

Kira Wegner-Clemens

kira@gwu.edu | kirawc.com

Education

PhD, Cognitive Neuroscience, George Washington University 2024

- Dissertation: The Influence of Audiovisual Semantics on Attention
- Advisor: Sarah Shomstein

BA, Cognitive Science, Rice University 2017

- Minors: Neuroscience, Language and Intercultural Communication
- Distinction in Research and Creative Work

Research Experience

Graduate Research Fellow Aug 2019 - Present

George Washington University, Psychological & Brain Sciences

- Investigated behavioral & neural mechanisms of semantic audiovisual attention
- Created open source database of auditory and visual semantic understanding
- Coordinated undergraduate research team, including teaching coding & data tutorials
- Successfully obtained fellowship grant (NIH F31) in nationally competitive process

Research Coordinator July 2017 - July 2019

Baylor College of Medicine, Neurosurgery (PI: Micheal Beauchamp)

- Investigated face and speech perception with behavior and eye tracking techniques
- Developed novel data driven method of analyzing eye tracking behavior

Undergraduate Researcher Aug 2015 - May 2017

Baylor College of Medicine, Neuroscience (PI: Jeffrey Yau)

- Investigated audiotactile perception using psychophysics
- Wrote undergraduate honors thesis & co-authored peer review publication

Awards & Honors

NIH Kirschstein National Research Service Award (F31) 2022-2025

Kavli Summer Institute for Cognitive Neuroscience Fellowship 2022

George Washington University Academic Excellence Fellowship 2019-2022

US State Department Critical Language Scholarship Russian 2015

Skills

Programming: Python, Matlab, R, Tensorflow, PyTorch, Javascript, HTML/CSS

Experimental: psychophysics, eye tracking, online data collection, fMRI

Scientific writing: Track record of peer reviewed journal publications (7 total, 4 lead author)

Other activities, training, & service

Ad hoc journal reviewing: Attention, Perception, & Psychophysics 2021-Present

Lab Manager, Shomstein Lab 2021-Present

Kavli Summer Institute for Cognitive Neuroscience 2022

GW Cognitive Neuroscience Program Vade Mecum Committee 2022

GW Cognitive Neuroscience Program Recruitment Coordinator 2022

Neuromatch Academy for Computational Neuroscience 2020

Publications

(* = equal contributions)

Wegner-Clemens, K., Kravitz, D.J., Shomstein, S. Task irrelevance guidance of attention in audiovisual semantic relationships. *In prep.*

McEvoy, K.*, **Wegner-Clemens, K.***, Auer, E., Eberhardt, S., Bernstein, L., Shomstein, S. Covert attention modulates visual speech perception independent of eye position. *In prep.*

Nag, S.*, Mahableshwarkar, P.*, **Wegner-Clemens, K.**, Cox, P., Kaplan, S., Teng, C., Kravitz, D., Mitroff, S. Efficiencies of online data collection. *In prep.*

Bean, S., **Wegner-Clemens, K.**, Shomstein, S., Malcolm, G.L. Semantically congruous sounds draw and hold gaze on objects across different scene backgrounds. *In prep.*

Wegner-Clemens, K., Malcolm, G., Shomstein, S. Search efficiency scales with audiovisual semantic relatedness in a continuous manner. *Under review.*

Wegner-Clemens, K., Malcolm, G., Shomstein, S. (2024) Predicting attention in real-world environments: the need to investigate crossmodal semantic guidance. *WIREs Cognitive Science*.

Wegner-Clemens, K., Malcolm, G., Shomstein, S. (2022) How much is a meow like a cow? A novel database of human judgements of audiovisual semantic relatedness. *Attention, Perception, & Psychophysics*.

Magnotti, J.F., Dzeda, K.B., **Wegner-Clemens, K.**, & Beauchamp, M.S. (2020). Weak observer-level correlation and strong stimulus-level correlation between the McGurk effect and audiovisual speech-in-noise: A causal inference explanation. *Cortex*.

Wegner-Clemens, K., Rennig, J., & Beauchamp, M.S. (2020). A relationship between Autism-Spectrum Quotient and face viewing behavior in 98 participants. *PLoS ONE*. 15(4): e0230866.

Rennig, J., **Wegner-Clemens, K.**, & Beauchamp, M.S. (2020) Face Viewing Behavior Predicts Multisensory Gain During Speech Perception. *Psychonomic Bulletin & Review*. 27, 70-77.

Wegner-Clemens, K., Rennig, J., Magnotti, J.F., & Beauchamp, M.S. (2019). Using principal component analysis to characterize eye movement fixation patterns during face viewing. *Journal of Vision*. Vol.19, 2.

Convento, S., **Wegner-Clemens, K. A.**, & Yau, J.M. (2019). Reciprocal Interactions Between Audition and Touch in Flutter Frequency Perception, *Multisensory Research*, 32(1), 67-85.

Presentations

(* = equal contributions)

Wegner-Clemens, K., Kravitz, D., Shomstein, S. Semantic relationships between sounds and images modulate attention even when the stimuli are task-irrelevant. Poster. Vision Sciences Society, St. Pete's Beach, 2024.

Wegner-Clemens, K., Malcolm, G., Shomstein, S. Search speed scales with audiovisual semantic relatedness. Talk. Psychonomic Society, San Francisco, 2023.

McEvoy, K.*, **Wegner-Clemens, K.***, Bernstein, L., Shomstein, S. Covert attention modulates visual speech perception independent of eye position. Poster. Object Perception, Attention, and Memory, San Francisco, 2023.

McEvoy, K.*, **Wegner-Clemens, K.***, Bernstein, L., Shomstein, S. Covert attention modulates visual speech perception independent of eye position. Poster. Society for Neuroscience, Washington, DC, 2023.

Wegner-Clemens, K., Malcolm, G., Shomstein, S. Attentional prioritization scales with audiovisual semantic relatedness. Talk. Society for Neuroscience, Washington, DC, 2023.

Wegner-Clemens, K., Malcolm, G., Shomstein, S. *Semantic meaning guides audiovisual attention in a continuous manner*. Poster. International Multisensory Research Forum, Poster, 2023.

Wegner-Clemens, K., Malcolm, G., Shomstein, S. Search efficiency scales with semantic relatedness in audiovisual contexts. Poster. Vision Sciences Society, St. Pete's Beach, 2023.

Wegner-Clemens, K., Malcolm, G., Shomstein, S. Search efficiency scales with semantic relatedness in audiovisual contexts. Poster. Cognitive Neuroscience Society, San Francisco, 2023.

Wegner-Clemens, K., Malcolm, G., Shomstein, S. Search efficiency scales with audiovisual semantic relatedness. Poster. Object Perception, Attention, & Memory, Boston, 2022.

Wegner-Clemens, K., Malcolm, G., Shomstein, S. Audiovisual semantic relatedness of real-world objects. Poster. Vision Sciences Society, St. Pete's Beach, 2022.

Wegner-Clemens, K., Malcolm, G., Shomstein, S. Measures of Audiovisual Semantic Relatedness for Real-World Objects. Poster. Psychonomic Society, virtual, 2021.

Wegner-Clemens, K., Rennig, J., & Beauchamp, M.S. A relationship between Autism-Spectrum Quotient and face viewing behavior in healthy adults. Poster. Society for Neuroscience, Chicago, 2019.

Wegner-Clemens, K., Rennig, J., Magnotti, J.F., & Beauchamp, M.S. Fixation eigenimages reveal task and stimulus modulate differences in face viewing. Poster. Society for Neuroscience, San Diego, 2018.

Rennig, J., **Wegner-Clemens, K.**, & Beauchamp, M.S. Face Viewing Behavior Predicts Multisensory Gain During Speech Perception. Poster. Society for Neuroscience, San Diego, 2018.

Wegner-Clemens, K., Rennig, J., & Beauchamp, M.S. Interindividual Differences in Eye Movements Made During Face Viewing are Consistent Across Task and Stimulus Differences. Poster. International Multisensory Research Forum, Toronto, 2018.