Joshua M. Olivier

Personal Information

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Education

2021 B.S., Psychology

Brigham Young University, Provo, UT Relevant coursework:

• Abnormal Psychology

- Behavioral Neurobiology
- Clinical Psychology
- Stress Psychobiology
- Cognition
- Psychometrics
- Writing Within Psychology
- Psychological Statistics

Scholarly Publications

- Olivier, J. M., Srokova, S., Hill, P. F., & Rugg, M. D. (2025). Moderating effects of cortical thickness, volume, and memory performance on age differences in neural reinstatement of scene information (p. 2025.02.06.636759). *bioRxiv*. https://doi.org/10.1101/2025.02.06.636759 (Manuscript under review)
- de Chastelaine, M., Srokova, S., Monier, S., **Olivier, J. M.**, & Rugg, M. D. (2025). Effects of age in the strategic control of recollected content as reflected by modulation of scene reinstatement (p. 2025.01.16.633416). *bioRxiv*. https://doi.org/10.1101/2025.01.16.633416 (Manuscript under review)
- Kamhout, S.[†], **Olivier, J. M.**[†], Morris, J., Brimhall, H. R., Black, B. L., Gabrielsen, T. P., South, M., Lundwall, R. A.[‡], & Nielsen, J. A.[‡] (2023). Binocular rivalry in autistic and socially anxious adults. *Frontiers in Psychiatry*, 14. https://doi.org/10.3389/fpsyt.2023.1181797

Poster Presentations

- Olivier, J. M.*, Srokova, S., & Rugg, M. D. (2025, March 29–April 1). Moderating effects of cortical thickness, volume, and memory performance on age differences in neural reinstatement of scene-related information. Cognitive Neuroscience Society, Boston, MA, United States.
- Olivier, J. M.*, Srokova, S., & Rugg, M. D. (2025, February 20–22). Moderating effects of cortical thickness, volume, and memory performance on age differences in neural reinstatement of scene-related information. Dallas Aging and Cognition Conference, Dallas, TX, United States.

[†]These authors have contributed equally to this work and share first authorship

[‡]These authors jointly supervised this work and share senior authorship

de Chastelaine, M.*, Monier, S., **Olivier, J. M.**, Srokova, S., & Rugg, M. D. (2024, October 5–9). *Goal-dependent attenuation of retrieval-related scene reinstatement in young and older adults.* Society for Neuroscience, Chicago, IL, United States.

- Olivier, J. M.*, Srokova, S., & Rugg, M. D. (2023, November 11–15). Moderating effects of cortical volume and thickness on retrieval-related scene reinstatement. Society for Neuroscience, Washington, D.C., United States.
- Olivier, J. M.*, Srokova, S., & Rugg, M. D. (2022, February 25–27). Age and retrieval-related scene reinstatement: moderating effects of cortical thickness. Dallas Aging and Cognition Conference, Dallas, TX, United States.
- Olivier, J. M.*, Srokova, S., & Rugg, M. D. (2022, November 12–16). Age and retrieval-related scene reinstatement: moderating effects of cortical thickness. Society for Neuroscience, San Diego, CA, United States.
- Olivier, J. M.*, Morris, J., Kamhout, S., Black, B., Wood, H., Brimhall, H., & Nielsen, J. A. (2021, April 8).

 Autistic traits do not predict binocular rivalry switching rate. Mary Lou Fulton Conference, Provo, UT,
 United States.
- Morris, J.*, Olivier, J. M., Kamhout, S., Brimhall, H., Wood, H., & Nielsen, J. A. (2021, April 8). *Anxious traits in college students do not correlate with visual perception*. Mary Lou Fulton Conference, Provo, UT, United States.
- Brimhall, H.*, **Olivier J. M.**, Kamhout. S., Morris, J., Black, B., Wood, H., Nielsen, J. A. (2021, April 8). Autistic and socially anxious conditions: Changes to visual perception. Mary Lou Fulton Conference, Provo, UT, United States.

*Presenter

Research Experience

Functional Neuroimaging of Memory Lab

April 2024 - Present

University of Texas at Dallas Mentor: Dr. Michael Rugg, PhD

Title: Lab Manager/Research Assistant II

- Supervised daily lab operations
- Coordinated research subject recruitment and scheduling
- Managed research data storage, organization, and compliance with security and privacy protocols
- Trained and coordinated with all lab personnel, including postdoc researchers, graduate students, research assistants, and master's and undergraduate level interns
- Ensured adherence to institutional and federal regulations for human subjects research, including IRB protocol management

- Created and coordinated subject recruitment advertisements on social media platforms and in local news publications
- Acted as liaison between the lab and external departments, collaborators, and organizations
- Managed inventory of lab supplies
- Coordinated lab member travel to international, national, and regional conferences
- Maintained all responsibilities outlined in the Research Assistant role below

Functional Neuroimaging of Memory Lab

June 2021 – April 2024

August 2018 - April 2021

University of Texas at Dallas Mentor: Dr. Michael Rugg, PhD Title: Research Assistant I

- Administered neuropsychological tests
- Collected fMRI and behavioral data
- Presented conference posters
- Processed and analyzed MRI data using MATLAB, SPM12, and FreeSurfer
- Analyzed statistical data using SPSS and R
- Represented the lab at community outreach events

Nielsen Brain & Behavior Lab

Brigham Young University Mentor: Dr. Jared Nielsen, PhD Title: Research Assistant

- Contributed to a peer-reviewed manuscript as a co-first author
- Obtained funding through three undergraduate research grants
- Contributed to an IRB application
- Administered tasks to adult research subjects

- Administered questionnaires using Qualtrics
- Analyzed data using R
- Presented a conference poster
- Quality-checked MRI data using FreeSurfer

Ladle Lab May 2018 – July 2018

Johns Hopkins University School of Medicine

Mentor: Dr. Brian Ladle, MD, PhD Title: Research Assistant/Oncology Staff

- Conducted cancer treatment research analyzing the effectiveness of histone deacetylase inhibitors on osteosarcoma cells from mice
- Utilized molecular techniques such as DNA and RNA isolation, cDNA, PCR, and qPCR
- Isolated immune tissue from mice tumor samples
- Maintained laboratory records
- Processed and analyzed data

Grants & Awards

2020, BYU Psychology Experiential Learning Grant

Spring/Summer Project: Binocular Rivalry Switch Rate Across a Range of Autistic and Anxious

Terms Traits

Status: Funded, \$1,500

2020, BYU Psychology Experiential Learning Grant

Winter Semester Project: Binocular Rivalry Switch Rate Across a Range of Autistic and Anxious

Traits

Status: Funded, \$1,500

2019, BYU Psychology Experiential Learning Grant

Fall Semester Project: Binocular Rivalry Switch Rate Across a Range of Autistic and Anxious

Traits

Status: Funded, \$1,500

2017–2019 Academic Half-Tuition Scholarship

Brigham Young University

Research Interests

• Clinical neuropsychology

• Neuropsychological assessment and test development

• Neuroimaging methods

• Cognitive aging

• Episodic memory

Neurocognitive disorders

Service & Activities

2021–2024	Volunteer Crisis Counselor Crisis Text Line
2023	Out of the Darkness Community Walk Volunteer American Foundation for Suicide Prevention, Arlington, TX
2023	Functional Neuroimaging of Memory Lab Community Outreach Presenter Hope for the Caregiver Conference, Prestonwood Baptist Church, Plano, TX
2019–2021	Part Time Student Secretary Brigham Young University Neuroscience Center
2020	Undergraduate Journal Editor Chiasm: BYU Undergraduate Journal of Neuroscience, Volume 12, Provo, UT
2017	English as a Second Language Tutor BYU International Network of Tutors of Languages, Provo, UT

Academic Affiliations

2024–2025 Cognitive Neuroscience Society

2022–2024 Society for Neuroscience

2020 Society for Neuroscience – Intermountain SfN Chapter Student Member

2020 Delta Alpha Pi Honor Society

Technical Skills

Software

- R Studio
- SPSS
- MATLAB
- SPM12

- FreeSurfer
- PsychoPy
- Microsoft Excel
- REDcap
- Programming languages
 - Bash
 - R
 - MATLAB

- Python
- Javascript

- Web development
 - HTML
 - CSS
 - React

- Astro
- Neuropsychological tests administered
 - MMSE
 - CVLT II
 - SDMT
 - Digit Span

- Trail Making Test
- Letter Fluency
- Category Fluency
- TOPF

- WMS Logical Memory
- Raven's APM

Qualtrics

Zotero

- BVMT-R
- HVLT-R

Languages

- English Native speaker
- Portuguese Advanced (Awarded BYU Center for Language Studies Portuguese Language

Certificate, Advanced Level)

• Spanish Beginner