

# Sian Leah Beilock

## Curriculum Vitae

### Address

Department of Psychology  
The University of Chicago  
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Chicago, IL 60637

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**Lab Webpage:** <http://hpl.uchicago.edu/>

### Employment

### Year

### Title

The University of Chicago	2008 - present	Associate Professor, Department of Psychology
The University of Chicago	2005 - 2008	Assistant Professor, Department of Psychology
Miami University of Ohio	2003 - 2005	Assistant Professor, Department of Psychology

### Other Current Affiliations

Adjunct Faculty, Department of Psychology; Miami University  
Center for Cognitive and Social Neuroscience; The University of Chicago  
NSF Spatial Intelligence and Learning Center; The University of Chicago  
Center for Human Potential and Public Policy; The University of Chicago

### Education

### Year

### Title

Michigan State University	2003	Ph.D. Psychology; <b>Advisor:</b> Dr. Thomas H. Carr
	2003	Ph.D. Kinesiology; <b>Advisor:</b> Dr. Deb L. Feltz
	2000	M.A. Psychology
University of California, San Diego	1997	B.S. Cognitive Science Minor: Psychology

### Research Interests

Attention and executive control of complex cognitive and sensorimotor skills  
Skill acquisition and expertise  
Performance under pressure and stereotype threat  
Individual differences in executive functioning  
Embodied cognition

I use converging methodologies in my research – ranging from behavioral performance measures (e.g., reaction time and accuracy), to physiological measures of stress (e.g., salivary cortisol), to neuroimaging techniques (e.g., fMRI).

### **Honors, Awards, and Highlights**

National Science Foundation CAREER Award (July, 2008)

NASPSA Early Career Distinguished Scholar Award (June, 2008)

- North American Society for the Psychology of Sport & Physical Activity
- New investigator award given to the young professor conducting outstanding research in the areas of sport psychology and motor learning.

Chosen as one of 25 “Women to Watch” by *Crain’s Chicago Business Magazine* (May, 2007)

Highlighted as one of four “Rising Stars” across all academic disciplines.

*Chronicle of Higher Education* (September, 2005)

ISSP Young Scholar Award (August, 2005)

- International Society of Sport Psychology
- New investigator award given once every 4 years to the young professor conducting outstanding research in the areas of sport psychology and motor learning.

### **Extramural Grants**

National Science Foundation DRL-0746970

Beilock, S. L. (PI). CAREER: Women in the Math and Sciences: Counteracting the Impact of Negative Group Stereotypes on Performance.

Total costs: \$820,882

July 1, 2008 – June 30, 2013

U.S. Department of Education, Institute of Education Sciences R305H050004

Beilock, S. L. (PI). Improving the Assessment Capability of Standardized Tests: How High-Stakes Testing Environments Compromise Performance.

Total costs: \$427,786

June 1, 2005 – May 31, 2009

National Science Foundation BCS-0601148

Beilock, S. L. (PI). The Causal Mechanisms of Stereotype Threat in Cognitive and Motor Skills.

Total costs: \$198,857

October 1, 2005 – September 30, 2009

National Science Foundation: Science of Learning Center Grant

Spatial Intelligence Learning Center (PI, Nora Newcombe)

Beilock, S. L. (member)

Total costs to Beilock: \$61,890

September 14, 2008 – September 14, 2009

National Science Foundation BCS-0751336

Beilock, S. L. (PI). Learning Math and Spatial Skills: Working Memory, Performance Stereotypes, and Anxiety

Total costs: \$39,770

August 27, 2007 – September 30, 2009

### **Intramural Grants**

Social Sciences Seed Funding, The University of Chicago, 2008-2009 - \$10,000

Social Sciences Faculty Research Grant, The University of Chicago, 2006-2007 - \$4,000

College of Arts and Science Summer Research Grant, Miami University, 2005 - \$6,000

Committee on Faculty Research Summer Research Award, Miami University; 2004 - \$6,000

*Total Extramural and Intramural Funding (through end of my current grants): \$1,575,185*

### **Peer-Reviewed Publications**

**37.** Beilock, S. L. (in press). Grounding cognition in action: Expertise, comprehension, and judgment. In M. Raab, J. Johnson, & H. Heekeren (Eds.), *Mind and Motion: The bidirectional link between thought and action. Progress in Brain Research*. Elsevier.

**36.** Rydell, B. J., McConnell, A. R., & Beilock, S. L. (in press). Multiple social identities and stereotype threat: Imbalance, accessibility, and working memory. *Journal of Personality & Social Psychology*.

**35.** DeCaro, M. S. & Beilock, S. L. (in press). The benefits and perils of attentional control. In M. Csikszentmihalyi and B. Bruya (Eds.), *Effortless Attention: A New Perspective in the Cognitive Science of Attention and Action*. MIT press.

**34.** Ping, R., Dhillon, S., & Beilock, S. L. (in press). Reach for what you like: The body's role in shaping preferences. *Emotion Review*.

**33.** Beilock, S. L., Bertenthal, B. I., Hoerger, M., & Carr, T. H. (2008). When does haste make waste? Expertise, speed vs. accuracy instructions, and the tools of the trade. *Journal of Experimental Psychology: Applied*, 14, 340-352.

**32.** Beilock, S. L. & Lyons, I. M. (2008). Expertise and the mental simulation of action. In K. Markman, B. Klein, and J. Suhr (Eds.), *The Handbook of Imagination and Mental Simulation* (pp. 21-34). Psychology Press.

**31.** Beilock, S. L. (2008). Math performance in stressful situations. *Current Directions in Psychological Science*, 17, 339-343.

**30.** Beilock, S. L., Lyons, I. M., Mattarella-Micke, A., Nusbaum, H. C., & Small, S. L. (2008). Sports experience changes the neural processing of action language. *Proceedings of the National Academy of Sciences, USA*, 105, 13269-13273.

- 29.** Beilock, S. L., & Gonso, S. (2008). Putting in the mind vs. putting on the green: Expertise, performance time, and the linking of imagery and action. *The Quarterly Journal of Experimental Psychology: Human Experimental Psychology*, *61*, 920-932.
- 28.** DeCaro, M. S., Thomas, R., & Beilock, S. L. (2008). Individual differences in category learning: Sometimes less working memory capacity is better than more. *Cognition*, *107*, 284-294.
- 27.** Beilock, S. L. (2008). Beyond the playing field: Sports psychology meets embodied cognition. *International Review of Sport and Exercise Psychology*, *1*, 19-30.
- 26.** Jackson, R., & Beilock, S. L. (2008). Attention and performance. In D. Farrow, J. Baker, and C. MacMahon (Eds.), *Developing elite sports performers: Lessons from theory and practice*. (pp. 104-118). Routledge.
- 25.** Sibley, B. A. & Beilock, S. L. (2007). Exercise and working memory: An individual differences investigation. *Journal of Sport and Exercise Psychology*, *29*, 783-391.
- 24.** 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, & Cognition*, *33*, 983-998.
- 23.** Gray, R., Beilock, S. L., & Carr, T. H. (2007). "As soon as the bat met the ball, I knew it was gone": Outcome prediction, hindsight bias, and the representation and control of action in novice and expert baseball players. *Psychonomic Bulletin & Review*, *14*, 669-675.
- 22.** Beilock, S. L. (2007). Choking under pressure. In R. Baumeister and K. Vohs (Eds.), *Encyclopedia of social psychology*. Sage Publications.
- 21.** Beilock, S. L. (2007). Understanding skilled performance: Memory, attention, and "choking under pressure." In Morris, Terry, and Gordon (Eds.), *Sport & Exercise Psychology: International Perspectives* (pp. 153-166). Morgantown, WV: Fitness Information Technology.
- 20.** DeCaro, M. S., & Wieth, M., & Beilock, S. L. (2007). Methodologies for examining problem solving success and failure. *Methods*, *42*, 58-67.
- 19.** Beilock, S. L., Rydell, R. J., & McConnell, A. R. (2007). Stereotype threat and working memory: Mechanisms, alleviation, and spill over. *Journal of Experimental Psychology: General*, *136*, 256-276.
- 18.** Beilock, S. L., & Gray, R. (2007). Why do athletes "choke" under pressure? In G. Tenenbaum and R. C. Eklund (Eds.), *Handbook of sport psychology*, 3<sup>rd</sup> Ed. (pp. 425-444). Hoboken, NJ: John Wiley & Sons.
- 17.** Beilock, S. L. & Holt, L. E. (2007). Embodied preference judgments: Can likeability be driven by the motor system? *Psychological Science*, *18*, 51-57.

16. Holt, L. E. & Beilock, S. L. (2006). Expertise and its embodiment: Examining the impact of sensorimotor skill expertise on the representation of action-related text. *Psychonomic Bulletin & Review*, 13, 694-701.
15. Beilock, S. L., & Feltz, D. L. (2006). Self Efficacy and expertise. In N. Hagemann, M. Tietjens, & B. Strauss, (Eds.), *The psychology of peak performance in sports* (pp. 156-174). Göttingen, Germany: Hogrefe Publishers.
14. Beilock, S. L., Jellison, W. A., Rydell, R. J., McConnell, A. R., & Carr, T. H. (2006). On the causal mechanisms of stereotype threat: Can skills that don't rely heavily on working memory still be threatened? *Personality & Social Psychology Bulletin*, 32, 1059-1071.
13. Beilock, S. L. (2005). Choking under pressure. In R. M. Bartlett, C. Gratton, and C. Rolf (Eds.), *Encyclopedia of international sports studies* (pp. 258-359; see also 1462-1463). Routledge.
12. Beilock, S. L., & Carr, T. H. (2005). When high-powered people fail: Working memory and “choking under pressure” in math. *Psychological Science*, 16, 101-105. **Editor's Choice – Science, December 3<sup>rd</sup>, 2004.**
11. Beilock, S. L. (2005). Controlled and automatic processing. In R. M. Bartlett, C. Gratton, and C. Rolf (Eds.), *Encyclopedia of international sports studies* (pp. 209-210). Routledge.
10. Beilock, S. L., Kulp, C. A., Holt, L. E., & Carr, T. H. (2004). More on the fragility of performance: Choking under pressure in mathematical problem solving. *Journal of Experimental Psychology: General*, 133, 584-600. **Editor's Choice – Science, December 3<sup>rd</sup>, 2004.**
9. Beilock, S. L. & McConnell, A. R. (2004). Stereotype threat and sport: Can athletic performance be threatened? *Journal of Sport and Exercise Psychology*, 26, 597-609.
8. Beilock, S. L., Bertenthal, B. I., McCoy, A. M., & Carr, T. H. (2004). Haste does not always make waste: Expertise, direction of attention, and speed versus accuracy in performing sensorimotor skills. *Psychonomic Bulletin & Review*, 11, 373-379.
7. Beilock, S. L., & Carr, T. H. (2004). From novice to expert performance: Attention, memory, and the control of complex sensorimotor skills. In A. M. Williams, N. J. Hodges, M. A. Scott, & M. L. J. Court (Eds.), *Skill acquisition in sport: Research, theory and practice* (pp. 309-328). Routledge.
6. Beilock, S. L., Wierenga, S. A., & Carr, T. H. (2003). Memory and expertise: What do experienced athletes remember? In J. L. Starkes and K. A. Ericsson (Eds.), *Expert performance in sports: Advances in research on sport expertise* (pp. 295-320). Champaign, IL: Human Kinetics.

5. Beilock, S. L., Wierenga, S. A., & Carr, T. H. (2002). Expertise, attention, and memory in sensorimotor skill execution: Impact of novel task constraints on dual-task performance and episodic memory. *The Quarterly Journal of Experimental Psychology: Human Experimental Psychology*, *55*, 1211-1240.
4. Beilock, S. L., Carr, T. H., MacMahon, C., & Starkes, J. L. (2002). When paying attention becomes counterproductive: Impact of divided versus skill-focused attention on novice and experienced performance of sensorimotor skills. *Journal of Experimental Psychology: Applied*, *8*, 6-16.
3. Beilock, S. L. & Carr, T. H. (2001). On the fragility of skilled performance: What governs choking under pressure? *Journal of Experimental Psychology: General*, *130*, 701-725.
2. Beilock, S. L., Afremow, J. A., Rabe, A. L., & Carr, T. H. (2001) "Don't miss!" The debilitating effects of suppressive imagery on golf putting performance. *Journal of Sport and Exercise Psychology*, *23*, 200-221.
1. Beilock, S. L., Feltz, D. L., & Pivarnik, J. M. (2001). Training patterns of athletes during pregnancy and postpartum. *Research Quarterly for Exercise and Sport*, *72*, 39-46.

### **Other Publications**

Beilock, S. L. (2007). Closing the racial achievement gap. Retrieved February 20<sup>th</sup>, 2007 from Scientific American.com:  
[http://hpl.uchicago.edu/Popular%20Press/Pop%20PDFs/Scientific%20American%202006.pdf?title=closing\\_the\\_racial\\_achievement\\_gap&more=1&c=1&tb=1&pb=1&ref=rss](http://hpl.uchicago.edu/Popular%20Press/Pop%20PDFs/Scientific%20American%202006.pdf?title=closing_the_racial_achievement_gap&more=1&c=1&tb=1&pb=1&ref=rss)

### **Manuscripts under Review**

Lyons, I., Cieslak, M., Mattarella-Micke, A., Nusbaum, H., Small, S., & Beilock, S. L. (invited submission; revise & resubmit). Neural processing of action-related language. *Brain & Language*.

DeCaro, M. S., Carlson, K. D., Thomas, R. D., & Beilock, S. L. (invited reply). When and How Less is More: Reply to Tharp & Pickering. *Cognition*

Yang, S., Gallo, D., & Beilock, S. L. (revise & resubmit). Embodied memory judgments: A case of motor fluency.

Lyons, I. & Beilock, S. L. (under review). "Beyond Quantity: Individual differences in working memory and the ordinal understanding of numerical symbols.

### **Manuscripts in Preparation**

Beilock, S. L., & Goldin-Meadow, S. (in preparation). Gesture changes thought by grounding it in action.

Matterella-Micke, A., Mateo, J., Kozak, M. N., Foster, K., & Beilock, S. L. (in preparation). Individual differences in choking and excelling under pressure: From physiology to behavior.

DeCaro, M. S., & Beilock, S. L. (in preparation). Diagnosing the impact of performance pressure on mathematical problem solving: Working memory and success under stress.

DeCaro, M. S., Thomas, R., & Beilock, S. L. (in preparation). Choking under pressure: Multiple routes to skill failure.

Beilock, S. L., & Gray, R. (in preparation). From attentional control to attentional spillover: A skill-level investigation of attention, kinematics, and performance outcome relations.

### **Invited Talks and Colloquia**

#### **Upcoming**

- Keynote Address. Council of Graduate Departments of Psychology (COGDOP) Annual meeting. Clearwater, FL. February, 2009.
- Carnegie Symposium on Cognition. Carnegie Mellon University. Pittsburgh, PA. June, 2009.
- Innovators in Cognitive Science Lecture. The University of California, Merced. Merced, CA. May, 2009.
- Annual Sigma Xi Lecture. Lake Forest College. Lake Forest, IL. April, 2009.
- Distinguished Speakers Colloquium Lecture. Department of Psychology. Washington University. St. Louis, MO. February, 2009

#### **2008**

- Invited Talk. School of Movement Sciences. Brunel University. London, England.
- Cognitive Science Colloquium Lecture. University of Maryland. College Park, MD.
- Fourth Annual Jeanne LaDuke Women in Mathematics, Science, and Technology Lecture. DePaul University. Chicago, IL.
- Harper Lecture. University of Chicago Alumni Association. Atlanta, GA.
- Invited Talk. Annual Neuroscience Retreat. University of Chicago. New Buffalo, MI.
- Invited Talk. Annual Meeting of the North American Society for the Psychology of Sport and Physical Activity (NASPSPA). Niagara Falls, Canada.
- Invited Talk. Annual Meeting of the Midwestern Psychological Association. Chicago, IL.
- Invited Talk. Midwest Faculty Seminar. University of Chicago. Chicago, IL.
- Invited Seminar. Lutheran School of Theology. University of Chicago. Chicago, IL.
- Talk, Invited Symposium. Sensory-Motor Foundations of Cognition and Language. International Congress of Psychology. Berlin, Germany.
- Talk, Invited Symposium. Individual Differences in Executive Control. International Congress of Psychology. Berlin, Germany.
- Department Colloquium. Department of Educational Psychology. University of Illinois. Urbana-Champaign, IL.

- Department Colloquium. Department of Applied Physiology and Kinesiology. University of Florida. Gainesville, FL.
- Department Colloquium. School of Human Kinetics. University of British Columbia. Vancouver, BC.
- Department Colloquium. Mathematics Department. The University of Chicago. Chicago, IL.

## 2007

- Invited Talk. Illinois Humanities Council. Chicago, IL.
- Invited Talk. Starcom MediaVest. Sundance, UT.
- Invited Talk. U.S. Army Natick Soldier RD&E Center and U.S. Army Research Institute of Environmental Medicine. Natick, MA.
- Invited Talk. California Algebra Forum. San Diego, CA.
- Invited Talk. Chicago Convenes. The University of Chicago. Chicago, IL.
- Talk, Invited Symposium. Motivation and Cognition. Annual Meeting of the Psychonomics Society, Long Beach CA.
- Talk, Invited Symposium. Functional Brain Imaging of Action Observation: Implications for Skill Acquisition. Annual Meeting of the North American Society for the Psychology of Sport and Physical Activity. San Diego, CA.
- Invited Talk. Max Planck Institute for Human Cognitive and Brain Sciences (Perception-Action Group). Leipzig, Germany.
- Department Colloquium. Department of Psychology. The University of Notre Dame. South Bend, IN.
- Department Colloquium. Department of Psychology. The University of Nevada, Las Vegas. Las Vegas, NV.
- Department Colloquium. Department of Human Movement Sciences. University of Illinois, Chicago. Chicago, IL.
- Department Colloquium. Department of Kinesiology. The Pennsylvania State University. State College, PA.

## 2006

- Invited Talk. Center for Cognitive and Social Neuroscience. University of Chicago. Chicago, IL.
- Invited Talk. Neural Basis of Mathematical Development Conference. Vanderbilt University. Nashville, TN.
- Keynote Address. Annual meeting of the German Sport Psychology Association. Muenster, Germany.
- Invited Talk. Social Psychologists of Chicago Conference. DePaul University. Chicago, IL.
- Talk, Invited Symposium. Action and Spatial Cognition. Annual meeting of the Midwestern Psychological Association. Chicago, IL.
- Invited Talk. Department of Psychology (Cognitive Psychology Group), The University of Illinois. Urbana-Champaign, IL.
- Invited Talk. University of Chicago Business School. Chicago, IL.

- Department Colloquium. Department of Psychology, Texas Tech University. Lubbock, TX.
- Invited Talk. Max Planck Institute (Adaptive Behavior Group). Berlin, Germany.
- Department Colloquium. Department of Psychology and Peabody College, Vanderbilt University. Nashville, TN.
- Department Colloquium. Department of Psychology, UC Berkeley. Berkeley, CA.
- Department Colloquium. Department of Psychology, Northwestern University. Evanston, IL.

## 2005

- Invited Talk. Australian Institute of Sport. Canberra, Australia.
- Invited Talk. 11<sup>th</sup> World Congress of Sport Psychology. Sydney, Australia.
- Invited Talk. Annual Meeting of the American Psychological Association (Division 3, Experimental Psychology). Honolulu, HI.
- Invited Talk. Annual Meeting of the Midwestern Psychological Association. Chicago, IL.
- Department Colloquium. Department of Health and Kinesiology, Purdue University. West Lafayette, IN.
- Invited Talk. Department of Psychology (Cognitive Psychology Group). University of California, Santa Barbara. Santa Barbara, CA.
- Department Colloquium. Department of Psychology, University of Chicago. Chicago, IL.
- Department Colloquium. Department of Human Movement Science, Vrije University. Amsterdam, The Netherlands.

## 2004

- Department Colloquium. Department of Psychology, University of California, San Diego. San Diego, CA.

## 2003

- Department Colloquium. Department of Psychology, Carnegie Mellon University. Pittsburgh, PA.
- Department Colloquium. Department of Psychology, University of North Carolina at Greensboro. Greensboro, NC.
- Department Colloquium. Department of Psychology, Georgia Institute of Technology. Atlanta, GA.
- Department Colloquium. Department of Psychology, Miami University. Oxford, OH.
- Department Colloquium. Department of Psychology, Florida State University. Tallahassee, FL.

## 2002

- Department Colloquium. Department of Psychology, Southern Illinois University. Carbondale, IL.

## Presentations

- Ramirez, G., & Beilock, S.L. (November, 2008). The "writing cure" as a solution to choking under pressure in math. Poster presented at the Annual Meeting of the Psychonomics Society. Chicago, IL.
- Mattarella-Micke, A., Wieth, M., & Beilock, S. L. (November, 2008). Performance pressure and the role of retrieval interference. Poster presented at the Annual Meeting of the Psychonomics Society. Chicago, IL.
- DeCaro, M. S., Carlson K. D., Thomas, R. D., & Beilock, S. L. (November, 2008). Attentional mechanisms underlying skill failure and success under pressure. Poster presented at the Annual Meeting of the Psychonomics Society. Chicago, IL.
- Beilock, S. L. (June, 2008). When two identities are better than one: Stereotype threat, anxiety, and women in math and the sciences. Poster presented at the Institute for Educational Sciences Research Conference. Washington, DC.
- Mattarella-Micke, A., Kozak, M. N., Foster, K., Mateo, J. M. & Beilock S. L. (June, 2008). High-stakes math performance. Poster presented at the Institute for Educational Sciences Research Conference. Washington, DC.
- Carlson K. D., Thomas, R. D., DeCaro, M. S., & Beilock, S. L. (June, 2008). 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, DC.
- DeCaro, M. S., & Beilock, S. L. (June, 2008). Working memory, stereotype threat, and performance under stress. Paper presented at the Society for the Psychological Study of Social Issues. Chicago, IL.
- Beilock, S. L. (June, 2008). When two identities are better than one. Stereotype threat and women in math and the sciences. Poster presented at the Annual Meeting of the Institute of Education Sciences. Washington, DC.
- Mattarella-Micke, A., Kozak, M. N., Foster, K., Mateo, J. M. & Beilock S. L. (May, 2008). Individual differences in math testing performance: Converging evidence from physiology and behavior. Poster presented at the Annual Meeting of the Association for Psychological Science. Chicago, IL.
- Lyons, I. M., & Beilock, S. L. (May, 2008). The numerical symbol-mapping problem: An individual differences approach. Poster presented at the Annual Meeting of the Association for Psychological Science. Chicago, IL.
- Ping, R. M., Dhillon, G. S. & Beilock, S. L. (May, 2008). The motor system's role in object likeability. Poster presented at the Annual Meeting of the Association for Psychological Science. Chicago, IL.
- Yang, S., Gallo, D., & Beilock, S. (May, 2008). Motor Fluency Influences Episodic Recognition Memory. Poster presented at the Annual Meeting of the Association for Psychological Science. Chicago, IL.

- DeCaro, M. S., Rotar, K. E., Kendra, M. S., & Beilock, S. L. (May, 2008). Diagnosing and alleviating the effects of performance pressure on mathematical problem solving. Paper presented at the Annual Meeting of the Association for Psychological Science. Chicago, IL. **\*Graduate student award to first author.**
- Lyons, I. M., & Beilock, S. L. (May, 2008). The numerical symbol-mapping problem: An individual differences approach. Paper presented at the Annual Meeting of the Midwestern Psychological Association. Chicago, IL.
- Mattarella-Micke, A., Kozak, M. N., Foster, K., Mateo, J. M. & Beilock S. L. (May, 2008). High-Stakes Performance: Why do some choke while others thrive? Paper presented at the Annual Meeting of the Midwestern Psychological Association. Chicago, IL.
- Ping, R. M., Dhillon, G. S. & Beilock, S. L. (May, 2008). The motor system's role in object preference. Paper presented at the Annual Meeting of the Midwestern Psychological Association. Chicago, IL.
- Yang, S., Gallo, D., & Beilock, S. (May, 2008). Embodied Memory Judgments: A Case of Motor fluency. Paper presented at the Annual Meeting of Midwestern Psychological Association. Chicago, IL.
- DeCaro, M. S., Thomas, R. D., & Beilock, S. L. (May, 2008). Choking under pressure: Multiple routes to skill failure. Paper presented at the Annual Meeting of the Midwestern Psychological Association, Chicago IL.
- Cieslak, M., Lyons, I., Beilock, S. L., (April, 2008). The role of expertise in language comprehension: How neural activity changes with increasing exposure to categorically related sentences. Poster presented at the Annual Meeting of the Cognitive Neuroscience Society.
- Beilock, S. L., Lyons, I., Mattarella-Micke, A., Nusbaum, H. C., & Small, S. L. (April, 2008). Sports experience changes the neural processing of language. Poster presented at the Annual Meeting of the Cognitive Neuroscience Society.
- Beilock, S. L. (February, 2007). Embodying likeability: Motor speed and ease impacts preferences (even without intention to act). Paper presented at the Annual Meeting of the Society for Personality and Social Psychology. Albuquerque, NM.
- DeCaro, M. S., Thomas, R. D., & Beilock, S. L. (November, 2007). On the multiple routes to skill failure: Distraction, over-attention, and task demands. Poster presented at the Annual Meeting of the Psychonomics Society. Long Beach, CA.
- Halvorson, K., Truelove, T., Hazeltine, E., & Beilock, S. L. (November, 2007). What is so hard about bimanual coordination? Evidence for conceptual interactions between bimanual responses. Poster presented at the Annual Meeting of the Psychonomics Society. Long Beach, CA.
- Mattarella-Micke, A., Mateo, J., & Beilock, S. L. (June, 2007). The effects of performance pressure on mathematical problem solving. Poster presented at the Annual Meeting of the Institute of Education Sciences. Washington, DC.

- Beilock, S. L., Rydell, R. J., & McConnell, A. R. (June, 2007). Stereotype threat and working memory: Mechanisms, alleviation, and spill over. Poster presented at the Annual Meeting of the Institute of Education Sciences. Washington, DC.
- DeCaro, M. S., Thomas, R., & Beilock, S. L. (May, 2007). Working memory capacity and category learning: Sometimes less is more. Paper presented at the Annual Meeting of the Midwestern Psychological Association. Chicago, IL. **\*Graduate student honorable mention award to first author.**
- Beilock, S. L. (February, 2007). Choking in math: Most qualified to succeed = most likely to fail. Paper presented at the Annual Meeting of the American Association for the Advancement of Science (AAAS). San Francisco, CA.
- Beilock, S. L., Rydell, R. J., & McConnell, A. R. (January, 2007). Stereotype threat and working memory: Mechanisms, alleviation, and spill over. Paper presented at the Annual Meeting of the Society for Personality and Social Psychology. Memphis, TN.
- DeCaro, M. S., Thomas, R., & Beilock, S. L. (November, 2006). Working memory capacity and category learning: Sometimes less is more. Poster presented at the Annual Meeting of the Psychonomic Society. Houston, TX.
- Fenn, K. M., Beilock, S. L., & Nusbaum, H. (November, 2006). Sleep-dependent consolidation of motor learning in golf putting. Poster presented at the Annual Meeting of the Psychonomic Society. Houston, TX.
- Beilock, S. L. (November, 2006). Embodied preference judgments: Can likeability be driven by the motor system? Paper presented at the Annual Meeting of the Psychonomic Society. Houston, TX.
- Beilock, S. L. (August, 2006). Expertise and its embodiment. Annual Meeting of the Cognitive Science Association for Interdisciplinary Learning (CSAIL). Mt. Hood, OR.
- Beilock, S. L., Gray, R., & Carr, T. H. (June, 2006). “As soon as the bat met the ball, I knew it was gone”: Outcome prediction, hindsight bias, and the representation and control of action in novice and expert baseball players. Paper presented at the Annual Meeting of the North American Society for the Psychology of Sport and Physical Activity. Denver, CO.
- Beilock, S. L. (May, 2006). Why do athletes choke under pressure? Paper presented at the Annual Meeting of the German Sport Psychology Association. Muenster, Germany.
- DeCaro, M. S., & Beilock, S. L. (May, 2006). 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.
- Beilock, S. L., Rydell, R. J., & McConnell, A. R. (November, 2005). Stereotype threat and working memory: What is threatened and can it be alleviated? Poster presented at the Annual Meeting of the Psychonomic Society. Toronto, CA.
- Kumar, S. D., Beilock, S. L., & Carr, T. H. (November, 2005). Working memory and mathematical computation: Does problem representation shift with increasing expertise? Paper presented at the Annual Meeting of the Psychonomic Society. Toronto, CA.

- Gray, R., Beilock, S. L., & Carr, T. H. (November, 2005). “As soon as the bat met the ball, I knew it was gone”: Accuracy and hindsight bias in predicting action outcomes. Paper presented at the Annual Meeting of the Psychonomic Society. Toronto, CA.
- Holt, L. E., & Beilock, S. L. (August, 2005). On the embodiment of knowledge: Expert athletes cognitively represent skill-related actions differently than novices. Poster presented at the 11<sup>th</sup> World Congress of Sport Psychology. Sydney, Australia
- Beilock, S. L. (June, 2005). Expertise, attention, and the speed-accuracy trade-off in sensorimotor skills. Paper presented at the Annual Meeting of the North American Society for the Psychology of Sport and Physical Activity. St. Pete, FL.
- Holt, L. E., & Beilock, S. L. (May, 2005). On the embodiment of expert knowledge: Is sensorimotor experience necessary to form detailed mental representations of action? Paper presented at the Annual Meeting of the Midwestern Psychological Association. Chicago, IL.
- Rydell, R. J., Beilock, S. L., McConnell, A. R., & Holt, L. E. (January, 2005). Multiple categories and stereotype threat. Poster presented at the Annual Meeting of the Society for Personality and Social Psychology. New Orleans, LA.
- Beilock, S. L., Hoerger, M., Bertenthal, B. I., & Carr, T. H. (November, 2004). Haste, waste, and tools of the trade: Speed vs. accuracy in experts and novices. Paper presented at the Annual Meeting of the Psychonomic Society. Minneapolis, MN.
- Beilock, S. L., & Carr, T. H. (November, 2004). When high-powered people fail: Working memory and “choking under pressure” in math. Poster presented at the Annual Meeting of the Psychonomic Society. Minneapolis, MN.
- Beilock, S. L. (July, 2004). Expertise, attention, and the speed-accuracy trade-off in sensorimotor skills. Paper presented at the Annual Meeting of the Cognitive Science Association for Interdisciplinary Learning (CSAIL). Mt. Hood, OR.
- Beilock, S. L. (June, 2004). Stereotype threat and sport: Can athletic performance be threatened? Symposium organized for the Annual Meeting of the North American Society for the Psychology of Sport and Physical Activity. Vancouver, BC.
- McConnell, A. R., Beilock, S. L., Jellison, W. A., Rydell, B. J., & Carr, T. H. (January, 2004). Stereotype threat: Is it a threat on working memory capacity? Poster presented at the Annual Meeting of the Society for Personality and Social Psychology. Austin, TX.
- Beilock, S. L., Rydell, B. J., McConnell, A. R., & Carr, T. H. (November, 2003). Skill execution and the self: What can stereotype threat teach us about real-time task performance? Poster presented at the Annual Meeting of the Psychonomic Society. Vancouver, BC.
- Beilock, S. L., Jellison, W. A., McConnell, A. R., & Carr, T. H. (June, 2003). When negative stereotypes lead to negative performance outcomes: Understanding the stereotype threat phenomenon in sensorimotor skill execution. Paper presented at the Annual Meeting of the North American Society for the Psychology of Sport and Physical Activity. Savannah, GA.

- Jellison, W. A., Beilock, S. L., McConnell, A. R., & Carr, T. H. (May, 2003). The wrong type of attention: Cognitive mechanisms underlying stereotype threat. Paper presented at the Annual Meeting of the Midwestern Psychological Association. Chicago, IL.
- Beilock, S. L., Jellison, W. A., Noechel, L., Furrow, N., McConnell, A. R., & Carr, T. H. (February, 2003). On the causal mechanisms underlying stereotype threat: Is stereotype threat a form of “choking under pressure?” Poster presented at the Annual Meeting of the Society for Personality and Social Psychology. Los Angeles, CA.
- Beilock, S. L., Feltz, D. L., & Carr, T. H. (November, 2002). More on the fragility of skilled performance: Choking under pressure is caused by different mechanisms in cognitive versus sensorimotor skills. Poster presented at the Annual Meeting of the Psychonomic Society. Kansas City, MO.
- Beilock, S. L., Bertenthal, B. I., McCoy, A. M., & Carr, T. H. (June, 2002). When haste *doesn't* make waste: Expertise, an exception to the speed-accuracy trade-off. Paper presented at the Annual Meeting of the North American Society for the Psychology of Sport and Physical Activity. Baltimore, MD.
- Beilock, S. L., Kulp, C. A., & Carr, T. H. (May, 2002). Choking under pressure in mathematical problem solving. Paper presented at the Annual Meeting of the Midwestern Psychological Association. Chicago, IL.
- Beilock, S. L., Carr, T. H., MacMahon, C., & Starkes, J. L. (November, 2001). To attend or not to attend: Divided versus skill-focused attention in novice and expert performance. Paper presented at the Annual Meeting of the Psychonomic Society. Orlando, FL.
- Beilock, S. L., Wierenga, S. A., & Carr, T. H. (May, 2001). Skilled performance and "expertise-induced amnesia." Paper presented at the 10<sup>th</sup> World Congress of Sport Psychology. Skiathos, Greece.
- Beilock, S. L., Wierenga, S. A., & Carr, T. H. (May, 2001). Expertise, attention, and memory in a sensorimotor skill: Impact of novel task constraints on dual-task performance and episodic memory. Paper presented at the Annual Meeting of the Midwestern Psychological Assoc. Chicago, IL.
- Beilock, S. L. & Carr, T. H. (November, 2000). On the fragility of skilled performance: What governs choking under pressure? Paper presented at the Annual Meeting of the Psychonomic Society. New Orleans, LA.
- Beilock, S. L. & Carr, T. H. (October, 2000). Attention to task performance and "expertise-induced amnesia." Paper presented at the Annual Meeting of the Canadian Society for Psychomotor Learning and Sport Psychology. Waterloo, Canada.
- Beilock, S. L., Afremow, J. A., Rabe, A. L., & Carr, T. H. (June, 2000) “Don’t miss!” The debilitating effects of suppressive imagery on golf putting performance. Paper presented at the Annual Meeting of the North American Society for the Psychology of Sport and Physical Activity. San Diego, CA.
- Beilock, S. L., & Carr, T. H. (May, 2000). On the fragility of skilled performance: What governs choking under pressure? Paper presented at the Annual Meeting of the Midwestern Psychological Association. Chicago, IL.

- Beilock, S. L., & Carr, T. H. (February, 2000). What governs choking under pressure in sensorimotor and cognitive skill execution? Paper presented at the Midwestern Sports Psychology Annual Conference. East Lansing, MI.
- Feltz, D. L., Pivarnik, J. M., & Beilock, S. L. (August, 1999). Psychological factors in training for pregnant and postpartum athletes. Poster presented at the Annual Meeting of the American Psychological Association. Boston, MA.
- Beilock, S. L., & Carr, T. H. (June, 1999). Generic knowledge and episodic memories of skilled performance: Comparison of expert and novice golfers. Paper presented at the Annual Meeting of the North American Society for the Psychology of Sport and Physical Activity. Clearwater, FL.

### **Professional Activities and Service**

#### **Ad Hoc Journal Reviewer**

*Science*

*Journal of Experimental Psychology: Applied*

*Journal of Experimental Psychology: General*

*Journal of Experimental Psychology: Human Perception & Performance*

*Journal of Experimental Psychology: Learning, Memory, & Cognition*

*Psychological Science*

*Current Directions in Psychological Science*

*Cognitive Psychology*

*Cognitive Science*

*Cognition* \***Editorial board**

*Psychonomic Bulletin & Review*

*Perception and Psychophysics*

*Memory and Cognition*

*Journal of Memory and Language*

*Brain and Language*

*Quarterly Journal of Experimental Psychology*

*American Journal of Psychology* \***Editorial board**

*The European Journal of Cognitive Psychology*

*Anxiety, Stress, & Coping*

*Consciousness and Cognition*

*Applied Cognitive Psychology*

*Human Factors*

*Developmental Psychology*

*Child Development*

*Journal of Personality and Social Psychology*

*Personality and Social Psychology Bulletin*

*Journal of Experimental Social Psychology*

*Social Cognition*

*Methods*

*Journal of Sport & Exercise Psychology* \***Editorial board**

*Journal of Motor Behavior*

*Journal of Sports Sciences*  
*Medicine & Science in Sport & Exercise*  
*Research Quarterly for Exercise and Sport*  
*Human Movement Science*  
*Psychology of Sport & Exercise*  
*The Sport Psychologist*  
*International Journal of Sport Psychology*  
*Women in Sport and Physical Activity Journal*

**Other review activity**

Grant Reviewer, Spencer Foundation  
Grant Reviewer, Institute of Education Sciences, U.S. Department of Education  
Grant Reviewer, National Science Foundation  
Grant Reviewer, Social Sciences and Humanities Research Council of Canada  
Grant Reviewer, Research Grants Council, Hong Kong  
Dissertation Examiner, Victoria University of Technology, Australia  
Book proposal reviewer, Sage Publications

**Professional Service**

Alumni Advisory Board, Department of Cognitive Science, UCSD; 2008-present  
APS Program Committee (Cognitive Track) for the Annual Meeting; 2008-2011  
Chicago Area Undergraduate Research Symposium (CAURS) Judge; 2008  
Motor Learning & Control program committee chair, NASPSPA Annual Conference, June 2007  
Science Committee, APA Division 47, 2006-2008  
Motor Learning & Control program committee, NASPSPA Annual Conference, June 2006

**University Service**

Head of Student Affairs, Dept. of Psychology, The University of Chicago; 2008-present  
Integrative Humanities and related Social Sciences Committee, The University of Chicago, 2008  
Graduate Admissions Committee, Dept. of Psychology, The University of Chicago; 2006, 2007  
Preparing Future Faculty Panel Participant, Miami University; 2004  
Freshman Orientation “Meet the Parents,” Miami University; 2004  
Panelist on Faculty Research, Psi Chi, Miami University; 2004  
Summer Scholars Selection Committee, Dept. of Psychology, Miami University; 2004  
Performance in Motion Coordinator, Dept. of Kinesiology Publication, MSU; 1999-2000  
Undergraduate Independent Study Mentor, Dept. of Kinesiology, MSU; 1998-2000  
Graduate Student Mentor, Dept. of Kinesiology, MSU; 1998-2000  
Poster Presentation Coordinator, Dept. of Kinesiology Centennial Symposium, MSU; 1999  
Graduate Orientation Committee, Dept. of Kinesiology, MSU; 1998-1999  
Graduate Teaching Assistants Evaluator, Dept. of Kinesiology, MSU; 1997-1998

### **Professional Memberships**

Society for Cognitive Neuroscience  
Association for Psychological Science  
Psychonomic Society, Member  
The American Association for the Advancement of Science (AAAS)  
Society for Personality and Social Psychology  
Society for Research on Educational Effectiveness  
American Educational Research Association  
Midwestern Psychological Association  
International Society of Sport Psychology  
North American Society for the Psychology of Sport and Physical Activity

### **Teaching Experience**

#### **Graduate Level**

Motor Learning and Control  
Cognitive Psychology

#### **Undergraduate Level**

Cognitive Psychology  
Sport Psychology and Motor Learning  
Introduction to Kinesiology  
The Mind  
Embodied Cognition  
Sport, Science, & Society

### **Student Supervision**

#### **Graduate Level – Primary or Co-Advisor Role**

Gerardo Ramirez, 2007-present, 2<sup>nd</sup> year Ph.D. student, The University of Chicago  
Ian Lyons; 2006-present, 3<sup>rd</sup> year Ph.D. student, The University of Chicago  
Andrew Mattarella-Micke; 2006-present, 3<sup>rd</sup> year Ph.D. student, The University of Chicago  
Shu-Ju Yang; 2006-present, 3<sup>rd</sup> year Ph.D. student, The University of Chicago  
Marci Sammons DeCaro; 2004-present, 5<sup>th</sup> year Ph.D. student, A.B.D. Miami University  
Richard Redding; M.A. 2008, The University of Chicago  
Sonica Dillon; M.A. 2006, The University of Chicago  
Lauren Holt; M.A. 2005, Miami University

#### **Graduate Level – Committee Member**

Elizabeth Allen, 2007-present, Trial Research (Masters), The University of Chicago  
Eve Sauer, 2007-present, Dissertation committee (Ph.D.), The University of Chicago  
Raedy Ping, 2007-present, Dissertation committee (Ph.D.), The University of Chicago  
Marc Hernandez, 2006-present, Dissertation committee (Ph.D.), The University of Chicago  
Sean Bradley, 2008, Trial Research (Masters), The University of Chicago  
Liesje Spaepen, 2008, Dissertation reader (Ph.D.), The University of Chicago  
Pat Zimmerman, 2008, Trial Research (Masters), The University of Chicago

Ian McDonough, 2008, Trial Research (Masters), The University of Chicago  
 Shali Wu, 2007, Dissertation committee (Ph.D.), The University of Chicago  
 Tiffany Bloomfield, 2007, Trial Research (Masters), The University of Chicago  
 Michael Andric, 2007, Trial Research (Masters), The University of Chicago  
 Kim Fenn, 2006, Dissertation committee (Ph.D.), The University of Chicago  
 Susan Wagner-Cook, 2006, Dissertation committee (Ph.D.), The University of Chicago  
 Matt Longo, 2006, Dissertation committee (Ph.D.), The University of Chicago

### **Undergraduate Level – Award Winners**

Sonia Lahr-Pastor, 2008-present: NIH Neuroscience Program Grant, The University of Chicago  
 Matthew Cieslak, 2006-present: NIH Neuroscience Program Grant; PRISM Research Grant, The University of Chicago  
 Melisa Borkon, 2005-2006: Honor's Thesis, DUOS/Undergraduate Scholarship, Miami University  
 Heather Fortine, 2005: Summer Scholar Award, Miami University  
 Sara Gonso, 2004-2005: Honor's Thesis, Undergraduate Research Award, Miami University  
 Lindsay Agee, 2004-2005: Undergraduate Research Award, Miami University  
 Christy Ring, 2004-2005: Undergraduate Research Award, Miami University  
 Brian Sipotz, 2003-2004: Undergraduate Research Award, Miami University

### **Popular Press**

#### **Select Radio and Television Interviews**

ABC Radio Australia; September, 2008  
 BBC World Service; September, 2008  
 WCVB News Boston; June, 2007  
 KTVU News San Francisco; June, 2007  
 Chicago Tonight, PBS Evening News; May 30<sup>th</sup>, 2007  
 CNN, America Morning (segment covering choking work); February 9, 2005  
 Canadian Broadcasting Company, Sports Journal; February 1, 2003  
 Canadian Broadcasting Company Newsworld, Sports Journal; January 27, 2003  
 National Public Radio, Todd Mundt Show; June 10, 2002  
 KCSN Evening Update (Southern California); March 13, 2002  
 WILX - Lansing/Jackson NBC Evening News; February 22, 2002  
 National Public Radio, Talk of the Nation: Science Friday; February 8, 2002  
 WBV Radio News (Boston); January 29, 2002  
 Canadian Broadcasting Company, Quirks & Quarks; December 21, 2001

#### **Select Magazine, Newspaper, Internet, and Press Coverage**

ScienceDaily.com; December, 2008  
 Chicago Tribune; September, 2008  
 Psychology Today; September, 2008  
 ScienceDaily.com; September, 2008  
 The Telegraph (UK); September, 2008  
 ABCNews.com; September, 2008  
 CTV.Ca; September, 2008

USA Today; September, 2008  
 USA Today; August, 2008  
 ABCnews.com; July, 2008  
 The Guardian (UK); April, 2008  
 New York Times; April, 2008  
 Chicago Sports Weekly; January, 2008  
 Boston Globe; January, 2008  
 Scientific American Mind Matters; December 2007  
 Times India; May, 2007  
 Science Daily; May, 2007  
 Newswise.com; May, 2007  
 New Zealand Herald; May, 2007  
 Toronto Globe & Mail; May, 2007  
 Reuters; May, 2007  
 Chicago Tribune; May, 2007  
 Medical News Today.com; May, 2007  
 Daily Telegraph, UK; May, 2007  
 Teacher Magazine; April, 2007  
 Travelgolf.com; March, 2007  
 Forbes.com; March, 2007  
 CNN.Com; February, 2007  
 Wall Street Journal; February, 2007  
 Science Daily; February, 2007  
 Education Week; February, 2007  
 Reuters; February, 2007  
 Chicago Magazine; November, 2006  
 The University of Chicago Magazine; February, 2006  
 New York Times; February, 2006  
 Newswise; January, 2006  
 Vancouver Sun; January, 2006  
 GolfIllinois.com; January, 2006  
 Vancouver Sun; June, 2005  
 Toronto Star; June, 2005  
 Chicago Tribune; March, 2005  
 Detroit Free Press; March, 2005  
 Chronicle of Higher Education; March, 2005  
 Cincinnati Enquirer; February, 2005  
 LiveScience.com; February, 2005  
 APA Monitor; January, 2005  
 Science, Editor's Choice Review; December, 2004  
 New York Times; December, 2004  
 Charleston Post and Courier; December, 2004  
 Cleveland Plain Dealer; December, 2004  
 York Daily Record (PA); December, 2004  
 San Antonio Express News; April, 2004

Houston Chronicle; April, 2003  
Baltimore Sun; April, 2003  
Psychology Today; June, 2002  
Men's Health; May, 2002  
Discover Magazine; May, 2002  
PGA Tour Partner's Club Magazine; April, 2002  
BerlinOnline.de; February, 2002  
APA Monitor; February, 2002  
Scientific American Magazine Online; February, 2002  
Golfmagic.com; February, 2002  
Puttingzone.com; February, 2002  
Los Angeles Times; December, 2001  
Cleveland Plain Dealer; December, 2001  
London Times; December, 2001  
Toronto Globe & Mail; December, 2001  
Washington Post; December, 2001  
ABCnews.com; December, 2001  
BBCnews.com; December, 2001  
CBShealthwatch.com; December, 2001  
United Press International (UPI); December, 2001  
Canadian Press (CP); December, 2001  
Travelgolf.com; October, 2001  
Reutershealth.com; September, 2001  
Travelgolf.com; April, 2001