#### CURRICULUM VITAE

# CHRISTOPHER L. ZERR

Department of Psychological and Brain Sciences, Washington University in St. Louis 1 Brookings Dr., CB 1125, St. Louis, MO 63130 Email: c.l.zerr@wustl.edu, Phone: 314.255.7447

### **EDUCATION**

Washington University in St. Louis
Doctoral Student
Advisor: Kathleen B. McDermott

Truman State University
B.Sc., Psychology with Honors, Statistical Methods

RESEARCH EXPERIENCE

Valedictorian, Summa Cum Laude

Memory and Cognition Laboratory, Washington University in St. Louis
 Graduate Researcher
 Supervisor: Kathleen B. McDermott, PhD
 Center for Applied Psychophysiology, Truman State University
 Laboratory Manager
 Supervisor: Fredric Shaffer, PhD

Center for Arrhythmia Research, University of Michigan
 Undergraduate Research Fellow
 Supervisor: José Jalife, MD

Clinical Psychosocial Laboratory, Truman State University
 Supervisor: Jeffrey R. Vittengl, PhD

#### **PUBLICATIONS**

McDermott, K. B., & **Zerr, C. L.** (2019). Individual differences in learning efficiency. *Current Directions in Psychological Science*, 28, 607-613.

- **Zerr, C. L.**, Berg, J. J., Nelson, S. M., Fishell, A. K., Savalia, N. K., & McDermott, K. B. (2018). Learning efficiency: Identifying individual differences in learning rate and retention in healthy adults. *Psychological Science*, *29*, 1436-1450.
- Thrailkill, E. A., Trott, J. M., **Zerr, C. L.**, & Bouton, M. E. (2016). Contextual control of chained instrumental behaviors. *Journal of Experimental Psychology: Animal Learning and Cognition*, 42(4), 401-414. http://dx.doi.org/10.1037/xan0000112
- Shaffer, F., & **Zerr**, C. L. (2016). Depressive Disorders. In G. Tan, F. Shaffer, R. Lyle, & I. Teo (Eds.), *Evidence-based practice in biofeedback and neurofeedback* (3rd ed.) (pp. 57-61). Wheat Ridge, CO: Association for Applied Psychophysiology and Biofeedback.
- Shaffer, F., McCraty, R., & **Zerr, C. L.** (2014). A healthy heart is not a metronome: An integrative review of the heart's anatomy and heart rate variability. *Frontiers in Psychology*, *5*, 1-19. doi: 10.3389/fpsyg.2014.01040
- **Zerr, C.**, Kane, A., Vodopest, T., Allen, J., Fluty, E., Gregory, J., . . . Shaffer, F. (2014). Heart rate variability norms for healthy undergraduates. [Abstract]. *Applied Psychophysiology and Biofeedback*, 39(3). doi: 10.1007/s10484-014-9254-9
- **Zerr, C.**, Kane, A., Vodopest, T., Allen, J., Fluty, E., Gregory, J., . . . Shaffer, F. (2014). Does sitting position matter in heart rate variability biofeedback? [Abstract]. *Applied Psychophysiology and Biofeedback*, 39(3). doi: 10.1007/s10484-014-9254-9
- **Zerr, C.**, Kane, A., Vodopest, T., Allen, J., Fluty, E., Gregory, J., . . . Shaffer, F. (2014). HRV biofeedback training raises temperature and lowers skin conductance. [Abstract]. *Applied Psychophysiology and Biofeedback*, 39(3). doi: 10.1007/s10484-014-9254-9
- **Zerr, C.**, Kane, A., Vodopest, T., Allen, J., Fluty, E., Gregory, J., . . . Shaffer, F. (2014). HRV biofeedback training decreases Beck Depression Inventory (BDI) scores. [Abstract]. *Applied Psychophysiology and Biofeedback*, 39(3). doi: 10.1007/s10484-014-9254-9
- Korenfeld, D., Shepherd, S., Jones, D., Burklund, Z., Kane, A., **Zerr**, C., . . . Shaffer, F. (2013). Can heartfelt emotion attenuate the autonomic effects of a math stressor? [Abstract]. *Applied Psychophysiology and Biofeedback*, 38(3), 215-216.

Korenfeld, D., Shepherd, S., Jones, D., Burklund, Z., Kane, A., **Zerr, C.**, . . . Shaffer, F. (2013). Can heartfelt emotion facilitate autonomic recovery from a math stressor? [Abstract]. *Applied Psychophysiology and Biofeedback*, 38(3), 215.

Korenfeld, D., Shepherd, S., Jones, D., Burklund, Z., Kane, A., **Zerr**, C., . . . Shaffer, F. (2013). Do the left and right hands differ in responsiveness to experimental stressors? [Abstract]. *Applied Psychophysiology and Biofeedback*, 38(3), 215.

#### MANUSCRIPTS IN PREPARATION

- **Zerr, C. L.**, Allen, J., & Shaffer, F. (in prep). The use of device-guided breathing in the treatment of hypertension: A meta-analytic review.
- **Zerr, C. L.**, Alberts, K. S., & Kim, H. J. (in prep). Undergraduate statistical consulting as a transformative learning experience.
- **Zerr, C. L.**, & Shaffer, F. (in prep). Efficacy of heart rate variability biofeedback and temperature biofeedback training for depression.

#### **PRESENTATIONS**

- **Zerr, C. L.**, & McDermott, K. B. (2018). *Quick to learn, slow to forget: Faster learners retain more*. Poster presented at the 2018 Psychonomic Society Annual Meeting in New Orleans, LA.
- **Zerr, C. L.** (2018). Learning rates and forgetting rates (...and testing effect confounds). Talk presented at the Washington University in St. Louis Behavior, Brain, and Cognition datablitz in St. Louis, MO.
- **Zerr, C. L.** (2017). *Learning efficiency*. Talk presented at the Washington University in St. Louis Behavior, Brain, and Cognition datablitz in St. Louis, MO.
- **Zerr, C. L.** (2015). *Investigating psychometric properties of a learning efficiency task within healthy young adults*. Talk presented at the Washington University in St. Louis Behavior, Brain, and Cognition datablitz in St. Louis, MO.
- Zerr, C. L. (2014). Role of context in controlling performance and extinction of a heterogeneous behavior chain. Poster presented at the University of Vermont Summer Neuroscience Undergraduate Research Fellowship Symposium, Burlington, VT.

**Zerr, C. L.**, Fluty, E., & Cangelosi, A. (2014). *Are blanketing and stem artifacts real?*Poster presented at the 2014 Biofeedback Federation of Europe international conference, Venice, Italy.

- **Zerr, C. L.**, Fluty, E., & Cangelosi, A. (2014). *Inhalation-to-exhalation ratio affects HRV training success*. Poster presented at the 2014 Biofeedback Federation of Europe international conference, Venice, Italy.
- **Zerr, C. L.**, & Allen, J. (2014). *The use of device-guided breathing in the treatment of hypertension: A meta-analytic review*. Poster presented at the Truman State University Psychological Research Capstone Symposium, Kirksville, MO.
- **Zerr, C. L.**, Bussen, S., & Nyquist, E. (2014). *Meanings and values of "better" and "worse" moods*. Poster presented at the Truman State University Student Research Conference, Kirksville, MO.
- **Zerr, C. L.** (2013). Galectin-3 inhibition reduces TGF-B1-induced structural and electrical of the atria during persistent atrial fibrillation in sheep. Paper presented at the University of Michigan Cardiovascular Summer Research Fellowship Symposium, Ann Arbor, MI.
- **Zerr, C. L.** (2013). Can heartfelt emotion attenuate the autonomic effects of a math stressor? Paper presented at the 2013 Association for Applied Psychophysiology and Biofeedback national conference, Portland, OR.
- **Zerr, C. L.** (2013). Can heartfelt emotion facilitate autonomic recovery from a math stressor? Paper presented at the 2013 Association for Applied Psychophysiology and Biofeedback national conference, Portland, OR.
- **Zerr, C. L.** (2013). Do the left and right hands differ in responsiveness to experimental stressors? Paper presented at the 2013 Association for Applied Psychophysiology and Biofeedback national conference, Portland, OR.
- **Zerr, C. L.** (2012). Does adding heartfelt emotion to resonance frequency breathing increase heart rate variability? Paper presented at the 2012 Association for Applied Psychophysiology and Biofeedback national conference, Baltimore, MD.
- **Zerr, C. L.** (2012). *Does heartfelt emotion increase heart rate variability?* Paper presented at the 2012 Association for Applied Psychophysiology and Biofeedback national conference, Baltimore, MD.

**Zerr, C. L.** (2012). Can ujjayi breathing increase the effectiveness of 6-bpm heart rate variability training? Paper presented at the 2012 Association for Applied Psychophysiology and Biofeedback national conference, Baltimore, MD.

#### AWARDS & HONORS

# APF/COGDOP William C. Howell Scholarship

2018

National Science Foundation – Graduate Research Fellowship Program
Award

2016

### Omicron Delta Kappa Student Hall of Fame

2014

Inductees have demonstrated a personal influence on the University, served as mentors to other students, brought about change through the organizations and the people they have touched, and have established a standard by which future leaders can measure themselves.

### Truman Leadership Scholarship

2011 - 2015

Scholarship awarded to top candidates, typically in the top 3% of their HS class with ACT scores in the top 3% nationally with promising leadership potential and exceptional records of academic success. Renewable for full tuition, room and board, and a four-year leadership development experience.

### Missouri Bright Flight Scholarship

2011 - 2015

Merit-based scholarship in the amount of \$1,750 per annum awarded to students with ACT/SAT scores in the top 3% statewide.

*President's List* 2011 – 2015

Awarded to Truman students who achieve a semester GPA of 4.0.

#### PROFESSIONAL EXPERIENCE

Center for Applied Statistics and Evaluation (CASE)

2012 - 2015

Statistical Consultant

Supervisors: Hyun-Joo Kim, PhD, and Scott Alberts, PhD

#### TEACHING EXPERIENCE & INVITED LECTURES

Teaching Assistant

Human Memory and Learning, Washington University in St. Louis

Fall 2017

Professor: Kathleen McDermott

Cognitive Neuroscience, Washington University in St. Louis

Spring 2017

Professor: Todd Braver Experimental Psychology, Truman State University 2014 - 2015Psychological Research Capstone, Truman State University 2014 STUDENT INVOLVEMENT AAAS Member 2019 – Present AAAS/Science program for excellence in science BBC Faculty Search Committee Fall 2018 Graduate Student Member Psychonomic Society 2015 – Present Student Member Association for Psychological Science 2014 – Present Student Member Dean's Student Advisory Committee 2014 - 2015Student Representative of the Psychology Department Vice President of Academic Affairs Ambassador 2014

2014 - 2015

2013 - 2014

Order of Omega, Greek Leadership Society

Psi Chi, the International Honor Society in Psychology

National Society of Collegiate Scholars

#### PROFESSIONAL REFERENCES

President

Vice President

### Kathleen B. McDermott, PhD, Professor of Psychological & Brain Sciences, Radiology

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### Fredric Shaffer, PhD, Professor of Psychology

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# Mark E. Bouton, PhD, Professor of Psychology, Assistant Director for the Neuroscience Graduate Program

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