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EMPLOYMENT

2008-Present Assistant Professor, Mississippi State University, Mississippi State, MS
2007-2008 Postdoctoral Fellow, University of Pittsburgh, Pittsburgh, PA
2006-2007 Postdoctoral Fellow, Carnegie Mellon University, Pittsburgh, PA

EDUCATION

2001-2006 Ph.D., Psychology
 Carnegie Mellon University, Pittsburgh, PA

1998-2000 B.S., Cognitive Science with minor in Computer Science
 Carnegie Mellon University, Pittsburgh, PA

GRANTS

Funded

Biologically-based Training for Adaptive Multitasking Strategies (renewal). ONR. PI, 4/16/13-9/30/15. Total costs: \$781,564.
Biologically-based Training for Adaptive Multitasking Strategies. ONR. Co-PI with Stephanie Doane, 4/16/10-4/15/13, Total costs: \$623,695.
Biologically Accelerated Learning Technology: Phase II. DARPA. PI on subcontract, 9/1/09-2/28/11, Subcontract total costs: \$149,783.
Selection Measures for Team Process Skill Acquisition and Adaptation. NPRST. PI on child account, 4/1/09-1/31/10, Child account total costs: \$70,000.

PUBLICATIONS

(* = student author)

Refereed Journal Publications

*Cranford, E. A., Moss, J. (2012). Is insight always the same? A protocol analysis of insight in compound remote associate problems. *The Journal of Problem Solving*, 4(1), Article 7. Available at: <http://docs.lib.purdue.edu/jps/vol4/iss1/7>
Moss, J., Schunn, C. D., Schneider, W., McNamara, D. S., & VanLehn, K. (2011). The neural correlates of strategic reading comprehension: Cognitive control and discourse comprehension. *NeuroImage*, 58(2), 675-686.
Moss, J., Kotovsky, K., & Cagan, J. (2011). The effect of incidental hints when problems are suspended before, during, or after an impasse. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 37(1), 140-148.
*Tseng, I., Moss, J., Cagan, J., & Kotovsky, K. (2008). The role of timing and analogical similarity in the stimulation of idea generation in design, *Design Studies*, 203-221.

- Moss, J., Kotovsky, K., & Cagan, J. (2007). The influence of open goals on the acquisition of problem relevant information. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 33(5), 876-891.
- Moss, J., Kotovsky, K., & Cagan, J. (2006). The role of functionality in the mental representations of engineering students: Some differences in the early stages of expertise. *Cognitive Science*, 30(1), 65-93.
- Moss, J., Cagan, J., & Kotovsky, K. (2004). Learning from design experience in an agent-based design system. *Research in Engineering Design*, 15(2), 77-92.

Manuscripts in Preparation and Under Review

- Moss, J., Schunn, C. D., Schneider, W., & McNamara, D. S. (under review). The nature of mind wandering during reading varies with the cognitive control demands of the reading strategy.
- *Cranford, E. A., Moss, J. (under review). Is insight always the same? An fMRI study insight in compound remote associate problems.
- *Jones, W. E., *Bai, H., Moss, J., & Doane, S. M. (in prep). Many tasks, one mind: An fMRI study exploring the neural correlates of multitasking ability.
- *Bai, H., *Jones, W. E., Moss, J., & Doane, S. M. (under review). Relating individual differences in cognitive ability to multitasking performance: Interruption recovery and task difficulty.

Refereed Conference Publications

- Gregory, A., Herrmann, M. M., Miller, B., & Moss, J. (2013). Integrated practice and architecture education: The evolution of a pedagogy. *Proceedings of the 2013 ARCC Spring Research Conference* (pp. 310-320). Charlotte, NC: University of North Carolina at Charlotte.
- Gregory, A., Herrmann, M. M., Miller, B., & Moss, J. (2013). Inter-actions: The making of an integrated practice studio. *The National Conference on the Beginning Design Student 2013*. Philadelphia, PA.
- Herrmann, M. M., Gregory, A. D., Miller, B., & Moss, J. (2013). An industry-sponsored competition to explore integrated project Delivery in an educational setting. *Proceedings of the Annual Conference of the Associated Schools of Construction*. Fort Collins, CO: Associated Schools of Construction.
- *Cranford, E. A., & Moss, J. (2011). Is insight always the same? An fMRI study of insight. *Proceedings of the Thirty-third Annual Conference of the Cognitive Science Society* (pp. 3558-3563). Austin, TX: Cognitive Science Society.
- Moss, J., Schunn, C. D., Schneider, W., McNamara, D. S. (2011). An fMRI study of zoning out during strategic reading comprehension. *Proceedings of the Thirty-third Annual Conference of the Cognitive Science Society* (pp. 1218-1223). Austin, TX: Cognitive Science Society.
- *Cranford, E. A., & Moss, J. (2010). Investigating insight using compound remote associate problems. *Proceedings of the Thirty-second Annual Conference of the Cognitive Science Society* (pp. 1768-1773). Austin, TX: Cognitive Science Society.
- Moss, J., Schunn, C. D., Schneider, W., McNamara, D. S., & VanLehn, K. (2010). An fMRI study of strategic reading comprehension. *Proceedings of the Thirty-second Annual Conference of the Cognitive Science Society* (pp. 1319-1324). Austin, TX: Cognitive Science Society.

- *Tseng, I., Moss, J., Cagan, J., & Kotovsky, K. (2008). Overcoming blocks in conceptual design: The effects of open goals and analogical similarity on idea generation. *Proceedings of the 2008 ASME Design Theory and Methodology Conference*. New York: ASME.
- Moss, J., Cagan, J., & Kotovsky, K. (2007). Design ideas and impasses: The role of open goals. *Proceedings of the 16th International Conference on Engineering Design*.
- Moss, J., Kotovsky, K., & Cagan, J. (2004). Cognitive investigations into knowledge representation in engineering design. In J. Gero (Ed.), *Design Computing and Cognition 2004* (pp. 97-116). Dordrecht, Netherlands: Kluwer.
- Moss, J., Cagan, J., & Kotovsky, K. (2002). Learning from design experience in an agent-based design System. In J. Gero and F. Brazier (Eds.), *Agents in Design 2002* (pp. 181-200). Sydney, Australia: Key Centre of Design Computing and Cognition, University of Sydney.

Other Conference Publications

- *Jones, W. E., Moss, J., Doane, S. M. (2010). Strategies for multitasking: An fMRI study of individual differences in multitasking ability. *Proceedings of the Thirty-second Annual Conference of the Cognitive Science Society* (p. 558).
- Moss, J., Schunn, C., VanLehn, K., Schneider, W., McNamara, D. S., & Jarbo, K. (2008). They were trained, but they did not all learn: Individual differences in uptake of learning strategy training. In B. C. Love, K. McRae, & V. M. Sloutsky (Eds.), *Proceedings of the Thirtieth Annual Conference of the Cognitive Science Society* (p. 1389). Austin, TX: Cognitive Science Society.
- Moss, J., Cagan, J., & Kotovsky, K. (2007). Understanding the role of open goals in problem solving: Impasses and hints. *Proceedings of the Twenty-ninth Annual Conference of the Cognitive Science Society* (p. 1817), Mahwah, NJ: Erlbaum.
- Kotovsky, K. & Moss, J. (2004). Mapping learning principles to knowledge structures in the natural and behavioral sciences. *Conference Proceedings of Integrating Research into Undergraduate Education: The Value Added* (pp. 52-53). Stony Brook, NY: The Reinvention Center at Stony Brook.
- Moss, J., Kotovsky, K., & Cagan, J. (2003). Knowledge representation in engineering design: An initial investigation. In R. Alterman and D. Kirsch (Eds.), *Proceedings of the Twenty-Fifth Annual Conference of the Cognitive Science Society* (p. 1386), Mahwah, NJ: Erlbaum.
- Moss, J., Kotovsky, K., & Cagan, J. (2002). Cognitive principles in a computational engineering design methodology. In W. Gray and C. Schunn (Eds.), *Proceedings of the Twenty-Fourth Annual Conference of the Cognitive Science Society* (p. 1023), Mahwah, NJ: Erlbaum.

PRESENTATIONS

(* = student author)

- *Jones, W. E., & Moss, J. (2013). Decreasing the costs of interruptions: Interruption recovery as a trainable and transferable skill. Poster presented at the 54th Annual Meeting of the Psychonomics Society.
- *Wong, A. Y., & Moss, J., Eakin, D. K., & *Tan, E. W. (2013). Understanding the role of rereading in the metacognitive monitoring of reading comprehension. Poster presented at the 54th Annual Meeting of the Psychonomics Society.

- Moss, J., Jones, W. E., Bai, H., & Doane, S. M. (2013). Changes in the cognitive control network associated with adapting to task environment modifications. Poster presented at the 35th Annual Meeting of the Cognitive Science Society.
- Moss, J., Jones, W. E., Bai, H., & Doane, S. M. (2013). Changes in cognitive control regions associated with successfully adapting to task environment modifications. Poster presented at the 2013 Annual Meeting of the Cognitive Neuroscience Society.
- Moss, J., & Doane, S. M. (2012). Neural predictors of multitasking performance. Talk given at the 2012 ONR Cognitive Science of Learning Program Review.
- *Tan, E. W., Eakin, D. K., Moss, J., & *Wong A. Y., (2012). Updating metacomprehension: Selecting effective learning strategies after experience. Poster presented at the 53rd Annual Meeting of the Psychonomics Society.
- *Pearson, L., *Salda, R., Moss, J., *Bell, C. (2012) Do self-explanation training and diagrams enhance reading comprehension? Poster presented at the Annual meeting of the Southeastern Psychological Association.
- *Jones, W. E., *Bai, H., Moss, J., & Doane, S. M. (2011). Predicting individual differences in multitasking ability using general cognitive ability measures. Poster presented at the 52nd Annual Meeting of the Psychonomics Society.
- Moss J. (2011). Activation of discourse processing brain regions during strategic reading. Poster presented at the 52nd Annual Meeting of the Psychonomics Society.
- *Cranford, E. A., & Moss, J. (2011). Is insight always the same? An fMRI study of insight. Poster presented at the Thirty-third Annual Conference of the Cognitive Science Society. Boston, MA.
- Moss, J., Schunn, C. D., Schneider, W., & McNamara, D. S. (2011). An fMRI study of zoning out during strategic reading comprehension. Poster presented at the Thirty-third Annual Conference of the Cognitive Science Society. Boston, MA.
- Moss, J., Schunn, C. D., Schneider, W., McNamara, D. S., & VanLehn, K. (2010). An fMRI study of strategic reading comprehension. Talk given at the Thirty-second Annual Conference of the Cognitive Science Society.
- *Cranford, E. A., & Moss, J. (2010). Investigating insight using compound remote associate problems. Poster presented at the Thirty-second Annual Conference of the Cognitive Science Society.
- *Jones, W. E., Moss, J., & Doane, S. M. (2010). Strategies for multitasking: An fMRI study of individual differences in multitasking ability. Poster presented at the Thirty-second Annual Conference of the Cognitive Science Society.
- *Jones, W. E., Moss, J., & Doane, S. M. (2009). Where tasks collide: A behavioral and fMRI study of individual differences in multitasking ability. Poster presented at the 50th Annual Meeting of the Psychonomic Society. Boston, MA.
- Schunn, C.D., Moss, J., Huppert, T., & Schneider, W. (2009). Real-time NIRS feedback may help improve self-explanation learning strategy use. Paper presented at the 2009 Annual Meeting of the Society for Neuroscience. Chicago, IL.
- Moss, J. (2009). Neural correlates of effective learning strategies. Invited talk given at University of Memphis IIS Colloquium Series.
- *Tseng, I., Moss, J., Cagan, J., Kotovsky, K. (2008). Overcoming blocks in conceptual design: The effects of open goals and analogical similarity on idea generation. Paper presented at the 2008 ASME Design Theory and Methodology Conference. New York, NY.

- Moss, J., Schunn, C., VanLehn, K., Schneider, W., McNamara, & D. S., Jarbo, K. (2008). They Were Trained, But They Did Not All Learn: Individual Differences in Uptake of Learning Strategy Training. Poster presented at the 29th Annual Conference of the Cognitive Science Society, Washington, DC.
- Moss, J., Cagan, J., & Kotovsky, K. (2007). Understanding the role of open goals in problem solving: Impasses and hints. Poster presented at the Twenty-ninth Annual Conference of the Cognitive Science Society, Nashville, TN.
- Moss, J., Cagan, J., & Kotovsky, K. (2007). Design ideas and impasses: The role of open goals. Paper presented at the 16th International Conference on Engineering Design, Paris, France.
- Moss, J., Kotovsky, K., & Cagan, J. (2004). Cognitive investigations into knowledge representation in engineering design. Paper presented at Design Computing and Cognition 2004, Cambridge, MA.
- Moss, J., Kotovsky, K., & Cagan, J. (2003). Knowledge representation in engineering design: An initial investigation. Poster presented at the Twenty-Fifth Annual Conference of the Cognitive Science Society, Boston, MA.
- Moss, J., Kotovsky, K., & Cagan, J. (2002). Cognitive principles in a computational engineering design methodology. Poster presented at the Twenty-Fourth Annual Conference of the Cognitive Science Society, Fairfax, VA.
- Moss, J., Cagan, J., & Kotovsky, K. (2002). Learning from design experience in an agent-based design System. Paper presented at the Workshop on Agents in Design 2002, Cambridge, MA.

HONORS AND AWARDS

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| 2011 | StatePride Faculty Accomplishments Award, Mississippi State University |
| 2011 | Selected for Mississippi State University Faculty Leadership Program |
| 2010 | StatePride Faculty Accomplishments Award, Mississippi State University |
| 2009 | Paper nominated for 2008 Design Studies Award |
| 2008 | Best Paper Award at 2008 ASME Design Theory and Methodology conference |
| 2005-2006 | Pre-doctoral Fellowship, NIH Training Grant, Computational and Behavioral Approaches to Cognition |
| 2004-2005 | Pre-doctoral Fellowship, NIH Training Grant, Basic Processes & Variation in Cognition |
| 2001-2004 | National Defense Science and Engineering Graduate Fellowship |
| 2001 | Carnegie Mellon University Senior Leader Service Award |
| 2000 | Undergraduate Research Initiative Summer Fellowship |
| 2000 | Inducted into Phi Beta Kappa |
| 2000 | Inducted into Phi Kappa Phi |

PROFESSIONAL ACTIVITIES

- Ad-hoc reviewer for National Science Foundation
- Ad-hoc reviewer for Academic Medicine, Journal of Educational Psychology, Journal of Problem Solving, NeuroImage, Neuropsychologia, Psychonomic Bulletin & Review, Thinking & Reasoning

Reviewer for Cognitive Science Society Meeting, Creativity and Cognition Conference,
Association for Computing Machinery Special Interest Group on Computer Human
Interaction Meeting, American Society of Mechanical Engineers Annual Design
Engineering Technical Conferences

Member, Executive Steering Committee, Institute for Imaging and Analytical Technologies
(2011-2012)

Member, Steering Committee, Institute for Neurocognitive Science and Technology (2008-
2010)

PROFESSIONAL MEMBERSHIPS

Cognitive Science Society

Cognitive Neuroscience Society

Association for Psychological Science

Psychonomic Society

TEACHING EXPERIENCE

Seminar on Higher-Order Cognition, 2011.

Cognitive Neuroscience, 2010, 2011, 2012, 2013.

Cognitive Models of Skill, 2010.

Psychology of Learning, 2009.

Introduction to Cognitive Simulation, 2009, 2011.

Cognitive Psychology, 2009, 2012.

Language and Thought, 2009, 2013.

Cognitive Science, 2008, 2012.