

Mohan W. Gupta

EDUCATION

University of California San Diego, La Jolla, CA (2019-2024, Expected)
PhD, Experimental Psychology, Concentration: Cognitive Psychology

Michigan State University (MSU), East Lansing, MI (2013-2017)
BS, Neuroscience, Honors, College of Natural Science
BS, Psychology, Honors, College of Social Science
Minor, Cognitive Science, College of Arts and Letters

University of Geneva, Switzerland (2015)

- Created and ran own experiment (write-up per request)
- Attended B1-B2 French oral and writing classes
- Seminars in cognitive science
- Weekly LABNIC meetings and forums

RESEARCH EXPERIENCE

University of California, Los Angeles Cognitive and Clinical Neuroscience Lab (2017 – Present)

- Analyzed data in behavioral and imaging measures
- Assisted in the drafting and programming of experiments
- Participant management
- Neuropsychological testing

University of Geneva, LABNIC (2015)

- Created and performed study on implicit motor learning
- Literature review and exploration

MSU Visual Agnosia Research Group (2014 - 2016)

- Worked with an individual with 2-D apperceptive visual agnosia
- Developed useful educational tools
- Reviewed current literature of visual agnosia
- Reviewed and studied to examine specific case study and its relation to the visual system

MSU Perception and Attention Lab (2014 - 2017)

- Experimental design
- Explain tasks and run experiments on human participants
- Oversee operation and use of eye tracking experiments
- Conducted senior thesis, “Mechanisms of the Early Boost Effect”

MSU Digital Humanities and Literary Cognition (DHLC) Lab (2014 - 2017)

- Undergraduate Lead, Brain Data Group

Mohan W. Gupta

- Analyzed functional magnetic resonance imaging (fMRI) data to study patterns of neural activity in focused reading
- Supervised up to 8 undergraduate research assistants
- Lead data analysis efforts across various aspects of multi-disciplinary projects, including functional MRI global activity and regions of interest (ROIs) using blood-oxygen-level dependent (BOLD) response data, physiological data, eye tracking, and algorithmic processing of stimulus text and subject-generated essay responses

WORK EXPERIENCE

UCLA Staff Researcher I (2017 – Present)

MSU Statistics Learning Assistant (2017)

- Facilitate learning for STT course 231
- Grade all assignments done by students

MSU Sailing Center (2014 - 2015)

- Customer service and rentals
- Facilitate learning during sailing classes
- Upkeep of boats and site maintenance

MSU Office of International Students and Scholars (OISS) (2014 - 2016)

- Orientation Leader Coordinator/Super Coordinator
 - Conducted and help run week-long training for orientation leaders
 - Coordination and preparation for International Academic Orientation Program
- Orientation Leader for International Academic Orientation Program
 - Educated international students on MSU expectations and policies
 - Helped international students acclimate to American culture

SKILLS AND EXPERTISE

Neuroimaging Software/Models: FSL, FreeSurfer, ANTS, GIFT, NODDI, ABTIN

Statistical Software: R, MATLAB, SPSS, STATA

Programming Languages: R, MATLAB, Unix, Python, HTML

Stimulus Presentation: MATLAB, E-Prime

Eye Tracking Operation

Neuropsychological Testing

MRI Operation

Machine Learning

Amazon Web Services

PUBLICATIONS

Mohan W. Gupta

Mennigen, E., Jolles, D., Hegarty C., **Gupta M.W.**, Jalbrzikowski M., Loohuis L.O., Ophoff R., Karlsgodt K.H., and Bearden C. State-Dependent Functional Dysconnectivity in Youth With Psychosis Spectrum Symptoms. *Schizophrenia Bulletin*. June 20, 2019. Available from: <https://academic.oup.com/schizophreniabulletin/advance-article/doi/10.1093/schbul/sbz052/5521083>.

Hegarty C.E., **Gupta, M.W.**, Miller E., Terashima, K., Loo, S., McCracken J., McGough, J., Bilder, R., Poldrack R.A., Galvan, A., Bookheimer S.Y. Symptom Severity in Youths with Attention Deficits Hyperactivity Disorder Associated with Normalizing Effects of Treatment on fMRI Response during a Stop Signal Task. *bioRxiv* 599803 [Preprint]. April 4, 2019. Available from: <https://doi.org/10.1101/599803>.

Jolles D., Mennigen E., **Gupta, MW.**, Hegarty CE., Bearden CE., Karlsgodt KH. Relationships between intrinsic functional connectivity, cognitive control, and academic achievement across development. *NeuroImage* [In Review].

PRESENTATIONS

“Multivariate Pattern Analysis in Psychotic-like Experiences,” **Gupta, M.W.**, Mumford, J., Barber, A., Moyett, A., Blair, M., and Karlsgodt, K.H. Poster. Society for Neuroscience. November 2018.

“Reduced higher-dimensional dynamism in youths with psychosis spectrum symptoms is mediated by cognition,” Mennigen, E., Jolles, D.D., Hegarty C.E., **Gupta, M.W.**, Karlsgodt, K.H., and Bearden, C.E. Poster. Resting State Conference. September 2018.

“Individual differences in academic ability are associated with intrinsic connectivity in cognitive control networks,” Jolles, D., Mennigen E., **Gupta, M.W.**, Hegarty, C.E., Bearden, C.E., and Karlsgodt, K.H. Flux Satellite Conference. May 2018.

“Higher-dimensional resting state fMRI dynamism in youth with psychosis spectrum symptoms,” Mennigen, E., Jolles, D.D., Hegarty, C.E., **Gupta, M.W.**, Karlsgodt, K.H., and Bearden, C. Flux Satellite Conference. May 2018.

“Mechanisms of the Early Boost Effect,” **Gupta, M.W.** and Becker, M. Poster, Senior Thesis Forum. April 2017.

“Neural Networks During a Natural Reading fMRI Investigation,” **Gupta, M.W.**, Grasser, L., Kabbash, M., and Phillips, N. Poster, Posters on the Hill. April 2017.

Mohan W. Gupta

“Attentional Connectivity Networks and Their Implications in reading and Memory,” **Gupta, M.W.**, Grasser, L., Kabbash, M., and Phillips, N. Presentation, National Conference on Undergraduate Research. April 2017.

“Functional Connectivity and Attention Patterns in Reading.” **Gupta, M.W.**, Grasser, L., and Phillips, N. Poster, Michigan Society for Neuroscience. May 2016.

“Reading Connectivity Networks Between Attentional Levels.” Grasser, L., **Gupta M.W.**, and Phillips, N. Poster, University Undergraduate Research Arts and Forum. April 2016.

“Quoting Memorability and Differential Neural Networks.” **Gupta, M.W.**, Smith, K., and Phillips, N. Poster, University Undergraduate Research Arts and Forum. April 2016.

“Implicit Learning in Early Boost and Spaced Motor Learning,” **Gupta, M.W.**, and Debarnot, U. Presentation, EuroScholars, Karolinska Institute. November 2015.

“2-D Processing Deficits Observed in a Case Study of Apperceptive Visual Agnosia,” Bruce, K., Distin, M., **Gupta, M.W.**, Joyce, M., Rahilly, G., Rapp, R., Rohl, C., and Symonds, L. Poster, Mid-Michigan Symposium for Undergraduate Research Experiences. July 2015.

“Literary Neuroscience and Top-Down Attention,” **Gupta, M.W.**, Grasser, L., Aliva, B., and Phillips, N. Poster, Mid-Michigan Symposium for Undergraduate Research Experiences. July 2015.

“Attention during reading, a Functional Magnetic Resonance Imaging study,” Zuchorea, A., **Gupta, M.W.**, Pathak, A., and Phillips, N. Poster, Michigan Society of Neuroscience. May 2015.

“Literary Neuroscience: Attention and Reading in Jane Austen’s *Mansfield Park*,” **Gupta, M.W.**, Grasser, L., Lynn, S., and Phillips, N. Presentation, University Undergraduate Research Arts and Forum. April 2015.

“The Neuroscience of Rioting,” Article. The State News. April 2015.

“Literary Neuroscience: Patterns of Attention and Memory in Reading Jane Austen,” Zuchora, A., **Gupta, M.W.**, Grasser, L., Silvasi, T., Gaynor, L., Grimes, K., Pathak, A., Kabbash, M., Hakun, J., and Phillips, N. Poster, Culture, Brain, Learning Symposium, Wallenberg Network Initiative, Lund University. November 2014.

“Functional Regions Activated by Literary Reading: An fMRI Study,” Pearson, C., Kothari, S., Garzaniti, I., Mayfield, K., **Gupta, M.W.**, and Phillips, N. Poster, Michigan Society of Neuroscience. May 2014.

INVITED TALKS

Mohan W. Gupta

“Predicting the Psychosis Spectrum and Issues with Heterogenous Data,” Neuroimaging Affinity, UCLA, 2019

ACADEMIC AND RESEARCH MENTORING

- DHLC undergraduate research assistants, 3 students advised and mentored.
- CCNL undergraduate research assistants, 4 students advised and mentored.

TEACHING

Tutor for Brain Bee Competition (UCLA 2017)
Teaching assistant for Brain and Behavior (MSU 2017)

AWARDS AND HONORS

Interfraternity Council Scholarship (2016 - 2017)
MSU College of Natural Science Study Abroad Scholarship (2015)
Eustace-Cole Study Abroad Award (2015)
Cole Excellence Award (2015)
Honors College Research Scholarship (2015)
Cole, Jeffrey HC Enrichment Award (2015)
MSUFCU Study Abroad Scholarship (2014 - 2015)
Deans List (2013-2017)
MCH Michigan Comp Scholarship (2013 - 2016)
Freshman Seminar Award (2013)
Case A.H. Scholarship (2013)

PROFESSIONAL ASSOCIATIONS

Undergraduate Research Ambassador (2016 - 2017)
Neuroscience Ambassador (2016 - 2017)
International Students Association Leadership Retreat (2016)
LeaderShape Graduate (2015)
Michigan Society for Neuroscience (2014 - 2017)
MSU Honors College Member (2014 - 2017)
MSU Neuroscience Club, Outreach Chair, Journal Committee (2014 - 2017)
MSU Psychology Club, Active Member (2014 - 2016)
Men of Honor Leadership Institute, Inductee (2014)
Phi Kappa Sigma International Fraternity, Secretary (Executive Board), Academic Chair (Executive Board), Recruitment Chair, New Member Committee (2013 - 2017)
MSU Ultimate Frisbee Club, Handler (2013 - 2016)

UC Los Angeles
Franz Hall, A327
Los Angeles, CA 90095

mohanwugupta@ucla.edu
www.mohanwugupta.com

Mohan W. Gupta

COMMUNITY ENGAGEMENT

UCLA Brain Awareness Week (2018)
Donley Elementary School Science Nights (2016-2017)
East Lansing School Science Nights (2016 - 2017)
MSU GATE Neuroscience Camp (2015 - 2016)
Boys and Girls Club of Lansing (2016 - 2017)
MSU Food Bank (2015 - 2017)
MSU Neuroscience Student Panel (2015)
MSU Honors College Panels (2014 - 2017)
PhUn Week (2014 - 2016)
Habitat for Humanity (2014 - 2016)
MSU Neuroscience Fair (2014 - 2017)
American Cancer Society Relay for Life (2011 - 2015)
Red Cross Blood Drive (2012 - 2015)
Harris Nature Center Junior Camp Counselor (2009 - 2012)