

Marci S. DeCaro

University of Louisville
Department of Psychological & Brain Sciences
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Professional Experience

Associate Professor, 2017-Present. *University of Louisville.*

Assistant Professor, 2011-2017. *University of Louisville.*

Postdoctoral Fellowship, 2009-2011. *Vanderbilt University*

Education

Ph.D. Cognitive Psychology, 2009. *Miami University*

M. A. Applied Experimental Psychology, 2004. *Western Kentucky University*

B. S. Psychology, 2000, *Indiana Wesleyan University*

Research Interests

My research program applies theories of attention and working memory to study learning and performance. I examine the comprehensive fit between (a) individual differences (e.g., working memory capacity), (b) the learning or performance environment (e.g., instructional techniques, performance pressure), and (c) task demands (e.g., attention-demanding versus more associative). By considering each of these factors, this research can help us better predict learning and performance success in both laboratory and educational contexts.

Publications

DeCaro, M. S. (2018, in press). When does higher working memory capacity help or hinder insight problem solving? In F. Vallee-Tourangeau & L. Ball (Eds.), *Current Issues in Thinking and Reasoning*. Psychology Press.

*Weaver, J. P., Chastain, R., & DeCaro, D. A., & **DeCaro, M. S.** (2017). Reverse the routine: Problem solving before instruction improves conceptual knowledge in undergraduate physics. *Contemporary Educational Psychology*. doi:10.1016/j.cedpsych.2017.12.003

DeCaro, M. S., Van Stockum, C. A. Jr., & Wieth, M. (2017). The relationship between working memory and insight depends on moderators: Reply to Chuderski and Jastrzębski (2017). *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 43, 2005-2010. doi:10.1037/xlm0000460

DeCaro, M. S., & Van Stockum, C. A. Jr. (2017). Ego-depletion improves insight. *Thinking and Reasoning*. doi:10.1080/13546783.2017.1396253

DeCaro, M. S. (2016). Inducing mental set constrains procedural flexibility and conceptual understanding in mathematics. *Memory and Cognition*, 44, 1138-1148. doi:10.3758/s13421-016-0614-y

- DeCaro, M. S.**, Van Stockum, C. A., & Wieth, M. B. (2016). When higher working memory capacity hinders insight. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, *42*, 39-49. doi:10.1037/xlm0000152
- *Bellinger, D. B., **DeCaro, M. S.**, & Ralston, P. A. S. (2015). Mindfulness, anxiety, and high-stakes mathematics performance in the laboratory and classroom. *Consciousness and Cognition*, *37*, 123-132. doi:10.1016/j.concog.2015.09.001
- DeCaro, D. A., **DeCaro, M. S.**, & Rittle-Johnson, B. (2015). Achievement motivation and knowledge development during exploratory learning. *Learning and Individual Differences*, *37*, 13-26. doi:10.1016/j.lindif.2014.10.015
- Fyfe, E. R., **DeCaro, M. S.**, & Rittle-Johnson, B. (2015). When feedback is cognitively-demanding: The importance of working memory capacity. *Instructional Science*, *73-91*. doi: 10.1007/s11251-014-9323-8
- *Van Stockum, C. A., & **DeCaro, M. S.** (2014). Enclothed cognition and controlled attention during insight problem-solving. *The Journal of Problem Solving*, *7(1)*, 73-83. doi:10.7771/1932-6246.1164
- Fyfe, E. R., **DeCaro, M. S.**, & Rittle-Johnson, B. (2014). An alternative time for telling: When conceptual instruction prior to problem solving improves mathematical knowledge. *British Journal of Educational Psychology*, *84*, 502-519. doi:10.1111/bjep.12035
- DeCaro, M. S.**, & Rittle-Johnson, B. (2012). Exploring mathematics problems prepares children to learn from instruction. *Journal of Experimental Child Psychology*, *113*, 552-568. doi:10.1016/j.jecp.2012.06.009
- Fyfe, E. R., Rittle-Johnson, B., & **DeCaro, M. S.** (2012). The effects of feedback during exploratory mathematics problem solving: Prior knowledge matters. *Journal of Educational Psychology*, *104*, 1094-1108. doi:10.1037/a0028389
- DeCaro, M. S.**, Thomas, R. D., Albert, N. B., & Beilock, S. L. (2011). Choking under pressure: Multiple routes to skill failure. *Journal of Experimental Psychology: General*, *140*, 390-406. doi:10.1037/a0023466
- DeCaro, M. S.**, Rotar, K. E., Kendra, M. S., & Beilock, S. L. (2010). Diagnosing and alleviating the impact of performance pressure on mathematical problem solving. *Quarterly Journal of Experimental Psychology*, *63*, 1619-1630. doi:10.1080/17470210903474286
- DeCaro, M. S.**, & Beilock, S. L. (2010). The benefits and perils of attentional control. In B. Bruya and M. Csikszentmihalyi (Eds.), *Effortless Attention: A New Perspective in the Cognitive Science of Attention and Action*. MIT Press. doi:10.7551/mitpress/9780262013840.003.0003
- DeCaro, M. S.**, & Maricle, D. E. (2010). Working Memory. In S. Goldstein and J. A. Naglieri (Eds.), *Encyclopedia of Child Behavior and Development*. Springer: Boston.
- DeCaro, M. S.**, Carlson, K. D., Thomas, R. D., & Beilock, S. L. (2009). When and how less is more: Reply to Tharp & Pickering. *Cognition*, *111*, 415-421. doi:10.1016/j.cognition.2009.03.001
- Mutter, S. A., **DeCaro, M. S.**, & Plumlee, L. F. (2009). The role of contingency and contiguity in young and older adults' causal learning. *Journal of Gerontology: Psychological Sciences*, *64*, 315-323. doi:10.1093/geronb/gbp004
- DeCaro, M. S.**, Thomas, R. D., & Beilock, S. L. (2008). Individual differences in category learning: Sometimes less working memory capacity is better than more. *Cognition*, *107*, 284-294. doi:10.1016/j.cognition.2007.07.001
- Beilock, S. L., & **DeCaro, M. S.** (2007). From poor performance to success under stress: Working memory, strategy selection, and mathematical problem solving under pressure. *Journal of*

Experimental Psychology: Learning, Memory, and Cognition, 33, 983-998. doi:10.1037/0278-7393.33.6.983

DeCaro, M. S., Wieth, M., & Beilock, S. L. (2007). Methodologies for examining problem solving success and failure. *Methods*, 42, 58-67. doi:10.1016/j.ymeth.2006.12.006

*Graduate Student First Author

Conference Proceedings

*Weaver, J. P., **DeCaro, M. S.**, Hieb, J. L., & Ralston, P. S. (2016). Social belonging and first-year engineering mathematics: A collaborative learning intervention. *Proceedings of the American Society for Engineering Education*.

DeCaro, D. A., **DeCaro, M. S.**,¹ & Rittle-Johnson, B. (2013). Achievement motivation and strategy selection during exploratory learning. In M. Knauff, M. Pauen, N. Sebanz, & I. Wachsmuth (Eds.), *Proceedings of the 35th Annual Conference of the Cognitive Science Society* (pp. 370-375). Berlin, Germany: Cognitive Science Society. (¹Joint first author)

*Van Stockum, C., & **DeCaro, M. S.** (2013). The path less taken: When working memory capacity constrains insight. In M. Knauff, M. Pauen, N. Sebanz, & I. Wachsmuth (Eds.), *Proceedings of the 35th Annual Conference of the Cognitive Science Society* (pp. 3633-3638). Berlin, Germany: Cognitive Science Society.

Invited Talks

Midwestern Psychological Association, *Invited Talk*, May 2016
Southern Society for Philosophy and Psychology, *Working Memory Symposium*, March 2016
University of Cincinnati, *Cognition, Action, and Perception Colloquium*, Dec 2015
University of Louisville, *Department of Psychological and Brain Sciences*, Feb 2011
Vanderbilt University, Dec 2008
Association for Psychological Science, *Research Award Symposium*, May 2008

Presentations

Hicks, A., Neace, S., **DeCaro, M. S.**, & Salmon, P. (2018, May). Gratitude as a Predictor of Intrinsic Exercise Motivation. Poster submitted to *American College of Sports Medicine Annual Meeting*, Minneapolis, MN.

Neace, S., Hicks, A., **DeCaro, M. S.**, & Salmon, P. (2018, May). Mindfulness and intrinsic exercise motivation: The mediating role of exercise self-efficacy. Poster submitted to the *American College of Sports Medicine Annual Meeting*, Minneapolis, MN.

*Weaver, J. P., **DeCaro, M. S.**, & Ralston, P. A. S. (2018, April). Limited support for use of a social-belonging intervention with first-year engineering students. Paper to be presented at the *American Education Research Association Conference*, New York, NY.

Fries, L., Ramirez, G., & **DeCaro, M. S.** (2017, November). The impact of seductive details on students' lecture learning. Poster presented at the *Annual Meeting of the Psychonomic Society*, Vancouver, Canada.

*Bego, C. R., Chastain, R., & **DeCaro, M. S.** (2017, July). The Effects of Deliberate Practice on Representational Skills. Poster presented at the *Physics Education Research Conference*, Cincinnati OH.

- Chastain, R., Weaver, J. P., **DeCaro, M. S.**, & DeCaro, D. A. (2017, July). Using an Explore-first Strategy in Introductory-level Courses. Paper presented at the *American Association of Physics Teachers Conference*, Cincinnati OH.
- [†]Newman, P. M., & **DeCaro, M. S.** (2017, June). More guidance is better when learning by inventing. Paper presented at the *Midwestern Cognitive Science Conference*, Oxford, OH.
- *Saeedi, M., & **DeCaro, M. S.** (2017, June). Person or Process? The Focus of Evaluative Monitoring in High-Pressure Situations Impacts Executive Attention. Poster presented at the *Midwestern Cognitive Science Conference*, Oxford, OH.
- [†]Newman, P. M., & **DeCaro, M. S.** (2017, May). Learning by invention: How much support is optimal? Poster presented at the *Association for Psychological Science Conference*, Boston, MA.
- *Weaver, J. P., **DeCaro, M. S.**, Chastain, R., & DeCaro, D. A. (2017, April). Exploration before instruction improves transfer in undergraduate physics. Paper presented at the *American Education Research Association Conference*, San Antonio, TX.
- *Van Stockum, C. A. Jr., & DeCaro, M. S. (2016, November). Working memory mechanisms predict insight in opposite directions. Poster presented at the *Annual Meeting of the Psychonomic Society*, Boston, MA.
- *Weaver, J. P., **DeCaro, M. S.**, Hieb, J. L., & Ralston, P. S. (2016, July). Social belonging and first-year engineering mathematics: A collaborative learning intervention. Paper presented at the *American Society for Engineering Education Conference*, New Orleans, LA. **AERA Division C Graduate Student Research Excellence Award.**
- *Van Stockum, C. A. Jr., & **DeCaro, M. S.** (2016, March). Working memory capacity mechanisms differentially predict flexibility versus mental set. Paper presented at *The Southern Society of Philosophy and Psychology*, Louisville, KY. **Griffith Memorial Award in Psychology.**
- *Weaver, J. P., Chastain, R., **DeCaro, M. S.**, & DeCaro, D. A. (2016, March). The impact of explore-first versus instruct-first in large enrollment introductory courses. Paper presented at the *Kentucky Association of Physics Teachers Conference*, Centre College, KY.
- *Bellinger, D. B., & **DeCaro, M. S.** (2015, November). What makes generation a desirable difficulty? Comparison of two appropriate processing frameworks. Poster presented at the *Annual Meeting of the Psychonomic Society*, Chicago, IL.
- *Van Stockum, C. A. Jr., & **DeCaro, M. S.** (2015, November). Different working memory components predict flexibility versus mental set. Poster presented at the *Annual Meeting of the Psychonomic Society*, Chicago, IL.
- DeCaro, M. S.** (2015, May). Reducing entrenchment and improving problem-solving in the mathematics classroom. Paper presented at the *Annual Meeting of the Midwestern Psychological Association*, Chicago, IL.
- *Bellinger, D. B., **DeCaro, M. S.**, & Ralston, P. A. S. (2015, May). Mindfulness, anxiety, and mathematics performance in the laboratory and classroom. Paper presented at the *Annual Meeting of the Midwestern Psychological Association*, Chicago, IL.
- *Van Stockum, C. A., & **DeCaro, M. S.** (2015, May). Enclothed Cognition and Controlled Attention During Insight Problem-Solving. Paper presented at the *Annual Meeting of the Midwestern Psychological Association*, Chicago, IL.
- DeCaro, M. S.** (2015, March). Improving procedural knowledge and transfer by teaching a shortcut strategy first. Paper presented at the semiannual meeting of the *Society for Research on Educational Effectiveness*, Washington DC.

- *Bellinger, D. B., **DeCaro, M. S.**, & Ralston, P. A. S. (2015, February). Mindfulness benefits exam performance by reducing test anxiety. Poster presented at the *Society for Personality and Social Psychology*, Long Beach, CA.
- *Van Stockum, C. A., & **DeCaro, M. S.** (2014, November). The Upside of Down-Regulated Self-Control: Depletion Enhances Insight. Poster presented at the *Annual Meeting of the Psychonomic Society*, Long Beach, CA.
- *Bellinger, D. B., & **DeCaro, M. S.** (2014, May). Gestalt-enhanced illustrations and learning from scientific text: The role of cognitive load. Poster presented at the *Midwestern Cognitive Science Conference*, Dayton, OH.
- *Van Stockum, C. A., & **DeCaro, M. S.** (2014, May). Perceived exhaustion predicts mind wandering. Poster presented at the *Midwestern Cognitive Science Conference*, Dayton, OH.
- *Edlin, J. M., Van Stockum, C. A., **DeCaro, M. S.**, & Lyle, K. B. (2014, May). Bilateral saccade execution can impair working memory capacity. Poster presented at the *Midwestern Cognitive Science Conference*, Dayton, OH.
- Rittle-Johnson, B., Fyfe, E. R., Loehr, A., & **DeCaro, M. S.** (2014, April). Learning from explanation: The timing and source of explanations for learning early algebra. Paper presented at the *American Education Research Association Conference*, Philadelphia, PA.
- *Fyfe, E. R., **DeCaro, M. S.**, & Rittle-Johnson, B. (2014, April). The role of feedback type and working memory capacity during problem solving. Paper presented at the *American Education Research Association Conference*, Philadelphia, PA.
- *Bellinger, D. B., & **DeCaro, M. S.** (2013, November). Learning from scientific illustrations: Do Gestalt principles matter? Poster presented at the *Annual Meeting of the Psychonomic Society*, Toronto, ON, Canada.
- DeCaro, D. A., **DeCaro, M. S.**¹, & Rittle-Johnson, B. (2013, August). Achievement motivation and strategy selection during exploratory learning. Paper presented at the *35th Annual Conference of the Cognitive Science Society*. Berlin, Germany. (¹Joint first author)
- *Van Stockum, C., & **DeCaro, M. S.** (2013, August). The path less taken: When working memory capacity constrains insight. Poster presented at the *35th Annual Conference of the Cognitive Science Society*. Berlin, Germany.
- *Loehr, A. M., Miller, M. R., **DeCaro, M. S.**, & Rittle-Johnson, B. (2013, May). Semantic verbal fluency predicts mathematical learning. Poster presented at the annual meeting of the *Association for Psychological Science*, Washington DC.
- *Fyfe, E. R., **DeCaro, M. S.**, & Rittle-Johnson, B. (2013, March). An alternative time for telling: When conceptual instruction prior to exploration improves mathematical knowledge. Paper presented at the semiannual meeting of the *Society for Research on Educational Effectiveness*, Washington DC.
- DeCaro, M. S.** (2012, November). When higher working memory capacity leads to choking or excelling under pressure on a sensorimotor skill. Poster presented at the *Annual Meeting of the Psychonomic Society*, Minneapolis, MN.
- DeCaro, M. S.**, Wieth, M., & Beilock, S. L. (2012, May). When higher working memory limits insight problem solving. Paper presented at the annual *Midwestern Cognitive Science Conference*, Bloomington, IN.
- DeCaro, M. S.**, DeCaro, D. A., & Rittle-Johnson, B. (2011, September). Preparing to learn from math instruction: Mastery-oriented students benefit most from exploratory activities. Paper presented at the annual meeting of the *Society for Research on Educational Effectiveness*, Washington DC.

- *Fyfe, E. R., Rittle-Johnson, B., & **DeCaro, M. S.** (2011, September). The effects of feedback during exploratory math practice. Paper presented at the annual meeting of the *Society for Research on Educational Effectiveness*, Washington DC.
- DeCaro, M. S.** (2011, August). Situational pressure, attentional demands, and skill failure. Paper presented at the annual meeting of the *American Psychological Association*, Washington DC.
- DeCaro, M. S.**, & Rittle-Johnson, B. (2011, April). Self-explanation prompts are less beneficial if students know more. Paper presented at the *American Education Research Association Conference*, New Orleans, LA.
- DeCaro, M. S.**, & Rittle-Johnson, B. (2011, March). Preparing to learn from math instruction by solving problems first. In B. Rittle-Johnson & **M. S. DeCaro** (chairs), *When are times for telling? Preparing students to learn from instruction*. Symposium presented at the *Society for Research in Child Development Conference*, Montreal, Canada.
- DeCaro, M. S.**, Albert N. B., Carlson, K. D., Thomas, R. D., & Beilock, S. L. (2010, November). Not all high-pressure situations are the same: Choking under pressure and implicit sensorimotor skill performance. Poster presented at the *Annual Meeting of the Psychonomic Society*, St. Louis, MO.
- DeCaro, M. S.**, & Rittle-Johnson, B. (2010, August). The capacity to discover: Working memory and the ability to use self-explanation to discover early algebra concepts. Poster presented at the *Annual Meeting of the Cognitive Science Society*, Portland, OR.
- DeCaro, M. S.**, & Rittle-Johnson, B. (2010, June). Self-explanation as a tool for discovering early algebra procedures: The importance of working memory capacity. Poster presented at the *Institute of Education Sciences Research Conference*, National Harbor, MD.
- McEldoon, K. L., Rittle-Johnson, B., **DeCaro, M. S.**, & Cho, S. J. (2010, June). Measuring multidimensional mathematical equivalence: A construct modeling approach. Poster presented at the *Institute of Education Sciences Research Conference*, National Harbor, MD.
- Rittle-Johnson, B., Matthews, P., Taylor, R., McEldoon, K., & **DeCaro, M. S.** (2010, March). Understanding the equal sign as a gateway to algebraic thinking. Poster presented at the *NSF REESE PI Meeting*, Washington D.C.
- DeCaro, M. S.**, Wieth, M., & Beilock, S. L. (2009, November). The downside of attentional control: When working memory capacity overshadows insight. Poster presented at the *Annual Meeting of the Psychonomic Society*, Boston, MA.
- Albert, N. B., **DeCaro, M. S.**, & Beilock, S. L. (2009, November). The relationship between working memory capacity and sensorimotor skill learning. Poster presented at the *Annual Meeting of the Psychonomic Society*, Boston, MA.
- DeCaro, M. S.**, Carlson, K. D., Thomas, R. D., & Beilock, S. L. (2008, November). Attentional mechanisms underlying skill failure and success under pressure. Poster presented at the *Annual Meeting of the Psychonomic Society*, Chicago, IL.
- Carlson, K. D., Thomas, R. D., **DeCaro, M. S.**, & Beilock, S. L. (2008, July). Working memory and category learning: Decision bound modeling of individual differences in response strategy. Poster presented at the *Annual Meeting of the Society for Mathematical Psychology*, Washington D. C.
- Beilock, S. L., & **DeCaro, M. S.** (2008, July). On the interplay of emotion and cognition: Individual differences, executive control, and performance under stress. Invited paper presented at the *XXIX International Congress of Psychology*, Berlin, Germany.
- DeCaro, M. S.**, & Beilock, S. L. (2008, June). Working memory, stereotype threat, and performance under stress. Paper presented at the *Society for the Psychological Study of Social Issues*, Chicago, IL.

- DeCaro, M. S.**, Rotar, K. E., Kendra, M. S., & Beilock, S. L. (2008, May). Diagnosing and alleviating the impact of performance pressure on mathematical problem solving. Poster presented at the *Annual Meeting of the Association for Psychological Science*, Chicago, IL. **APS Student Research Award.**
- DeCaro, M. S.**, Thomas, R. D., & Beilock, S. L. (2008, May). Choking under pressure: Multiple routes to skill failure. Paper presented at the *Annual Meeting of the Midwestern Psychological Association*, Chicago, IL.
- DeCaro, M. S.**, Thomas, R. D., & Beilock, S. L. (2007, November). On the multiple routes to skill failure: Distraction, over-attention, and task demands. Poster presented at the *Annual Meeting of the Psychonomic Society*, Long Beach, CA.
- Beilock, S. L., & **DeCaro, M. S.** (2007, November). Choking under pressure: Insights into skill failure and success. Paper presented at the *Annual Meeting of the Psychonomic Society*, Long Beach, CA.
- DeCaro, M. S.**, Thomas, R. D., Kendra, M. S., & Beilock, S. L. (2007, May). Working memory and category learning: When less is more. Paper presented at the *Annual Meeting of the Midwestern Psychological Association*, Chicago, IL. **Graduate Student Award: Honorable Mention.**
- DeCaro, M. S.**, Thomas, R. D., & Beilock, S. L. (2006, November). Working memory and category learning: Sometimes less is more. Poster presented at the *Annual Meeting of the Psychonomic Society*, Houston, TX.
- DeCaro, M. S.**, & Beilock, S. L. (2006, May). Higher capacity can produce less optimal performance: Working memory, mental set, and strategy selection in math. Paper presented at the *Annual Meeting of the Midwestern Psychological Association*, Chicago, IL.
- Sammons, M. C.**, & Mutter, S. A. (2005, May). Event timing constraints and response-outcome contingency learning: Evidence for an associative memory theory of contingency learning. Paper presented at the *Annual Meeting of the Midwestern Psychological Association*, Chicago, IL.
- Sammons, M. C.**, Mutter, S. A., Plumlee, L., & Strain, L. M. (2004, November). The effects of task timing characteristics on contingency judgments. Poster presented at the *Annual Meeting of the Psychonomic Society*, Minneapolis, MN.
- Strain, L. M., Mutter, S. A., Plumlee, L., & **Sammons, M. C.** (2004, May). The effect of age and prior expectancies on contingency judgments. Poster presented at the *Annual Meeting of the American Psychological Society*, Chicago, IL.
- Mutter, S. A., Haggblom, S. J., Schirmer, A., **Sammons, M. C.**, & Strain, L. M. (2004, April). Aging and the feature positive effect. Poster presented at the *Tenth Cognitive Aging Conference*, Atlanta, GA.
- Sammons, M. C.**, Strain, L. M., & Mutter, S. A. (2003, November). Aging, hypothesis testing, and the feature positive effect. Paper presented at the *Annual Meeting of the Kentucky Academy of Science (KAS)*, Bowling Green, KY. **Received Griffith Memorial Award in Psychology.**
- Schirmer, A., Strain, L. M., **Sammons, M. C.**, & Mutter, S. A. (2003, October). Out of sight, out of mind: Aging and the feature positive effect. Poster presented at the *Annual Meeting of the Kentucky Association of Gerontology (KAG)*, Bowling Green, KY. **Awarded most outstanding poster presentation.**

*Graduate Student First Author

†Undergraduate Student First Author

Teaching Experience

Graduate

Cognitive Processes

Working Memory

Cognition and Education

Undergraduate

Experimental Psychology

Cognitive Psychology

Seminar: Working Memory in Everyday Life

Seminar: Applying Cognitive Psychology to Education

Grants

EVPRI Internal Grant Program: Research Type II Grant, University of Louisville

Sephton, S. (PI), Salmon, P., Depue, B., Lyle, K., **DeCaro, M.**, Kayser, K., & Newton, K. (Co-PIs). A Dyadic Mindfulness Intervention for College Students and Their Roommates: Mechanisms and Health Effects

Costs: \$10,000

January 1, 2017 – December 31, 2017

EVPRI Internal Grant Program: Research Type I Grant, University of Louisville

DeCaro, M. S. (PI), Salmon, P., & Ralston, P. A. S. Test Anxiety and High-Stakes Exams: A Mindfulness Training Intervention for First-Year Engineering Students

Costs: \$2960.50

January 1, 2016 – December 31, 2016

Honors and Awards

Faculty Favorite Nominee, *University of Louisville*, 2016, 2017

Academic Achievement Award, *Miami University*, 2009

Association for Psychological Science (APS) Student Research Award, 2008

Academic Achievement Award, *Miami University*, 2007

Graduate Student Award: Honorable Mention, *Midwestern Psychological Association*, 2007

Griffith Memorial Award in Psychology, *Kentucky Academy of Science*, 2003

Service

Professional and University Service

Department Personnel Committee, 2017-Present

Arts and Sciences Technology and Facilities Committee, 2016-Present

Psychology Subject Pool Committee, 2016-Present

Department Website Committee, *University of Louisville*, 2015-Present

Departmental Plans and Policies Committee, *University of Louisville*, 2013-2016

Facilitator, Grawemeyer Award Winner Book Talk, *University of Louisville*, 2015

Experimental Psychology Program Brown Bag Coordinator, *University of Louisville*, 2014-2015

Colloquium Committee, *University of Louisville*, 2011-2015

Psychology Participant Pool Co-Administrator, *University of Louisville*, 2014

Graduate Curriculum Committee, *University of Louisville*, 2012-2013

Chair, Organizing Committee, *Annual Midwestern Conference on Cognition*, 2008

Panelist, Getting into Graduate School, *Association for Psychological Science (APS)*, 2008

Panelist, Applying to Graduate School, *Psi Chi*, 2006

Ad hoc Journal Reviewer

Journal of Experimental Psychology: General – Editorial Board
American Journal of Psychology
Animal Cognition
Applied Cognitive Psychology
Attention, Perception, & Psychophysics
Basic and Applied Social Psychology
Cognition
Cognition and Instruction
Cognitive, Affective, and Behavioral Neuroscience
Cognitive Science
Consciousness and Cognition
Contemporary Educational Psychology
Educational Psychology
European Journal of Psychology of Education
European Psychologist
Experimental Psychology
Instructional Science
Journal of Experimental Child Psychology
Journal of Experimental Psychology: Applied
Journal of Experimental Psychology: Human Perception and Performance
Journal of Experimental Psychology: Learning, Memory, and Cognition
Journal of Experimental Social Psychology
Journal of Motor Behavior
Journal of Sport & Exercise Psychology
Learning and Individual Differences
Learning and Instruction
Memory and Cognition
Methods
Quarterly Journal of Experimental Psychology
Psychological Research
Psychological Science
Psychology of Sport and Exercise
Psychophysiology
Scientific Reports
The Journal of Problem Solving

Community Presentations

DeCaro, M. S. (2013, February). Exploratory activities in the classroom: A cognitive science perspective. Invited talk presented at the *University of Louisville Celebration of Teaching and Learning*, Louisville, KY.

DeCaro, M. S., & Lyle, K. B. (2012, August). Increasing students' performance: Ideas from cognitive psychology. Invited talk presented at *Liberty High School*, Louisville, KY.

Student Supervision

Graduate Students: Primary Advisor

Campbell Rightmyer Bego, 2016-Present

Manooch Saeedi, 2016-Present
Charles Van Stockum, 2012-Present (M.A. 2014)
David Bellinger, M.A. 2014, Ph.D. 2016
Joanna Weaver, M. A. 2016

Graduate Student Committee Member

Marcus Leppanen, Master's, Dissertation Committees, 2015-2017
Robin Hopkins, Master's, Preliminary Exam, Dissertation Committees, 2015-2017
Sophia Searcy, Dissertation Committee, 2016
Elena Geronimi, Dissertation Committee, 2016
Nicholas Holt, Master's Committee, 2013, Dissertation Committee, 2016
Campbell Rightmyer, Master's Committee, 2016
Holly Knight, Dissertation Committee, 2015
Lauren Vines, Dissertation Committee, 2014
Ryan Hacklaender, Dissertation Committee, 2013
J. Matthew Edlin, Dissertation Committee, 2013
Baxter Eaves, Master's Committee, Preliminary Exam Committee, 2013

Undergraduate Honors Students and Award Winners

Phillip Newman, 2016-2017: Honors Thesis, Undergraduate Research Grant, Heuermann Award, Seely Outstanding Senior Award
Lauren Grant, 2014-2015: Honors Thesis, Undergraduate Research Grant
Mary Alter, 2014: Honors Thesis, Undergraduate Research Grant
Elizabeth Camfield, 2013: Honors Thesis, Undergraduate Research Grant
Sandra Hutzler, 2012-2013: Honors Thesis, Undergraduate Research Grant
Megan Smith, 2011-2013: Honors Thesis, Psi Chi Research Grant, Undergraduate Research Grant
Kristin Rotar, 2008: Honors Thesis, Undergraduate Research Award, Miami University
Matthew Kendra, 2007: Honors Thesis, Undergraduate Research Award, Miami University
Andrea Mankins, 2007: Undergraduate Research Award, Miami University
Melissa Borkon, 2006: Honors Thesis, DUOS Grant, Undergraduate Research Award, Miami

Select Media Coverage

Harvard Business Review, August 2015
NeuroNet Learning Research Blog, 2015
Chalkbeat TN, August 2014
BabyCenter, January 2014
Reflex Magazine, June 2012
Msnbc.com, August 2011
Huffington Post, August 2011
KFWB News/Talk 980 (CBS, Los Angeles), August 2011