Curriculum Vitae Thomas J. Palmeri

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University Experience

Distinguished Professor of Psychology, Vanderbilt University, 2019-present

Chair, Department of Psychology, Vanderbilt University, 2023-present

Faculty Affiliate, Vanderbilt Data Science Institute, 2018-present

Professor of Ophthalmology and Visual Sciences, Vanderbilt University Medical Center, 2017-present

Investigator, Vanderbilt Vision Research Center, 2012-present

Director of Graduate Studies, Department of Psychology, Vanderbilt University, 2006-2011, 2014-2015, 2022-2023

Director of Undergraduate Research, Vanderbilt Data Science Institute, 2019-2022

Vanderbilt Data Science Institute Executive Committee (ex officio), 2018-2022

Director of Undergraduate Data Science Minor, 2021

Founding co-Director, Scientific Computing Program, Vanderbilt University, 2011-2021

Investigator, Vanderbilt Center for Integrative and Cognitive Neuroscience, 2000-2021

Professor, Associate Professor, and Assistant Professor, Department of Psychology, Vanderbilt University, 1995-2019

Temporal Dynamics of Learning Center Executive Committee Member, 2006-2017

Associate Director, Learning Sciences Institute, Vanderbilt University, 2003-2007

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 Summer 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, 1987

Research Interests

perceptual categorization; category learning; visual learning; visual memory; perceptual expertise; object and face recognition; automaticity; perceptual decision making; mathematical, computational, and neural modeling

Honors and Awards

Chair for Twenty-Five Years of Service as a Faculty Member, 2020

Appointed Distinguished Professor at Vanderbilt, 2019

Elected Fellow of the Association for Psychological Science, 2015

Certificate of Recognition as a Doctoral Mentor from the New York Academy of Sciences, 2014

The Chancellor's Award for Research, 2009

Elected Fellow of the Psychonomics Society, 1998

APA Division of Experimental Psychology New Investigator Award, 1998

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 Review Panel Member for:

National Science Foundation, Computational Cognition Grant Panel

National Science Foundation, Perception, Action, and Cognition Panel

National Institute of Health, NIMH Conte Centers Grant Panel

External Grant Reviewer for:

Air Force Office of Scientific Research

Fund for Scientific Research FNRS, Belgium

Independent Research Fund Denmark

The Israel Science Foundation

Katholieke Universiteit Leuven

Leverhulme Trust

Louisiana Board of Regents

National Science Foundation, CISE and SBE directorates

New York University Office of Sponsored Programs

NYU Abu Dhabi Research Enhancement Fund

Research Grants Council of Hong Kong

The Wellcome Trust / DBT India Alliance Fellowship Program

Editorial Service:

Consulting Editor, Journal of Experimental Psychology: General (2012-2022)

Associate Editor, Cognitive Psychology (2017-2020)

Consulting Editor, Psychonomic Bulletin & Review (2011-2019)

Editorial Board, Memory & Cognition (2009-2018)

Guest Editor, Proceedings of the National Academy of Sciences (2016)

Managing Guest Editor, *Journal of Mathematical Psychology* (2014-2016)

Associate Editor, Frontiers in Psychology - Cognitive Science (2010-2013)

Guest Editor, Journal of Experimental Psychology: Learning, Memory, and Cognition (2011-2012)

Editorial Board, Journal of Experimental Psychology: Learning, Memory, and

Cognition (1999-2000)

Ad Hoc Reviewer for:

Acta Psychologica

Annals of the New York Academy of Sciences

Attention, Perception, & Psychophysics

Australian Journal of Psychology

Behavioral and Brain Sciences

Behavioral Research Methods

Brain and Cognition

Brain Research

Cahiers de Psychologie Cognitive

Cerebral Cortex

Cognition

Cognitive, Affective, & Behavioral Neuroscience

Cognitive Neuropsychology

Cognitive Processing

Cognitive Psychology

Cognitive Science

Collabra

Cortex

Current Biology

Current Directions in Psychological Science

Decision

European Journal of Cognitive Psychology

Experimental Brain Research

Experimental Psychology

Frontiers in Psychology

Journal of Applied Research in Memory and Cognition

Journal of Cognitive Neuroscience

Journal of Experimental Psychology: General

Journal of Experimental Psychology: Human Perception and Performance

Journal of Experimental Psychology: Learning, Memory, and Cognition

Journal of General Psychology

Journal of Mathematical Psychology

Journal of Memory and Language

Journal of Neurophysiology

Journal of Vision

Memory & Cognition

Nature Communications

Neural Computation

Neurocomputing

Neuroimage

Neuropsychologia

Neuroscience

Perception & Psychophysics

PLoS Computational Biology

PloS One

Proceedings of the National Academy of Sciences

Psychological Review

Psychological Science

Psychophysiology

Psychonomic Bulletin & Review

Quarterly Journal of Experimental Psychology

Science Advances

The Journal of Neuroscience

Trends in Cognitive Science

Vision Research

Visual Cognition

WIRES Cognitive Science

Book Reviewer for:

Blackwell Publishers

Cambridge University Press

MIT Press

Oxford University Press

Sage Publishing

Springer

Wadsworth Publishing Company

Wilev

Worth Publishers

Other Reviewing:

Cognitive Science Society Computational Modeling Prize in Higher-Level Cognition

Other Professional Service

Member of *Model-Based Research and Reproducibility Workshop*, Center for Open Science, Charlottesville, VA, 2020

Selection Committee for the *Australasian Cognitive Neuroscience Society Young Investigator Award*, 2017

Lecture at the *Model-based Neuroscience Summer School*, Amsterdam, The Netherlands, 2017

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

Co-organizer of the 31st 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

External Consulting

Albright-Knox Art Gallery, Buffalo, New York, 2016-2020

Northrup Grummon Corporation, 2015

U.S. Army Research Institute, Senior Research Fellow, 2015

College and University Service

AI Grand Challenge Initiative (A&S), Steering Committee, 2023-present

Vanderbilt University Department of Anthropology Promotion Review Committee, 2023

Data Science Minor Governing Board, 2021-2022

Director of Undergraduate Research, Vanderbilt Data Science Institute, 2019-2022

Vanderbilt Data Science Institute Executive Committee (ex officio), 2018-2022

Faculty Senate Task Force on Administerial Effectiveness (co-Chair), 2020-2022

co-Director, Scientific Computing Program, 2011-2021

Advisory Committee on Scientific Computing (ex officio), 2013-2021

Provost's Data Science Next Generation Committee, 2020-2021

Sony Building Renovation Working Group, 2021

Interim Director of Undergraduate Data Science Minor (directed its launch), 2021

Data Science Minor Working Group (Chair), 2020-2021

Faculty Search Committee Member, Joint Computer Science / Data Science Institute, 2019-2020

Vanderbilt Institute for Digital Learning Advisory Committee on Digital Literacy, 2017-2018

Provost's Data Science Minor Design Committee (Chair), 2018

VVRC Director's Committee, 2015-2018

Director of Computing, Vanderbilt Vision Research Center, 2015-2018

Provost's Data Science Visions Working Group (Chair of Education Sub-committee), 2017-2018

Ad Hoc Committee to Propose a Master's Degree in Data Science, 2016-2017

College of Arts and Science Advisory Review Committee (SARC), 2014-2015, 2016-2017

Vanderbilt Provost Faculty Advisory Committee for Research IT, 2015-2016

Vanderbilt Provost Faculty Advisory Committee for Desktop IT (Acting Chair), 2014-2016

Mentor for College of Arts & Science's Program in Career Development, 2014-2015

Graduate Faculty Delegate Assembly, 2006-2011, 2014-2015

Vanderbilt Discovery Grant Program Review Committee, 2014

Academic Planning Group for Education Technologies, 2013

Organizing committee for Vanderbilt Educational Neuroscience Conference, 2012

Nomination committee for the Graduate School Founder's Medal, 2011

College of Arts and Science Advisory Review Committee (JARC), 2004, 2010, 2011

The Next Step Graduate School Admissions Panel, 2010

NSF Graduate Research Fellowship Workshop, Panel Member, 2010

ACCRE Faculty Advisory Board, 2007-2010

Speakers and Conferences Committee for the Educational Neuroscience Initiative, 2009

Committee on Graduate Education, College of Arts and Science, 2008-2009

Vanderbilt Graduate School Excalibur User's Group, 2008-2009

Participant in Honors Directors Conference on minority recruiting, 2008, 2009

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, 2008

ACCRE Study Group, 2006-2007

Departmental Service

Director of Graduate Studies, Department of Psychology, 2006-2011, 2014-2015, 2022-2023

Graduate Studies Committee, 2004, 2006-2011 (ex officio), 2014-2015 (ex officio), 2022-2023 (ex officio)

Departmental Ad-Hoc Reappointment, Pretenure, Tenure and Promotion, Promotion Review Committees, 2003 (*Chair*), 2005, 2006 (*Chair*), 2008 (*Chair*), 2009, 2010, 2011 (*Chair*), 2012, 2014, 2015 (*Chair*), 2019 (*Chair*), 2021-2022 (*Chair*)

Departmental Ad-Hoc Committee for Distinguished Alumnus Award, 2013

Departmental Ad Hoc Committee for the Randolph Blake Early Career Award, 2012

Psychological Sciences Web Site Design Committee, 2010

Cognition and Cognitive Neuroscience Faculty Search Committee, 2007-2008 (Chair)

Head of Cognition and Cognitive Neuroscience Area Group, 2004, 2008

Psychology Department Web Site Coordinator, 1996-2000, 2003-2007

Psychological Sciences Web Site Development Committee, 2004-2006

ERP Faculty Search Committee, 2003-2004 (Chair)

Departmental Faculty-Staff Campaign Coordinator, 2003

Undergraduate Studies Committee, 1997-2006

Organizer of Cognitive Brown Bag Seminar, 1996-1998

Outreach

Panelist on Coding and Computational Thinking, University School of Nashville, 2016 Guest Lecturer in Psychology, University School of Nashville, 2002, 2003

Grants

CC* CIRA: Mid-TN AI for Interdisciplinary Imaging Interpretation Alliance, National Science Foundation, Senior Investigator (D. Moyer PI), under review.

How We Make Good Choices: Cognitive and Neural Representations of Knowledge, Australian Research Council (ARC) Discovery Grant, Partner Investigator (D. Sewell PI), under revision.

Stochastic Models of Visual Decision Making and Visual Search, R01 EY021833, National Eye Institute, \$1,583,958, PI, 9/2020-8/2024.

Core Grant in Vision Research, P30-EY08126, National Eye Institute, Computer Module Director (when submitted) (D. Calkins, PI), 2/2020-1/2025.

To Support a Scientific Study Testing Whether Visual Art Training Can Enhance Visual Perception and Visual Cognition, National Endowment for the Arts, \$85,000, co-PI (R. Davidson PI), 9/2019-8/2021.

Explaining Misdiagnoses in the Transition from Competence to Expertise, Australian Research Council (ARC) Discovery Grant, \$418,000AD, co-PI (M. Wiggins PI), 12/2017-11/2021.

Data Science Hardware Mini-Grant, Vanderbilt Data Science Institute, \$3,685, PI, 2019.

Data Science Visions, Vanderbilt TIPs Program, \$200,000, Senior Collaborator (A. Berlind PI), 8/2017-7/2019.

High-Performance Computer Cluster for Biomedical Research, S10 OD023680, National Institutes of Health, \$550,000, Senior Investigator (J. Meiler PI), 3/2017-2/2020.

Mapping, Measuring, and Modeling Perceptual Expertise, SMA 1640681, National Science Foundation, \$749.955, co-PI (I. Gauthier PI), 10/2016-9/2020.

- Stochastic Models of Visual Decision Making and Visual Search, R01 EY021833, National Eye Institute, \$1,099,000, PI, 12/2014-11/2019.
- Core Grant in Vision Research, P30 EY008126, National Eye Institute, Computer Module Director (D. Calkins, PI), 2/2015-1/2020.
- REU Supplement: Perceptual Categorization in Real-World Expertise, SBE 1447762. National Science Foundation, \$19,500, PI, 7/2014-6/2016.
- *Perceptual Categorization in Real-World Expertise*, SBE 1257098. National Science Foundation, \$400,000, PI, 7/2013-6/2018.
- Temporal Dynamics of Learning Center, SMA 1041755, National Science Foundation, \$18,000,000, PI on Vanderbilt subcontract (approx. \$1,300,000 total anticipated) and member of Executive Committee (G. Cottrell, Center PI), 10/2011-9/2017.
- Stochastic Models of Visual Search, R01 EY021833, National Eye Institute, \$702,000, PI, 9/2011-8/2014.
- Online Web-based Experiments of Real-World Perceptual Expertise, Vanderbilt Discovery Grant, \$48,143, PI, 7/2011-6/2016.
- Exploring Research Collaborations in Cognitive and Neural Modeling with the University of Melbourne, Vanderbilt International Office, \$6500, PI, 9/2012-8/2013.
- *TurboComputing with Graphics Card Supercomputers*. IDEAS Program, Vanderbilt University, co-PI (K. Holley-Bockelman PI), \$138,499, 7/2010-6/2013.
- MRI-R2: Acquisition of a GPU Cluster for Solving n-body Systems in Science and Engineering, OCI 0959454, National Science Foundation, co-PI (G. Walker PI), \$557,746 (\$390,423 NSF / \$167,323 Vanderbilt), 4/2010-3/2013.
- CPATH: Revitalizing Computing Education Through Computational Science, CCF 0939164, National Science Foundation, \$299,953, co-PI (B. Bodenheimer PI), 10/2009-9/2013.
- 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).
- Saccade Target Selection: Frontal Cortex, R01 EY008890, National Eye Institute, \$1,558,750, co-PI (J. Schall PI), 2/2011-9/2011.
- Temporal Dynamics of Learning Center, SBE 0542013, National Science Foundation, \$15,500,000, PI on Vanderbilt subcontract (\$3,524,029 subcontract total) and member of Executive Committee, (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), 1/2006-12/2010.
- 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.
- CRCNS: Stochastic Models of Executive Control in Monkeys and Humans, BCS 0218507. National Science Foundation, \$756,181, co-PI (G.D. Logan PI). 5/2003-4/2007.
- 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, 6/2002-5/2004.
- Research Network on Expertise in Object Perception, James S. McDonnell Foundation, \$1,509,154, co-PI (I. Gauthier PI), 1/2001-12/2005.
- *Training in Fundamental Neuroscience*, NIH 5T32 MH64913, National Institute of Mental Health. Training Faculty Member (E. Sanders-Bush, PI), 7/2001-6/2011.

- Interdisciplinary Collaborative Consortium on the Cognitive Neuroscience of Category Learning. James S. McDonnell Foundation, \$310,000, co-Investigator (M.Gluck PI), 9/2002-8/2005.
- *fMRI Studies of Perceptual Categorization*. Vanderbilt University Discovery Grants Program, \$48,127, PI, 5/2001-12/2005.
- 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, 7/2001-6/2003.
- Rules and Instances in Perceptual Categorization, R01 MH61370. National Institute of Mental Health. \$258,742, PI, 6/2000-5/2004.
- *Perceptual Categorization and Memory*, BCS 9910756. National Science Foundation. \$108,387, PI, 5/2000-4/2004.
- Acquisition of Instrumentation for Cognitive Neuroscience Brain Imaging (Major Research Instrumentation Grant), NSF 0079579.Y. National Science Foundation, \$234,772. Investigator (R. Blake PI), 9/2000-8/2002.
- An Exemplar-Based Random Walk Model of Visual Attention. Vanderbilt University Research Council Direct Research Support Grant. \$2,465, PI, 7/1998-6/1999.
- 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, 7/1997-6/1998.
- Perceptual Categorization and Automaticity. Vanderbilt University Research Council Direct Research Support Grant. \$4,303, PI, 7/1996-6/1997.

NRSA Fellowships Supported

- *National Research Service Award (NRSA) Postdoctoral Fellowship for Brent Miller*, National Eye Institute, co-Sponsor, 12/2015-11/2018.
- National Research Service Award (NRSA) Postdoctoral Fellowship for Linh Dang, National Institute of Mental Health, co-Sponsor, 3/2015-2/2018.
- National Research Service Award (NRSA) Postdoctoral Fellowship for Jonathan Folstein, National Eye Institute, co-Sponsor, 12/2009-11/2011.
- National Research Service Award (NRSA) Postdoctoral Fellowship for Leanne Boucher, National Eye Institute, co-Sponsor, 3/2005-2/2008.

Publications (trainees, current and former, are underlined)

- <u>Chow, J.K.</u>, & **Palmeri, T.J.** (in preparation). Manipulating and measuring variation in Deep Neural Network (DNN) representations of objects. *Manuscript in preparation*.
- Sun, J., Jeong, J., Cha, C. Gauthier, I., & **Palmeri**, **T.J.** (in preparation). Relations between ensemble perception and perceptual categorization. *Manuscript in preparation*.
- Annis, J., Tillman, G., & Palmeri, T.J. (in preparation). Thinking in high-dimensional spaces (working title). *Manuscript in preparation (AP&P)*.
- <u>Lilburn, S., Cox, G.E.</u>, Logan, G.D., Schall, J.D., Zandbelt, B., & **Palmeri, T.J.** (under revision). Choice decision making by ensembles of accumulators. *Manuscript under revision (PsyRev)*. PsyArXiv: https://psyarxiv.com/qdk7b/
- **Palmeri, T.J.**, & Gauthier, I. (in press). Object recognition. To appear in D.J. Calkins, V.A. Casagrande, J.D. Schall, & G.F. Woodman (Eds.), *The Visual System*, Sinauer Associates.

- <u>Chow, J.K.</u>, **Palmeri, T.J.**, Pluck, G., & Gauthier, I. (under review). Evidence for an amodal domain-general object recognition ability. *Manuscript under review (Cogn)*.
- Shen, J., & Palmeri, T.J. (under revision). Modeling categorization by real-world perceptual. *Manuscript under revision (JEPLMC)*.
- <u>Chow, J.K.</u>, **Palmeri, T.J.**, & Gauthier, I. (under review). Distinct but related abilities for visual and haptic object recognition. *Manuscript under review (PB&R)*.
- Mack, M.L., & **Palmeri, T.J.** (in press). Discrimination, recognition, and classification. To appear in M.J. Kahana & A. Wagner (Eds.), *Handbook on Human Memory*, Oxford University Press.
- Cox, G.E., **Palmeri, T.J.**, Logan, G.D., Smith, P.L., & Schall, J.D. (in press). Spiking, salience, and saccades: Using cognitive models to bridge the gap between "how" and "why". In B. Forstmann & B.M. Turner (Eds.), *An Introduction to Model-Based Cognitive Neuroscience* (2nd Ed.), Springer Neuroscience.
- <u>Umakantha, A., Purcell, B.A.,</u> & **Palmeri, T.J.** (2022). Relating a spiking neural network model and the diffusion model of decision making. *Computational Brain & Behavior*, 5, 279-301.
- Cox, G.E., Palmeri, T.J., Logan, G.D., Smith, P.L., Schall, J.D. (2022). Salience by competitive and recurrent interactions: Bridging neural spiking and computation in visual attention. *Psychological Review*, 129, 1144-1182.
- <u>Chow, J.K.</u>, **Palmeri, T.J.**, Gauthier, I. (2022). Visual object recognition ability is not related to experience with visual arts. *Journal of Vision*, 22.
- <u>Chow, J.K.</u>, **Palmeri, T.J.**, <u>Mack, M.L.</u> (2022). Revealing a competitive dynamic in rapid categorization with object substitution masking. *Attention, Perception, & Performance*, 84(3), 638-646.
- Carrigan, A.J., Charlton, A., Wiggins, M.W., Georgiou, A., **Palmeri, T.J.**, & Curby, K.M. (2022). Cue utilisation reduces the impact of response bias in histopathology. *Applied Ergonomics*, 98, 103590.
- <u>Chow, J.K.</u>, **Palmeri, T.J.**, Gauthier, I. (2022). Haptic object recognition based on shape relates to visual object recognition ability. *Psychological Research*, 86, 1262-1273.
- Carrigan, A.J., Charlton, A., Foucar, E., Wiggins, M., Georgiou, A., **Palmeri, T.J.**, & Curby, K. (2022). The role of cue based strategies in skilled diagnosis amongst pathologists. *Human Factors*, 64, 1154-1167.
- Annis, J., Gauthier, I., & **Palmeri**, **T.J.** (2021). Combining convolutional neural networks and cognitive models to predict novel object recognition in humans. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 47(5), 785-807.
- Carrigan, A.J., Magnussen, J., Georgiou, A., Curby, K.M., **Palmeri, T.J.**, & Wiggins, M.W. (2021). Differentiating experience from cue utilization in radiological assessments. *Human Factors*, 63(4), 635-646.
- Middlebrooks, P.G., Zandbelt, B.B., Logan, G.D., Palmeri, T.J., Schall, J.D. (2020). Unification of countermanding and perceptual decision-making. *iScience*, 23, 100777.
- Benear, S., Sunday, M.A., Davidson, R., **Palmeri, T.J.**, & Gauthier, I. (2019). Can art change the way we see? *Psychology of Aesthetics, Creativity, and the Arts*.
- **Palmeri, T.J.** (2019). On developing and testing cognitive models. *Computational Brain & Behavior*, 2, 193-196.
- Servant, M., Tillman, G., Logan, G.D., Schall, J.D., & Palmeri, T.J. (2019). Neurally-constrained modeling of speed-accuracy tradeoff during visual search: Gated accumulation of modulated evidence. *Journal of Neurophysiology*, 121, 1300-1314.
- Annis, J., Evans, N.J., Miller, B.J., & Palmeri, T.J. (2019). Thermodynamic integration and steppingstone sampling methods for estimating Bayes factors: A tutorial for psychologists. *Journal of Mathematical Psychology*, 89, 67-86.

- Annis, J., & Palmeri, T.J. (2019). Modeling memory dynamics in visual expertise. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 45, 1599-1618.
- Boehm, U., Annis, J., Frank, M.J., Hawkins, G.E., Heathcote, A., Kellen, D., Krypotos, A.-M., Lerche, V., Logan, G.D., Palmeri, T.J., Servant, M., Singmann, H., van Ravenzwaaij, D., Starns, J.J., Wiecki, T.V., Voss, A., Matzke, D., Wagenmakers, E.-J. (2018). Estimating across-trial variability parameters of the Drift Diffusion Model: Expert advice and recommendations. *Journal of Mathematical Psychology*, 87, 46-75.
- Ross, D.A., <u>Tamber-Rosenau</u>, B.J., **Palmeri**, T.J., Zhang, J.D., Xu, Y. & Gauthier, I. (2018). High resolution fMRI reveals configural processing of cars in right anterior Fusiform Face Area of car experts. *Journal of Cognitive Neuroscience*, 30(7), 973-984.
- Dutilh, G., Annis, J., Brown, S.D., Cassey, P., Evans, N.J., Grasman, R.P.P.P., Hawkins, G.E., Heathcote, A., Holmes, W.R., Krypotos, A.-M., Kupitz, C.-N., Leite, F.P. Lerche, V., Lin, Y.S., Logan, G.D., Palmeri, T.J., Starns, J.J., Trueblood, J.S., van Maanen, L., van Ravenzwaaij, D., Vandekerckhove, J., Visser, I., Voss, A., White, C.N., Wiecki, T.V., Rieskamp, J., & Donkin, C. (2018). The quality of response time data inference: A blinded, collaborative approach to the validity of cognitive models. Psychonomic Bulletin & Review, 26(4),1051-1069.
- Cheng, X.J., McCarthy, C., Wang, T.S.L., **Palmeri, T.J.**, & Little, D.R. (2018). Composite faces are not (necessarily) processed coactively: A test using Systems Factorial Technology and logical-rule models. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 44(6), 833-862.
- Annis, J., & Palmeri, T.J. (2018). Bayesian statistical approaches to evaluating cognitive models. *Wiley Interdisciplinary Reviews in Cognitive Science*, 9(2). PMCID: PMC5814360
- Annis, J., Miller, B.J., & Palmeri, T.J. (2017). Bayesian inference with Stan: A tutorial on adding custom distributions. *Behavioral Research Methods*, 49, 863-886. PMCID: PMC5149118
- Vogelsang, M.D., **Palmeri, T.J.**, Busey, T.A. (2017). Holistic processing of fingerprints by expert forensic examiners. *Cognitive Research: Principles and Implications*, 2: 15. PMCID: PMC5318483
- Schall, J.D., **Palmeri, T.J.**, & Logan, G.D. (2017). Models of inhibitory control. *Philosophical Transactions of the Royal Society B*, 372: 20160193. PMCID: PMC5332852
- <u>Purcell, B.A.</u>, & **Palmeri, T.J.** (2017). Relating accumulator model parameters and neural dynamics. *Journal of Mathematical Psychology*, 76, 156-171. PMCID: PMC5381950
- Turner, B.M., Forstmann, B.U., Love, B., **Palmeri, T.J.**, & Van Maanen, L. (2017). Approaches to analysis in model-based cognitive neuroscience. *Journal of Mathematical Psychology*, 76, 65-79.
- **Palmeri, T.J.**, Love, B.C., & Turner, B.M. (2017). Model-based cognitive neuroscience. *Journal of Mathematical Psychology*, 76, 59-64. PMCID: PMC6103531
- Shen, J., & Palmeri, T.J. (2016). Modeling individual differences in visual categorization. *Visual Cognition*, 24, 260-283.
- Ross, D.A., & Palmeri, T.J. (2016). The importance of formalizing computational models of face adaptation aftereffects. *Frontiers in Psychology*.
- Mack, M.L., & Palmeri, T.J. (2015). The dynamics of categorization: Unraveling rapid categorization. *Journal of Experimental Psychology: General*, 144, 551-569.
- Logan, G.D., <u>Yamaguchi, M.</u>, Schall, G.D., & **Palmeri, T.J.** (2015). Inhibitory control in mind and brain 2.0: Blocked-input models of saccadic countermanding. *Psychological Review*, 122, 115-147. PMCID: PMC4556000
- Richler, J.J., Palmeri, T.J., & Gauthier, I. (2015). Holistic processing does not require configural variability. *Psychonomic Bulletin & Review*, 22, 974-979.
- **Palmeri, T.J.**, Schall, J.D. & Logan, G.D. (2015). Neurocognitive modeling of perceptual decision making. In J.R. Busemeyer, J. Townsend, Z.J. Wang, & A. Eidels (Eds.), *Oxford Handbook of Computational and Mathematical Psychology*, Oxford University Press.

- Nosofsky, R.M., & **Palmeri, T.J.** (2015). Exemplar-based random walk model of categorization and recognition. In J.R. Busemeyer, J. Townsend, Z.J. Wang, & A. Eidels (Eds.), *Oxford Handbook of Computational and Mathematical Psychology*, Oxford University Press.
- Logan, G.D., Schall, J.D., & **Palmeri, T.J.** (2015). Inhibitory control in mind and brain: The mathematics and neurophysiology of the underlying computation. In B. Forstmann & E.J. Wagenmakers (Eds.), *An Introduction to Model-Based Cognitive Neuroscience*, Springer Neuroscience.
- Shen, J., & Palmeri, T.J. (2015). The perception of a face can be greater than the sum of its parts. *Psychonomic Bulletin & Review*, 22, 710-716.
- Folstein, J., Palmeri, T.J., Van Gulick, A.B., & Gauthier, I. (2015). Category learning stretches neural representations in visual cortex. *Current Directions in Psychological Science*, 24, 17-23.
- **Palmeri, T.J.**, & Mack, M.L. (2015). How experimental trial context affects perceptual categorization. *Frontiers in Psychology*.
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National and International Conference Presentations and Abstracts

- <u>Jeong, J.</u>, & **Palmeri, T.J.** (2023). A computational modeling framework for ensemble perception. *To be presented at the Vision Sciences Society meeting*, St. Pete Beach, FL.
- <u>Chow, J., & Palmeri, T.J.</u> (2022). Manipulating and measuring variation in DNN representations. Presented at the Conference on Computational Cognitive Neuroscience, San Francisco, CA.
- <u>Chow, J.</u>, **Palmeri, T.J.**, Gauthier, I. (2022). Haptic object recognition abilities correlate across feature types and with visual object recognition ability. *Presented at the Vision Sciences Society meeting*, St. Pete Beach, FL.
- Sewell, D.K., Jaymes, R., & **Palmeri, T.J.** (2020). Modeling switch costs in a rule-plus-exception categorization task. *Presented at the Australian Mathematical Psychology Conference*.
- <u>Chow, J.K.</u>, **Palmeri, T.J.**, & Gauthier, I. (2020). Tactile object recognition performance on graspable objects, but not texture-like objects, relates to visual object recognition ability. *Presented at the Vision Sciences Society meeting*.
- Cox, G.E., **Palmeri, T.J.**, Schall, J.D., Logan, G.D., Smith, P.A. (2019). Dynamic model of target selection in visual search by neurons in frontal eye fields. *Presented at the Society for Mathematical Psychology meeting*, Montreal, Canada.

- Annis, J., & Palmeri, T.J. (2018). Combining convolutional neural networks and cognitive models to predict novel object recognition in humans. *Presented at the Conference on Computational Cognitive Neuroscience*, Philadelphia, PA.
- **Palmeri, T.J.** (2017). Approaches to model-based cognitive neuroscience. *Keynote talk presented at Australasian Cognitive Neuroscience Society*, Adelaide, Australia.
- **Palmeri, T.J.** (2017). Bridging levels: From accumulator models to spiking neurons. *Presented at the Model-based Neuroscience Summer School*, Amsterdam, The Netherlands.
- **Palmeri, T.J.** (2017). Perspective on visual literacy from the study of visual cognition. *Presented at Visual Literacy and Perception in the Contemporary World*, OCAD University, Toronto, Ontario, Canada.
- Miller, B.M., Annis J., Evans, N.J., Palmeri, T.J. (2017). Computing Bayes factors via thermodynamic integration with an application using the Linear Ballistic Accumulator model. *Presented at the Society for Mathematical Psychology meeting*, Coventry, UK.
- <u>Middlebrooks, P.G.</u>, Zandbelt, B.M., **Palmeri, T.J.**, Logan, G.D., Schall, J.D. (2016). Joint modeling of perceptual decision making and response inhibition. *Presented at the Society for Neuroscience meeting*, San Diego, CA.
- Annis, J., & Palmeri, T.J. (2016). Modeling memory dynamics in visual expertise. *Presented at the 57th annual meeting of the Psychonomic Society*, Boston, MA.
- **Palmeri, T.J.** (2016). Approaches to model-based cognitive neuroscience: Bridging levels of understanding of perceptual decision making. *Presented at the 57th annual meeting of the Psychonomic Society*, Boston, MA.
- **Palmeri, T.J.**, & Turner, B.M. (2016). Introduction to model-based cognitive neuroscience. *Presented at the 57th annual meeting of the Psychonomic Society*, Boston, MA.
- Shen, J., Annis, J., & Palmeri, T.J. (2016). Modeling categorization by real-world perceptual experts. *Presented at the Society for Mathematical Psychology meeting*, New Brunswick, NJ.
- Annis, J., & Palmeri, T.J. (2016). Modeling memory dynamics in visual expertise. *Presented at the Society for Mathematical Psychology meeting*, New Brunswick, NJ.
- **Palmeri, T.J.** (2016). Modeling perceptual expertise. *Presented at the Fifteenth Annual Summer Interdisciplinary Conference*, Selva di Val Gardena, Italy.
- **Palmeri, T.J.** (2015). What the science of visual cognition tells us about visual learning and visual performance. *Presented at Perception Experiment Workshop*, Night Vision and Electronic Sensors Directorate (NVESD), Fort Belvoir, VA.
- Miller, B., Zandbelt, B., Logan, G.D., Schall, J.D., & Palmeri, T.J. (2015). Ensemble accumulator models of choice decision making. *Presented at the Society for Mathematical Psychology meeting*, Newport Beach, CA.
- Shen, J., Annis, J., & **Palmeri, T.J.** (2015). Modeling the dynamics of visual object categorization. *Presented at the Vision Sciences Society meeting*, St. Petersburg, FL.
- Ross, D.A., Tamber-Rosenau, B.J., Palmeri, T.J., Xu, Y., Jie Dong, Z., & Gauthier, I. (2015). High resolution fMRI reveals holistic car representations in the anterior FFA of car experts. *Presented at the Vision Sciences Society meeting*, St. Petersburg, FL.
- <u>Umakantha, A., Purcell, B.A.,</u> & **Palmeri, T.J.** (2014). Relating a spiking neural network model and the diffusion model of decision making to investigate neural mechanisms of speed-accuracy tradeoffs. *Presented at the Society for Neuroscience meeting*, Washington, DC.
- **Palmeri, T.J.** (2014). Linking sequential sampling models with neurons. *Presented at Workshop on Sequential Sampling Models for Cognitive and Perceptual Decision Making, Cognitive Science Society meeting*, Québec City, Québec, Canada.

- **Palmeri, T.J.**, Umakantha, A., & Purcell, B.A. (2014). On making connections between cognitive models and neural data. *Presented at the Society for Mathematical Psychology meeting*, Quebec City, Quebec, Canada.
- <u>Umakantha, A., Purcell, B.A.,</u> & **Palmeri, T.J.** (2014). Inferring neural mechanisms from cognitive model parameters: Relations between the diffusion model and a spiking neural network model of perceptual decision making. *Presented at the Society for Mathematical Psychology meeting*, Quebec City, Quebec, Canada.
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- Logan, G.D., **Palmeri, T.J.**, & Schall, J.D. (2014). A gated accumulator model of cognitive control. *Presented at the Association for Psychological Science*, San Francisco, CA.
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- **Palmeri, T.J.** (2013). Linking cognitive and neural levels in perceptual decision making. *Presented at Interfacing Models with Brain Signals to Investigate Cognition*, UC Irvine, CA.
- Shen, J., & Palmeri, T.J. (2013). The perception of a face is greater than the sum of its parts. *Presented at the 9th Asia-Pacific Conference on Vision (APCV 2013)*. Suzhou, China.
- **Palmeri, T.J.**, <u>Purcell, B.A.</u>, Schall, J.D., & Logan, G.D. (2013). Modeling neural dynamics and behavioral dynamics of perceptual decision making. *Presented at a symposium on Joint Modeling of Neural and Behavioral Data at the Society for Mathematical Psychology*, Potsdam, Germany.
- **Palmeri, T.J.**, <u>Purcell, B.A.</u>, Schall, J.D., & Logan, G.D. (2013). Cognitive and neural models of perceptual decisions. *Presented at the Twelfth Annual Summer Interdisciplinary Conference*, Cortina d'Ampezzo, Italy.
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- <u>Folstein, J.R.</u>, Newton, A., <u>Van Gulick, A.B.</u>, **Palmeri, T.J.**, Gauthier, I. (2012). Category learning causes long-term enhancement of relevant object dimensions: a multivoxel pattern analysis at 7T. *Presented at the Society for Neuroscience meeting*.
- **Palmeri, T.J.**, <u>Purcell, B.A.</u>, Schall, J.D., & Logan, G.D. (2012). From salience to saccades: Multiplealternative gated stochastic accumulator model of visual search. *Presented at the Eleventh Annual* Summer Interdisciplinary Conference, Cala Gonone, Sardinia, Italy
- Mack, M.L., & Palmeri, T.J. (2012). Uncovering the time course of categorization with object-substitution masking. *Presented at the 12th Annual meeting of the Vision Science Society*, Naples, FL.
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- <u>Yamaguchi, M.</u>, Logan, G.D., **Palmeri, T.J.**, & Schall, J.D. (2012). On the "site" and "source" of saccadic countermanding: Reformulations of the interactive race model. *Presented at Computational and Systems Neuroscience (COSYNE) 2012*, Salt Lake City, UT.
- Ross, D.A., Deroche, M., & **Palmeri**, **T.J.** (2011). Exemplar-based and norm-based accounts of face adaptation. *Presented at the 52nd annual meeting of the Psychonomic Society*, Seattle, WA.
- <u>Purcell, B.A.</u>, Schall, J.D., Logan, G.D., **Palmeri, T.J.** (2011) Gated stochastic accumulator model of visual search. *Presented at the Sixteenth Annual Meeting of the European Conference on Eye Movements*, Marseille, France.
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- <u>Folstein, J.R.</u>, Gauthier, I., & **Palmeri, T.J.** (2011). Integral dimensions can be differentiated in dimensional but not polar morphspaces. *Presented at the 11th Annual meeting of the Vision Science Society*, Naples, FL.
- <u>Harrison, S.A., Richler, J.J., Mack, M.L.</u>, **Palmeri, T.J.**, Hayward, W., & Gauthier, I. (2011). The complete design lets you see the whole picture: Differences in holistic processing contribute to other-race and face-inversion effects. *Presented at the 11th Annual meeting of the Vision Science Society*, Naples, FL.
- Purcell, B.A., Heitz, R.P., Schall, J.D., Logan, G.D., & Palmeri, T.J. (2011). Multiple-accumulator model of decision making during visual search. Presented at Computational and Systems Neuroscience (COSYNE) 2011, Salt Lake City, UT.
- Mack, M.L., Richler, J.J., Polyn, S., & Palmeri, T.J. (2010). Modeling effects of object naming on long-term object recognition memory. *Presented at the 18th annual Object Perception, Attention, and Memory (OPAM) meeting*, St. Louis, MO.
- **Palmeri, T.J.**, <u>Purcell, B.A.</u>, <u>Heitz, R.P.</u>, Schall, J.D., Logan, G.D. (2010). Neurally-constrained multiple-accumulator model of perceptual decision making. *Presented at the 51st annual meeting of the Psychonomic Society*, St. Louis, MO.
- <u>Folstein, J.R.</u>, **Palmeri, T.J.**, & Gauthier, I. (2010). Category learning stretches diagnostic shape dimensions in human visual cortex. *Presented at the Society for Neuroscience Conference*. San Diego, CA.
- <u>Purcell, B.A., Heitz, R.P.</u>, Schall, J.D., Logan, G.D., **Palmeri, T.J.** (2010). Multiple-accumulator model of decision making during visual search. *Presented the Society for Neuroscience Conference*. San Diego, CA.
- Richler, J.J., Gauther, I., & Palmeri, T.J. (2010). Automaticity of basic-level categorization accounts for naming effects in recognition memory. *Presented at the Canadian Society for Brain Behavior and Cognitive Science*. Dalhousie University, Halifax, NS.
- Mack, M.L., & Palmeri, T.J. (2010). Speed of categorization: A priority for people? *Presented at the 10th Annual meeting of the Vision Science Society, Naples, FL.*
- Wilimzig, C., Palmeri, T.J., Logan, G.D., & Schall, J.D. (2010). Toward an interactive race model of double-step saccades. *Presented at the 10th Annual meeting of the Vision Science Society,* Naples, FL.
- <u>Folstein, J.R.</u>, Gauthier, I., & **Palmeri, T.J.** (2010). Not all spaces stretch alike: How the structure of morphspaces constrains the effect of category learning on shape perception. *Presented at the 10th Annual meeting of the Vision Science Society*, Naples, FL.

- Mack, M.L., & **Palmeri**, **T.J.** (2009). Are detection and categorization tightly coupled? *Presented at the* 50th annual meeting of the Psychonomic Society, Boston, MA.
- Richler, J.J., Mack, M.L., Gauthier, I., & Palmeri, T.J. (2009). What makes face recognition holistic: Insights from models. *Presented at the Thirty-First Annual Meeting of the Cognitive Science Society*, Amsterdam, The Netherlands.
- <u>Purcell, B.A., Heitz, R.P., Cohen, J.Y.,</u> Schall, J.D., Logan, G.D., & **Palmeri, T.J.** (2009). Using neurophysiology to explore discrete versus continuous flow models of perceptual decision making. *Presented at the 2009 meeting of the Society for Mathematical Psychology*, Amsterdam.
- Richler, J.J., Mack, M.L., Gauthier, I., & Palmeri, T.J. (2009). What makes face recognition holistic: Insights (or not) from models and MSDA. *Presented at the 2009 meeting of the Society for Mathematical Psychology*, Amsterdam.
- **Palmeri, T.J.** (2009). Neurally-constrained model of perceptual decision making. *Presented at the Copenhagen Colloquium*, Center for Visual Cognition, University of Copenhagen.
- <u>Folstein, J.R.</u>, Gauthier, I., <u>Green, J.L.</u>, & **Palmeri, T.J.** (2009). An effect of mere exposure on visual category learning. *Presented at the 9th Annual meeting of the Vision Science Society*, Naples, FL.
- Wong, A.C.-N., **Palmeri, T.J.**, Rogers, B.P., Gore, J.C., Gauthier, I. (2009). Experience can determine category selectivity in the visual system. *Presented at the 9th Annual meeting of the Vision Science Society*, Naples, FL.
- <u>Purcell, B.A., Cohen, J.Y., Heitz, R.P.,</u> Schall, J.D., Logan, G.D., & **Palmeri, T.J.** (2009). Developing a neuromimetic accumulator model of perceptual decisions. *Presented at the 9th Annual meeting of the Vision Science Society*, Naples, FL.
- **Palmeri, T.J.**, <u>Purcell, B.A.</u>, Schall, J.D., Logan, G.D., <u>Heitz, R.P.</u>, <u>Cohen, J.Y.</u> (2009). Neural basis of stochastic accumulator models of perceptual decision making. *Presented at the 2009 Annual Interdisciplinary Conference*, Jackson Hole, WY.
- **Palmeri, T.J.** (2008). Automaticity, categorization, and perceptual expertise. *Invited presentation 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. Presented at the 16th annual Object Perception, Attention, and Memory (OPAM) meeting, Chicago, IL
- Mack, M.L., & Palmeri, T.J. (2008). Objects in scenes: Is one system enough? *Presented at the 16th annual Object Perception, Attention, and Memory (OPAM) meeting*, Chicago, IL
- **Palmeri, T.J.**, <u>Purcell, B.</u>, <u>Cohen, J.Y.</u>, <u>Heitz, R.P.</u>, Schall, J.D., & Logan, G.D. (2008). Stochastic accumulator model of saccade response time and neurophysiology. *Presented at the 49th annual meeting of the Psychonomic Society*, Chicago, IL.
- <u>Boucher, L.</u>, Logan, G.D., **Palmeri, T.J.**, & Schall, J.D. (2008). The effect of instruction on response inhibition. *Presented at 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. *Presented at to the Society for Neuroscience Conference*, Washington, DC.
- <u>Pouget, P.</u>, Logan, G.D., **Palmeri, T.J.**, <u>Boucher, L.</u>, Paré, M., & Schall, J.D. (2008). Neural basis of adaptive response time adjustment in saccade countermanding. *Presented at to the Society for Neuroscience Conference*, Washington, DC.
- <u>Purcell, B., Heitz, R.P., Cohen, J.Y.,</u> 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. *Presented to the 8th 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. *Presented at the 8th 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. *Presented at the 8th Annual meeting of the Vision Science Society*, Naples, FL.
- <u>Pearson, L.R.</u>, Logan, G.D., Schall, J.D., & **Palmeri, T.J.** (2007). Accumulator race models of search target step performance. *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. *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. *Presented at the Society for Neuroscience Conference*, Atlanta, GA.
- **Palmeri, T.J.**, <u>Mack, M.L.</u>, <u>Wong, A.C.-N.</u>, & Gauthier, I. (2007). The time-course of detecting, categorizing, and identifying objects. *Presented at the joint meeting of the EPS and Psychonomic 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 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. *Presented at the 7th Annual Meeting of the Vision Science Society*, Sarasota, FL.
- <u>Cheung, O.S., Richler, J.</u>, **Palmeri, T.J.**, & Gauthier, I. (2007). Revisiting the role of spatial frequencies in the holistic processing of faces. *Presented at the 7th Annual Meeting of the Vision Science Society*, Sarasota, FL.
- **Palmeri, T.J.**, <u>Mack, M.</u>, <u>Wong, A.C.-N.</u>, & Gauthier, I. (2006). The time-course of detection, categorization, and identification. *Presented at the 47th Annual Meeting of the Psychonomic Society*, Houston, TX.
- Boucher, L., Logan, G.D., **Palmeri, T.J.**, & Schall, J.D. (2006). Modeling trial history of saccade countermanding. *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. *Presented at the 6th Annual Meeting of the Vision Science Society*, Sarasota, FL.
- <u>Richler, J.</u>, Gauthier, I., Wenger, M., & **Palmeri, T.J.** (2006). Holistic processing for faces: Bridging paradigms. *Presented at the 6th Annual Meeting of the Vision Science Society*, Sarasota, FL.
- **Palmeri, T.J.**, <u>Camalier, C.R.</u>, <u>Boucher, L.</u>, Schall, J.D., & Logan, G.D. (2005). Stochastic models of neurophysiology and behavior of visually guided saccades. *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. *Presented at the Society for Neuroscience Conference*, Washington, DC.
- <u>Camalier, C.R., Gotler, A.</u>, 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. *Presented at the Society for Neuroscience Conference*, Washington, DC.
- **Palmeri**, **T.J.** (2005). Computational modeling of the development of perceptual expertise. *Invited presentation at the 2005 meeting of TENNET*, Montreal, Canada.

- Schall, J.D., <u>Boucher, L.</u>, Logan, G.D., & **Palmeri, T.J.** (2005). Choice, decision and action investigated with visually guided saccades. *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. *Presented at the 5th 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. *Presented at the Society for Neuroscience Conference*, San Diego, CA.
- Schall, J.D., <u>Boucher, L.</u>, Logan, G.D., & Palmeri, T.J. (2004). An interactive race model of countermanding. *Presented at the Society for Mathematical Psychology*, Ann Arbor, MI.
- **Palmeri**, **T.J.** (2004). Categorization and amnesia. *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. *Presented at the 2004 Computational and Systems Neuroscience Conference at Cold Spring Harbor in the Spring*.
- <u>Flanery, M.A.</u>, & **Palmeri, T.J.** (2003). Using fMRI to examine representational shifts during category learning. *Presented at the 44th Annual Meeting of the Psychonomic Society*, Vancouver, BC.
- <u>Boucher, L.</u>, Logan, G.D., **Palmeri, T.**, & Schall, J.D. (2003). An interactive race model of countermanding saccades. *Presented at the Society for Neuroscience Conference*.
- Logan, G.D., Palmeri, T.J., & <u>Vickery, T.</u> (2003). An instance theory of attention and memory in visual search. *Presented at the Munich Symposium on Visual Search*, Holzhausen, Germany.
- **Palmeri, T.J.**, <u>Kim, C.-Y.</u>, Blake, R., Marois, R., <u>Guttman, S.</u>, & <u>Vickery, T.</u> (2003). The perceptual reality of synesthetic colors and their interactions with real colors. *Presented at the 3rd Annual Meeting of the American Synesthesia Association*, New York.
- <u>Kim, C.-Y.</u>, Blake, R.B., **Palmeri, T.J.**, Marois, R., & Whetsell, W. (2003). Synesthetic colors act like real colors and interact with real colors. *Presented at the 3rd Annual Meeting of the Vision Sciences Society*, Sarasota, FL.
- **Palmeri, T.J.**, Logan, G.D., Schall, J., & <u>Vickery, T.</u> (2002). Tests of an instance theory of attention and memory. *Presented at the 43rd Annual Meeting of the Psychonomic Society*, Kansas City, MO.
- **Palmeri, T.J.**, & Johansen, M.K (2001, July). Representational shifts in category learning. *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. *Presented at the 1st Annual Meeting of the Vision Sciences Society*, Sarasota, FL.
- <u>Flanery, M.A.</u>, & **Palmeri, T.J.** (2001). fMRI studies of perceptual and probabilistic categorization. *Presented at the Cognitive Neuroscience Society Meeting*.
- **Palmeri, T.J.**, & <u>Flanery, M.A.</u> (2000). Category knowledge acquired during categorization testing. *Presented at the 41st Annual Meeting of the Psychonomic Society*, New Orleans, LA.
- Jenkins, L., Corbett, A.M., Allison, E.S., & **Palmeri, T.J.** (2000). Age and exemplar similarity in automaticity. *Presented at the 2000 Meeting of Cognitive Aging*, Atlanta, GA.
- <u>Flanery, M.A., Shelton, A.L.,</u> **Palmeri, T.J.,** Morgan, V.L., Price, R.R., & Pickens, D.R (2000). A functional brain imaging study of perceptual categorization. *Presented at the Cognitive Neuroscience Society Meeting*.

- <u>Flanery, M.A., Shelton, A.L.,</u> **Palmeri, T.J.**, Morgan, V.L., Price, R.R., & Pickens, D.R (1999). Functional brain imaging of novel object classification. *Presented at 7th Annual Workshop on Object Perception and Memory*, Los Angeles, CA.
- **Palmeri, T.J.**, & Johansen, M.K. (1999). Prototypes, rules, and instances in category learning. *Presented at the 40th Annual Meeting of the Psychonomic Society*.
- **Palmeri, T.J.**, & <u>Flanery, M.A.</u> (1999). Learning about categories in the absence of training: Profound amnesia and the relationship between perceptual categorization and recognition memory. *Presented at the Cognitive Neuroscience Society Meeting*.
- **Palmeri, T.J.** (1998). An exemplar-based diffusion model of perceptual categorization. *Presented at the 39th Annual Meeting of the Psychonomic Society*.
- Grossman, E., Blake, R., & Palmeri, T.J. (1998). Motion perception at scotopic light levels. *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. *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. *Presented at the 38th Annual Meeting of the Psychonomic Society*.
- 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. *Presented at the Society for Mathematical Psychology 1997 Annual Meeting*, Indiana University.
- **Palmeri, T.J.** (1997). Predicting response time distributions in speeded classification tasks. *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. *Presented at the 37th Annual Meeting of the Psychonomic Society*.
- **Palmeri, T.J.** (1996). Exemplar similarity and the development of automaticity. *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. *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. *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. *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. *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. *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. *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. *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. *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

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, Vanderbilt News

Invited Talks and Colloquia

Annual Meeting of TENNET, Australasian Cognitive Neuroscience Society Conference, Indiana University, Institute for Empirical Research in Economics at the University of Zurich, Max-Planck Institute for Biological Cybernetics, McMaster University, Melbourne University, Netherlands Institute for Neuroscience, Northeastern University, Perceptual Expertise Network, University of Buffalo, University College London, University of California at San Diego, University of California at Irvine, University of Copenhagen, University of Memphis, University of Minnesota, University of Newcastle, University of North Carolina Greensboro, University of Texas at Austin, University of Warwick, Vanderbilt Center for Quantitative Sciences, Vanderbilt Microbiology and Immunology Fall Retreat, Washington State University

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, 2011; Spring 2014, 2020)

Computational Neuroscience (Fall 2021; Spring 2017, 2019)

Graduate Seminar in Cognition and Cognitive Neuroscience (Fall 2000, 2002, 2003, 2008, 2009, 2010, 2011; Spring 1997, 2001, 2003, 2004, 2015)

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 2006-2010, 2014)

Scientific Computing for Psychological and Brain Sciences (Fall 2012, 2014, 2016, 2018, 2020)

Scientific Computing Toolbox (Fall 2011-2019)

Systems Neuroscience, co-instructor (Fall 2005)

Thinking and Cognition (Fall 1997; Spring 1999)

The Visual System, co-instructor (Spring 2015-2017, 2019)

Graduate Student Committees

PhD Committee Chair / co-Chair:

Jason Chow (2018-present)

Dr. Marci Flanery (1997-2005), now consultant in San Francisco

Jinhyeok Jeong (2021-present)

Dr. Michael Mack (2005-2011), now Associate Professor of Psychology, University of Toronto Patrick Mundy (2010-2011), now working in Bloomington, IN

Dr. Braden Purcell (2007-2013), postdoctoral fellow at NYU, now data scientist at SquareSpace

Dr. Jennifer Richler (2005-2010), now senior editor at Nature Publishing

Dr. Jianhong (May) Shen (2012-2018), now data scientist at Facebook

Matthew Tillis (2019-2020)

Dr. Alan Wong (2002-2007), now Senior Lecturer at University of Surrey

PhD Thesis Administrative Chair:

Dr. Eric Emeric (2005-2010, official chair of Neuroscience thesis committee), now postdoctoral fellow, Johns Hopkins University

Dr. Christian Luhmann (2001-2006, official chair), now Associate Professor of Psychology, University of Stony Brook

Dr. Ken Sobel (1995-2000, official chair), now Associate Professor of Psychology, University of Central Arkansas

Committee Member:

Michael Berkowitz (2005-2007)

Dr. Corrie Camalier (2004-2006), now Assistant Research Professor, Vanderbilt Medical Center Ting-Yun Chang (2021-present)

Dr. Kao-Wei Chua (2012-2017), now Postdoctoral Fellow at NYU

Dr. Ron Cobb (2002-2005), faculty member, Massachusetts School of Professional Psychology

Dr. Rebecca Cutler (2017-2022), now Postdoctoral Fellow at UT Austin

Dr. Lewis Frey (1998-2003, Computer Science Department)

Dr. Marja Germans Gard (1998-2004), now artist

Dr. Emily Grossman (1997-2002), now Professor of Psychology, UC Irvine

Jordan Gunn (2021-present)

Dr. Stephenie Harrison (2011-2012)

Eeshan Hasan (2020-2022)

Julia High (2002-2003), now engineer at MITRE

Langdon Holmes (2023-present)

Dr. William Hudenko (2000-2004), now Assistant Professor, Dartmouth Medical School

Dr. Hojin Jang (2017-2019)

Dr. Min-Suk Kang (2003-2008), now postdoctoral fellow, Vanderbilt University

Dr. Chai-Youn Kim (2003-2006), now Assistant Professor of Psychology, Korea University

Dr. James Kragel (2012-2015), now postdoctoral fellow, University of Pennsylvania

Dr. Nana Landenberger (1999-2001)

Joshua McCluey (2014-2016)

Dr. N. Rankin Williams McGugin (2009-2011), now Research Assistant Professor, Vanderbilt University

Dr. Michael Mebane (2004-2006), economist in NY City after receiving doctorate in economics from Fordham University

Huiyuan Miao (2019-present)

Dr. Gayathri Narasimham (2000-2006, Department of Psychology and Human Development), now Lecturer in Psychology and Human Development, Vanderbilt University Jeffrey Oliver (1996-1997), now in business

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Andrew Palmer (1997-1998)

Cynthia Peng (2012)

Dr. Joshua Phillips (2004, Masters Degree Committee, Department of Computer Science), now Associate Professor, Middle Tennessee State University

Lasyapriya Pidaparthi (2023-present)

Ken Rahman (2023-present)

Dr. Amy Shelton (1996-1999), now Professor, Johns Hopkins University

Jennica Sherwood (2003-2004)

Dr. Darryl Schneider (2004-2008), now Associate Professor, Purdue University

Weidong Shi (1996-1999)

Dr. Moria Smoski (1996-1999), now Associate Professor of Psychiatry, Duke University Medical Center

Dr. David Sprinzen (2014-2017, Integrative Neuroscience), now Vice President at Vantiq

Dr. Rebecca St. Clair (2008-2012), now researcher at Verizon

Jisoo Sun (2020-present)

Dr. Mackenzie Sunday (2017-2019), now at Google

Dr. Tricia Thornton-Wells (2002-2005, Integrative Neuroscience), now Assistant Professor of Molecular Physiology & Biophysics and Biomedical Informatics, Vanderbilt Medical Center

Dr. Ana Beth Van Gulick (2010-2014), now Postdoctoral Fellow, Carnegie Mellon University

Dr. Maggie Xiong (2002-2005), Director of Data Engineering at Huffington Post Siyuan Yin (2015-2017)

External Examiner:

Dr. Erika W. Contini (2018, Macquarie University)

Dr. David Sewell (2008, University of Western Australia), now Postdoctoral Fellow, University of Melbourne

Dr. Prasanna Venkatesh (2017, Indian Institute of Science, Bengaluru, Karnataka, India), now Knowledge Officer, STEER Engineering

Dr. Lee-Xieng Yang (2003, University of Western Australia), now Assistant Professor, Institute of Cognitive Science, National Cheng Kung University

Postdoctoral Fellows Supervised

Brandon Ally, K23 co-advisor (2011-2012), now Assistant Professor of Neurosurgery, University of Louisville School of Medicine, and co-Founder of SportsSense

Jeffrey Annis, Postdoctoral Supervision (2014-2019), now Data Scientist at Vanderbilt Medical Center Giwon Bahg (2021-present)

Leanne Boucher, Joint Postdoctoral Supervision (2003-2008, NIH/NEI NRSA), now Professor of Psychology, Nova Southeastern University

Greg Cox, Joint Postdoctoral Supervision (2018-2021), now Assistant Professor of Psychology, University of Albany

Linh Dang, Joint Postdoctoral Supervision (NRSA co-sponsor, 2014-2017)

Stephen Denton, Postdoctoral Supervision (2011-2012), now working in industry

Jonathan Folstein, Joint Postdoctoral Supervision (2007-2012, NIH/NEI NRSA), now Assistant Professor of Psychology, Florida State University

Simon Lilburn (2021-present)

Brent Miller, Joint Postdoctoral Supervision (2014-2018), now working in industry

Lance Pearson, Joint Postdoctoral Supervision (2006-2007), was Director of Applied Analytics for the Philadelphia 76ers

Jennifer Richler, Joint Postdoctoral Supervision (2010-2014), now Senior Editor at Nature Publishing

David Ross, Joint Postdoctoral Supervision (2011-2014), now postdoctoral fellow, Department of Psychology, University of Massachusetts, Amherst

Craig Sanders, Joint Postdoctoral Supervision (2018-2019), now Research Engineer at Meta/Facebook Amirsaman Sajad (2022-present)

Mathieu Servant, Joint Postdoctoral Supervision (2016-2018), now Assistant Professor, Department of Psychology, Université de Bourgogne Franche-Comté

Gabriel Tillman, Joint Postdoctoral Supervision (2017-2018), now Lecturer at the Australian College of Applied Psychology, Sydney, Australia

James Yearsley, Joint Postdoctoral Supervision (2015-2017), now Lecturer at City University of London Bram Zandbelt, Joint Postdoctoral Supervision (2011-2014), now postdoctoral fellow at the Donders Institute for Brain, Cognition, and Behaviour, Nijmegen, The Netherlands

Personal

Married to Amy Palmeri, Associate Professor of the Practice, Department of Teaching and Learning, Peabody College, Vanderbilt University

Two sons, Matthew (24) and Jordin (18)

Dual citizen of the United States and Italy

Fluent (native speaker) in English, CEFR level B1/B2 in Italian