

CURRICULUM VITAE

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Department of Psychology
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EDUCATION

- 2011 **Ph.D., Cognitive Neuroscience**
University of California, Los Angeles
Advisors: Patricia Cheng, Ph.D. and James Stigler, Ph.D.
Dissertation: Integrating Implicit and Explicit Knowledge in Mathematics
Through Causal Learning: A Causal Contrast Approach
- 2004 **M.A., Cognitive Psychology**
University of California, Los Angeles
Advisor: Russ Poldrack, Ph.D.
Thesis: Asymmetries in Predictive and Diagnostic Causal Learning
- 2001 **B.A., Philosophy, with honors**
B.A., Psychology, with honors
The College of New Jersey
Magna cum laude

TEACHING EXPERIENCE

Academic Appointments

- February 2014 to present **Assistant Professor, Psychology, Chapman University**
Orange, CA
Learning, Statistics for Behavioral Science, Physiological Psychology, History & Systems of Psychology, Cognitive Psychology
- August 2013 to January 2014 **Adjunct Professor, Psychology, Chapman University, Orange, CA**
Cognitive, Lifespan Development
- Spring 2010
Spring 2011 **Instructor, Interdisciplinary Cluster Program, UCLA**
Seminar: A Neuropsychological Approach to Understanding Cognition and the Human Brain

September 2005 to August 2007 **Adjunct Professor, Psychology, Rowan University, Glassboro, NJ**
Intro to Psychology: Brain, Mind, Behavior; History & Systems

January 2005 to June 2007 **Adjunct Professor, Psychology, TCNJ, Ewing, NJ**
General Psychology, Methods & Tools of Psychology,
Behavioral Statistics

Lectures by Invitation

February 15, 2013; February 27, 2013 **Guest Lecturer, California Institute of Technology (Caltech)**
Cognitive Psychology

March 2004 **Guest Lecturer, UCLA**
Principles of Behavioral Neuroscience

Teaching Assistantships

September 2009 to June 2011 **Teaching Fellow, Interdisciplinary Cluster Program, UCLA**
Evolution of the Cosmos & Life

September 2007 to August 2009 **Teaching Assistant, Department of Psychology, UCLA**

MENTORING AND ADVISING EXPERIENCE

June 2013 to August 2013 **Faculty Mentor**
Summer Undergraduate Research Fellowship (SURF)
Department of Psychology, Chapman University

September 2013 to December 2013 **Advisor: Individual Research (PSY 499)**
Department of Psychology, Chapman University

January 2011 to December 2013 **Supervisor: Directed Independent Research, Senior Thesis**
Department of Psychology, UCLA

January 2007 to May 2007 **Advisor: Senior Capstone Thesis**
Department of Psychology, The College of New Jersey, Ewing, NJ

RESEARCH EXPERIENCE

Postdoctoral Experience

September 2013 to January 2014 **Research Associate Level III, Psychology, UCLA**
PI: Patricia Cheng, Ph.D.

August 2011 to August 2013 **Postdoctoral Scholar, Psychology, UCLA**
Center for Advanced Technology in Schools
PIs: Keith Holyoak, Ph.D. and James Stigler, Ph.D.

Research Assistantship

August 2004 to
June 2005

**Research Specialist, Neurology, University of Pennsylvania
Center for Functional Neuroimaging (fMRI)**

PI: Geoffrey Aguirre, M.D., Ph.D.

LECTURES & COLLOQUIA

Walker, J.M. (2013, September). Discovering the causality in math: Causal contrast comparisons for teaching mathematics. Talk presented at UCLA Developmental Forum Research Colloquium, Los Angeles, CA.

Walker, J.M. (2012, March). The causal contrast approach to learning mathematics. Talk presented at the UCLA Cognitive Forum Research Colloquium, Los Angeles, CA.

Walker, J.M. (2010, October). Causal contrast comparisons support goal-directed reasoning. Talk presented at UCLA Cognitive Forum Research Colloquium, Los Angeles, CA.

CONFERENCE & WORKSHOP PRESENTATIONS

Walker, J.M. (2014, May). Causal Contrasts for Algebra Learning. Talk presented in Relational Understanding in Mathematics: Issues and Interventions Symposium, J. W. Stigler (Chair), at 26th Association for Psychological Sciences (APS) Annual Convention, San Francisco, CA.

Ye, J.P., Walker, J.M., & Cheng, P.W. (2013, May). Causal Contrasts and Self-explanation in Mathematics Teaching. Poster presented at UCLA Psychology Undergraduate Research Conference (PURC), Los Angeles, CA.

Ye, J.P., Walker, J.M., & Cheng, P.W. (2013, May). Causal Contrasts and Self-explanation in Mathematics Teaching. Poster presented at Stanford Undergraduate Psychology Conference (SUPC), Palo Alto, CA.

Walker, J.M. (2012, November). The Front End: What Cognitive Psychology Can Offer Math Learning Games. Talk presented at the Educational Technology Workshop sponsored by the Center for Advanced Technology in Schools (CATS) and the Institute for Education Sciences (IES), Los Angeles, CA.

Delacruz, G., Walker, J.M., Chung, G. (2012, September). Math games and learning. Talk presented at IES Principal Investigators Meeting within the Society for Research on Educational Effectiveness (SREE) Conference, Washington D.C.

Walker, J.M., Cheng, P.W. (2011, July). Applying causal learning to mathematics learning. Talk presented at the Annual Summer Interdisciplinary Conference (ASIC), Pyrenees, Spain.

Prasad, S, Aguirre, G. K., Walker, J.M., Brainard, D. H., Chatterjee A. (2005). Area V5/MT demonstrates altered temporal responses in Riddoch syndrome. Poster presented at the American Academy of Neurology Annual Meeting, Miami, FL.

Aguirre, G. K., Komaromy, A. M., Brainard, D. H., Walker, J. M., Maguire, A. M., Bennett, J., Hauswirth, W. W., Acland, G. M., Aguirre, G. D. (2005). fMRI of recovered cortical visual responses following gene therapy in dogs. Poster presented at the ARVO Annual Meeting, Ft. Lauderdale, FL.

HONORS AND AWARDS

- 2014 Summer Undergraduate Research Fellowship (SURF) Mentor, Chapman University
- 2011 Academic Senate Distinguished Teaching Assistant Award, Honorable Mention, UCLA
- 2004 Summer Research Mentorship Award (Fellowship), UCLA
- 2003 Summer Incentive Award, UCLA Department of Psychology
- 2002–2003 First-year Graduate Fellowship, UCLA Department of Psychology
- 2001 Phi Kappa Phi Student Research Award, The College of New Jersey
- 2001 Phi Kappa Phi
- 1996–2001 Edward J. Bloustein Distinguished Scholar of New Jersey, The College of New Jersey
- 1996–2001 Merit Scholar, The College of New Jersey

PROFESSIONAL AFFILIATIONS

American Psychological Association
Association for Psychological Science
Cognitive Neuroscience Society
Cognitive Science Society

AD HOC REVIEWER

Frontiers in Cognition
Cognitive Psychology

MANUSCRIPTS UNDER REVIEW

- Walker J.M., Stigler, J.W., & Holyoak, K.J. (2014). Causal Contrasts for Teaching Conceptual Understanding of Number Lines. Invited revision resubmitted, *Cognition and Instruction*.
- Walker, J.M., Cheng, P.W., & Stigler, J.W. (2015). Equations Are Effects: Using Causal Contrasts to Support Algebra Learning. Under review, *Frontiers in Cognition*.

PUBLICATIONS

- Walker, J. M., Cheng, P.W., & Stigler, J.M. (2014). Equations Are Effects: Using Causal Contrasts to Support Algebra Learning. In P. Bello, M. Guarini, M. McShane, & B. Scasellati. (Eds.), *Proceedings of the 36th Annual Conference of the Cognitive Science Society*. Austin, TX: Cognitive Science Society.
- Waldmann, M. R. & Walker, J.M. (2005). Competence and Performance in Causal Learning. *Learning & Behavior*, 33 (2), 211 – 223.
- Leynes, P.A., Landau, J.D. & Walker, J.M. (2005). Event-Related Potential (ERP) Evidence for Multiple Causes of the Revelation Effect. *Consciousness & Cognition*, 14 (2), 327 – 350.