

DAVID A BRIDWELL

SEPTEMBER, 2018

ADDRESS

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CONTACT

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RESEARCH INTERESTS

social psychology, attention, visual and auditory perception, psychophysics,
schizoaffective spectrum disorders, mood disorders, electroencephalography (EEG)

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

RESEARCH EXPERIENCE

- 2015 — CURRENT **Research Scientist, Mind Research Network, Albuquerque, NM.**
Human brain dynamics in healthy and clinical populations using fMRI.
- 2012 — 2015 **Postdoctoral Fellow, Mind Research Network, Albuquerque, NM.**
Impairments in cognitive control and attention in patients diagnosed with
schizophrenia and depression (using ERP's). (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.** The effects of
intensive meditation training on cognitive and behavioral measures of atten-
tion and emotion regulation. (PI: Dr. Clifford Saron)
- 2005 **Laboratory Assistant, UC Davis, Department of Neurobiology, Phys-
iology, and Behavior.** Using an animal stroke model to look at the neuro-
protective and anti-inflammatory actions of estrogen. (PI: Dr. Phyllis Wise)

GRANT SUPPORT

NIH UO1 (Co-Investigator, 20 % effort)

08/01/2018 – 7/31/2020

Title: ECT Current Amplitude and Medial Temporal Lobe Engagement

Agency: NINDS, 5UO1MH111826-02 (PI: Chris Abbott)

Summary: This investigation will identify the relationship and intermediate steps between elec-
troconvulsive therapy (ECT) pulse amplitude and clinical outcomes and develop a model to select
the optimal pulse amplitude dose for an individual patient.

NIH R21 (Co-Investigator, 20 % effort)

08/17/2017 – 7/31/2019

Title: Building Research Capacity in Child Neurology: A US/Sri Lanka Collaborative

Agency: NICHD, 1 R21 HD093563-01 (PI: John Phillips, Jithangi Wanigasinghe)

Summary: This project uses portable EEG to overcome access barriers to health care in Sri Lanka and allows development of novel therapy based on EEG data in early childhood.

AWARDS

- 2017 — 2018 NIMH Student Loan Repayment Award, Competitive Renewal
- 2014 — 2016 NIMH Student Loan Repayment Award
- 2012 Travel Award Nominee, University of New Mexico SFN Chapter
- FALL 2011 Center for Cognitive Neuroscience Merit Fellowship
- 2007 — 2011 Social Science Merit Fellowship
- 2006 Citation for Outstanding Academic and Research Achievements

ADDITIONAL EXPERIENCE

- SEPTEMBER 2018 **Fellow, Big Data Neuroscience Workshop**, Case Western Reserve University, Cleveland, Oh.
- JULY 2018 **Fellow, Summer Institute in Cognitive Neuroscience (SICN)**, Tahoe, Ca.
- SEPTEMBER 2017 **Fellow, Big Data Neuroscience Workshop**, Indiana University, Bloomington In.
- JUNE 2015 **Fellow, Summer Institute in Cognitive Neuroscience (SICN)**, University of California Santa Barbara (UCSB)
- MARCH 2013 **Program in Multimodal Neuroimaging**, UCLA, Institute for Pure and Applied Mathematics (IPAM).
- JULY 2012 **Fellow, Advanced Neuroimaging Training Program (NITP)**, University of California Los Angeles (UCLA)
- MARCH 2012 **MRN fMRI Image Acquisition and Analysis Course**, University of Colorado Boulder. Hosted by Kent Kiehl, Tor Wager, and Vince Calhoun.
- 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.
- 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.

JOURNAL PAPERS

- Bridwell, D.A.**, Henderson, S., Sorge, M., Plis, S., Calhoun, V.D. (2018) *Relationships between alpha oscillations during speech preparation and listener ERPs to the produced speech*. Scientific Reports, 8:12138. doi: 10.1038/s41598-018-31038-9
- Bridwell, D.A.**, Cavanagh, J.F., Collins, A., Nunez, M.D., Srinivasan, R., Stober, S., Calhoun, V.D. (2018) *Moving Beyond ERP Components: A selective review of approaches to Integrate EEG and Behavior*. Frontiers in Human Neuroscience, 12:106. doi: 10.3389/fnhum.2018.00106
- Labounek, R., **Bridwell, D.A.**, Mareček, R., Lamoš, M., Mikl, M., Slavíček, T., Bednařík, P., Baštinec, J., Hlušník, P., Brázdil, M., Jan, J., (2018) *Stable scalp EEG spatio-spectral patterns across paradigms estimated by group ICA*. Brain Topography, 31(1):76-89.
- Bridwell, D.A.**, Leslie, E., McCoy, D., Plis, S., and Calhoun, V.D., (2017) *Cortical sensitivity to guitar note patterns: EEG entrainment to repetition and key*. Frontiers in Human Neuroscience, 11:90 doi: 10.3389/fnhum.2017.00090
- Yu, Q. Wu, L., **Bridwell, D.A.**, Erhardt, E.B., Du, Y., He, H., Chen, J., Liu, P., Sui, J., Pearlson, G., Calhoun, V.D. (2016) *Building an EEG-fMRI multi-modal brain graph: a concurrent EEG-fMRI study*. Frontiers in Human Neuroscience, 10:476. doi: 10.3389/fnhum.2016.00476
- Lowe, M., Sakaie, K., Beall, E., Calhoun, V.D., **Bridwell, D.A.**, Rubinov, M., Rao, S.M. (2016). *Modern Methods for Interrogating the Human Connectome*. Journal of the International Neuropsychological Society, 22(2):105-119.
- Bridwell, D.A.**, Rachakonda, S., Silva, R.F., Pearlson, G.D., Calhoun, V.D. (2016). *Spatiospectral decomposition of multi-subject EEG: evaluating blind source separation algorithms on real and realistic simulated data*. Brain Topography, doi:10.1007/s10548-016-0479-1
- Bridwell, D.A.**, Roth, C., Navin Gupta, C., Calhoun, V.D. (2015). *Cortical response similarities predict which audiovisual clips individuals viewed, but are unrelated to clip preference*. PLoS ONE, 10(6): e0128833. doi:10.1371/journal.pone.0128833
- Saggar, M., Zanesco, A.P., King, B.G., **Bridwell, D.A.**, MacLean, K.A., Aichele, S.R., Jacobs, T.L., Wallace, B.A., Saron, C.D., Miikkulainen, R. (2015). *Mean-field thalamocortical modeling of longitudinal EEG acquired during intensive meditation training*. NeuroImage, 114:88-104, doi: 10.1016/j.neuroimage.2015.03.073

- Rosenberg, E.L., Zanesco, A.P., King, B.G., Aichele, S.R., Jacobs, T.L., **Bridwell, D.A.**, MacLean K.A., Shaver, P.R., Ferrer, E., Sahdra, B.K., Lavy, S., Wallace, B.A., Saron, C.D. (2015). *Intensive Meditation Training Influences Emotional Responses to Suffering*. *Emotion*, 15(6):775-790.
- Bridwell, D.A.**, Steele, V.R., Maurer, M.J., Kiehl, K.A., Calhoun, V.D. (2015) *The relationship between somatic and cognitive-affective depression symptoms and error-related ERP's*. *Journal of Affective Disorders*, 172(1):89-95
- Bridwell, D.A.**, Kiehl, K.A., Pearson, G.D., Calhoun, V.D. (2014) *Patients with schizophrenia demonstrate reduced cortical sensitivity to auditory oddball regularities*. *Schizophrenia Research*, 158(1-3):189-94.
- Roth, C., Navin Gupta, C., Plis, S.M., Damaraju, E., Khullar, S., Calhoun, V.D., **Bridwell, D.A.** (2013) *The Influence of Visuospatial Attention on Unattended Auditory 40 Hz Responses*. *Frontiers in Human Neuroscience*, 7:370. doi: 10.3389/fnhum.2013.00370
- Bridwell, D.A.**, Hecker, E.A., Serences, J.T., Srinivasan, R. (2013) *Individual differences in attention strategies during detection, fine discrimination, and coarse discrimination*. *Journal of Neurophysiology*, 110:784-794.
- Jacobs, T.L., Shaver, P.R., Epel, E.S., Zanesco, A.P., Aichele, S.R., **Bridwell, D.A.**, Rosenberg, E.L., King, B.G., MacLean, K.A., Sahdra, B.K., Kemeny M.E., Ferrer, E., Wallace, B.A., Saron, C.D. (2013) *Self-reported mindfulness and cortisol during a shamatha meditation retreat*. *Health Psychology*, 32(10):1104-1109.
- Bridwell, D.A.**, Wu, L., Eichele, T., Calhoun, V.D., (2013) *The spatio-spectral characterization of brain networks: fusing concurrent EEG spectra and fMRI maps*. *NeuroImage*, 69:101-111.
- Bridwell, D.A.**, Srinivasan, R. (2012) *Distinct attention networks for feature enhancement and suppression in vision*. *Psychological Science*, 23(10):1151-1158.
- Saggar, M., King, B.G., Zanesco, A.P., MacLean, K.A., Aichele, S.R., Jacobs, T.L., **Bridwell, D.A.**, Shaver, P.R., Rosenberg, E.L., Sahdra, B.K., Ferrer, E., Tang, A.C., Mangun G.R., Wallace, B.A., Miikkulainen, R., Saron, C.D. (2012) *Intensive training induces longitudinal changes in meditation state-related EEG oscillatory activity*. *Frontiers in Human Neuroscience*, 6:256 doi:10.3389/fnhum.2012.00256.
- 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 PAPERS

Labounek, R., **Bridwell, D.A.**, Mareček, R., Lamoš, M., Mikl, Brázdil, Jan J., M., T., Hlušík, P., (2019) *Stable EEG Spatospectral Sources Using Relative Power as Group-ICA Input* In: Lhotska L., Sukupova L., Lacković, I., Ibbott G. (eds) World Congress on Medical Physics and Biomedical Engineering 2018. IFMBE Proceedings, vol 68/2. Springer, Singapore

Labounek, R., Janeček, D., Mareček, R., Lamoš, M., Slavíček, T., Mikl, M., Baštinec, J., Bednařík, P., **Bridwell, D.A.**, Brázdil, M., Jan, J. (2016) *Generalized EEG-fMRI spectral and spatospectral heuristic models*. IEEE International Symposium on Biomedical Imaging

Sui, J., Castro, E., He, H., **Bridwell, D.A.**, Du, Y., Pearlson, G.D., Jiang, T., Calhoun, V.D. (2014) *Combination of fMRI-SMRI-EEG data improves discrimination of schizophrenia patients by ensemble feature selection*. IEEE Engineering in Medicine and Biology Society

BOOK CHAPTERS

Bridwell, D.A., Calhoun, V.D. (2014) Fusing concurrent EEG and fMRI intrinsic networks. In: *MEG- From Signals to Dynamic Cortical Networks*. Eds: S. Supek and C.A. Aine. Springer.

CONFERENCE ABSTRACTS

Bridwell, D.A., Srinivasan, R., Calhoun, V.D. (2018) *Spatiotemporal Group ICA reveals EEG networks that support attentional biases*. Big Data Neuroscience Workshop, Cleveland, Oh.

Bridwell, D.A., Henderson, S., Sorge, M., Plis, S., Calhoun, V.D. (2018) *Relationships between alpha oscillations during speech preparation and listener ERPs to the produced speech*. Organization for Human Brain Mapping, Singapore.

Bridwell, D.A., Liddle, B.J., Kiehl, K.A., Pearlson, G.D., Calhoun, V.D. (2018) *T-SNE visualization of single trial oddball ERP's in controls and patients with schizophrenia*. Organization for Human Brain Mapping, Singapore.

Bridwell, D.A., Liddle, B.J., Kiehl, K.A., Pearlson, G.D., Calhoun, V.D. (2017) *T-SNE projections of single trial ERP's demonstrate a reduced sensitivity to environmental regularities in patients with schizophrenia*. Big Data Neuroscience Workshop, Bloomington In.

Bridwell, D.A., Leslie, E., McCoy, D., Plis, S., and Calhoun, V.D. (2017) *Cortical sensitivity to guitar note melody: EEG entrainment to repetition and key*. Organization for Human Brain Mapping, Vancouver, Canada.

Bridwell, D.A., Henderson, S., Sorge, M., Plis, S., Calhoun, V.D. (2017) *From My Brain To Yours: Relationships between EEG during response preparation and ERP's to the listened speech*. Neuroscience Day, Albuquerque, NM.

- Bridwell, D.A.**, Rachakonda, S., Silva, R.F., Pearlson, G.D., Calhoun, V.D. (2016) *Deriving Distinct EEG Spatiospectral Maps with Multi-Subject Blind Source Separation*. Organization for Human Brain Mapping, Geneva, Switzerland.
- Bridwell, D.A.**, Leslie, E., McCoy, D., Plis, S., Calhoun, V.D. (2016) *Cortical responses reflect the sensitivity to musical structure: a mobile event-related potential (ERP) study*. Neuroscience Day, Albuquerque, NM.
- Skwara, A.C., King, B.G., Zanesco, T.P., Powers, C.E., Wineberg, K.R., Saggari, M., Aichele, S.R., **Bridwell, D.A.**, Jacobs, T.L., MacLean, K.A., Sahdra, B.K., Ferrer, E., Wallace, B.A., Saron, C.D. (2015) *Resting EEG Θ / β ratios increase reliably over the course of intensive three-month meditation retreats*. Society for Neuroscience, Chicago, IL.
- Powers, C.E., Zanesco, A.P., Wineberg, K.R., King, B.G., MacLean, K.A., Aichele, S.R., Saggari, M., **Bridwell, D.A.**, Jacobs, T.L., Wallace, B.A., Saron, C.D. (2015) *Longitudinal modulations of cortical responses during a visual continuous performance task: Effects of practice or intensive meditation training?* Society for Neuroscience, Chicago, IL.
- Bridwell, D.A.**, Roth, C., Navin Gupta, C., Calhoun, V.D., (2015) *Lights, Camera, Inter-Subject Correlation's and Action! EEG ISC magnitudes depend on movie content*. Organization for Human Brain Mapping, Honolulu, HI.
- Bridwell, D.A.**, Steele, V.R., Maurer, M.J., Kiehl, K.A., Calhoun, V.D. (2015) *The relationship between somatic and cognitive-affective depression symptoms and cognitive control*. Organization for Human Brain Mapping, Honolulu, HI.
- Plis, S., **Bridwell, D.A.**, Huster, R., Damaraju, E., Calhoun, V.D. (2015) *EEG independent topographies match to electrode-space projections of fMRI default mode networks*. Organization for Human Brain Mapping, Honolulu, HI.
- Yu, Q., Wu, L., **Bridwell, D.A.**, Erhardt, E., Du, Y., He, H., Sui, J., Pearlson, G., Calhoun, V.D. (2015) *Concurrent EEG-fMRI multi-modal brain graph*. Organization for Human Brain Mapping, Honolulu, HI.
- King, B.G., Zanesco, A.P., Shaver, P.R., Jacobs, T.L., Aichele, S.R., **Bridwell, D.A.**, MacLean, K.A., Wallace, B.A., Saron, C. D. (2015) *Remote emotional memory for depictions of human suffering following an intensive meditation intervention*. Mindfulness and Compassion: The Art and Science of Contemplative Practice, Mindfulness Compassion International Association, San Francisco, CA. [talk]
- Pokorny, J.J., King, B.G., Fukushima, H., Zanesco, A.P., Aichele, S.R., Jacobs, T.L., Bridwell, D.A., MacLean, K.A., Sahdra, B. K., Shaver, P.R., Wallace, B.A., Saron, C.D. (2015) *Meditation training modulates empathic physiological resonance while maintaining the ability to correctly identify the emotional state of others*. Mindfulness and Compassion: The Art and Science of Contemplative Practice, Mindfulness Compassion International Association, San Francisco, CA.
- Conklin, Q.A., King, B.G., Zanesco, A.P., Jacobs, T.L., Pokorny, J.J., Aichele, S.R., **Bridwell, D.A.**, MacLean, K.A., Bales, K.L., Shaver, P.R., Rosenberg, E.L., Wallace, B.A., Ferrer, E., Sahdra, B.K., Saron, C.D. (2014) *The effects of intensive meditation training on oxytocin, vasopressin, and attachment style*. Society for Neuroscience, Washington D.C.
- King, B.G., Zanesco, A.P., Shaver, P.R., Jacobs, T.L., Aichele, S.R., **Bridwell, D.A.**, MacLean, K.A., Wallace, B.A., Sahdra, B.K., Saron, C.D. (2014). *Remote emotional memory for depictions of human suffering following an intensive meditation intervention*. International Symposium for Contemplative Studies, Boston, MA.

- Bridwell, D.A.**, Kiehl, K.A., Pearlson, G.D., Calhoun, V.D. (2014). *Surprise! Relevance and regularity ERP differences in Controls and Patients with Schizophrenia*. Organization for Human Brain Mapping, Hamburg Germany.
- Roth, C., **Bridwell, D.A.**, Navin Gupta, C., Kiehl, K., Pearlson, G., Calhoun, V.D. (2014). *Reduced auditory regularity sensitivity in schizophrenia: wavelet analysis of oddball ERP's*. Organization for Human Brain Mapping, Hamburg Germany.
- Sui J., He, H., Du, Y., Yu, Q., Chen, J., Castro, E., **Bridwell, D.A.**, Pearlson, G., Calhoun, V.D. (2014) *Fusion of fMRI-sMRI-EEG by Ensemble Feature Selection Improves Classification of Schizophrenia*. Organization for Human Brain Mapping, Hamburg Germany.
- Roth, C., **Bridwell, D.A.**, Navin Gupta, C., Kiehl, K., Pearlson, G., Calhoun, V.D. (2014) *Reduced Auditory Regularity Sensitivity in Schizophrenia: Wavelet Analysis of Oddball ERP's*. Biology Research Day, UNM, Albuquerque, NM. [best poster award]
- Roth, C., Navin Gupta, C., Plis, S.M., Damaraju, E., Khullar, S., Calhoun, V.D., **Bridwell, D.A.** (2013) *The Influence of Visuospatial Attention on Unattended Auditory Cortical Responses*. SACNAS National Conference, San Antonio, Tx.
- Aichele, S.R., Ferrer, E., MacLean, K.A., Shaver, P.R., Zanesco, A.P., Rosenberg, E.L., Sahdra, B.K., Jacobs, T.L., **Bridwell, D. A.**, King, B.G., Wallace, B.A., Mangun, G.R., Saron, C.D. (2013) *Intraindividual attentional coherence across scales of time and methods of measurement*. Annual International Meeting of the Psychometric Society, Arnhem, Netherlands.
- Bridwell, D.A.**, Wu, L., Eichele, T., Calhoun, V.D. (2013) *Integrating EEG and fMRI with group joint independent component analysis*. Organization for Human Brain Mapping, Seattle, Wa.
- Roth, C., **Bridwell, D.A.**, Plis, S., Gupta, C.N., Damaraju, E., Khullar, S., Calhoun, V.D. (2013) *The influence of visuospatial attention on unattended auditory cortical responses*. Organization for Human Brain Mapping, Seattle, Wa.
- Bridwell, D.A.**, Wu, L., Eichele, T., Calhoun, V.D. (2012) *The frequency characteristics of intrinsic functional networks: linking concurrent EEG-fMRI*. Society for Neuroscience, New Orleans, La.
- Rosenberg, E.L., Zanesco, A.P., King, B.G., Aichele, S.R., Jacobs, T.L., **Bridwell, D.A.**, MacLean, K.A., Shaver, P.R., Ferrer, E., Sahdra, B.K., Wallace, B.A., Saron, C.D. (2012) *Meditation and the plasticity of emotion: facial expression and the unfolding of emotional responses to suffering*. Association for Psychological Science, Chicago, Il. [talk]
- Tan, J., **Bridwell, D.A.**, Srinivasan, R. (2012) *The influence of target probability on feature-based attention*. UCI Undergraduate Research Symposium. Irvine, Ca.
- Jacobs, T.L., Zanesco, A.P., Aichele, S.R., **Bridwell, D.A.**, King, B.G., MacLean, K.A., Shaver, P.R., Epel, E.S., Kemeny, M.M., Sahdra, B.K., Rosenberg, E.L., Ferrer, E., Wallace, B.A., Saron, C.D. (2012) *Effects of concentrative meditation retreat on working memory capacity, dehydroepiandrosterone-sulfate (DHEA-S), and their association*. Symposium for Contemplative Studies, Denver, Co.
- Bauer-Wu, S., Sahdra, B.K., Whitworth, R., MacLean, K.A., Aichele, S.A., Jacobs, T.L., Zanesco, A.P., **Bridwell, D.A.**, King, B.G., Rosenberg, E.L., Shaver, P.R., Ferrer, E., Mangun, G.R., Wallace, B.A., Saron, C.D. (2012) *The first-person experience of intensive meditation training and associations with third-person socioemotional-cognitive data*. Symposium for Contemplative Studies, Denver, Co.

- MacLean, K.A., Sahdra, B.K., Ferrer, E., Shaver, P.R., Aichele, S.R., **Bridwell, D.A.**, Zanesco, A.P., Jacobs, T.L., King, B.G., Rosenberg, E.L., Wallace, B.A., Mangun, G.R., Saron, C.D. (2012) *Training the mind: The effects of intensive meditation on perception, attention, and self-regulation*. Society for Personality and Social Psychology, San Diego, Ca. [invited talk]
- King, B.G., Zanesco, A.P., Shaver, P.R., Rosenberg, E.L., Jacobs, T.L., Aichele, S.R., MacLean, K.A., **Bridwell, D.A.**, Sahdra, B.K., Saron, C.D. (2012) *Intensive meditation training increases the motivational salience of human suffering*. Society for Psychophysiological Research, New Orleans, La.
- 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. [invited 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. [invited 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.
- Bridwell, D.A.**, DeBello, W.M. (2006) *Cloning and Localization of DARPP-32 in the Barn Owl Sound Localization Pathway*. Annual Undergraduate Research Conference, University of California Davis.

TALKS

- AUGUST 2018 *What can Mobile EEG do for you? Measuring cortical responses to natural stimuli and bringing access to medicine in Sri Lanka*. University of Moratuwa, Department of Mechanical Engineering.
- APRIL 2017 *Cortical dynamics that contribute to cognition and perception: Electroencephalography (EEG) frequency tagging and Event-Related Potential's (ERP's)*. University of New Mexico, Department of Mathematics and Statistics QuantBrains seminar.
- DEC 2015 *Human brain dynamics above and below the scalp*. Mind Research Network and IEEE Engineering in Medicine and Biology Society Seminar.
- NOV 2012 *Windows onto human brain dynamics: EEG-fMRI integration and frequency tagging*. University of New Mexico, Center for Biomedical Engineering (CBME) Seminar.
- NOV 2012 *Human Brain Dynamics in Attention and at Rest*. University of New Mexico, Neuroscience Seminar Series.
- MAY 2009 *The Role of Cued Attention on Signal Processing and Internal Noise*. University of California Irvine, Department of Cognitive Sciences Colloquium Series.

MENTORSHIP

- RENÉ LABOUNEK 2015-current, Graduate Student, Department of Biomedical Engineering, Brno University of Technology Czech Republic, role: Supervisor Specialist
- NAIYMA MARTIN 2017-current, Research Assistant I, Developing techniques for Mobile EEG assessment of developmental trajectories of infants at risk for epilepsy

SERGIO CORTEZ	Fall 2017, Undergraduate Student Intern, Using Deep Learning to discriminate EEG responses to spoken alphabet letters
BENJAMIN LIDDLE	2017, Undergraduate Student Intern, t-Distributed Stochastic Neighbor Embedding (t-SNE)) projections of single trial ERPs
MARIEKE SORGE	2016-2017, high school student intern, assisted in collecting data for mobile EEG hyperscanning studies
SARAH HENDERSON	2016, Undergraduate Student Work Study Research Assistant, assisted with hospital epilepsy EEG and ERP mobile screening
DAKARAI MCCOY	2016, mentored for UNM MARC program, examined ERP responses to guitar notes presented randomly or with a musical pattern
EMILY LESLIE	2016, Graduate Student Work Study Research Assistant, assisted with collection of mobile EEG responses during verbal communication
CULLEN ROTH	2012-2014, Undergraduate, examining the influence of visuospatial attention on frequency tagged auditory cortical responses
JESSICA TAN	2011, Undergraduate, mentored for UCI SURP fellowship, examining the influence of target probability on feature based attention
ELIZABETH HECKER	2010-2011, Research Assistant, examined individual differences in attention strategies during detection and discrimination.

UNIVERSITY SERVICE

MAY 2017	Panelist , discussed applying new skills in brain imaging, University of New Mexico, Department of Mathematics and Statistics QuantBrains seminar.
APRIL 2012	Judge , Undergraduate Research and Creativity Conference, University of New Mexico (UNM), Albuquerque, NM.
JAN. 2011 JAN. 2010	Travel Scholarship , Annual Interdisciplinary Conference (AIC) 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.

COMMUNITY SERVICE

APRIL 2018	Career Day at Painted Sky Elementary School, Albuquerque, NM.
MAY 2017	Mobile EEG demo , at the New Mexico Science Fiesta, Albuquerque, NM.
NOVEMBER 2016	Elementary School Presentation , Presented about research and the brain at Painted Sky Elementary School, Albuquerque, NM.
APRIL 2016	Exhibit/Demo , NeuroExpo ABQ, <i>Mobile EEG at MRN: Tetris, Movies, Music, and More</i>

- APRIL 2014 **Judge**, Biology Research Day, student posters, University of New Mexico (UNM), Albuquerque, NM.
- MARCH 2014 **Judge and Mentor**, NeuroGame Jam, individuals compete to create innovative brain-controlled games or recreational devices, Albuquerque, NM.
- 2012 - 2018 **Judge** at the following high school and middle school science fairs: Albuquerque School of Excellence, Albuquerque Sign Language Academy, Cleveland Middle School, Cleveland High School, Hoover Middle School, Laguna Acoma High School, Laguna Middle School, Rio Grande Enrichment Studies, Washington Middle School, Van Buren Middle School
- 2012 - 2017 **Judge** at the following regional science fairs/events:
 Central New Mexico Science and Engineering Research Challenge
 New Mexico Science and Engineering Fair, New Mexico Tech, Socorro, NM.
 Southwest Regional Junior Science and Humanities Symposium (JSHS)
 United States Academic Decathlon (USAD) Nationals Competition, NM.

REVIEWER (JOURNALS)

Journal of Affective Disorders
 Biomedical Signal Processing and Control
 BioMed Research International
 Brain and Cognition
 Brain Topography
 Cerebral Cortex
 Cognitive Systems Research
 Entropy
 Evolutionary Bioinformatics
 Frontiers in Human Neuroscience
 Human Brain Mapping
 IEEE Transactions on Biomedical Engineering
 Information
 Journal of Neural Engineering
 Journal of Neurophysiology
 Journal of Neuroscience Methods
 Journal of Neuroscience Research
 Merrill-Palmer Quarterly
 NeuroImage
 Neuroinformatics
 Neuroscience
 Neuropsychiatric Disease and Treatment
 Neuroscience Research
 PLOS ONE
 Psychiatry Research
 Psychiatry Research: Neuroimaging
 Journal of Psychiatry and Neuroscience
 Scientific Reports
 Schizophrenia Research
 Sensors

Transactions on Neural Systems Rehabilitation Engineering
Organization for Human Brain Mapping (abstracts)

REVIEWER (GRANTS)

Central European Institute of Technology (CEITEC), external reviewer
University of Ottawa Medical Research Fund (UMRF) Grants Competition, external reviewer
University of New Mexico Brain Seed Award

MEMBERSHIPS

Association for Psychological Science
Cognitive Neuroscience Society
Organization for Human Brain Mapping
Society for Neuroscience
Vision Sciences Society