CURRICULUM VITAE

DEBORAH MARIE CLAWSON

Department of Psychology Catholic University of America Washington, DC 20064 (202) 319-5528 clawson@cua.edu

https://psychology.catholic.edu/faculty-and-research/faculty-profiles/clawson-deborah/

EDUCATION

- B. A. in Computer Science and in Psychology, Cornell University (1985)
- M. A. in Psychology, University of Colorado, Boulder (1992)
- Ph.D. in Cognitive Psychology (minor in Behavioral Neuroscience), University of Colorado, Boulder (1994)

PROFESSIONAL EXPERIENCE

1985-1989	Computer Systems Analyst, National Computer Security Center.
1989-1994	Research Assistant, Teaching Assistant, Department of Psychology, University of Colorado, Boulder.
1994-2000	Assistant Professor, Department of Psychology, Catholic University of America,
2000-2020	Associate Professor, Department of Psychology, Catholic University of America
2000-2007 2011-2020	Director, Applied Experimental Ph.D. and Human Factors M.A. programs, Department of Psychology, Catholic University of America
2007-2008	Director, MA in General Psychology program, Catholic University of America

RESEARCH

RESEARCH INTERESTS

Broadly, my research addresses methods of improving performance on cognitive tasks. Within that area, my first focus is on the effects of practice, particularly addressing the questions of what methods are best for incrementally practicing complex skills, to what extent do improvements due to practice transfer to novel circumstances, and how well are those practice effects retained. I have investigated these issues in domains of Morse code reception, the Stroop task, and spatial learning in virtual reality (VR). My second focus is on the inter-related areas of planning and prospective memory.

GRANTS

- Using virtual reality to improve the learning, retention, and applications of spatial mental models. \$282,084 for three years from the U. S. Army Research Institute, 1996 (co-PI, with M. M. Sebrechts).
- *Improving the use of spatial models through enhanced virtual reality.* \$156,749 from the Office of Naval Research, 1997 (with M. M. Sebrechts).
- The effects of multiple sclerosis on time-based and event-based prospective memory. \$1995. Faculty grant-in-aid, Catholic University of America, 2002.
- Prospective memory and the effect of a mnemonic strategy in multiple sclerosis. \$44,000 Pilot Research Grant for one year from the National Multiple Sclerosis Society, 2003.
- The role of prefrontal cortex in planning and memory using virtual environments. \$1995. Faculty grant-in-aid, Catholic University of America, 2008.
- Effects of multiple interruptions on task performance. \$1200. Faculty grant-in-aid, Catholic University of America, 2014.

PUBLICATIONS

- Doane, S. M., McNamara, D. S., Kintsch, W., Polson, P. G., Dungca, R. G., & Clawson, D. M. (1991). Action planning: The role of prompts in UNIX command production. *Proceedings of the Thirteenth Annual Conference of the Cognitive Science Society* (pp. 682-687). Hillsdale, NJ: Erlbaum.
- Doane, S. M., McNamara, D. S., Kintsch, W., Polson, P. G., & Clawson, D. M. (1992). Prompt comprehension in UNIX command production. *Memory & Cognition*, 20, 327-343.
- Clawson, D. M., King, C. L., Healy, A. F., & Ericsson, K. A. (1993). Specificity of practice effects in the classic Stroop color-word task. *Proceedings of the Fifteenth Annual Conference of the Cognitive Science Society* (pp. 324-329). Hillsdale, NJ: Erlbaum.
- Healy, A. F., Clawson, D. M., McNamara, D. S., Marmie, W. R., Schneider, V. I., Rickard, T. C., Crutcher, R. J., King, C. L., Ericsson, K. A., & Bourne, L. E., Jr. (1993). The long-term retention of knowledge and skills. In D. Medin (Ed.) *The psychology of learning and motivation* (Vol. 30, pp. 135-164). New York: Academic Press.
- Clawson, D. M., King, C. L., Healy, A. F., & Ericsson, K. A. (1995). Training and retention of the classic Stroop task: Specificity of practice effects. In A. F. Healy & L. E. Bourne, Jr. (Eds.) *Learning and memory of knowledge and skills: Durability and specificity.* Thousand Oaks, CA: Sage.
- Healy, A. F., King, C. L., Clawson, D. M., Sinclair, G. P., Rickard, T. C., Crutcher, R. J., Ericsson, K. A., & Bourne, L. E., Jr. (1995). Optimizing the long-term retention of skills. In A. F. Healy & L. E. Bourne, Jr. (Eds.) *Learning and memory of knowledge and skills: Durability and specificity.* Thousand Oaks, CA, CA: Sage.
- Clawson, D. M. (1996). Perceptual, motor, and cognitive skills: All under one roof [Review of the book Skill acquisition and human performance]. *American Journal of Psychology*, 109, 645-649.

- Miller, M. S., Clawson, D. M., Sebrechts, M. M., & Knott, B. A. (1998). Interface design for inducing and assessing immersion in virtual reality. *CHI 98 Summary: Human Factors in Computing Systems* (pp. 343-344). New York: The Association for Computing Machinery.
- Clawson, D. M., Miller, M. S., Knott, B. A., & Sebrechts, M. M. (1998). Navigational training in virtual and real buildings. In *Proceedings of the 42nd Annual Meeting of the Human Factors and Ergonomics Society*, 1427-1431.
- Miller, M. S., Clawson, D. M., & Sebrechts, M. M. (1999). Long-term retention of spatial knowledge acquired in virtual reality. In *Proceedings of the 43nd Annual Meeting of the Human Factors and Ergonomics Society*, 1243-1246.
- Clawson, D. M., Healy, A. F., Ericsson, K. A., & Bourne, L. E., Jr. (2001). Retention and transfer of Morse code reception skill by novices: Part-whole training. *Journal of Experimental Psychology: Applied*, 7, 129-142.
- Lathan, C.E., Tracey, M., R., Sebrechts, M., M. Clawson, D. M., & Higgins, G. A. (2002). Using virtual environments as training simulators: Measuring transfer. In K. M. Stanney (Ed.)_Handbook of virtual environments: Design, implementation, and applications (pp. 403-414). Mahwah, NJ: Erlbaum.
- Sebrechts, M. M., Lathan, C. E., Clawson, D. M., Miller, M. S., & Trepagnier, C. (2003). Transfer of training in virtual environments: Issues for human performance. In L.J. Hettinger & M. Haas (Eds.) *Virtual and adaptive environments: Applications, implications, and human performance issues* (pp. 67-90). Mahwah, NJ: Erlbaum.
- Kardiasmenos, K.S., Clawson, D.M., Wilken, J.A., & Wallin, M.T. (2005). Poster presentations: Prospective memory in relapsing-remitting and secondary progressive multiple sclerosis. *Multiple Sclerosis*, 11, 120-121
- Kardiasmenos, K.S., Clawson, D.M., Wilken, J.A., & Wallin, M.T. (2008). Prospective memory and the efficacy of a memory strategy in multiple sclerosis. *Neuropsychology*, 22, 746-754.
- Strenziok, M., Pulaski, S, Krueger, F., Zamboni, G., Clawson, D., & Grafman, J. (2011). Regional brain atrophy and impaired decision making on the balloon analog risk task in behavioral variant frontotemporal dementia. *Cognitive and Behavioral Neurology*, 24, 59-67.
- Settle, J.R., Clawson, D.M., & Sebrechts, M.M. (2017). Initial planning benefits complex prospective memory at a cost. *Quarterly Journal of Experimental Psychology*, 70, 1700-1712, doi: 10.1080/17470218.2016.1204326
- Settle, J.R., Clawson, D.M., Sebrechts, M.M., French, L.M., Massey Watts, A.T., & Duncan, C.C. (2019). Prospective memory in service members with mild traumatic brain injury. *Military Medicine*, 184(11-12), 723–730. https://doi.org/10.1093/milmed/usz062

INVITED PRESENTATIONS

Clawson, D. M. (1998, May). *Navigation learning in virtual reality*. Invited presentation to the Institute for Cognitive Science, University of Colorado at Boulder, Boulder, CO.

- Clawson, D. M. (2001, November). *Transfer of spatial learning from virtual reality to real places*. Invited presentation to the Department of Psychology, Mississippi State University, Starkville, MS.
- Clawson, D. M., Miller, M. S., Mullin, L. N., & Sebrechts, M. M. (2002, April). *Transfer of spatial learning from virtual reality to real places*. Invited presentation at the 72nd Annual Convention of the Rocky Mountain Psychological Association, Park City, UT.
- Clawson, D. M. (2008, April). *Did you forget something? Prospective memory and the effectiveness of a mnemonic strategy in multiple sclerosis*. Invited keynote address at the Psi Chi Symposium, University of Mary Washington, Fredericksburg, VA.

CONFERENCE PRESENTATIONS

- Clawson, D. M., Healy, A. F., Ericsson, K. A., & Bourne, L. E., Jr. (1993, April). *Acquisition and retention of Morse code reception: Part-whole training*. Paper presented at the Joint Annual Convention of the Western Psychological and Rocky Mountain Psychological Associations, Phoenix, AZ.
- Clawson, D. M. (1995, November). *Dimensions of practice specificity in the classic Stroop task: Implications for automaticity.* Poster presented at the 36th Annual Meeting of the Psychonomic Society, Los Angeles, CA.
- Clawson. D. M., & Miller, M. S. (1996, November). *Long-term retention and transfer of Stroop practice effects*. Poster presented at the 37th Annual Meeting of the Psychonomic Society, Chicago, IL.
- Clawson. D. M., & Miller, M. S. (1997, November). *Evidence of suppression: Learning not to read?* Poster presented at the 38th Annual Meeting of the Psychonomic Society, Philadelphia, PA.
- Clawson, D. M., Miller, M. S., & Sebrechts, M. M. (1998, May). *Specificity to route orientation: Reality, virtual reality, and maps*. Poster presented at the 10th Annual Convention of the American Psychological Society, Washington, DC.
- Sebrechts, M. M., Knott, B. A., & Clawson, D. M. (1998, November). *Changes in spatial mental models with alternative virtual reality learning environments*. Poster presented at the 39th Annual Meeting of the Psychonomic Society, Dallas, TX.
- Clawson, D. M., Miller, M. S., & Sebrechts, M. M. (1998, November). *Mental representations of large spaces: Orientation specificity*. Poster presented at the 39th Annual Meeting of the Psychonomic Society, Dallas, TX.
- Sebrechts, Marc M., Knott, B. A., Miller, M. S., & Clawson, D. M. (1999, August). *Effects of spatial ability on the utility of "virtual" training*. Paper presented at the 107th Annual American Psychological Association Convention, Boston, MA.
- Miller, M. S., Clawson, D. M., Sebrechts, M. M., & Navas-Latiff, L. A. (1999, November). Retention of spatial representations: Orientation specificity, virtual reality, and restricted FOV. Poster presented at the 40th Annual Meeting of the Psychonomic Society, Los Angeles, CA.

- Sebrechts, M. M., Mullin, L. N., Clawson, D. M., & Knott, B. A. (1999, November). *Virtual exploration effects on spatial navigation and recall of location*. Poster presented at the 40th Annual Meeting of the Psychonomic Society, Los Angeles, CA.
- Miller, M. S., Clawson, D. M., & Sebrechts, M. M. (2000, August). *How does alignment with virtual environment navigation affect survey knowledge?* Poster presented at the 108th Annual American Psychological Association Convention, Washington, DC.
- Mullins, L. N., Sebrechts, M. M., & Clawson, D. M. (2000, August). *Using virtual environments to reinstate context for recalling object placement*. Poster presented at the 108th Annual American Psychological Association Convention, Washington, DC.
- Miller, M. S., Clawson, D. M., & Sebrechts, M. M.(2000, November). *Spatial knowledge acquired from virtual reality: Transfer and flexibility*. Poster presented at the 41st Annual Meeting of the Psychonomic Society, New Orleans, LA.
- Kardiasmenos, K. S., Clawson, D. M., Wilken, J. A., & Wallin, M. T. (2004, June). *Prospective memory and a mnemonic strategy in multiple sclerosis*. Poster presented at the 18th Annual Meeting of the Consortium of Multiple Sclerosis Centers, Toronto, Canada.
- Kardiasmenos, K. S., Clawson, D. M., Wilken, J. A., & Wallin, M. T. (2004, July). *Prospective and retrospective components of prospective memory in multiple sclerosis*. Poster presented at the 112th Annual American Psychological Association Convention, Honolulu, HI.
- Kardiasmenos, K. S., Clawson, D. M., Wilken, J. A., & Wallin, M. T. (2004, October). *Prospective memory in relapsing–remitting and secondary progressive multiple sclerosis*. Poster presented at the 9th Annual Meeting of the Americas Committee for Treatment and Research in Multiple Sclerosis, Toronto, Canada.
- Kardiasmenos, K. S., Clawson, D. M., Wilken, J. A., & Wallin, M. T. (2004, November). *Effects of implementation intentions on prospective memory performance*. Poster presented at the 45th Annual Meeting of the Psychonomic Society, Minneapolis, MN.
- Bennett, L. R., Kardiasmenos, K. S., & Clawson, D. M. (2005, August). When Prospective Memory Fails: Did You Forget Something? Poster presented at the 113th Annual American Psychological Association Convention, Washington, DC.
- Bennett, L. R., Clawson, D. M., & Kardiasmenos, K. S. (2005, November). *The retrospective component of prospective memory: Relationship to prospective-component success*. Poster presented at the 46th Annual Meeting of the Psychonomic Society, Toronto, Canada.
- Clawson, D. M., Schuberg, K.E., & Sebrechts, M.M. (2009, November). *Planning and complex prospective memory in virtual reality*. Poster presented at the 50th Annual Meeting of the Psychonomic Society, Boston, MA.
- Clawson, D. M., Settle, J. R., & Sebrechts, M. M. (2010, November). *Initial planning and complex prospective memory in a virtual environment*. Poster presented at the 51st Annual Meeting of the Psychonomic Society, St. Louis, MO.
- Clawson, D. M., Settle, J. R., Fritsch, L.E., Isaac, B. K., & Sebrechts, M. M. (2011, May). *Best-laid plans: Benefits and risks of planning on prospective memory tasks*. Poster presented at the 23rd Annual Convention of the Association for Psychological Science, Washington, DC.
- Settle, J. R., Schaefer, E. F., Siuzdak, C. F., Clawson, D. M., & Sebrechts, M. M. (2011, August). Executive functions in completing tasks in virtual reality: Planning and prospective

- *memory*. Poster presented at the 119th Annual Convention of the American Psychological Association, Washington, DC.
- Settle, J. R., Clawson, D. M., Fritsch, L.E., & Sebrechts, M. M. (2011, November). *Paradoxical Effects of Detailed Plans on Complex Prospective Memory Performance*. Poster presented at the 52nd Annual Meeting of the Psychonomic Society, Seattle, WA.
- Settle, J. R., Resnick, J. B., McFarland, A. B., Auslander, M. V., Clawson, D. M., Sebrechts, M. M., French, L M., & Duncan, C. C. (2015, March). *Prospective memory in mild traumatic brain injury*. Poster presented at the National Capital TBI Research Symposium, Bethesda, MD.
- Hughes, E. R., Varga, P. J., Clawson, D. M. (2019, May 23-26). The effect of acute stress and implementation intentions on prospective memory. [Conference Poster]. Association of Psychological Science, Washington, D.C., USA. https://psychologicalscience.org/conventions/archive/2019-2
- Hughes, E.R., & Clawson, D.M. (2020, August 6-8). *Responses to acute psychosocial stress depend on trait anxiety* [Conference Poster]. APA 2020 Virtual Convention. Washington, DC, United States. https://convention.apa.org/
- Hughes, E.R., & Clawson, D.M. (2021, May 26 September 1). "Zoom"ing in on the Trier Social Stress Test: Is the TSST still stressful online? [Conference Poster]. 2021 APS Virtual Convention. https://www.psychologicalscience.org/conventions/2021-virtual
- Hughes, E.R., & Clawson, D.M. (2021, November 4-7). Concurrent commission errors in prospective memory under acute stress: Effects of saliency and semantic association [Conference Poster]. 62nd Annual Meeting of the Psychonomic Society. https://www.psychonomic.org/page/2021annualmeeting

TEACHING

UNDERGRADUATE COURSES

Introductory Statistics - PSY 322 Data Analysis (Honors Program) – HSSS 203 Psychology of Memory - PSY 375 Psychology of Brain Injury - PSY 385

GRADUATE COURSES

Cognitive Rehabilitation – PSY621 Cognitive & Neuropsychological Aspects of Human Memory – PSY 628 Statistics I – PSY 705 Statistics II – PSY 706 Psychology of Skills and Expertise – PSY 703

SERVICE

SERVICE TO THE DEPARTMENT

1994-2002	Undergraduate Committee, Member
1994-2007	Curriculum Committee, Chair 2003-2005
1997-1999	Academic Advisor to Psychology Freshmen
1997-2009	Organizer, Annual Workshop on Graduate Teaching of Introductory Psychology
2002-2007, 20	010- Scholarship Committee, Chair 2002-2007, 2010-2015, 2016-
2005-2008	Ad Hoc Committee on Advanced Statistics Development, Chair

SERVICE TO THE COLLEGE AND UNIVERSITY

1995-1996	Secretary, Arts & Sciences Faculty	
1995-1997	Academic Advisor to Undecided-Major Freshmen (School of Arts & Sciences)	
1997-2005, 2010-2012, 2013- Undergraduate Board of the Academic Senate, Member		
1998-1999	Committee for the Appeal of Failing Grades, Academic Senate, Member	
2001	Undergraduate Admissions Committee, Member (School of Arts & Sciences)	
2001-2007	Academic Standing Committee, Member (School of Arts & Sciences)	
2008-2009, 2010-2012 Graduate Board of the Academic Senate, Member		
2009	University "Core 1" Course Development Committee	

PROFESSIONAL ACTIVITIES

PROFESSIONAL MEMBERSHIPS

American Psychological Society American Psychological Association (Division 3 Experimental Psychology) Psychonomic Society, Emeritus Member

AD HOC REVIEWER (in alphabetical order)

American Journal of Psychology

Conference of the Cognitive Science Society

Conference on Human Factors in Computing Systems (CHI)

Human Factors

International Journal of Human Computer Studies

Journal of Experimental Psychology: Learning, Memory, and Cognition

Journal of the International Neuropsychological Society

National Science Foundation, Major Research Instrumentation Program

Presence: Teleoperators and Virtual Environments

Psychological Science

Psychonomic Bulletin & Review

PROGRAM CHAIR

2005 Program Chair, Division 3 (Experimental), 113th Annual American Psychological Association Convention, Washington, DC.