

DAVID A BRIDWELL

FEBRUARY, 2012

ADDRESS

The Mind Research Network
1101 Yale Blvd. NE
Albuquerque, New Mexico 87106

CONTACT

✉ dbridwell@mrn.org
Web: www.davidbridwell.info
Web: mialab.mrn.org

RESEARCH INTERESTS

Attention, visual perception, psychophysics, blind source separation, time-series analysis, electroencephalography (EEG), functional Magnetic Resonance Imaging (fMRI)

EDUCATION

- Ph.D.** University of California, Irvine, Department of Cognitive Sciences Psychology, 2011 (Cognitive Neuroscience training area)
- B.S.** University of California, Davis, Davis, Ca. Neurobiology, Physiology, and Behavior, 2006 (High Honors) Minor in Neuroscience

ACADEMIC APPOINTMENTS

- 2012 — CURRENT **Postdoctoral Fellow, Mind Research Network**, Albuquerque, NM. Characterizing brain networks in healthy and clinical populations using functional magnetic resonance imaging (fMRI) (PI: Dr. Vince Calhoun)
- 2007 — 2011 **Graduate Research, UC Irvine, Department of Cognitive Sciences.** Examining attention and visual perception using electroencephalography (EEG). (PI: Dr. Ramesh Srinivasan)
- 2006 — 2007 **Junior Specialist, UC Davis, Center for Mind and Brain.** Examining the effects of intensive meditation training on cognitive and behavioral measures of attention and emotion regulation. (PI: Dr. Clifford Saron)
- 2005 — 2006 **Honors Thesis, UC Davis, Center for Neuroscience.** Characterizing the role of DARPP-32 in prism induced adaptive plasticity in the barn owl sound localization pathway. (PI: Dr. William DeBello)
- 2005 **Laboratory Assistant, UC Davis, Department of Neurobiology, Physiology, and Behavior.** Using an animal stroke model to look at the neuroprotective and anti-inflammatory actions of estrogen. (PI: Dr. Phyllis Wise)

FELLOWSHIP/AWARDS

- FALL 2011 Center for Cognitive Neuroscience Merit Fellowship
2007 — 2011 Social Science Merit Fellowship
2006 Citation for Outstanding Academic and Research Achievements

ADDITIONAL EXPERIENCE

- JULY 2011 **Summer Program in Probabilistic Models of Cognition**, UCLA, Institute for Pure and Applied Mathematics (IPAM).
- AUG. 2009 **Training Course in fMRI**, University of Michigan. An intensive 10 day training on BOLD fMRI, hosted by John Jonides, fully funded.
- FALL 2008 **Freelance Programmer**, California State University Long Beach, Department of Communicative Disorders. Converted pencil and paper based clinical tests into computer based assessments.
- AUG. 2007 **ERP Bootcamp**, University of California Davis. An intensive 10 day training on the ERP technique, hosted by Steve Luck.

TEACHING EXPERIENCE

- SPRING 2009 **Teaching Assistant**, University of California Irvine.
Research in Perception and Psychophysics, I led two weekly laboratory sessions.
- FALL 2008 **Teaching Assistant**, University of California Irvine.
Psychological Research Methods, I revised weekly SPSS laboratory activities and helped analyze weekly laboratory data.
- SPRING 2008 **Teaching Assistant**, University of California Irvine.
Probability and Statistics in the Social Sciences III, I led two weekly labs and bi-weekly review sessions.
- WINTER 2008 **Teaching Assistant**, University of California Irvine.
Probability and Statistics in the Social Sciences II. I led three weekly discussion/laboratory sessions.
- SPRING 2006 **Assistant T.A.**, University of California Davis.
SPRING 2005 *Human Physiology*. I led a bi-weekly discussion/laboratory session.

SERVICES

- JAN. 2011 **Travel Scholarship**, Annual Interdisciplinary Conference (AIC)
- JAN. 2010 Assisted with catering/logistics, organized by George Sperling.
- 2005 — 2006 **Educational Outreach Internship Coordinator**, University of California Davis, Coordinating and Assisting groups as they develop interactive scientific presentations for local grade school students.

MENTORSHIP

- JESSICA TAN 2011, Undergraduate, mentored for UCI SURP fellowship, first authored 1 manuscript (submitted), co-authored 1 manuscript (in preparation)
- ELIZABETH HECKER 2010-2011, Research Assistant, co-authored 4 conference abstracts and 1 manuscript (in preparation)

MEMBERSHIPS

Society for Neuroscience, Vision Sciences Society, Cognitive Neuroscience Society

JOURNAL PAPERS

- Bridwell, D.A.**, Srinivasan, R. (accepted) *Distinct attention networks for feature enhancement and suppression in vision*. Psychological Science
- Jacobs, T.L., Epel, E.S., Lin, J., Blackburn, E.H., Wolkowitz, O.M., **Bridwell, D.A.**, Zanesco, A.P., Aichele, S.R., Sahdra, B.K., MacLean, K.A., King, B.G., Shaver, P.R., Rosenberg, E.L., Ferrer, E., Wallace, B.A., Saron, C.D. (2011) *Intensive meditation training, immune cell telomerase activity, and psychological mediators*. Psychoneuroendocrinology, 36(5):664-81.
- Sahdra, B.K., MacLean, K.A., Ferrer, E., Shaver, P.R., Rosenberg, E.L., Jacobs, T.L., Zanesco, A.P., King, B.G., Aichele, S.R., **Bridwell, D.A.**, Mangun, G.R., Lavy, S., Wallace, B.A., Saron, C.D. (2011) *Enhanced response inhibition during intensive meditation training predicts improvements in self-reported adaptive socioemotional functioning*. Emotion, 11(2):299-312.
- MacLean, K.A., Ferrer, E., Aichele, S.R., **Bridwell, D.A.**, Zanesco, A.P., Jacobs, T.L., King, B.G., Rosenberg, E.L., Sahdra, B.K., Shaver, P.R., Wallace, B.A., Mangun, G.R., Saron, C.D., (2010) *Intensive meditation training leads to improvements in perceptual discrimination and sustained attention*. Psychological Science, 21(6):829-839.
- MacLean, K.A., Aichele, S.R., **Bridwell, D.A.**, Mangun, G.R., Wojciulik, E., Saron, C.D., (2009) *Interactions between endogenous and exogenous attention during vigilance*. Attention, Perception and Psychophysics, 71(5):1042-1058
- Suzuki, S., Brown, C.M., Dela Cruz, C.D., Yang E., **Bridwell, D.A.**, Wise, P.M. (2007) *Timing of estrogen therapy after ovariectomy dictates the efficacy of its neuroprotective and anti-inflammatory actions*. Proceedings of the National Academy of Sciences of the United States of America, 104(14):6013-8

CONFERENCE ABSTRACTS

- Bridwell, D.A.**, Garcia, J.O., Hecker, E.A., Serences, J.T., Srinivasan, R. (2011) *Attention shapes large-scale cortical networks in a frequency specific manner*. Society for Neuroscience, Washington D.C. [talk]
- Saggar, M., MacLean, K.A., Sahdra, B.K., Aichele, S., Jacobs, T.L., Zanesco, A.P., **Bridwell, D.A.**, King, B.G., Rosenberg, E.L., Mangun, G.R., Shaver, P.R., Ferrer, E., Wallace, B.A., Saron, C.D., Miikkulainen, R. (2011) *A computational model to understand longitudinal changes in EEG associated with intensive meditation training*. Society for Neuroscience, Washington D.C.
- Bridwell, D.A.**, Hecker, E.A., Lee, M.D., Serences, J.T., Srinivasan, R. (2011) *Hierarchical Bayesian Modeling of Individual Differences in attention strategies*. Poster presented at UCLA Institute for Pure and Applied Mathematics (IPAM) Probabilistic Models of Cognition Summer school.
- MacLean, K.A., Zanesco, A.P., King, B.G., Aichele, S.R., Jacobs, T.L., **Bridwell, D.A.**, Sahdra, B.K., Ferrer, E., Rosenberg, E.L., Shaver, P.R., Wallace, B.A., Mangun, G.R., Saron, C.D. (2011) *Intensive meditation training improves visual perception*. Association for Psychological Science, Washington D.C. [talk]

- Jacobs, T.L., Epel, E.S., Zanesco, A.P., Aichele, S.R., **Bridwell, D.A.**, King, B.G., MacLean, K.A., Shaver, P.R., Rosenberg, E.L., Sahdra, B.K., Ferrer, E., Kemeny, M.M., Wallace, B.A., Saron, C.D. (2011) *Mindfulness reduces cortisol reactivity to separation-related sadness and attenuates day-to-day variability of the cortisol awakening response*. Society of Biological Psychiatry, San Francisco, Ca.
- Bridwell, D.A.**, Hecker, E., Srinivasan, R. (2011) *Different attention strategies are reflected by modulations in the feature tuned flicker response*. Vision Science Society, Naples, FL. [talk]
- Saggar, M., MacLean, K.A., Aichele, S.R., Jacobs, T.L., Zanesco, A.P., **Bridwell, D.A.**, King, B.G., Sahdra, B.K., Rosenberg, E.L., Shaver, P.R., Ferrer, E., Wallace, B.A., Mangun, G.R., Miikkulainen, R., Saron, C.D. (2011) *Cortical activation changes associated with intensive meditation training are related to vigilance performance*. Cognitive Neuroscience Society, San Francisco, Ca.
- King, B.G., Zanesco, A.P., Rosenberg, E.L., **Bridwell, D.A.**, Jacobs, T.L., Aichele, S.R., MacLean, K.A., Shaver, P.R., Sahdra, B.K., Ferrer, E., Wallace, A., Saron, C.D. (2011) *Differential responses to images of threat and human suffering after intensive meditation training*. Cognitive Neuroscience Society, San Francisco, Ca.
- Bridwell, D.A.**, Hecker, E., Srinivasan, R. (2011) *Differences in attentional strategies during Detection, Fine Discrimination, and Coarse Discrimination*. Southern California Cognitive Neuroscience Meeting, Irvine, Ca.
- Saron, C.D., Sahdra, B.K., MacLean, K.A., Jacobs, T.L., Ferrer, E., Epel, E.S., Shaver, P.R., Lin, J., Aichele, S.R., **Bridwell, D.A.**, Zanesco, A.P., King, B.G. (2011) *Intensive meditation training enhances response inhibition, adaptive socio-emotional functioning, and markers of cellular aging*. Society for Personality and Social Psychology, San Antonio, Tx. [talk]
- Rosenberg, E.L., Zanesco, A.P., King, B.G., Aichele, S.R., Jacobs, T.L., MacLean, K.A., **Bridwell, D.A.**, Sahdra, B.K., Ferrer, E., Shaver, P.R., Wallace, B.A., Saron, C.D. (2011) *Intensive meditation training influences emotional responses to scenes of human suffering*. Society for Personality and Social Psychology, San Antonio, Tx. [talk]
- Bridwell, D.A.**, Srinivasan, R. (2010) *Cortical responses to an unattended flicker reflect modulations in attention within and across tasks*. Society for Neuroscience, San Diego, Ca.
- Garcia, J.O., Hecker, E.A., **Bridwell, D.A.**, Srinivasan, R. (2010) *Temporal frequency tuning in non-retinotopic cortex*. Society for Neuroscience, San Diego, Ca. [talk]
- Sahdra, B.K., MacLean, K.A., Ferrer, E., Shaver, P.R., Rosenberg, E.L., Jacobs, T.L., Zanesco, A.P., King, B.G., Aichele, S.R., **Bridwell, D.A.**, Mangun, G.R., Lavy, S., Wallace, A., Saron, C.D. (2010) *Response inhibition enhanced by meditation training predicts improved adaptive functioning*. American Psychological Association, San Diego, Ca.
- Saggar, M., Aichele, S.R., Jacobs, T.L., Zanesco, A.P., **Bridwell, D.A.**, MacLean, K.A., King, B.G., Sahdra, B.K., Rosenberg, E.L., Shaver, P.R., Ferrer, E., Wallace, A., Mangun, G.R., Saron, C.D., Miikkulainen, R. (2010) *A computational approach to understand the longitudinal changes in cortical activity associated with intensive meditation training*. Computational Neuroscience Society Annual Meeting, San Antonio Tx. [talk]
- Bridwell, D.A.**, Thorpe, S., Srinivasan, R. (2010) *The influence of goal-directed attention on unattended stimulus-driven responses*. Vision Sciences Society, Naples, FL.

- King, B.G., Zanesco, A.P., **Bridwell, D.A.**, Jacobs, T.L., Aichele, S.R., MacLean, K.A., Shaver, P.R., Rosenberg, E.L., Sahdra, B.K., Ferrer, E., Wallace, C., Saron, C.D. (2010) *Accentuate the positive: Longitudinal effects of intensive meditation training on modulation of the emotion potentiated startle reflex*. Cognitive Neuroscience Society, Montreal, Canada.
- Saggar, M., Aichele, S.R., Jacobs, T.L., Zanesco, A.P., **Bridwell, D.A.**, MacLean, K.A., King, B.A., Sahdra, B.K., Rosenberg, E.L., Shaver, P.R., Ferrer, E., Tang, A.C., Wallace, B., Mangun, G.R., Miikkulainen, R., Saron, C.D. (2010) *Training attention: Longitudinal changes in cortical activity associated with intensive meditation*. Human Vision and Electronic Imaging, San Jose, Ca. [talk]
- MacLean, K.A., Aichele, S.R., **Bridwell, D.A.**, Jacobs, T.L., Zanesco, A.P., King, B.G., Saggar, M., Mazaheri, A., Ferrer, E., Rosenberg, E.L., Sahdra, B.K., Shaver, P.R., Wallace, B.A., Mangun, G.R., Saron, C.D. (2009) *Effects of intensive meditation training on sustained attention: Changes in visual event-related potentials, ongoing EEG and behavioral performance*. Society for Neuroscience, Chicago II.
- Saggar, M., Aichele, S.R., Jacobs, T.L., Zanesco, A.P., **Bridwell, D.A.**, MacLean, K.A., King, B.G., Sahdra, B.K., Rosenberg, E.L., Shaver, P.R., Ferrer, E., Tang, A.C., Wallace, B., Mangun, G.R., Miikkulainen R., Saron, C.D. (2009) *Longitudinal changes in cortical activity associated with intensive meditation training*. Society for Neuroscience, Chicago II.
- Jacobs, T.L., Epel, E.S., Lin, J., Blackburn, E.H., Wolkowitz, O.M., **Bridwell, D.A.**, Zanesco, A.P., Aichele, S.R., King, B.G., Sahdra, B.K., MacLean, K.A., Lavy, S., Shaver, P.R., Ferrer, E., Rosenberg, E.L., Wallace, B., Saron, C.D. (2009) *The Relation Between Telomerase Activity and Intensive Meditation Training is Mediated by Changes in Psychological Well-Being*. International Society of Psychoneuroendocrinology, San Francisco Ca. [talk]
- Rosenberg, E.L., Zanesco, A.P., King, B.K., Aichele, S.R., Jacobs, T.L., MacLean K.A., **Bridwell, D.A.**, Wallace, B.A., Saron, C.D. (2009) *Intensive Meditative Training Changes Facial Responses to Scenes of Human Suffering*. Association for Psychological Science, San Francisco, Ca. [talk]
- MacLean, K., Aichele, S., **Bridwell, D.A.**, Jacobs, T., Zanesco, T., King, B.K., Ferrer, E., Mangun, R., Saron, C.D. (2008) *Intensive training in concentration meditation leads to improvements in visual sustained attention and response inhibition*. Society for Neuroscience, Washington D.C.
- MacLean, K., Saron, C., Aichele, S., **Bridwell, D.A.**, Jacobs, T., Zanesco, T., Mangun, R. (2008) *Improvements in Perceptual Threshold with Intensive Attention Training through Concentration Meditation*. Cognitive Neuroscience Society, San Francisco, Ca.
- Suzuki, S., Dela Cruz, C.D., Yang, E.H., **Bridwell, D.A.**, Wise, P.M. (2005) *Estradiol Treatment does not protect against cerebral ischemia after a prolonged absence of circulating ovarian hormones*. Society for Neuroscience, Washington, D.C.

PRESENTATIONS

- MAY 2009 *The Role of Cued Attention on Signal Processing and Internal Noise*. University of California Irvine, Department of Cognitive Sciences Colloquium Series.

MAY 2006 *Cloning and Localization of DARPP-32 in the Barn Owl Sound Localization Pathway.* Annual Undergraduate Research Conference, University of California Davis.