

Kristina Krasich

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Education

- May 2019 University of Notre Dame, Notre Dame, IN
Ph.D. in Psychology (2019), M.A. in Psychology (2016)
- May 2011 Duke University, Durham, NC
B.A. in Psychology, B.A. in English

Appointments

- 2019 - Postdoctoral Associate, Center for Cognitive Neuroscience, Duke University
- 2014 - 2019 Ph.D. Candidate, Department of Psychology, University of Notre Dame
- 2012 - 2014 Lab Manager, Department of Psychiatry and Behavioral Sciences, Duke University

External Funding

- 2020 - 2022 **Krasich, K. (PI)**. *Delineating the unique impact of attention and conscious awareness on action and responsibility for action*. Worldwide Competition in the Neurophilosophy of Free Will sub-award (\$37,500). John Templeton Foundation; Fetzer Institute.
- 2017 - 2019 **Krasich, K. (PI)**, Murray, S. (PI), Blakey, R. (PI). *Stay on target: Mind wandering, prospective memory, & responsibility*. Summer Seminars in Neuroscience and Philosophy sub-award. (\$30,450). Templeton World Charity Foundation.

Awards, honors, and distinctions

- 2017, 2018 Notebaert Professional Development Fund, University of Notre Dame
- 2017, 2018 GSU Conference Presentation Grant, University of Notre Dame
- 2017 AKA EAF Graduate Merit Scholarship, AKA Education Advancement Foundation
- 2017 James Chen Best Student Paper Award, Association for Computing Machinery
- 2016 Graduate Teaching Award, University of Notre Dame
- 2015 Social Responsibilities of Researchers, University of Notre Dame

Publications

JOURNAL ARTICLES

1. Murray, S., **Krasich, K.**, Irving, Z., Nadelhoffer, T., & De Brigard, F. (in press). Mental control and attributions of blame for negligent wrongdoing. *Journal of Experimental Psychology: General*.

2. Irving, Z., Murray, S., Glasser, A., & **Krasich, K.** (in press). The Catch-22 of forgetfulness: Responsibility for mental mistakes. *Australasian Journal of Philosophy*.
3. **Krasich, K.**, Gjorgieva, E., Murray, S., Bhatia, S., Faber, M., De Brigard, F., & Woldorff, M. G. (2021). The impact of error-consequence severity on cue processing in importance-biased prospective memory. *Cerebral Cortex Communications*, 2(4), tgab056.
4. **Krasich, K.**, Kim, J., Huffman, G., Klaffehn, A. L., & Brockmole, J. R. (2021). Does task-irrelevant music affect gaze allocation during real-world scene viewing?. *Psychonomic Bulletin & Review*, 28(6), 1944-1960.
5. Murray S. & **Krasich, K.** (2020). Can the mind wander intentionally?. *Mind & Language*, 37(3), 432-443.
6. **Krasich, K.**, Huffman, G., Faber, M., & Brockmole, J. R. (2020). Where the eyes wander: The relationship between mind wandering and fixation allocation to visually salient and semantically informative static scene content. *Journal of Vision*, 20(9):10, 1-30.
7. Faber, M., **Krasich, K.**, Bixler, R., Brockmole, J. R., & D’Mello, S. K. (2020). The eye-mind wandering link: Identifying gaze indices of mind wandering across tasks. *Journal of Experimental Psychology: Human Perception and Performance*, 46(10), 1201-1221.
8. Murray, S., **Krasich, K.**, Schooler, J. W., & Seli, P. (2020). What’s in a task? Complications in the study of the task-unrelated-thought (TUT) variety of mind wandering. *Perspectives on Psychological Science*, 15(3), 572-588.
9. Hutt, S., **Krasich, K.**, Mills, C., Bosch, N., White, S., Brockmole, J. R., & D’Mello, S. K. (2019). Automated gaze-based mind wandering detection during computerized learning in classrooms. *User Modeling and User-Adapted Interaction*. 1-47.
10. **Krasich, K.**, Biggs, A. T., & Brockmole, J. R. (2018). Attention capture during visual search: The consequences of distractor appeal, familiarity, and frequency. *Visual Cognition*. [Special Issue: Dealing with Distractors], 1-19.
11. **Krasich, K.**, McManus, R., Hutt, S., Faber, M., D’Mello, S. K., & Brockmole, J. R. (2018). Gaze-Based signatures of mind wandering during real-world scene processing. *Journal of Experimental Psychology: General*. 147(8), 1111-1124.
12. **Krasich, K.**, Ramger, B., Holton, L., Wang, L., Mitroff, S. R., & Appelbaum, L. G. (2016). Sensorimotor learning in a computerized athletic training battery. *Journal of Motor Behavior*, 48(5), 401-412.
13. Wang, L., **Krasich, K.**, Bel-Bahar, T., Hughes, L., Mitroff S.R., & Appelbaum, L.G. (2015). Mapping the structure of perceptual and visual-motor abilities in healthy young adults. *Acta Psychologica*, 157. 74-84.

PEER-REVIEWED PUBLISHED CONFERENCE PROCEEDINGS

1. O’Neill, K., **Krasich, K.**, Murray, S., Brockmole, J. R., Nuthmann, A., & De Brigard, F. (2022, August). Fixation duration variability increases with mind wandering during scene viewing. In *Proceedings of the 2022 Conference on Cognitive Computational Neuroscience*. (pp. 588-590).

2. **Krasich, K.**, O'Neill, K., & De Brigard, F. (2022, July). Eye tracking mental simulation during retrospective causal reasoning. In *Proceedings of the Annual Meeting of the Cognitive Science Society*. (pp. 1004-1010). UC Merced.
3. Hutt, S., **Krasich, K.**, Brockmole, J. R., & D'Mello, S. K. (2021, May). A gaze-based attention-aware technology to address mind wandering during learning in classrooms. In *Proceedings of the 2021 CHI Conference on Human Factors in Computing Systems*. (pp. 1-14). AMC.
4. Mills, C., Bosch, N., **Krasich, K.**, & D'Mello, S. K. (2019, June). Reducing Mind-Wandering During Vicarious Learning from an Intelligent Tutoring System. In *International Conference on Artificial Intelligence in Education* (pp. 296-307). Springer, Cham.
5. **Krasich, K.**, Hutt, S., Mills, C., Spann, C. A., Brockmole, J. R., & D'Mello, S. K. (2018, June). "Mind" TS: Testing a Brief Mindfulness Intervention with an Intelligent Tutoring System. In *International Conference on Artificial Intelligence in Education* (pp. 176-181). Springer, Cham.
6. Hutt, S., Mills, C., Bosch, N., **Krasich, K.**, Brockmole, J., R. & D'Mello, S. K. (2017, July). Out of the Fr-Eye-ing Pan: Towards Gaze-Based Models of Attention during Learning with Technology in the Classroom. In *Proceedings of the 25th Conference on User Modeling, Adaptation and Personalization* (pp. 94-103). ACM.

Book Chapters

1. Murray S., Irving Z., & **Krasich, K.** (2022). The scientific study of passing thinking: The methodology of mind wandering research. In De Brigard, F. & Sinnott-Armstrong, W. (Eds.) *Neuroscience and Philosophy*. Cambridge, MA: MIT Press, 389-426.

Conference presentations

1. **Krasich, K.**, O'Neill, K., & De Brigard, F. (2022, July). Eye tracking mental simulation during retrospective causal reasoning. Paper presented at the Annual Meeting of the Society for Philosophy and Psychology. Milan, Lombardy, IT.
2. **Krasich, K.**, O'Neill, K., & De Brigard, F. (2022, March). Eye tracking mental simulation during retrospective causal reasoning. Paper presented at the Annual Meeting of the Southern Society for Philosophy and Psychology. Mobile, AL, USA.
3. **Krasich, K.**, Gjorgieva, E., Murray, S., De Brigard, F., & Woldorff, M. G. (2021, June). The neural and behavioral impact of mind wandering on event-based prospective memories with varying error-related consequences. Poster presented at the Annual Meeting of the Society for Philosophy and Psychology. Princeton, NJ, USA.
4. **Krasich, K.** (2020, December). The eye-mind wandering link: Adapting gaze behaviors when the mind begins to wander. Paper presented at the Annual Meeting of the Southern Society for Philosophy and Psychology. Louisville, Kentucky, USA.

5. **Krasich, K.**, Gjorgieva, E., Murray, S., De Brigard, F., & Woldorff, M. G. (2020, May). Delineating the impact of mind wandering on event-based prospective memories with varying error-related consequences. Poster presented at the Cognitive Neuroscience Society Annual Meeting. Boston, MA, USA.
6. Brockmole, J. R., **Krasich, K.**, & Huffman, G. (2019, November). Where do the eyes wander?: The Relationship between mind wandering and the allocation of gaze to visually salient and semantically meaningful scene content. Paper presented at the Annual Meeting of the Psychonomic Society. Montréal, Québec, Canada.
7. **Krasich, K.**, Murray, S., Faber, M., & Brockmole, J. R. (2018, November). Stay on target: Does mind wandering affect prospective memory?. Poster presented at the Annual Meeting of the Psychonomic Society. New Orleans, LA, USA.
8. Brockmole, J. R., **Krasich, K.**, Hutt, S., & D’Mello, S. K. (2018, November). Attention-aware cyberlearning to detect and combat wandering minds. Paper presented at the Annual Meeting of the Psychonomic Society. New Orleans, LA, USA.
9. **Krasich, K.**, Faber, M., Brockmole, J. R., & Radvansky, G. A. (2017, November). How quickly we remember: The rate of short-term consolidation. Poster presented at the Annual Meeting of the Psychonomic Society. Vancouver, BC, Canada.
10. **Krasich, K.**, McManus, R., Hutt, S., Faber, M., D’Mello, S. K., & Brockmole, J. R. (2017, November). Gaze-based indices of mind wandering during real-world scene processing. Paper presented at the Annual Workshop on Object Perception, Attention, and Memory. Vancouver, BC, Canada.
11. **Krasich, K.**, Clement, A., Stothart, C., & Brockmole, J. R. (2017, May). Does Memory Consolidation Influence Memory-Driven Attentional Capture? Poster presented at the Vision Science Society Annual Meeting. St Pete Beach, FL, USA.
12. McManus, R., **Krasich, K.**, Brockmole, J. R., & D’Mello, S. K. (2016, November). Eye movement patterns associated with mind wandering during real-world scene viewing. Poster presented at the Annual Meeting of the Psychonomic Society. Boston, MA, USA.
13. **Krasich, K.**, Biggs, A. T., & Brockmole, J. R. (2015, November). Infrequency over positivity: How distractors capture attention. Poster presented at the Annual Workshop on Object Perception, Attention, and Memory. Chicago, IL, USA.
14. **Krasich, K.**, Hughes, L., Wang, L., Bel-Bahar, T., Mitroff, S.R., & Appelbaum, L.G. (2013, November). Visual perception and motor skills across the day. Annual Workshop on Object Perception, Attention, and Memory. Toronto, ON, Canada.
15. Appelbaum, L.G., Bel-Bahar, T., Wang, L., **Krasich, K.**, Hughes, L., & Mitroff, S.R. (2013, November). Mapping the core factors of visual perceptual performance. Poster presented at the Annual Meeting of the Psychonomic Society. Toronto, ON, Canada.

16. Bel-Bahar, T., Gentzler, E., Adamo, S.H., Wang, L., **Krasich, K.**, Hughes, L., Mitroff S.R., & Appelbaum, L.G. (2013, November). Visuomotor performance is predicted by ERP amplitudes in a rapid serial visual presentation (RSVP) protocol. Poster presented at the Annual Meeting of the Psychonomic Society. Toronto, ON, Canada.

Invited Colloquia

- 2022 **Krasich, K.** "Does responsibility require consciousness?." The 3rd Annual Meeting of the Neurophilosophy of Free Will Consortium. Palm Springs, CA, USA.
- 2021 **Krasich, K.** "Eye tracking mental simulations during causal reasoning" Reasoning and Decision-making Laboratory." Lake Forest College, IL, USA.
- 2021 Murray, S. & **Krasich, K.** "Free will over time: Distinguishing top-down and now-then control." Early-career joint neurophilosophy talks. Chapman University, CA, USA.
- 2021 **Krasich, K.** "What can eye movements tell us about free will?" Neurophilosophy of Free Will Early-Career Mini-Discussions. Chapman University, CA, USA.
- 2019 De Brigard & **Krasich, K.** "Counterfactual thinking, prospective memory, and control: Exploring the connections." Models of Control and Moral Responsibility. University of Copenhagen, Copenhagen, Denmark.
- 2018 **Krasich, K.** "Does mind wandering affect valuable prospective memory?" The Moral Attitudes and Decision-making Laboratory. Duke University, Durham, NC, USA.
- 2018 Murray, S. & **Krasich, K.** "Responsibility and mind wandering." The META laboratory. University of California Santa Barbra, Santa Barbra, CA, USA.

Teaching

- 2017 Guest Lecturer, Introduction to Biopsychology, University of Notre Dame
- 2016 Co-Instructor of Record, Introduction to Biopsychology, University of Notre Dame
- 2015 Teaching Assistant, Introduction to Biopsychology, University of Notre Dame
- 2015 Teaching Assistant, Cognitive Psychology, University of Notre Dame

Mentorship

UNDERGRADUATES

Morgan Biele. Using eye tracking to explore the neurological basis of mental simulation and counterfactual reasoning as mechanisms for the development of causal judgment in children ages 5-7. Duke University. Internal funding: Summer Neuroscience Program Fellowship (\$3,000). Primary advisor: Felipe De Brigard.

Sara Rose Shannon. Performance of unconscious arithmetic through subliminal multiplication equations. Duke University. Internal funding: Summer Neuroscience Program Fellowship (\$3,000). Primary advisor: Felipe De Brigard.

Vincent Sinfuego. A meta-analysis of prestimulus alpha oscillations and conscious visual perception. Duke University. Internal funding: Summer Neuroscience Program Fellowship (\$3,000). Primary advisor: Dr. Marty Woldorff.

Shreya Bhatia. Investigating the neural mechanisms by which mind wandering impacts the prospective memory processes. Duke University. Internal funding: Undergraduate Research Support (URS) Independent Study Grant (\$400); Psychology and Neuroscience URS Matching Grant (\$400); Charles Lafitte Foundation Undergraduate Travel Grant (\$1,500). Psychology & Neuroscience Small Grant (\$270). Primary advisor: Dr. Marty Woldorff.

Scott Carlson. Tracking how norm violating omissions impact casual judgements. Duke University. Internal funding: Undergraduate Research Support Independent Study Grant (\$400). Primary advisor: Dr. Felipe De Brigard.

Joanne Kim. The influence of music on gaze control. University of Notre Dame. Internal funding: Institute for Scholarship in the Liberal Arts (\$1,800); Undergraduate Scholarly Engagement (\$480). Primary advisor: Dr. James R. Brockmole.

Erin C. Sullivan. The rate of memory stabilization over time. University of Notre Dame. Internal funding: Glynn Family Honors Program, Undergraduate Research Grant (\$5,075). Primary advisor: Dr. James R. Brockmole.

Robert McManus. Using eye movements to identify periods of mind wandering during real-world scene perception. University of Notre Dame. Internal funding: Undergraduate Research Opportunities Grant, Institute for Scholarship in the Liberal Arts (\$3,130). Primary advisor: Dr. James R. Brockmole.

Department service

2022	Cognitive Neuroscience Research Internship Center for Cognitive Neuroscience, Duke University Mentoring undergraduate interns; Teaching research methods in eye tracking
2021	Center for Cognitive Neuroscience Training Committee Center for Cognitive Neuroscience, Duke University Voted by peers; Leading postdoctoral advocacy and professional development
2017	Junior Faculty Search Committee Department of Psychology, University of Notre Dame Appointed by faculty; Evaluated applications; Coordinated student feedback

Ad-hoc reviewing

J Cogn Neurosci	PLOS One	Int J Hum-Comput Int
J Exp Psychol: Hum Percept Perform	Psychol Res	Neuropsychologia
J Exp Psychol: Gen	Int J Environ Res Public Health	Psychon Bull Rev
Vis Cogn	Mem Cogn	Philo Mind Sci
Conscious and Cogn	Front Neurosci	Q J Exp Psychol

Scientific outreach

2022	Mentor , Cognitive Science Society Mentorship Program, Toronto, ON, Canada
2022	Mentor , Society for Philosophy and Psychology Mentorship Program, Milan, Lombardy, IT
2022	Guest Speaker , Duke Institute from Brain Sciences Methods Meetings, Durham, NC, USA
2021	Guest Speaker , Default Mode Radio Show, Durham, NC, USA
2019	Science Presenter , Science Day, Durham, NC, USA
2018	Discussion Leader , Responsible Conduct of Research Workshop, South Bend, IN, USA
2017, 2018	Guest Speaker , Penn High School, Mishawaka, IN, USA
2016, 2017	Coordinator , Conversations on Brain, Mind, and Behavior, South Bend, IN, USA
2016, 2017	Judge , N. Indiana Regional Science & Engineering Fair, South Bend, IN, USA
2014	Science Presenter , N. Carolina Science Festival, Chapel Hill, NC, USA
2013	Science Presenter , N. Carolina Museum of Life and Science, Durham, NC, USA