.
- Kim, C.-Y., Blake, R., & **Palmeri, T.J.** (2005). Perceptual interaction between real and synesthetic colors. *Cortex*.
- Palmeri, T.J.**, Wong, A.C.-N., & Gauthier, I. (2004). Computational approaches to the development of perceptual expertise. *Trends in Cognitive Science*, 8, 378-386.
- Palmeri, T.J.**, & Gauthier, I. (2004). Visual object understanding. *Nature Reviews Neuroscience*, 5, 291-303.
- Blake, R.B., **Palmeri, T.J.**, Marois, R., & Kim, C.-Y. (2003). On the perceptual reality of synesthetic color. In L. Robertson & N. Sagiv (Eds.), *Attention on Synesthesia: Cognition, Development, and Neurobiology*.
- Johansen, M.K., & **Palmeri, T.J.** (2002). Are there representational shifts during category learning? *Cognitive Psychology*, 45, 482-553.
- Viken, R.J., Treat, T.A., Nosofsky, R.M., McFall, R.M., & **Palmeri, T.J.** (2002). Modeling individual differences in perceptual and attentional processes related to bulimic symptoms. *Journal of Abnormal Psychology*, 111, 598-609.
- Palmeri, T.J.**, & Noelle, D. (2002). Concept learning. In M.A. Arbib (Ed.), *The Handbook of Brain Theory and Neural Networks*, MIT Press.
- Palmeri, T.J.** (2002). Automaticity. In L. Nadel et al. (Eds.), *Encyclopedia of Cognitive Science* (pp. 390-401), Nature Publishing Group, London.
- Luhmann, C.C., Ahn, W.-K., & **Palmeri, T.J.** (2002). Theories and similarity: Categorization under speeded conditions. *Proceedings of the Twenty-Fourth Annual Meeting of the Cognitive Science Society*, 590-595.
- Palmeri, T.J.**, Blake, R.B., & Marois, R. (2002). What is synesthesia? *Scientific American On-Line*.
- Palmeri, T.J.**, & Flanery, M.A. (2002). Memory systems and perceptual categorization. In B.H. Ross (Ed.), *The Psychology of Learning and Motivation (Volume 41)*, Academic Press.
- Gauthier, I., & **Palmeri, T.J.** (2002). Visual neurons: Categorization-based selectivity. *Current Biology*, 12, R282-R284.

- Palmeri, T.J.**, Blake, R.B., Marois, R., Flanery, M.A., & Whetsell, W.O. (2002). The perceptual reality of synesthetic color. *Proceedings of the National Academy of Sciences*, 99, 4127-4131.
- Flanery, M.A., **Palmeri, T.J.**, & Schaper, B.L. (2001). Investigating dissociations between perceptual categorization and explicit memory. *Proceedings of the Twenty-Third Annual Meeting of the Cognitive Science Society*, Edinburgh, Scotland.
- Palmeri, T.J.** (2001). The time course of perceptual categorization. In M. Ramscar & U. Hahn (Eds.), *Similarity and Categorization* (pp. 193-224), Oxford University Press.
- Palmeri, T.J.**, & Flanery, M.A. (2001). Prototype abstraction in category learning? *Proceedings of the Twenty-Third Annual Meeting of the Cognitive Science Society*, Edinburgh, Scotland.
- Palmeri, T.J.**, & Nosofsky, R.M. (2001). Central tendencies, extreme points, and prototype enhancement effects in ill-defined perceptual categorization. *The Quarterly Journal of Experimental Psychology*, 54, 197-235.
- Palmeri, T.J.**, & Blalock, C. (2000). The role of background knowledge in speeded perceptual categorization. *Cognition*, 77, B45-B57.
- Palmeri, T.J.** (1999a). Learning hierarchically structured categories: A comparison of category learning models. *Psychonomic Bulletin & Review*, 6, 495-503.
- Palmeri, T.J.** (1999b). Theories of automaticity and the power law of practice. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 25, 543-551.
- Palmeri, T.J.**, & Blalock, C. (1999). The time-course of the use of background knowledge in perceptual categorization. In M. Hahn & S.C. Stoness (Eds.), *Proceedings of the Twenty-first Annual Meeting of the Cognitive Science Society* (pp. 519-524), Lawrence Erlbaum Associates: Mahwah, NJ.
- Palmeri, T.J.**, & Flanery, M.A. (1999a). Learning about categories in the absence of training: Profound amnesia and the relationship between perceptual categorization and recognition memory. *Psychological Science*, 10, 526-530.
- Palmeri, T.J.**, & Flanery, M.A. (1999b). Investigating the relationship between perceptual categorization and recognition memory through induced profound amnesia. In M. Hahn & S.C. Stoness (Eds.), *Proceedings of the Twenty-first Annual Meeting of the Cognitive Science Society* (pp. 513-518), Lawrence Erlbaum Associates: Mahwah, NJ.
- Nosofsky, R.M., & **Palmeri, T.J.** (1998). A rule-plus-exception model for classifying objects in continuous-dimension spaces. *Psychonomic Bulletin & Review*, 5, 345-369.
- Palmeri, T.J.** (1998). Formal models and feature creation. *Behavioral and Brain Sciences*, 21, 33-34.
- Nosofsky, R.M., Alfonso-Reese, L., & **Palmeri, T.J.** (1997). Effects of similarity, practice, and familiarity on speeded classification response times and accuracies: Further tests of an exemplar-retrieval model. *Indiana University Cognitive Science Technical Report Number 197*, Indiana University.
- Nosofsky, R.M., & **Palmeri, T.J.** (1997a). An exemplar-based random walk model of speeded classification. *Psychological Review*, 104, 266-300.
- Nosofsky, R.M., & **Palmeri, T.J.** (1997b). Comparing exemplar-retrieval and decision-bound models of speeded perceptual classification. *Perception & Psychophysics*, 59, 1027-1048.
- Palmeri, T.J.** (1997a). Exemplar similarity and the development of automaticity. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 23, 324-354.
- Palmeri, T.J.** (1997b). An exemplar-based random walk model of perceptual categorization. In M. Ramscar, U. Hahn, E. Cambouropoulos, & H. Pain (Eds.), *Proceedings of the Interdisciplinary*

*Workshop On Similarity And Categorisation* (pp. 181-187), Edinburgh, Scotland: University of Edinburgh.

- Nosofsky, R.M., & **Palmeri, T.J.** (1996). Learning to classify integral-dimension stimuli. *Psychonomic Bulletin & Review*, 3, 222-226.
- Palmeri, T.J.**, & Nosofsky, R.M. (1995). Recognition memory for exceptions to the category rule. *Journal of Experiment Psychology: Learning, Memory, and Cognition*, 21, 548-568.
- Nosofsky, R.M., **Palmeri, T.J.**, & McKinley, S.C. (1994). Rule-plus-exception model of classification learning. *Psychological Review*, 101, 53-79.
- Nosofsky, R.M., Gluck, M., **Palmeri, T.J.**, McKinley, S.C., & Glauthier, P. (1994). Comparing models of rule-based classification learning: A replication and extension of Shepard, Hovland, and Jenkins (1961). *Memory & Cognition*, 22, 352-369.
- Palmeri, T.J.**, & Nosofsky, R.M. (1993). Generalizations by rule models and exemplar models of category learning. In W. Kintsch (Ed.), *Proceedings of the Fifteenth Annual Meeting of the Cognitive Science Society* (pp. 794-799). Hillsdale, NJ: Erlbaum.
- Palmeri, T.J.**, Goldinger, S.D., & Pisoni, D.B. (1993). Episodic encoding of voice attributes and recognition memory for spoken words. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 19, 309-328.
- Goldinger, S.D., **Palmeri, T.J.**, & Pisoni, D.B. (1992). Words and voices: Perceptual details are preserved in lexical representations. In J. Ohala, T. Neary, B. Derwing, M. Hodge, & G. Wiebe (Eds.), *Proceedings of the International Conference on Spoken Language Processing* (pp. 591-594), Banff, Alberta, Canada: University of Alberta Press.
- Palmeri, T.J.**, Lively, S.E., & Pisoni, D.B. (1991). Implicit learning of auditory sequences. *Research on Speech Perception Progress Report Number 17*, Indiana University.
- Palmeri, T.J.**, Goldinger, S.D., & Pisoni, D.B. (1990). Episodic encoding of voice and recognition memory for spoken words. *Research on Speech Perception Progress Report Number 16*, Indiana University.

### **National and International Conference Presentations and Abstracts**

- Palmeri, T.J.** (2008). Automaticity: Overview from the computational sciences. *Invited paper to be presented at the Conference on Perceptual Learning, Motor Learning, and Automaticity*. Netherlands Institute for Neuroscience, Amsterdam.
- Richler, J.J., Mack, M.L., Gauthier, I., **Palmeri, T.J.** (2008). The time-course of holistic processing of faces. *Paper to be presented at the 16<sup>th</sup> annual Object Perception, Attention, and Memory (OPAM) meeting*, Chicago, IL
- Mack, M.L., & **Palmeri, T.J.** (2008). Objects in scenes: Is one system enough? *Paper to be presented at the 16<sup>th</sup> annual Object Perception, Attention, and Memory (OPAM) meeting*, Chicago, IL
- Palmeri, T.J.**, Purcell, B., Cohen, J.Y., Heitz, R.P., Schall, J.D., Logan, G.D., (2008). Stochastic accumulator model of saccade response time and neurophysiology. *Paper submitted to the 49<sup>th</sup> annual meeting of the Psychonomic Society*, Chicago, IL.
- Boucher, L., Logan, G.D., **Palmeri, T.J.**, & Schall, J.D. (2008). The effect of instruction on response inhibition. *Paper submitted to the Society for Neuroscience Conference*, Washington, DC.
- Nelson, M.J., Boucher, L., Logan, G.D., **Palmeri, T.J.**, Schall, J.D. (2008). Nonstationarity of saccade response time in stopping and stepping tasks. *Paper submitted to the Society for Neuroscience Conference*, Washington, DC.

- Pouget, P., Logan, G.D., **Palmeri, T.J.**, Boucher, L., Paré, M., & Schall, J.D. (2008). Neural basis of adaptive response time adjustment in saccade countermanding. *Paper submitted to the Society for Neuroscience Conference*, Washington, DC.
- Purcell, B., Heitz, R.P., Cohen, J.Y., Logan, G.D., Schall, J.D., **Palmeri, T.J.** (2008). Modeling interactions between visually-responsive and movement-related neurons in FEF during saccade visual search. *Paper presented to the 8<sup>th</sup> Annual meeting of the Vision Science Society*, Naples, FL.
- Wong, A.C.-N., **Palmeri, T.J.**, Gauthier, I. (2008). Individuation training but not categorization training leads to configural processing of non-face objects. *Paper presented at the 8<sup>th</sup> Annual meeting of the Vision Science Society*, Naples, FL.
- Mack, M.L., **Palmeri, T.J.** (2008). Dissociating detection and categorization: As soon as you know it is there, you don't necessarily know what it is. *Paper presented at the 8<sup>th</sup> Annual meeting of the Vision Science Society*, Naples, FL.
- Pearson, L.R., Logan, G.D., Schall, J.D., **Palmeri, T.J.** (2007). Accumulator race models of search target step performance. *Paper presented at the Society for Neuroscience Conference*, Atlanta, GA.
- Nelson, M.J., Boucher, L., Murthy, A., Thompson, K.G., Logan, G.D., **Palmeri, T.J.**, Schall, J.D. (2007). Executive control of search-step saccade performance investigated through trial history. *Paper presented at the Society for Neuroscience Conference*, Atlanta, GA.
- Boucher, L., Logan, G.D., **Palmeri, T.J.**, & Schall, J.D. (2007). Interactive race model of the stopping mechanism for combined eye and hand movements. *Paper presented at the Society for Neuroscience Conference*, Atlanta, GA.
- Palmeri, T.J.**, Mack, M.L., Wong, A.C.-N., Gauthier, I. (2007). The time-course of detecting, categorizing, and identifying objects. *Paper presented at the joint meeting of the EPS and Psychonomics Society*, Edinburgh, Scotland.
- Palmeri, T.J.**, Gauthier, I., Schunn, C., Bruer, J.T., McClelland, J.L., Goldstone, R.L. (2007). Making extra- and intra-disciplinary collaborations work. *Symposium to be presented at the 2007 meeting of the Cognitive Science Society*, Nashville, TN.
- Mack, M.L., Richler, J.J., Gauthier, I., & **Palmeri, T.J.** (2007). Comparing the loci of holistic processing in people and models. *Paper presented at the 7<sup>th</sup> Annual Meeting of the Vision Science Society*, Sarasota, FL.
- Cheung, O.S., Richler, J., **Palmeri, T.J.**, & Gauthier, I. (2007). Revisiting the role of spatial frequencies in the holistic processing of faces. *Paper presented at the 7<sup>th</sup> Annual Meeting of the Vision Science Society*, Sarasota, FL.
- Palmeri, T.J.**, Mack, M., Wong, A.C.-N., & Gauthier, I. (2006). The time-course of detection, categorization, and identification. *Abstracts of the Psychonomic Society: 47th Annual Meeting*, 11, Houston, TX.
- Boucher, L., Logan, G.D., **Palmeri, T.J.**, Schall, J.D. (2006). Modeling trial history of saccade countermanding. *Paper presented at the Society for Neuroscience Conference*, Atlanta, GA.
- Mack, M., Wong, A.C.N., Gauthier, I. & **Palmeri, T.J.** (2006). The time-course of visual object detection and categorization. *Paper presented at the 6<sup>th</sup> Annual Meeting of the Vision Science Society*, Sarasota, FL.
- Richler, J., Gauthier, I., Wenger, M., & **Palmeri, T.J.** (2006). Holistic processing for faces: Bridging paradigms. *Paper presented at the 6<sup>th</sup> Annual Meeting of the Vision Science Society*, Sarasota, FL.
- Palmeri, T.J.**, Camalier, C.R., Boucher, L., Schall, J.D., & Logan, G.D. (2005). Stochastic models of neurophysiology and behavior of visually guided saccades. *Paper presented at the First Annual Computational Cognitive Neuroscience Conference*, Washington, DC.

- Mebane, M.W., **Palmeri, T.J.**, Schall, J.D., & Logan, G.D. (2005). Testing the Neural Theory of Visual Attention: Mixture distributions of neural activity. *Paper presented at the Society for Neuroscience Conference*, Washington, DC.
- Camalier, C.R., Gotler, A., Murthy, A., Thompson, K.G., Schall, J.D., **Palmeri, T.J.**, Logan, G.D. (2005). Race analysis of double step and search step saccade performance. *Paper presented at the Society for Neuroscience Conference*, Washington, DC.
- Palmeri, T.J.** (2005). Computational modeling of the development of perceptual expertise. *Paper presented at the 2005 meeting of TENNET*, Montreal, Canada.
- Schall, J.D., Boucher, L., Logan, G.D., **Palmeri, T.J.** (2005). Choice, decision and action investigated with visually guided saccades. *Paper presented at the Neurobiology of Decision Making meeting*, Cold Springs Harbor Laboratory, Cold Springs Harbor, NY.
- Palmeri, T.J.** (2005). Stochastic models of executive control in monkeys and humans. *Presented at the NSF Workshop on Collaborative Research in Computational Neuroscience*, Washington, DC.
- Wong, A.C.-N., **Palmeri, T.J.**, Gauthier, I., & Tanaka, J.W. (2005). The time-course of basic- and subordinate-level categorization. *Paper presented at the 5<sup>th</sup> Annual Meeting of the Vision Science Society*, Sarasota, FL.
- Boucher, L., Stuphorn, V., Logan, G.D., **Palmeri, T.J.**, & Schall, J.D. (2004). Dissecting the stop process: Eye-hand coordination in a stop task. *Paper presented at the Society for Neuroscience Conference*, San Diego, CA.
- Schall, J.D., Boucher, L., Logan, G.D., Palmeri, T.J. (2004). An interactive race model of countermanding. *Paper presented at the Society for Mathematical Psychology*, Ann Arbor, MI.
- Palmeri, T.J.** (2004). Categorization and amnesia. *Paper presented at the Second Annual Summer Interdisciplinary Conference*, Cavalese, Italy.
- Boucher, L., Logan, G.D., **Palmeri, T.**, & Schall, J.D. (2004). An interactive race model of countermanding saccades. *Paper presented at the 2004 Computational and Systems Neuroscience Conference at Cold Spring Harbor in the Spring*.
- Flanery, M.A., & **Palmeri, T.J.** (2003). Using fMRI to examine representational shifts during category learning. *Abstracts of the Psychonomic Society: 44<sup>th</sup> Annual Meeting*, 8, Vancouver, BC.
- Boucher, L., Logan, G.D., **Palmeri, T.**, & Schall, J.D. (2003). An interactive race model of countermanding saccades. *Paper presented at the Society for Neuroscience Conference*.
- Logan, G.D., Palmeri, T.J., & Vickery, T. (2003). An instance theory of attention and memory in visual search. *Paper presented at the Munich Symposium on Visual Search*, Holzhausen, Germany.
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- Kim, C.-Y., Blake, R.B., **Palmeri, T.J.**, Marois, R., & Whetsell, W. (2003). Synesthetic colors act like real colors and interact with real colors. *Paper presented at the 3<sup>rd</sup> Annual Meeting of the Vision Sciences Society*, Sarasota, FL.
- Palmeri, T.J.**, Logan, G.D., Schall, J., & Vickery, T. (2002). Tests of an instance theory of attention and memory. *Abstracts of the Psychonomic Society: 43<sup>rd</sup> Annual Meeting*, 7, Kansas City, MO.
- Palmeri, T.J.**, & Johansen, M.K (2001, July). Representational shifts in category learning. *Paper presented at the 2001 International Conference on Memory*, Valencia, Spain.
- Blake, R.B., **Palmeri, T.J.**, Marois, R., & Whetsell, W.O. (2001). Visual binding of synesthetic colors to achromatic forms. *Paper presented at the 1<sup>st</sup> Annual Meeting of the Vision Sciences Society*, Sarasota, FL.

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- Palmeri, T.J.**, & Flanery, M.A. (2000). Category knowledge acquired during categorization testing. *Abstracts of the Psychonomic Society: 41<sup>st</sup> Annual Meeting*, 5, New Orleans, LA.
- Jenkins, L., Corbett, A.M., Allison, E.S., & **Palmeri, T.J.** (2000). Age and exemplar similarity in automaticity. *Paper presented at the 2000 Meeting of Cognitive Aging*, Atlanta, GA.
- Flanery, M.A., Shelton, A.L., **Palmeri, T.J.**, Morgan, V.L., Price, R.R., & Pickens, D.R. (2000). A functional brain imaging study of perceptual categorization. *Journal of Cognitive Neuroscience*, 18C Suppl. S 2000, 69.
- Flanery, M.A., Shelton, A.L., **Palmeri, T.J.**, Morgan, V.L., Price, R.R., & Pickens, D.R. (1999). Functional brain imaging of novel object classification. *Paper presented at 7<sup>th</sup> Annual Workshop on Object Perception and Memory*, Los Angeles, CA.
- Palmeri, T.J.**, & Johansen, M.K. (1999). Prototypes, rules, and instances in category learning. *Abstracts of the Psychonomic Society: 40<sup>th</sup> Annual Meeting*, 4, 98.
- Palmeri, T.J.**, & Flanery, M.A. (1999). Learning about categories in the absence of training: Profound amnesia and the relationship between perceptual categorization and recognition memory. *Journal of Cognitive Neuroscience*, 80-80 Suppl. S 1999.
- Palmeri, T.J.** (1998). An exemplar-based diffusion model of perceptual categorization. *Abstracts of the Psychonomic Society: 39<sup>th</sup> Annual Meeting*, 3, 50.
- Grossman, E., Blake, R., & **Palmeri, T.J.** (1998). Motion perception at scotopic light levels. *Paper presented at the 1998 meeting of the Association for Research in Vision and Ophthalmology (ARVO)*, Fort Lauderdale, FL.
- Palmeri, T.J.** (1997). An exemplar-based random walk model of perceptual categorization. *Paper presented at the Interdisciplinary Workshop On Similarity And Categorisation*, Edinburgh, Scotland: University of Edinburgh.
- Palmeri, T.J.** (1997). An exemplar-based random walk model of visual attention. *Abstracts of the Psychonomic Society: 38<sup>th</sup> Annual Meeting*, 2, 43.
- Nosofsky, R.M., Alfonso-Reese, L., Cohen, A., & **Palmeri, T.J.** (1997). Tests of an exemplar model for predicting categorization and same-different response times. *Paper presented at the Society for Mathematical Psychology 1997 Annual Meeting*, Indiana University.
- Palmeri, T.J.** (1997). Predicting response time distributions in speeded classification tasks. *Paper presented at the Society for Mathematical Psychology 1997 Annual Meeting*, Indiana University.
- Palmeri, T.J.**, & Nosofsky, R.M. (1996). Prototypes and ideal points in perceptual categorization. *Abstracts of the Psychonomic Society: 37<sup>th</sup> Annual Meeting*, 1, 34.
- Palmeri, T.J.** (1996). Exemplar similarity and the development of automaticity. *Paper presented at the Society for Mathematical Psychology 1996 Annual Meeting*, UNCCH.
- Nosofsky, R.M., & **Palmeri, T.J.** (1996). Comparing exemplar-retrieval and decision-bound models of speeded classification. *Paper presented at the Society for Mathematical Psychology 1996 Annual Meeting*, UNCCH.
- Nosofsky, R.M., & **Palmeri, T.J.** (1995). Exemplar-based random-walk model of speeded classification. *Paper presented at the Society for Mathematical Psychology 1995 Annual Meeting*, Irvine, CA: UC Irvine.
- Palmeri, T.J.**, & Nosofsky, R.M. (1994). Recognition memory for exceptions to the category rule. *Paper presented at the Annual Indiana-Purdue Conference on Cognition*, Purdue University.

- Nosofsky, R.M., **Palmeri, T.J.**, & McKinley, S.C. (1993). Rule-plus-exception model of classification learning. *Paper presented at the 34th annual meeting of the Psychonomic Society, Washington, DC.*
- Palmeri, T.J.**, & Nosofsky, R.M. (1993). Generalizations by rule models and exemplar models of category learning. *Paper presented at the Fifteenth Annual Meeting of the Cognitive Science Society, Boulder, CO: University of Colorado.*
- Palmeri, T.J.**, & Nosofsky, R.M. (1993). Comparing models of classification learning: Acquisition of rule-based categories. *Paper presented at the Annual Indiana-Purdue Conference on Cognition, Indiana University.*
- Goldinger, S.D., **Palmeri, T.J.**, & Pisoni, D.B. (1992). Words and voices: Perceptual details are preserved in lexical representations. *Paper presented at the International Conference on Spoken Language Processing, Banff, Alberta, Canada.*
- Palmeri, T.J.**, Goldinger, S.D., & Pisoni, D.B. (1991). Continuous recognition memory for spoken words. *Paper presented at the Annual Indiana-Purdue Conference on Cognition, Indiana University.*

### **Dissertation**

- Palmeri, T.J.** (1995). *Exemplar similarity and the development of automaticity*. Unpublished doctoral dissertation. Indiana University: Bloomington, IN.  
*Dissertation Committee* : Robert M. Nosofsky (chair), Robert L. Goldstone, John K. Kruschke, Richard M. Shiffrin, James T. Townsend.

### **Press Coverage**

Synesthesia Research (2002-2005): *The Dallas Morning News, The Washington Post, The Wall Street Journal, The Observer International, The New York Times, Scientific American, Los Angeles Times, United Press International, Associated Press, CBC News, The Daily Telegraph (U.K.), Science et Vie, Denver Post, The Tennessean, The Hindustan Times, The Globe and Mail, abcnews.com, msnbc.com, wired.com, thirdage.com, psycport.com, dailypress.com*

### **Invited Talks and Colloquia**

- Netherlands Institute for Neuroscience (upcoming 2008)  
 University School of Nashville (yearly 2002-2006)  
 Perceptual Expertise Network, Boulder, Colorado (2003)  
 Keynote Speaker for the Vanderbilt Microbiology and Immunology Fall Retreat (2002)  
 Max-Planck Institute for Biological Cybernetics, Tuebingen (2002)  
 Department of Psychology, University of Warwick (2001)  
 Department of Computer Science, Vanderbilt University (1997)  
 Department of Psychology and Human Development, Vanderbilt University (1996)  
 Department of Psychology, University of Texas at Austin (1995)  
 Department of Cognitive Science, University of California at San Diego (1995)  
 Department of Psychology, Washington State University (1995)  
 Department of Psychology, McMaster University (1995)  
 Department of Psychology, University of North Carolina Greensboro (1995)  
 Department of Psychology, Northeastern University (1995)  
 Department of Psychology, University of Minnesota (1995)

## Teaching Experience

*Categories and Concepts* (Fall 2000; Spring, 1997, 1998, 2000)  
*Categorization, Object Recognition, and Perceptual Expertise* (Fall, 2002)  
*Cognitive Psychology* (Spring, 2001, 2002)  
*Computational Modeling* (Fall, 2005, 2008)  
*Graduate Research Seminar* (Fall 2006, 2007)  
*Graduate Seminar in Cognitive Science* (Fall 2000, 2002, 2003; Spring, 1997, 2001, 2003, 2004)  
*Knowledge, Brain, and Culture* (Fall 2001, Spring 2004)  
*Models of Categorization* (Fall, 1996, 1999)  
*Principles of Experimental Design* (Fall 1995, 1996, 1997, 1999, 2001, 2003, 2004, 2007; Spring, 1996, 2006, 2007)  
*Research Seminar in Psychological Sciences* (Fall, 2006, 2007, 2008)  
*Systems Neuroscience*, co-instructor (Fall, 2005)  
*Thinking and Cognition* (Fall 1997; Spring 1999)

## Graduate Student Committees

Committee Chair for Dr. Marci Flanery (1997-2005), Julia High (2002-2003), Michael Mack (2005-present)  
 Committee co-Chair for Corrie Camalier (2004-2006), Braden Purcell (2007-present), Jennifer Richler (2005-present), Jennica Sherwood (2003-2004), Dr. Alan Wong (2002-2007)  
 Committee Member for Michael Berkowitz (2005-2007), Dr. Ron Cobb (2002-2005), Eric Emeric (2005-present, official chair of Neuroscience thesis committee), Dr. Lewis Frey (1998-2003, Computer Science Department), Dr. Marja Germans Gard (1998-2004), Dr. Emily Grossman (1997-2002), Dr. William Hudenko (2000-2004), Min-Suk Kang (2003-present), Dr. Chai-Youn Kim (2003-2006), Dr. Nana Landenberger (1999-2001), Dr. Christian Luhmann (2001-2006, official chair by courtesy), Michael Mebane (2004-2006), Dr. Gayathri Narasimham (2000-2006, Department of Psychology and Human Development), Jeffrey Oliver (1996-1997), Andrew Palmer (1997-1998), Joshua Phillips (2004, Masters Degree Committee, Department of Computer Science), Dr. Amy Shelton (1996-1999), Dr. Darryl Schneider (2004-2008), Weidong Shi (1996-1999), Dr. Moria Smoski (1996-1999), Dr. Ken Sobel (1995-2000, official chair by courtesy), Tricia Thornton (2002-2005, Integrative Neuroscience), and Dr. Maggie Xiong (2002-2005)  
 External Examiner for Dr. David Sewell (2008, University of Western Australia), Dr. Lee-Xieng Yang (2003, University of Western Australia)

## Postdoctoral Fellows Supervised

Joint Postdoctoral Supervision of Leanne Boucher (2003-2008, NIH/NEI NRSA)  
 Joint Postdoctoral Supervision of Lance Pearson (2006-2007)  
 Joint Postdoctoral Supervision of Jonathan Folstein (2007-present)

## Undergraduate Honors Students Supervised

Celina Blalock (1996-1998), Eva Greco (2001-2003), Brooke Schaper (1999-2001)

## Some Undergraduate Students Supervised

Dr. Timothy Vickery (2001-2003, Harvard PhD)