THOMAS E. GORMAN CV

Cognitive Scientist

Department of Psychological and Brain Sciences 1101 E. 10th St. Bloomington, IN 47405

Education

2017 - May 2024 University of Indiana - Bloomington

PhD in Psychology and Cognitive Science,

2011 - 2015 University of Wisconsin Madison

B.Sc. in Psychology,

Research Experience

Percepts and Concepts Lab

Principal Investigator: Robert Goldstone, PhD

• Graduate Student (2017 - Present)

Learning and Transfer Lab (University of Wisconsin-Madison)

• Principal Investigator: C. Shawn Green, PhD

■ Lab Manager / Research Coordinator (2015-2017)

• Undergraduate Research Assistant (2013 - May 2015)

Alexander Lab - Medical Physics (University of Wisconsin-Madison)

• Principal Investigator: Andrew Alexander, PhD

■ Research Coordinator (2015 – 2017)

Center for Healthy Minds (University of Wisconsin-Madison)

• Principal Investigator: Richard J. Davidson, PhD

Undergraduate Research Assistant (January 2014 - May 2015)

Skills

Category	Skills
Programming	 R (Quarto, Rmarkdown, Shiny) JavaScript Python (jupyter, torch, tensorflow) Bash (Shell scripting, Workflow automation) MATLAB (psychtoolbox)
Computational Modeling	 Artificial Neural Networks Exemplar Models Bayesian Statistics Mixed Effect Models Similarity Scaling Approximate Bayesian Computation Individual Differences
Data Analysis	 Multilevel Modeling Bayesian Statistics Mixed Effects Models Dimensionality Reduction Frequentist ANOVA/Regression
Experimental Skills	 Behavioral Tasks Online Data Collection (jsPsych for web-based experiments) Survey Data Collection (Qualtrics) Mechanical Turk MRI & EEG
Workflow Automation & Version Control	Multi-language workflows (integrating R, Bash, Python)Git (Documentation, backup, branching, collaboration)
Tools	RStudioVS CodeVim/NeovimObsidian
Miscellaneous Skills	Web ScrapingSQLWebsite Design

Journal Articles and Conference Proceedings

- **Gorman**, T. E., & Goldstone, R. L. (2022). An instance-based model account of the benefits of varied practice in visuomotor skill. *Cognitive Psychology*, *137*, 101491.
- Bazyldo, A., Kecskemeti, S., Cochrane, A., Gorman, T., Rokers, B., Dean, D., Green, C. S., & Alexander, A. L. (2021). Assessment of R1 Relaxometry Changes Induced via Repeated Videogame Training as a Measure of Neuroplasticity in College-aged Brains. In Proceedings of the ISMRM & SMRT Annual Meeting & Exhibition. An Online Experience. link
- Patrick, A., Dean, D., Gorman, T., Green, C. S., & Alexander, A. (2019). Assessment of Microstructural Changes Induced via Repeated Videogame Training as a Measure of Neuroplasticity in Normal Developing, College-age Brains.
 In Proceedings of the 27th Annual Meeting & Exhibition of the International Society for Magnetic Resonance in Medicine. Montréal, QC, Canada. link
- Dean, C. D., Patrick, A. M., Gorman, T., Green, C. S., & Alexander, A. L. (2018). Neuroplastic Changes of Myelin Microstructure With Video Game Play. In Proceedings of the Joint Annual Meeting ISMRM-ESMRMB. Paris, France. link

- Kattner, F., Cochrane, A., Cox, C. R., **Gorman**, T. E., & Green, C. S. (2017). Perceptual learning generalization from sequential perceptual training as a change in learning rate. *Current Biology*, 27(6), 840-846.
- **Gorman**, T.E., & Green, C.S. (2016). Short-term mindfulness intervention reduces the negative attentional effects associated with heavy media multitasking. *Scientific Reports*, 6.

Reviews and Book Chapters

- **Gorman**, T.E., Gentile, D.A., & Green, C.S. Video game addiction: a short primer (2018). *American Journal of Play*, 10 (3), 309-327
- **Gorman**, T.E., & Green, C.S. (2017). Young minds on video games. In *Cognitive development in digital contexts*. 121-143. Academic Press.
- Green, C. S., **Gorman**, T., & Bavelier, D. (2016). Action Video-Game Training and Its Effects on Perception and Attentional Control. In *Cognitive Training* (pp. 107-116). Springer International Publishing.

Presentations

- Half Day Tutorial on Measuring Mindfulness Behaviorally: Onsite/Online Data Col-lection with jsPsych
 - Cognitive Science Conference 2018
- Does interleaving go the distance? Exploring the effect of dissimilarity on interleaved category learning
 - Math Psych/ICCM 2018
- Short term mindfulness intervention reduces cognitive deficits in heavy media multi-taskers
 - Undergraduate Research Symposium UW-Madison April 16th, 2015

Awards

IU-Bloomington - Development Training Grant - beginning Fall 2019
 IU-Bloomington - Steinmetz Summer Research Award - 2018
 UW-Madison - Undergraduate Research Scholar Award - 2015
 UW-Madison - Hilldale Undergraduate/Faculty Research Fellowship - 2014

Ad-hoc Reviewer

Cognitive Science

Journal of Experimental Psychology: General

Journal of Experimental Psychology: Human Perception and Performance

Contemporary Educational Psychology

Conferences

Cognitive Science Conference - 2021 Cognitive Science Conference - 2018 Mathematical Psychology & ICCM 2018 Boston Meeting on Methods in Cognitive Training (NSF Sponsored) – May 2017