BRANDON HACKNEY

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EDUCATION

Ph.D., Cognitive Neuroscience (2025) *expected*
M.S., Cognitive Neuroscience (2022)
University of California, Irvine (UCI)
Advisor: Dr. Emily Grossman

B.A., Psychology (2015) *cum laude, honors program*
California State University, Northridge (CSUN)

A.A., Social & Behavioral Sciences (2010) *with honors*
A.A., Arts & Humanities (2010) *with honors*
Moorpark College

TEACHING EXPERIENCE

Guest Lectures

- Guest lecture (February 2022) on Declarative Memory, PSYCH 160A Cognitive Neuroscience

Teaching Assistant (September 2019 – Present)
Cognitive Sciences Department, UCI, Irvine, CA

- COGS 14M MATLAB Programming
- PSYCH 7A Introduction to Psychology
- PSYCH 10A Probability and Statistics in Psychology
- PSYCH 111/112A, B, C Research in Experimental Psychology
- PSYCH 112P Perception Research
- PSYCH 119/112N Introduction to fMRI Research
- PSYCH 160A Cognitive Neuroscience
- PSYCH 146MW Writing About Memory
- SS3A Computer Research in Social Sciences

RESEARCH EXPERIENCE

Graduate Student (September 2019 – Present)
Visual Perception and Neuroimaging Lab, Cognitive Sciences Department, UCI, Irvine, CA

- Collected and analyzed human fMRI data and eye tracking data
- Extensive MATLAB programming for data collection and analysis
- Some use of Python and R, mainly for data visualization
- Collaborated with researchers at Carnegie Mellon University, University of Washington, and Dartmouth College

Graduate Student Researcher (March 2023 – September 2023)
Learning and Decision Neuroscience Lab, Cognitive Sciences Department, UCI, Irvine, CA

- Programmed an independent experiment and created stimuli for same
- Led fMRI data collection

Researcher (December 2016 – September 2019)
Research Assistant (September 2014 – November 2016)
Vision Information Science at Northridge Lab, Psychology Department, CSUN, Northridge, CA

- Helped design and execute psychophysical experiments
- Analyzed data in both SPSS and R
- Mentored undergraduate research assistants on statistics, APA style, and equipment use

SCHOLARSHIP

Publications

Hackney, B. C., Pyles, J. A., & Grossman, E. D. (2024). A quantitative comparison of atlas parcellations on the human superior temporal sulcus. *Human Brain Mapping*, *1842*, 149119. doi: 10.1016/j.brainres.2024.149119

Drew, S. A., Awad, J. F., **Hackney, B. C.,** & Fenn, E. (2018). Orange is less than green: An examination of bidirectionality in grapheme-color synesthesia. *Perception*, *47*(8), 881-891. doi:10.1177/0301006618779485

National Conference Poster Presentations

Hackney, B. C., Awad, M. F., Del Cid, D. A., Mosher, R. L., Kangavary, A., & Drew, S. A. (2018, November). Impact of virtual reality headset use on ocular function and subjective discomfort. Poster session presented at the annual meeting of the Society for Neuroscience, San Diego, CA.

Larranaga, D., **Hackney, B. C.**, Delgado, C. Y., McGinnis, C. A., Kangavary, A. & Drew, S. A. (2018, May). An evaluation of the effects of English Second Language Status on overt attention to different word classes during a continuous reading task. Poster session presented at the annual meeting of the Association for Psychological Science, San Francisco, CA.

Mosher, R. L., Del Cid, D. A., **Hackney, B. C.,** Ilnicki, A., & Drew, S. A. (2017, November). *Examining accommodative changes after using head-mounted virtual immersion displays*. Poster session presented at the annual meeting of the Society for Neuroscience, Washington, D.C.

Awad, J. F., **Hackney, B. C.**, Morales, R., Doty, T., Mosher, R. L., & Drew, S. A. (2017, November). *Exploration of different processes in synesthetic bidirectionality*. Poster session presented at the annual meeting of the Society for Neuroscience, Washington, D.C.

Lundqvist, S., Buenrostro, J., **Hackney, B. C.**, & Drew, S. A. (2017, May). *Reading colors: A study on bidirectional effects in grapheme-color synesthesia*. Poster session presented at the annual meeting of the Association for Psychological Science, Boston, MA.

Awad, J. F., Urenda, N., Larrananga, D., **Hackney, B. C.**, & Drew, S.A. (2016, November). *Consistently incorrect: Potential implicit numerical activation in non-synesthetes*. Poster session presented at the annual meeting of the Society for Neuroscience, San Diego, CA.

Buenrostro, J., Del Cid, D., **Hackney, B. C.**, Awad, J. F., Gorji, T., & Drew, S. A. (2016, May). *When colors spell words: A study on the bidirectionality effect in synesthesia*. Poster session presented at the annual meeting of the Vision Sciences Society, St. Pete Beach, FL.

Hackney, B. C., Awad, J. F., Hill, L. D. J., Levy, H. N., & Drew, S. A. (2015, October). *Spelling with color? An investigation into the bidirectionality of synesthesia*. Poster session presented at the annual meeting of the Society for Neuroscience, Chicago, IL.

University Research Presentations

McGinnis, C., Larranaga, D., **Hackney, B**., Delgado, C. & Kangavary, A. (2018, April). *An evaluation of the effects of English Second Language status on overt attention to different word classes during a continuous reading task*. Poster session presented at the annual Research & Creative Works CSUNposium, CSUN, Northridge, CA.

Awad, J. F., **Hackney, B. C.**, & Drew, S. A. (2017, April). *Teal is less than purple: A study on bidirectionality in synesthesia*. Poster session presented at the annual Student Research & Creative Works CSUNposium, CSUN, Northridge, CA.

Hackney, B. C., Awad, J. F., Hill, L. D. J., Levy, H. N., & Drew, S. A. (2015, May). *Spelling with color? An investigation into the bidirectionality of synesthesia*. Poster session presented at bi-annual Psi Chi Research Competition, CSUN, Northridge, CA.

PROFESSIONAL SERVICE

Ad-hoc Journal Reviews

- Journal of Vision (2021)

UNIVERSITY SERVICE

Committee Membership

- Colloquium Committee, UCI Cognitive Sciences (2022–2023)

TECHNICAL SKILLS

- **Equipment:** Siemens MAGNETOM Prisma 3T MRI, Grand Seiko WAM-5500 open-field autorefractor, SR Research EyeLink 1000 Plus and Eyelink II eye tracking systems
- **Programming:** MATLAB, PsychToolbox, some R and Python including OpenCV

HONORS

- 1st place Psi Chi Research Competition, Advanced Division (May 2015) – CSUN
- Dean's list – CSUN
- Dean's list – Moorpark College