Michael James Starrett Ambrose, Ph.D.

(stAIR-it AM-brohz; he/him/his)

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University of Nevada, Reno
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EDUCATION

08/2018 – 05/2021 **Ph.D. Psychology | Minor: Cognitive Science** (May 14, 2021)
University of Arizona
Advisor: Arne D. Ekstrom, Ph.D.

09/2015 – 07/2018 **M.A. Psychology** (December 15, 2017)
University of California, Davis
Advisor: Arne D. Ekstrom, Ph.D.

08/2007 – 12/2011 **B.A. Psychology** (December 24, 2011)
University of Wisconsin-Madison

ACADEMIC APPOINTMENTS

07/2026 – **Assistant Professor, Cognitive and Brain Sciences**
University of Nevada, Reno | Psychology

07/2021 – 06/2026 **Postdoctoral Scholar**
University of California, Irvine | Neurobiology & Behavior
Supervisor: Elizabeth R. Chrastil, Ph.D.

05/2021 – 06/2021 **Research Technician IV**
University of Arizona | Psychology
Supervisor: Arne D. Ekstrom, Ph.D.

08/2018 – 05/2021 **Graduate Assistant, Research**
University of Arizona | Psychology
Supervisor: Arne D. Ekstrom, Ph.D.

09/2015 – 07/2018 **Graduate Student Researcher**
University of California, Davis | Psychology/Center for Neuroscience
Supervisor: Arne D. Ekstrom

07/2012 – 08/2015 **Associate Research Specialist (Lab Manager)**
University of Wisconsin-Madison | Psychology/Psychiatry
Supervisor: Bradley R. Postle, Ph.D.

08/2010 – 06/2012 **Undergraduate Research Assistant**
University of Wisconsin-Madison | Psychology
Supervisor: Bradley R. Postle, Ph.D.

PUBLICATIONS

equal contributions * equal contributions (senior authors) † *mentored/supervised §*

Peer-Reviewed Articles

In press

Starrett, M. J., Stark, C. E. L., & Chrastil, E. R. (2027). Switching to an allocentric spatial reference frame incurs distinct cognitive processing costs. *Brain Research*, *1896*, 150637. https://doi.org/10.1016/j.brainres.2026.150637

2026

Jetter, C., He, C., Tu, A. S., **Starrett, M. J.**, Chrastil, E. R., & Hegarty, M. (2026). Map-based navigation: Individual differences in perspective taking and path integration. *Neuropsychologia*, *229*, 109476. https://doi.org/10.1016/j.neuropsychologia.2026.109476

Chi, L.*§, **Starrett, M. J.***, Rao, Y.§, & Chrastil, E. R. (2026). Graph properties drive navigational selection between equidistant routes. *Neuropsychologia, 221*, 109310. https://doi.org/10.1016/j.neuropsychologia.2025.109310

Sabharwal-Siddiqi, S., McAvan, A. S., Robinson, E. M., **Starrett, M.**, Garren, J. D., Zheng, J., Grilli, M. D., Isham, E. A., & Ekstrom, A. D. (2026). Naturalistic movements enrich episodic memories but not their spatiotemporal structure. *Cognition, 267*, 106358. https://doi.org/10.1016/j.cognition.2025.106358

2025

Huffman, D. J., Annes, P. J., Yumurtaci, S., **Starrett Ambrose, M. J.**, & Shakya, A. (2025). Another Brick in the wall? A null effect of boundaries on spatial memory judgments in a novel, highly immersive, first-person object-placement task. *Proceedings of the annual meeting of the Cognitive Science Society, 47*. https://escholarship.org/uc/item/6d11q44r

2023

Alexander, A. S.*, Place, R.*, **Starrett, M. J.***, Chrastil, E.R.†, & Nitz, D. A.† (2023). Rethinking retrosplenial cortex: Perspectives and predictions. *Neuron, 111*(2), 150-175. https://doi.org/10.1016/j.neuron.2022.11.006

Doner, S., Zheng, J., McAvan, A. S., **Starrett, M. J.**, Campbell, H., Sanders, D., & Ekstrom, A. D. (2023). Evidence for flexible navigation strategies during spatial learning involving path choices. *Spatial Cognition and Computation, 23*(3), 233-262. https://doi.org/10.1080/13875868.2022.2158090

Starrett, M. J., Huffman, D. J., & Ekstrom, A. D. (2023). Combining egoformative and alloformative cues in a novel tabletop navigation task. *Psychological Research, 87*, 1644-1664. https://doi.org/10.1007/s00426-022-01739-y

2021 **Starrett, M. J.**, McAvan, A. S., Huffman, D. J., Stokes, J. D., Kyle, C. T., Smuda, D. N., Kolarik, B. S., Laczko, J., & Ekstrom, A. D. (2021). Landmarks: A solution for spatial navigation and memory experiments in virtual reality. *Behavior Research Methods, 53*(3), 1046-1059. https://doi.org/10.3758/s13428-020-01481-6

Sheldon, A. D., Saad, E., Sahan, M. I., Meyering, E., **Starrett, M. J.**, LaRocque, J. J., Rose, N. S., & Postle, B. R. (2021). Attention biases competition for visual representation via enhancement of targets and inhibition of nontargets. *Journal of Cognitive Neuroscience,* 1-17. https://doi.org/10.1162/jocn_a_01672

2020 Hejtmanek, L., **Starrett, M. J.**, Ferrer, E., & Ekstrom, A. D. (2020). How much of what we learn in virtual reality transfers to real-world navigation? *Multisensory Research, 33*(4-5), 479-503. https://doi.org/10.1163/22134808-20201445

2019 **Starrett, M. J.**, Stokes, J. D., Huffman, D. J., Ferrer, E., & Ekstrom, A. D. (2019). Learning-dependent evolution of spatial representations in large-scale virtual environments. *Journal of Experimental Psychology: Learning, Memory, and Cognition, 45*(3), 497-514. https://doi.org/10.1037/xlm0000597

2018 Preciado, C. E.[§], **Starrett, M. J.**, & Ekstrom, A. D. (2018). Assessment of a short, focused training to reduce symptoms of cybersickness. *PRESENCE: Virtual and Augmented Reality, 27*(4), 361-377. https://doi.org/10.1162/pres_a_00335

Liang, M., **Starrett, M. J.**, & Ekstrom, A. D. (2018). Dissociation of frontal-midline delta-theta and posterior alpha oscillations: A mobile EEG study. *Psychophysiology, 55*(9), e13090. https://doi.org/10.1111/psyp.13090

Starrett, M. J., & Ekstrom, A. D. (2018). Perspective: Assessing the flexible acquisition, integration, and deployment of human spatial representations and information. *Frontiers in Human Neuroscience, 12*, 281. https://doi.org/10.3389/fnhum.2018.00281

Gosseries, O., Yu, Q., LaRocque, J. J., **Starrett, M. J.**, Rose, N. S., Cowan, N., & Postle, B. R. (2018). Parietal-occipital interactions underlying control- and representation-related processes in working memory for nonspatial visual features. *Journal of Neuroscience, 38*(18), 4357-4366. https://doi.org/10.1523/JNEUROSCI.2747-17.2018

2017 Ekstrom, A. D., Huffman, D. J., & **Starrett, M.** (2017). Interacting networks of brain regions underlie human spatial navigation: A review and novel synthesis of the literature. *Journal of Neurophysiology, 188*(6), 3328-3344. https://doi.org/10.1152/jn.00531.2017

2016 Rose, N. S., LaRocque, J. J., Riggall, A. C., Gosseries, O., **Starrett, M. J.**, Meyering, E. E., & Postle, B. R. (2016). Reactivation of latent working memories with transcranial magnetic stimulation. *Science, 354*(6316), 1136-1139. https://doi.org/10.1126/science.aah7011

2015 LaRocque, J. J., Eichenbaum, A. S.*, **Starrett, M. J.***, Rose, N. S., Emrich, S. M., & Postle, B. R. (2015). The short- and long-term fates of memory items retained outside the focus of attention [Special issue]. *Memory and Cognition, 43*(3), 453-468. https://doi.org/10.3758/s13421-014-0486-y

Manuscripts in Progress

In prep **Starrett, M. J.**, Koslov, S. R.*, Herrera, E.*, Steel, A.*, Barnett, A. J., Braga, R. M., Epstein, R. A., Heilbronner, S. R., & Chrastil, E. R. Building Consensus about Human Posterior Medial Cortex.

Starrett, M. J., Cheng, Y., Davis, R. C., Stark, C. E. L., & Chrastil, E. R. Egocentric and allocentric relational processing in the human brain. [Preregistration of multivariate analyses: https://osf.io/bf69h].

Preregistrations Tu, A. S., Krohn, N. A., Hatamian, N., **Starrett, M. J.**, Karpinska, M., Hegarty, M., & Chrastil, E. R. Uncovering the neural basis for two path integration homing tasks: Triangle completion and loop closure. [https://osf.io/47w2m]

Le, T.[§], Puthusseryppady, V., **Starrett, M. J.**, & Chrastil, E. R. Reinforcement learning in the acquisition of spatial graph knowledge: The impact of making explicit predictions on active and passive navigation. [Preregistration: https://osf.io/9rhz8].

Chrastil, E. R., He, C., Tu, A. S., Munns, M.E., Hatamian N., **Starrett, M. J.**, Rashidi, F., Stark, C. E. L., Krichmar, J. L., & Hegarty, M. (2025). Individual differences in human navigation ability: Representations, predictors, and strategies. [Preregistration: https://osf.io/y4zrp].

ACADEMIC HONORS, AWARDS, AND FELLOWSHIPS

07/2025 – 06/2027 **Loan Repayment Program Award**
NIH L70-NS145340 *(Role: PI; amount: $26,675)*
National Institute of Neurological Disorders and Stroke
"Updating models of human retrosplenial function"

05/2023 – 04/2025 **Kirschstein Postdoctoral National Research Service Award**

NIH F32-NS129626 *(Role: PI; direct costs: $152,688)*
National Institute of Neurological Disorders and Stroke
"Challenging classical theories in spatial cognition: Contrasting translator and comparator models of human retrosplenial function"

2022 **CNLM Roger W. Russell Award** ($1000)
University of California, Irvine

01/2022 – 12/2022 **Kirschstein Institutional National Research Service Award**
NIH T32-AG073088 *(Role: Trainee; stipend: $63,760)*
National Institute on Aging
"Training in Translational ADRD [Alzheimer's Disease and Related Dementias] Neuroscience (TITAN)"

2017 **Psychology Prof. Dev. Travel Fellowship** ($500)
University of California, Davis

2016 **Duke's Travel Award** ($500)
University of California, Davis

2015 **Psychology Department Fellowship** ($18,167)
University of California, Davis

08/2010 – 05/2011 **Undergraduate Research Scholar Award** ($500)
University of Wisconsin-Madison

PRESENTATIONS

Invited Talks

03/11/2026 Department of Cognitive Sciences; University of California, Irvine. Irvine, CA, United States.

02/18/2026 Department of Psychology; University of Nevada, Reno. Reno, NV, United States

10/28/2022 Department of Psychological and Brain Sciences; University of California, Santa Barbara. Santa Barbara, CA, United States.

Talks at Scientific Meetings

2026 **Starrett, M. J.**, Koslov, S. R., Herrera, E., Steel, A., Barnett, A. J., Epstein, R. A., Braga, R. M., Heilbronner, S. R., Foster, B. L., & Chrastil, E. R. (2026, April 9-10). *What is the posteromedial cortex and what does it do?* [Data Blitz]. UC Irvine Center for the Neurobiology of Learning and Memory Spring Meeting. Irvine, CA, United States.

2024 **Starrett Ambrose, M. J.**, Cheng, Y., Davis, R. C., & Chrastil, E. R. (2024, June 17-21). *Egocentric and allocentric relational processing in the human brain* [Data Blitz]. 5th Interdisciplinary Navigation Symposium, Merano, BZ, Italy.

2017 **Starrett, M. J.**, Stokes, J. D., & Ekstrom, A. D. (2017, August 3-7). *Dynamic evolution of spatial representations during free ambulation of novel large-scale virtual environments* [Conference session]. Cognitive Science Association for Interdisciplinary Learning Annual Meeting, Hood River, OR, United States.

2015 Saad, E., **Starrett, M. J.**, LaRocque, J. J., Rose, N. S., & Postle, B. R. (2015, October 17-21). Multivariate assessment of biased competition in human visual attention. In C. Gray (Chair), *Assessment and Modulation of Human Working Memory* [Nanosymposium]. Society for Neuroscience Annual Meeting, Chicago, IL, United States.

2014 Riggall, A. C., Rose, N. S., **Starrett, M. J.**, & Postle, B. R. (2014, November 15-19). Frontoparietal contributions to the short-term retention of motion and color. In A. C. Nobre (Chair) *Working Memory* [Nanosymposium]. Society for Neuroscience Annual Meeting, Washington, DC, United States.

Posters at Scientific Meetings

2026 **Starrett, M. J.**, Stark, C. E. L., & Chrastil, E. R. (2026, November 14-18). Neural correlates of trial-by-trial reference frame switching during spatial memory recall [Poster presentation]. Society for Neuroscience Annual Meeting, Washington, DC, United States.

Tu, A. S., **Starrett, M. J.**, Karpinska, M., Stark, C. E. L., Hegarty, M., & Chrastil, E. R. (2026, November 14-18). Distinct navigation strategies and entorhinal correlates of human path integration in immersive virtual reality [Poster presentation]. Society for Neuroscience Annual Meeting, Washington, DC, United States.

Starrett, M. J., Stark, C. E. L., & Chrastil, E. R. (2026, July 6-10). Switching to an allocentric spatial reference frame incurs distinct cognitive processing costs [Poster presentation]. 6th Interdisciplinary Navigation Symposium. Banff, AB, Canada.

2025 **Starrett, M. J.**, Stark, C. E. L., & Chrastil, E. R. (2025, November 15-19). Increased processing time preserves spatial information across reference frames: The role of posterior medial cortex [Poster presentation]. Society for Neuroscience Annual Meeting, San Diego, CA, United States.

Chrastil, E. R., **Starrett Ambrose, M. J.**, Koslov, S. R., Herrera, E., Steel, A., Barnett, A. J., Braga, R. M., Epstein, R. A., Foster, B. L., & Heilbronner, S. R. (2025, November 15-19). Building consensus about human posterior medial cortex [Poster presentation]. Society for Neuroscience Annual Meeting, San Diego, CA, United States.

Tu, A. S., Krohn, N. A., **Starrett Ambrose, M. J.**, Karpinska, M., Stark, C. E. L., Hegarty, M., & Chrastil, E. R. (2025, November 15-19). Distinct navigation strategies and entorhinal correlates of human path integration in immersive virtual reality [Poster presentation]. Society for Neuroscience Annual Meeting, San Diego, CA, United States.

Krohn, N, Rashidi, M., Illeck, C., Hendi, T., Tu, A. S., **Starrett Ambrose, M. J.**, He, C., Stark, C. E., & Chrastil, E. R. (2025, November 15-19). Hippocampus gray matter volume and human navigation: exploring differences in navigational performance and abilities [Poster presentation]. Society for Neuroscience Annual Meeting, San Diego, CA, United States.

Starrett Ambrose, M. J., Cheng, L., Davis, R. C., Stark, C. E., & Chrastil, E. R. (2025, March 29-April 1). *Abstract Relational Distance Coding in the Human Brain* [Poster presentation]. Cognitive Neuroscience Society Annual meeting, Boston, MA, United States.

Tu, A. S., **Starrett Ambrose, M. J.**, Karpinska, M., Hegarty, M., & Chrastil, E. R. (2025, March 29-April 1). *Uncovering the neural basis for two path integration homing tasks: Triangle Completion and Loop Closure* [Poster presentation]. Cognitive Neuroscience Society Annual meeting, Boston, MA, United States.

2024

Le, T.[§], Puthusseryppady, V., **Starrett Ambrose, M. J.**, & Chrastil, E. R. (2024, November 21-24). *Reinforcement Learning for Spatial Graph Knowledge through Explicit Predictions during Active versus Passive Exploration* [Poster presentation]. Psychonomic Society Annual Meeting, New York, NY, United States.

Tu, A. S., **Starrett Ambrose, M. J.**, Karpinska, M., Hegarty, M., & Chrastil, E. R. (2024, November 21-24). *The Role of Working Memory Ability on Path Integration Performance* [Poster presentation]. Psychonomic Society Annual Meeting, New York, NY, United States.

Tu, A. S., **Starrett Ambrose, M. J.**, Karpinska, M., Hegarty, M., & Chrastil, E. R. (2024, June 17-21). *Evaluating the relationship between path integration tasks: Triangle completion and loop closure* [Poster presentation]. 5th Interdisciplinary Navigation Symposium, Merano, BZ, Italy.

2023

Starrett Ambrose, M. J., Cheng, L., Davis, R. C., Tranquada-Torres, B., & Chrastil, E. R. (2023, November 11-15). *Brain networks supporting egocentric and allocentric relational processing* [Poster presentation]. Society for Neuroscience Annual meeting, Washington, DC, United States.

Chi, L.[§], **Starrett Ambrose, M. J.**, Rao, Y., & Chrastil, E. R. (2023, November 16-19). *Labelled graphs in navigation behavior and route choice* [Poster presentation]. Psychonomic Society Annual Meeting, San Francisco, CA, United States.

Tu, A. S., **Starrett Ambrose, M. J.**, Karpinska, M., Hegarty, M., & Chrastil, E. R. (2023, November 16-19). *Evaluating consistency in path integration measures: Triangle Completion and Loop Closure* [Poster presentation]. Psychonomic Society Annual Meeting, San Francisco, CA, United States.

Starrett Ambrose, M. J., Cheng, Y., Davis, R. C., Tranquada-Torres, B., & Chrastil, E. R. (2023, April 26-30). *Domain generality and specificity across egocentric and allocentric distance ratings* [Poster presentation]. 2023 International Conference on Learning and Memory, Huntington Beach, CA, United States.

Le, T.[§], **Starrett Ambrose, M. J.**, Puthusseryppady, V., & Chrastil, E. R. (2023, April 26-30). *The impact of making predictions when learning during active and passive navigation* [Poster presentation]. 2023 International Conference on Learning and Memory, Huntington Beach, CA, United States.

Chi, L.[§], Rao, Y., **Starrett Ambrose, M. J.**, & Chrastil, E. R. (2023, April 26-30). *The influence of labeled graphs, turns, and environmental properties on navigational behavior* [Poster presentation]. 2023 International Conference on Learning and Memory, Huntington Beach, CA, United States.

Krohn, N. A., Cossio, D., **Starrett Ambrose, M. J.**, Stark, C. E., Hegarty, M., & Chrastil, E. R. (2023, April 26-30). *Microstructural properties of the hippocampus and individual differences in path integration ability in humans* [Poster presentation]. 2023 International Conference on Learning and Memory, Huntington Beach, CA, United States.

2022

Starrett Ambrose, M. J., Cheng, L., Davis, R. C., Tranquada-Torres, B., & Chrastil, E. R. (2022, November 12-16). *Domain generality and specificity across egocentric and allocentric distance ratings* [Poster presentation]. Society for Neuroscience Annual Meeting, San Diego, CA, United States.

Doner, S. G., Zheng, J., McAvan, A. S., **Starrett, M. J.**, Campbell, H., Sanders, D., & Ekstrom, A. D. (2022, November 12-16). *Evidence for flexible navigation strategies during spatial learning involving path choices* [Poster presentation]. Society for Neuroscience Annual Meeting, San Diego, CA, United States.

Robinson, E.M., McAvan, A., **Starrett, M. J.**, Chambers, K., Isham, E. A., & Ekstrom, A. D. (2022, November 12-16). *The intersection of space and time in navigation and episodic memory* [Poster presentation]. Society for Neuroscience Annual Meeting, San Diego, CA, United States.

Starrett Ambrose, M. J., Rao, Y., Chi, L., Abarham, A., & Chrastil, E. R. (2022, June 14-16). *Graph properties influence route selection for equidistant paths* [Poster presentation]. 4th Interdisciplinary Navigation Symposium, online.

2021 **Starrett, M. J.**, Huffman, D. J., & Ekstrom, A. D. (2021, January 11-13). *Spatial learning through interaction: A hybrid "route" to a cognitive map* [Poster presentation]. Society for Neuroscience Global Connectome: A Virtual Event.

2019 Du, Y., **Starrett, M. J.**, & Ekstrom, A. D. (2019, November 14-17). *Asymmetrical influence of visual gain changes on spatial representations during navigation* [Poster presention]. Psychonomic Society Annual Meeting, Montreal, QC, Canada.

2018 Liang, M., **Starrett, M. J.**, & Ekstrom, A. D. (2018, November). *Do frontal human cortical theta oscillations during free ambulation code spatial distance, temporal interval, or both?* [Poster presentation]. Society for Neuroscience Annual Meeting, San Diego, CA, United States.

2017 Liang, M., **Starrett, M.**, & Ekstrom, A. D. (2017, November 10-15). *Frontal midline theta oscillations increase with ambulation in virtual environments, while posterior alpha oscillations increase with rest* [Poster presentation]. Society for Neuroscience Annual Meeting, Washington, D. C., United States.

2016 **Starrett, M. J.**, Stokes, J. D., Kreylos, O., & Ekstrom, A. D. (2016, November 12-16). *Navigation in virtual reality with vestibular and proprioceptive input diminishes orientation-dependent spatial representations* [Poster presentation]. Society for Neuroscience Annual Meeting, San Diego, CA, United States.

Starrett, M. J., Stokes, J. D., & Ekstrom, A. D. (2016, August 2-5). *Vestibular and proprioceptive contributions to human spatial learning and memory during free-navigation of virtual reality environments* [Poster presentation]. Spatial Cognition 2016, Philadelphia, PA, United States.

Starrett, M. J., Stokes, J. D., & Ekstrom, A. D. (2016, May 17-18). *Vestibular and proprioceptive contributions to human spatial learning and memory during free-navigation of virtual reality environments* [Poster presentation]. Experiential Technology & Neurogaming Conference and Expo, San Francisco, CA, United States.

Rose, N. S., LaRocque, J. J., Riggall, A. C., Gosseries, O., **Starrett, M. J.**, & Postle, B. R. (2016, April 2-5). *Can transcranial magnetic stimulation bring passively retained items in short-term memory back into focal attention?* [Poster presention]. Cognitive Neuroscience Society Annual Meeting, New York, NY, United States.

Starrett, M. J., Stokes, J. D., & Ekstrom, A. D. (2016, March 4). *Head- and body- based information contribute to immersive experience during virtual reality navigation* [Poster presentation]. Northern California Consciousness Meeting, Davis, CA, United States.

2015

Starrett, M. J., Gosseries, O., LaRocque, J. J., Saad, E., Cowan, N., & Postle, B. R. (2015, October 17-21). *Delay-period activity of the parietal cortex depends on working memory load, not interference representations* [Poster presentation]. Society for Neuroscience Annual Meeting, Chicago, IL, United States.

Starrett, M. J., Rose, N. S., Riggall, A. C., Samaha, J., & Postle, B. R. (2015, March 28-31). *EEG and behavioral effects of delay-period rTMS* [Poster presentation]. Cognitive Neuroscience Society Annual Meeting, San Francisco, CA, United States.

2014

Starrett, M. J., Rose, N. S., Riggall, A. C., & Postle, B. R. (2014, November 15-19). *Behavioral and EEG effects of rTMS on recall of items inside versus outside the focus of attention representations* [Poster presentation]. Society for Neuroscience Annual Meeting, Washington, DC, United States.

Gosseries, O., LaRocque, J. J., Riggall, A. C., **Starrett, M. J.**, & Postle, B. R. (2014, November 15-19). *Theta burst stimulation to MT+ versus IPS: effect on behavioral and neural fidelity in short-term memory* [Poster presentation]. Society for Neuroscience Annual Meeting, Washington, DC, United States.

Starrett, M. J., LaRocque, J. J., Rose N. S., & Postle, B. R. (2014, April 5-8). *In short-term memory but outside the focus of attention: A role for long-term memory?* [Poster presentation]. Cognitive Neuroscience Society Annual Meeting, Boston, MA, United States.

Gosseries, O., LaRocque, J. J., Riggall, A. C., **Starrett, M. J.**, & Postle, B.R. (2014, April 5-8). *Effect of theta burst stimulation on visual representation during a short-term memory task* [Poster presentation]. Cognitive Neuroscience Society Annual Meeting, Boston, MA, United States.

TEACHING EXPERIENCE

University of Nevada, Reno

Instructor of Record **PSY 446: Human Neuropsychology** (Fall 2026)

University of California, Irvine

Senior Peer Reviewer **NIH Fellowship Writing Skills** (Spr. 2023, Spr. 2024), *David Fruman, Ph.D. & Harinder Singh, Ph.D.*

University of California, Davis

Guest Lecturer	**Cognitive Neuroscience** (Fall 2017), *Arne Ekstrom, Ph.D.* **Intro to Cog Psychol** (Sum. 2016), *Branden Kolarik*
Teaching Assistant	**Cognitive Neuroscience** (Fall 2017), *Arne Ekstrom, Ph.D.* **Adv Cog Neurosci** (Spr. 2017), *Arne Ekstrom, Ph.D.* **Intro to Cog Psychol** (Sum. 2016), *Branden Kolarik* **Development of Memory** (Spr. 2016), *Simona Ghetti, Ph.D.* **General Psychology** (Win. 2016), *Erin Freed*

University of Wisconsin-Madison

Meeting Facilitator	**Cog Neurosci of Working Mem** (2012-15), *Brad Postle, Ph.D.*

MENTORING EXPERIENCE

University of Nevada, Reno

Doctoral Students	Autumn Heflin, *Cognitive and Brain Sciences* (2026 – present)

University of California, Irvine

Undergraduate	Campuswide Honors Collegium *Daniel Marin* Undergraduate Research Opportunities Program *Komal Joshi, Jasmine Benepal, Taylor Le, Luke Chi, & Yiwen "Vicky" Rao* Learning-Aligned Employment Program (LAEP) *Tina Hendi* Undergraduate Excellence in Research *Luke Chi*
High School	AP Research – STEM, Thousand Oaks High School *1 student*

University of Arizona

Peer (graduate)	Professional Development Committee (Psych) Mentorship Program *Patricia Chilton*

University of California, Davis

Undergraduate	Mentor-Mentee Program in Humanities, Arts, Cultural Studies, and Social Sciences *Victoria Rubio* Mentorships for Undergraduate Research in Agriculture, Letters and Science (MURALS) Program *Cristian Preciado*
High School	UC Davis Young Scholar Program *High school summer students (2 total)*

PROFESSIONAL SERVICE

Outreach

2022 **Inclusive Excellence Certificate**
Office of Inclusive Excellence, University of California, Irvine
UCI as a Minority Serving Institution (Fall 2021)
Community Safety (Spring 2022)

2016 **Poster Presenter**
2nd annual Neuroscience Initiative to Enhance Diversity (Apr 21-22)
Center for Neuroscience, Davis, CA

Poster Presenter
Brain Awareness Week Neuroscience Public Seminars (Mar 12)
Center for Neuroscience, Davis, CA.

Organizing

2023 – Present **Posteromedial Cortex and Cognition Group**
Role(s): Steering Committee; Co-founder

2024 **Unity and Virtual Reality for Research Workshop** (Jun 13)
University of California, Irvine; Irvine, CA, United States
Role(s): Organizing Committee; Presenter

2023 – 2024 **Thomas Henry Curtis Colloquium Series**
Center for the Neurobiology of Learning and Memory
University of California, Irvine; Irvine, CA, United States
Role(s): Planning Committee

2023 **International Conference on Learning and Memory** (Apr 26-30)
Huntington Beach, CA, United States
Role(s): Scientific Review Committee

2018 **UC Davis 3D Imaging and Visualization Conference** (Jan 22-23)
University of California, Davis; Davis, CA, United States
Role(s): Organizing Committee

Professional Development

2024 **Effective Mentoring Program Certificate** (CIMER Model)
Institute for Clinical and Translational Science and Graduate Professional Success in STEM (GPS-STEM) Program
University of California, Irvine

2024 **Preparing for Faculty Careers Certificate**
Graduate and Postdoctoral Scholar Resource Center
University of California, Irvine

Affiliations

2014 – Present **Society for Neuroscience**, *member*

2013 – Present **Cognitive Neuroscience Society**, *member*

Ad hoc reviewing

Behavior Research Methods • *Cognition* • *Cognitive Processing* • *Cognitive Research: Principles and Implications* • *Computers in Human Behavior* • *Current Biology* • *Experimental Aging Research* • *Hippocampus* • *Imaging Neuroscience* • *Journal of Cognitive Neuroscience* • *Journal of Experimental Psychology: General* • *Journal of Experimental Psychology: Human Perception and Performance* • *Memory and Cognition* • *Nature Communications* • *NeuroImage* • *Neuropsychologia* • *PLOS Computational Biology* • *PLOS One* • *Psychological Research* • *Psychology of Popular Media* • *Scientific Reports* • *Spatial Cognition and Computation* • *Transactions on Applied Perception* • *Virtual Reality*

TECHNICAL SKILLS AND EXPERIENCE

Methods

Magnetic resonance imaging (MRI), electroencephalography (EEG), virtual reality (VR), transcranial magnetic stimulation (TMS)

Programming

C#, *R*, Python, bash, MATLAB, some C++

Software

Unity 3D, AFNI, FSL, Nilearn, MRIQC, fMRIPrep, MATLAB, Fieldtrip, EEGLAB, E-Prime, MPlus, SPSS, VS Code, R-Studio, Jupyter, Git, Singularity/Apptainer