

Nanthia Suthana, Ph.D.

nanthia.suthana@duke.edu

suthanalab.com

(919) 681-2577

EDUCATION: 2005 B.S. Honors (Neuroscience), UCLA
2009 Ph.D. (Neuroscience), UCLA

PROFESSIONAL EXPERIENCE:

Present Positions

Professor (tenured), Depts. of Neurosurgery, Biomedical Engineering, Duke University 2025 – present

Previous Positions

Associate Professor-in-Residence, Dept. of Psychiatry & Biobehavioral Sciences, 2021 - 2025
Dept. Neurosurgery / Psychology / Bioengineering, UCLA

Associate Director, Neuromodulation Division, Semel Institute of Neuroscience 2015 - 2025
and Human Behavior, UCLA

Associate Director for Neuroscience Outreach, Brain Research Institute, UCLA 2016 - 2025

Assistant Professor-in-Residence, Dept. of Psychiatry & Biobehavioral Sciences, 2015 - 2021
Dept. Neurosurgery / Psychology / Bioengineering, UCLA

Assistant Researcher, Department of Neurosurgery, UCLA 2013 - 2015

Lecturer, Department of Psychology, UCLA 2013 - 2014

Postdoctoral Scholar, Dept. of Neurosurgery, PI: Itzhak Fried, UCLA 2009 - 2012

Graduate Student Researcher, Neuroscience Interdepartmental Ph.D. Program, 2005 - 2009
PIs: Susan Bookheimer and Barbara Knowlton, UCLA

HONORS & SPECIAL AWARDS:

UCLA DGSOM W. M. Keck Foundation Junior Faculty Award 2020

UCLA Postdoctoral Scholar Mentoring Award 2019

McKnight Technological Innovations in Neuroscience Award 2019

European Journal of Neuroscience Young Investigator Award Lecture, 2019
Neuromodulation Symposium, Del Monte Institute for Neuroscience

Ruth and Raymond Stotter Term Chair, Department of Neurosurgery, UCLA 2016

Excellence in Translational Research Award, Department of Neurosurgery, UCLA 2015

Joseph Drown Friends Scholar Award, Friends of the Semel Institute of 2015
Neuroscience and Human Behavior, UCLA

PUBLICATIONS:

Seeber M., Stangl M., Martelo M.V., Topalovic U., Hiller S., Halpern C.H., Langevin J.P., Rao, V.R., Fried I., Eliashiv D., **Suthana N.** (2025) Human neural dynamics of real-world and imagined navigation. Nature Human Behavior. 9:781-793. [[link](#)]

Gill, J. L., Omidbeigi, M., Ryu, J., **Suthana, N.**, Kao, J., Bari, A. (2025). Multiregional representations of intertemporal decision making in human single neurons. Scientific Reports, 15(1), 24406. [[link](#)]

Leuchter, M., Oughli, H., Durbin, K., Jackson, N., Elashoff, D., Chang, T., Corlier, J., Ngo, D., Matthews, C., Wong, D., Fogel, B., Bitan, G., Leuchter, A., Vossel, K., **Suthana, N.** (2025). Broad repetitive

Suthana C.V. - 1

transcranial magnetic stimulation (rTMS) of the precuneus in Alzheimer's Disease: a rationale and study design The American Journal of Geriatric Psychiatry, 33(10, Supplement), S82. [\[link\]](#)

- Ma, L., Yosef, B., Talu, I., Batista, D., Jenkins-Drake, E., **Suthana, N.**, Cross, K. (2025). Effects of virtual reality on spatiotemporal gait parameters and freezing of gait in Parkinson's disease. npj Parkinson's Disease, 11(1), 148. [\[link\]](#)
- Nho, Y.-H.*, Rolle, C.E.*, Topalovic, U., Shivacharan, R.S., Cunningham, T., Hiller, S., Batista, D., Feng, A., Epsil, F., Kratter, I., Bhati, M., Kellogg, M., Raslan, A.M., Williams, N.R., Garnett, J., Pesaran, B., Oathes, D.J., **Suthana, N.**, Barbosa, D.A.N.**., Halpern, C.H.**. (2024) Responsive deep brain stimulation guided by nucleus accumbens-ventral pallidal electrophysiology of obsession durably ameliorates compulsion. Neuron. 112:73-83. *Co-first authorship, **Co-senior authorship. [\[link\]](#)
- Maoz, S.L., Stangl, M., Topalovic, U., Batista, D., Hiller, S., Aghajan, Z., Knowlton, B., Langevin, J.P., Fried, I., Eliashiv, D., **Suthana, N.** (2023) Dynamic neural representations of memory and space during human ambulatory navigation. Nature Communications. 14:6643. [\[link\]](#)
- Gill, J.*, Schneiders, J.A.*, Stangl, M., Aghajan, Z.M., Villaroman, Hiller, S., Topalovic, U., Martelo, M.V., Inman, C.S., Villaroman, D., D., Bari, A., Adhikari, A., Rao, V., Faselow, M.G., Craske, M., Krah, S., Chen, J., Vick, M., Hasulak, N., Kao, J., Koek, R.J., **Suthana, N.****, Langevin, J.P.**. (2023) Closed-loop neuromodulation for treatment-resistant post-traumatic stress disorder. Nature Communications. 14:2997. *Co-first authorship, **Co-senior authorship. [\[link\]](#)
- Stangl, M., Maoz, S.L., **Suthana, N.** (2023) Mobile Cognition: Studying the human brain in the 'real world'. Nature Reviews Neuroscience. Perspective, 24:347-362. [\[link\]](#)
- Topalovic U., Barclay, S., Ling, Chenkai, Alzuhair, A., Yu, W., Hokhikyan, V., Chandrakumar, H., Rozgic, D., Jiang, W., Basir-Kazeruni, S., Maoz, S.L., Inman, C., Bari, A., Fallah, A., Eliashiv, D., Fried, I., **Suthana, N.***, Markovic, D.* (2023) A wearable platform for closed-loop stimulation and recording of single-neuron and local field potential activity in freely-moving humans. Nature Neuroscience, 26:517-27. *Co-senior authorship. [\[link\]](#)
- Feinsinger, A., Pouratian, N., Ebadi, H., Adolphs, R., Andersen, R., Beauchamp, M.S., Chang, E.F., Crone, N.E., Collinger, J.L., Fried I., Mamelak, A., Richardson, M., Rutishauser, U., Sheth, S.A., **Suthana, N.**, Tandon, N., Yoshor, D. (2022) NIH Research Opportunities in Humans Consortium. Ethical commitments, principles, and practices guiding intracranial neuroscientific research in humans. Neuron. 110:188-194. PMID: 35051364. [\[link\]](#)
- Mobbs, D., Wise, T., **Suthana, N.**, Guzmán, N., Kriegeskorte, N., Leibo, J. Promises and Challenges of Human Computational Ethology. Perspective. (2021) Neuron. 109:2224-2238. PMID: 34143951 [\[link\]](#)
- Stangl, M., Topalovic, U., Inman, C., Hiller, S., Hasulak, N., Rao, V., Halpern, C., Fried, I., **Suthana, N.** (2021) Boundary-anchored neural mechanisms of location-encoding for self and others. Nature, 589:420-425. PMID: 33361808 [\[link\]](#)
- Mankin, E.A.*, Aghajan, Z.*, Schuette, P.*, Tran M., Tchemodanov, N., Titiz, A.S., Kalender, G., Eliashiv, D., Stern, J., Weiss, S.A., Kirsch, D., Knowlton, B., Fried, I.**., **Suthana, N.**** (2021) Stimulation of right entorhinal white matter enhances visual memory encoding in humans. *Co-first authorship. *Co-senior authorship. Brain Stimulation, 14, 131-40. PMID: 33279717 [\[link\]](#)
- Topalovic, U., Aghajan, Z.M., Villaroman, D., Hiller, S., Christov-Moore, L., Wishard, T., Stangl, M., Hasulak, N., Inman, C., Fields, T., Eliashiv, D., Fried, I., Rao, V., **Suthana, N.** (2020) Wireless and Programmable Recording and Stimulation of Deep Brain Activity in Freely Moving Humans. Neuron, 108, 322-34. PMID: 32946744 [\[link\]](#)

- Ramirez-Zamora, A., Giordano, J., Gunduz, A. Alcantara, J., Nathanael J.C., Cernera, S., Difuntorum, P., Eisinger, R.S., Gomez, J., Long, S., Parks, B., Wong, J.K., Chiu, S., Patel, B., Grill, W.M., Walker, H.C., Little, S.J., Gilron, R., Tinkhauser, R., Thevathasan, W., Nicholas Sinclair, Lozano, A., Tom Foltynie, Fasano, A., Sheth, S., Scangos, K., Sanger, T., Miller, J., Brumback, A.C., Rajasethupathy, P., McIntyre, C., Schlachter, L., **Suthana, N.**, Kubu, C., Sankary, L.R., Herrera-Ferrá, K., Goetz, S., Cheeran, B., Steinke, K.G., Hess, C.W., Almeida, Wissam Deeb, L., Foote, K.D., Okun, M.S. (2020) Proceedings of the Seventh Annual Deep Brain Stimulation Think Tank: Advances in Neurophysiology, Adaptive DBS, Virtual Reality, Neuroethics and Technology. Frontiers in Human Neuroscience, Perspective. 14:54. PMID32292333 [[link](#)]
- Olsen, R.K., Carr, V.A., Daugherty, A.M., La Joie, R., Amaral, R.S.C., Amunts, K., Augustinack, J.C., Bakker, A., Berron, D., Boccardi, M., Bocchetta, M., Burggren, A., Chakravarty, M.M., Chetelat, de Flores, R., DeKraker, J., Ding, S.-L., Geerlings, M., Huang, Y., Johnson, E., Insausti, R., Kanel, P., Kedo, O., Kennedy, K.M., Keresztes, A., Lee, J.K., Lindenberger, U., Mueller, S.G., Mulligan, E.M., Ofen, N., Palombo, D.J., Pasquini, L., Pluta, J.B., Raz, N., Rodrigue, K.M., Schlichting, M.L., Shing, Y.L., Stark, C.E.L., Steve, T.A., **Suthana, N.**, Wang, L., Werkle-Bergner, M., Yushkevich, P.A., and Wisse, L.E.M. (2019). Progress Update from the Hippocampal Subfields Group. Alzheimers Dement (Amst). 11:439-449. PMID31245529. [[link](#)]
- Saravanapandian, V., Sparck, E.M., Cheng, K.Y., Yu, F., Yaeger, C., Hu, T., **Suthana, N.**, Romero-Calderón, R., Ghiani, C.A., Evans, C.J., Carpenter, E.M., Ge, W. (2019) Quantitative Assessments Reveal Improved Neuroscience Engagement and Learning through Outreach. Journal of Neuroscience Research. 97(9):1153-1162. PMID30985023. [[link](#)]
- Ralph-Nearman, C., Arevian, A., Puhl, M., Kumar, R., Villaroman, D., **Suthana, N.**, Feusner, J.D., Khalsa, S.S. (2019) Somatmap: A novel mobile tool assessing body image perception reveals differences between fashion models and non-models. Journal of Medical Internet Resarch Mental Health. PMID31469647. [[link](#)]
- Suthana, N.**, Aghajan, Z.M., Mankin, E.A., Lin, A. (2018) Reporting guidelines and issues to consider for using intracranial brain stimulation in studies of human declarative memory. Frontiers in Neuroscience, Mini-review, 4:12:905. PMID30564089 [[link](#)]
- Reggente, N., Essoe, J.K., M. Aghajan, Z., Tavakoli, A.V., McGuire, J.F., **Suthana, N.**, Rissman, J. (2018) Enhancing the ecological validity of fMRI memory research using virtual reality. Frontiers in Neuroscience, Mini-review, 15:12:408. PMID29962932 [[link](#)]
- Titiz, A.S.*, Hill, M.R.H.*, Mankin, E.A.*, M.Aghajan, Z., Eliashiv, D., Tchemodanov, N., Maoz, U., Stern, J., Tran, M.E., Schuette, P., Behnke, E., **Suthana, N.****, and Fried, I.** (2017) Theta-burst microstimulation in the human entorhinal area improves memory specificity. eLife, 6 PMC5655155. *Co-first authorship. ** Co-senior authorship. [[link](#)]
- Nir, Y., Andrillon, T., Marmelshtein, A., **Suthana, N.**, Cirelli, C., Tononi, G., and Fried, I. (2017) Selective neuronal lapses precede human cognitive lapses following sleep deprivation. Nature Medicine, 23:1474-1480. PMC5720899. [[link](#)]
- Aghajan, Z.M., Schuette, P., Fields, T.A., Tran, M.E., Siddiqui, S.M., Hasulak, N.R., Tcheng, T.K., Eliashiv, D., Mankin, E.A., Stern, J., Fried, I., and **Suthana, N.** (2017) Theta Oscillations in the Human Medial Temporal Lobe during Real-World Ambulatory Movement. Current Biology, 27:3743-3751.e3. PMC5937848. [[link](#)]
- Wisse, L.E.M.*, Daugherty, A.M.*, Olsen, R.K., Berron, D., Carr, V.A., Stark, C.E.L., Amaral, R.S.C., Amunts, K., Augustinack, J.C., Bender, A.R., Bernstein, J.D., Boccardi, M., Bocchetta, M., Burggren, A., Chakravarty, M.M., Chupin, M., Ekstrom, A., de Flores, R., Insausti, R., Kanel, P., Kedo, O., Kennedy, K.M., Kerchner, G.A., LaRocque, K.F., Liu, X., Maass, A., Malykhin, N., Mueller, S.G., Ofen, N.,

- Palombo, D.J., Parekh, M.B., Pluta, J.B., Pruessner, J.C., Raz, N., Rodrigue, K.M., Schoemaker, D., Shafer, A.T., Steve, T.A., **Suthana, N.**, Wang, L., Winterburn, J.L., Yassa, M.A., Yushkevich, P.A., and la Joie, R. (2017) A harmonized segmentation protocol for hippocampal and parahippocampal subregions: Why do we need one and what are the key goals? Hippocampus, 27:3-11. PMC5167633. *Co-first authorship. [\[link\]](#)
- Cohen, M.S., Rissman, J., **Suthana, N.**, Castel, A.D., and Knowlton, B.J. (2016) Effects of aging on value-directed modulation of semantic network activity during verbal learning. Neuroimage, 125:1046-1062. PMC4794448. [\[link\]](#)
- Suthana, N.**, Parikshak, N.N., Ekstrom, A.D., Ison, M.J., Knowlton, B.J., Bookheimer, S.Y., and Fried, I. (2015) Specific responses of human hippocampal neurons are associated with better memory. Proceedings of the National Academy of Sciences of the United States of America, 112:10503-8. PMC4547223. [\[link\]](#)
- Suthana, N.**, Donix, M., Wozny, D.R., Bazih, A., Jones, M., Heidemann, R.M., Trampel, R., Ekstrom, A.D., Scharf, M., Knowlton, B., Turner, R., and Bookheimer, S.Y. (2015) High-resolution 7T fMRI of Human Hippocampal Subfields during Associative Learning. Journal of Cognitive Neuroscience, 27:1194-1206. PMC4417053. [\[link\]](#)
- Yushkevich, P.A., Amaral, R.S., Augustinack, J.C., Bender, A.R., Bernstein, J.D., Boccardi, M., Bocchetta, M., Burggren, A.C., Carr, V.A., Chakravarty, M.M., Chetelat, G., Daugherty, A.M., Davachi, L., Ding, S.L., Ekstrom, A., Geerlings, M.I., Hassan, A., Huang, Y., Iglesias, J.E., La Joie, R., Kerchner, G.A., LaRocque, K.F., Libby, L.A., Malykhin, N., Mueller, S.G., Olsen, R.K., Palombo, D.J., Parekh, M.B., Pluta, J.B., Preston, A.R., Pruessner, J.C., Ranganath, C., Raz, N., Schlichting, M.L., Schoemaker, D., Singh, S., Stark, C.E., **Suthana, N.**, Tompary, A., Turowski, M.M., Van Leemput, K., Wagner, A.D., Wang, L., Winterburn, J.L., Wisse, L.E., Yassa, M.A., and Zeineh, M.M. (2015) Quantitative comparison of 21 protocols for labeling hippocampal subfields and parahippocampal subregions in in vivo MRI: towards a harmonized segmentation protocol. Neuroimage, 111:526-41. PMC4387011. [\[link\]](#)
- Miller, J.F., Fried, I., **Suthana, N.**, and Jacobs, J. (2015) Repeating spatial activations in human entorhinal cortex. Current Biology, 25:1080-5. PMC4422049. [\[link\]](#)
- Wagshal, D., Knowlton, B.J., **Suthana, N.**, Cohen, J.R., Poldrack, R.A., Bookheimer, S.Y., Bilder, R.M., and Asarnow, R.F. (2014) Evidence for corticostriatal dysfunction during cognitive skill learning in adolescent siblings of patients with childhood-onset schizophrenia. Schizophrenia Bulletin, 40:1030-9. PMC4133665. [\[link\]](#)
- Suthana, N.**, Fried, I. (2014) Deep Brain Stimulation for Enhancement of Learning and Memory. Neuroimage Review, 85:996-1002, PMID23921099. [\[link\]](#)
- Cohen, M.S., Rissman, J., **Suthana, N.**, Castel, A.D., and Knowlton, B.J. (2014) Value-based modulation of memory encoding involves strategic engagement of fronto-temporal semantic processing regions. Cognitive, Affective and Behavioral Neuroscience, 14:578-92. PMC4074434. [\[link\]](#)
- Jacobs, J., Weidemann, C.T., Miller, J.F., Solway, A., Burke, J.F., Wei, X.-X., **Suthana, N.**, Sperling, M.R., Sharan, A.D., Fried, I., and Kahana, M.J. (2013) Direct recordings of grid-like neuronal activity in human spatial navigation. Nature Neuroscience 16:1188. [\[link\]](#)
- Donix, M., Burggren, A.C., Scharf, M., Marschner, K., **Suthana, N.**, Siddarth, P., Krupa, A.K., Jones, M., Martin-Harris, L., Ercoli, L.M., Miller, K.J., Werner, A., von Kummer, R., Sauer, C., Small, G.W., Holthoff, V.A., and Bookheimer, S.Y. (2013) APOE associated hemispheric asymmetry of entorhinal cortical thickness in aging and Alzheimer's disease. Psychiatry Research, 214:212-20. PMC3851589. [\[link\]](#)
- Staba, R.J., Ekstrom, A.D., **Suthana, N.**, Burggren, A., Fried, I., Engel, J., Jr., and Bookheimer, S.Y. (2012) Gray matter loss correlates with mesial temporal lobe neuronal hyperexcitability inside the human seizure-onset zone. Epilepsia, 53:25-34. PMC3253228. [\[link\]](#)

- Suthana, N.,** Haneef, Z., Stern, J., Mukamel, R., Behnke, E., Knowlton, B., and Fried, I. (2012) Memory Enhancement and Deep-Brain Stimulation of the Entorhinal Area. New England Journal of Medicine, 366:502-510. PMC3447081. [[link](#)]
- Suthana, N.,** Fried, I. (2012) Percepts to recollections: Insight from single neuron recordings in the human brain. Trends in Cognitive Science, Review, 16:427-36, PMID22795560. [[link](#)]
- Kern, K.C., Ekstrom, A.D., **Suthana, N.,** Giesser, B.S., Montag, M., Arshanapalli, A., Bookheimer, S.Y., and Sicotte, N.L. (2012) Fornix damage limits verbal memory functional compensation in multiple sclerosis. Neuroimage, 59:2932-40. PMID22001266. [[link](#)]
- Romero-Calderón, R., O'Hare, E.D., **Suthana, N.,** Scott-Van Zeeland, A.A., Rizk-Jackson, A., Attar, A., Madsen, S.K., Ghiani, C.A., Evans, C.J., and Watson, J.B. (2012) Project brainstorm: using neuroscience to connect college students with local schools. PLoS Biology, 10:e1001310. PMC3328426. [[link](#)]
- Burggren, A.C., Renner, B., Jones, M., Donix, M., **Suthana, N.,** Martin-Harris, L., Ercoli, L.M., Miller, K.J., Siddarth, P., Small, G.W., and Bookheimer, S.Y. (2011) Thickness in entorhinal and subicular cortex predicts episodic memory decline in mild cognitive impairment. International Journal of Alzheimer's Disease, 2011: 956053. PMC3089880. [[link](#)]
- Suthana, N.,** Ekstrom, A., Moshirvaziri, S., Knowlton, B., and Bookheimer, S. (2011) Dissociations within human hippocampal subregions during encoding and retrieval of spatial information. Hippocampus, 21:694-701. PMC3026858. [[link](#)]
- Donix, M., Burggren, A.C., **Suthana, N.,** Siddarth, P., Ekstrom, A.D., Krupa, A.K., Jones, M., Martin-Harris, L., Ercoli, L.M., Miller, K.J., Small, G.W., and Bookheimer, S.Y. (2010) Family history of Alzheimer's disease and hippocampal structure in healthy people. American Journal of Psychiatry, 167:1399-406. PMC3086166. [[link](#)]
- Suthana, N.,** Krupa, A., Donix, M., Burggren, A., Ekstrom, A.D., Jones, M., Ercoli, L.M., Miller, K.J., Siddarth, P., Small, G.W., and Bookheimer, S.Y. (2010) Reduced hippocampal CA2, CA3, and dentate gyrus activity in asymptomatic people at genetic risk for Alzheimer's disease. Neuroimage, 53:1077-84. PMC3260048. [[link](#)]
- Donix, M., Burggren, A.C., **Suthana, N.,** Siddarth, P., Ekstrom, A.D., Krupa, A.K., Jones, M., Rao, A., Martin-Harris, L., Ercoli, L.M., Miller, K.J., Small, G.W., and Bookheimer, S.Y. (2010) Longitudinal changes in medial temporal cortical thickness in normal subjects with the APOE-4 polymorphism. Neuroimage, 53:37-43. PMC3118546. [[link](#)]
- Suthana, N.,** Ekstrom, A.D., Moshirvaziri, S., Knowlton, B., and Bookheimer, S.Y. (2009) Human hippocampal CA1 involvement during allocentric encoding of spatial information. Journal of Neuroscience, 29:10512-9. PMC2873654. [[link](#)]
- Ekstrom, A., **Suthana, N.,** Millett, D., Fried, I., and Bookheimer, S. (2009) Correlation between BOLD fMRI and theta-band local field potentials in the human hippocampal area. Journal of Neurophysiology, 101:2668-78. PMC2681439. [[link](#)]
- Ekstrom, A.D., Bazih, A.J., **Suthana, N.,** Al-Hakim, R., Ogura, K., Zeineh, M., Burggren, A.C., and Bookheimer, S.Y. (2009) Advances in high-resolution imaging and computational unfolding of the human hippocampus. Neuroimage, 47:42-9. PMC2689320. [[link](#)]
- Ekstrom, A., **Suthana, N.,** Behnke, E., Salamon, N., Bookheimer, S., and Fried, I. (2008) High-resolution depth electrode localization and imaging in patients with pharmacologically intractable epilepsy. Journal of Neurosurgery, 108:812-5. PMC2628813. [[link](#)]
- Wang, L.M., **Suthana, N.,** Chaudhury, D., Weaver, D.R., and Colwell, C.S. (2005) Melatonin inhibits hippocampal long-term potentiation. European Journal of Neuroscience, 22:2231-7. PMC2581482. [[link](#)]

Book Chapters

- Suthana, N.**, and Fried, I. (2013) “Navigating our Environment: Insight from single neuron recordings from the human brain” in Chapter 9 of Atoms of Cognition. Probing single neurons in the human brain. Publisher: MIT Press.
- Ezzyat, Y., and **Suthana, N.** (2022) “Brain Stimulation” in Handbook of Human Memory. Publisher: Oxford University Press. In Press.
- Maoz, S., Stangl, M., **Suthana, N.** (2022) “Promises and challenges of mobile iEEG recordings” in Intracranial EEG for Cognitive Neuroscience. Publisher: Springer, STM. In Press.

Traditional media (selected)

- Learning the Language of the Brain*, Duke SOM Magnify Magazine, [\[link\]](#) June 2025
- Clinical trial for PTSD.* [\[link\]](#) October 2023
- Have Neuroscientists found a New Treatment for PTSD? | DEEP LEARNING Ep.4, Chad & JT Go Deep.* [\[link\]](#) September 2023
- Neuro-stack device technology shows promise for future of brain research*, UCLA Daily Bruin. [\[link\]](#) April 2023
- Want to Decode the Human Brain? There’s a New System for That, and It’s Pretty Wild*, Singularity Hub. [\[link\]](#) September 2022
- Lessons from the Stories of Women in Neuroscience*, Women in Neuroscience (WiN). [\[link\]](#) June 2022
- Brain rhythms that help us to detect borders*, Nature. [\[link\]](#) December 2020
- Scientists discover how our brains track where we and others go*, NIH. [\[link\]](#) December 2020
- What Happens in Your Brain When You Make Memories? Scientists are using new tech to decode how our brains remember*, Discover Magazine. [\[link\]](#) June 2020
- Exploring the human brain with virtual reality*, Nature. [\[link\]](#) July 2019
- Getting Curious*, iTunes. [\[link\]](#) September 2018
- How Brain Implants, VR Could Help Treat Diseases Like Alzheimer's*, PCmag. [\[link\]](#) Jan 2018
- Virtual Traveler*, U Magazine. [\[link\]](#) Fall 2018
- Meet the Neuroscience using VR to fight memory loss | How she works*, Mashable. [\[link\]](#) August 2017

RESEARCH GRANTS AND FELLOWSHIPS RECEIVED:

Current Grants

- | | |
|---|-------------------------|
| SFI-AN-NC-SCN-00007276-18, Simons Foundation | 07/01/2025 – 06/30/2030 |
| Simons Collaboration on Ecological Neuroscience (SCENE) | |
| Role: Principal Investigator | |
| NIH R61 MH135106, NIMH | 02/01/2024 – 01/31/2029 |
| Synchronized neuronal and peripheral biomarker recordings in freely moving humans | |
| Role: Principal Investigator | |
| NIH RO1 MH124761, NIMH | 08/01/2021 – 05/31/2026 |

Intracranial neurophysiological signatures of fear and anxiety in humans

Role: **Principal Investigator**

NIH R61 MH135109, NIMH

03/15/2024 – 02/28/2029

Capturing Autobiographical memory formation in People moving Through real-world spaces

Role: **Co-Investigator** (PI: C. Inman)

NIH UO1 NS121472, NINDS

06/01/2021 – 03/31/2026

Mapping Algorithmic State Space in the Human Brain

Role: **Co-Investigator** (PI: S. Sheth)

NIH UH3 NS107673, NINDS

09/30/2019 – 07/31/2026

Responsive Neurostimulation for Post-Traumatic Stress Disorder

Role: **Co-Investigator** (PI: J.P. Langevin)

Completed Grants

NIH UO1 NS117838, NINDS

07/01/2020 – 06/30/2025

Neurostimulation and Recording of Real World Spatial Navigation in Humans

Role: **Principal Investigator**

NIH T32 TNS115753, NINDS

07/01/2020 – 03/30/2025

Training in Neurotechnology Translation

Role: **Co-Principal Investigator** (PIs: N. Suthana, D. Lu, D. Markovic)

NIH RO1 AG068317, NIA

07/01/2020 – 03/30/2025

Network-targeted theta-burst stimulation for episodic memory improvement in MCI

Role: **Co-Principal Investigator** (PIs: N. Suthana, A. Leuchter)

NIH RO1 NS084017, NINDS

09/01/2018 – 08/31/2023

Mechanisms of Memory Enhancement by Deep Brain Stimulation in Humans

Role: **Co-Investigator** (PI: I. Fried)

UCLA DGSOM W. M. Keck Foundation Junior Faculty Award

01/01/2020 – 12/31/2022

Deep Brain Recording and Stimulation of Human Experiences in the Wild

Role: **Principal Investigator**

McKnight Foundation Technological Innovations in Neuroscience

08/01/2019 – 07/31/2022

Wireless and Programmable Recording and Stimulation of Deep Brain Activity in Freely Moving Humans
Immersed in Virtual (or Augmented) Reality

Role: **Principal Investigator**

Zenith Award, ZEN-20-643042, Alzheimer's Association

02/01/2020 – 01/31/2022

Modulation of Hippocampal Circuitry with Focused Ultrasound in MCI

Role: **Co-Investigator** (PI: S. Bookheimer)

NIH UO1 NS103802, NINDS

09/25/2017 – 08/24/2020

Neurostimulation and Recording of Real World Spatial Navigation in Humans

Role: **Principal Investigator**

NIH UO1 NS103802-Supplement, NINDS

09/25/2018 – 08/24/2019

Data sharing

Role: **Principal Investigator**

Joseph Drown Friends Scholar Award, Jane and Terry Semel Institute
for Neuroscience & Human Behavior, UCLA

07/01/2015 – 06/30/2017

Role: **Principal Investigator**

INVITED PRESENTATIONS (Selected):

University of Pennsylvania, Philadelphia, Pennsylvania, September 2025
Cosyne, Mont Tremblant, Quebec, Canada, March 2025
Georgia Tech, Atlanta, Georgia, May 2025
DARPA, Arlington, Virginia, May 2025
Harvard University, Boston, Massachusetts, February 2025
Pavlov Society Meeting, Indianapolis, Indiana, September 2024
Boston University, Boston, Massachusetts, August 2024
NYC Neuromodulation Conference, New York, NY, August 2024
FENS Forum, Vienna, Austria, June 2024
McKnight Neuroscience Conference, Aspen, Colorado, June 2024
Yale University, New Haven, CT, February 2024
Rice University, Houston, Texas, November 2023
Duke University, Durham, North Carolina, November 2023
Memory Disorders Research Society, Los Angeles, California, September 2023
Brain Initiative Investigator's Meeting, Washington D.C., June 2023
Spring Hippocampal Research Conference, Verona, Italy, June 2023
Kavli Institute for Systems Neuroscience, Trondheim, Norway, March 2023
Neural Engineering Training Program, University of Michigan, Ann Arbor, Michigan, April 2023
Cognitive Neuroscience Society Meeting, San Francisco, California, March 2023
Winter School on Brains & Computations, University of California, San Diego, December 2022
Stanford Psychiatry Grand Rounds, Wu Tsai Neuroscience Seminar, Stanford University, April 2022
Brain Behavior Quantification and Synchronization Workshop, NIH, Virtual Meeting, March 2022
Brain Meeting, Wellcome Centre for Human Neuroimaging, UCL, Virtual Meeting, Oct 2021
Neuroengineering Seminar Series, University of Minnesota, Virtual Meeting, March, 2021
Human Single-unit Meeting, California Institute of Technology, Pasadena, CA, November 2020
Frontiers in Neuropsychiatry Seminars, Cornell University, Ithaca, NY, Oct 2020
Winter Conference in Neural Plasticity, St. Kitts, St. Kitts and Nevis, Caribbean, Feb 2020
North American Neuromodulation Society Meeting, Las Vegas, Nevada, Jan 2020
Baylor College of Medicine, Houston, Texas, Nov 2019
Neuromodulation Symposium, Del Monte Institute for Neuroscience, Rochester, NY, Oct 2019
Memory Disorders Research Society Meeting, New York, Oct 2019
Deep Brain Stimulation Think Tank, Orlando, Florida, Sept 2019
Spring Hippocampus Research Conference, Taormina, Sicily, Italy, June 2019
World Society for Stereotactic and Functional Neurosurgery, New York, June 2019
Neural Prosthesis Seminar Series, Case Western Reserve University, Cleveland, OH, Nov 2018
Psychiatry Grand Rounds, Dartmouth-Hitchcock Medical Center, Lebanon, NH, October 2018
iNAV Symposium, Mont Tremblant, Quebec, Canada, June 2018
Cognitive Neuroscience Society Annual Meeting, Boston, MA, March 2018
International Conference on Memory, Budapest, Hungary, July 2016
UT Austin Conference on Learning & Memory, Session chair & speaker, Austin, TX, April 2017
Winter Conference in Neural Plasticity, Maui, HI, Feb 2016
Center for Molecular and Behavioral Neuroscience, Rutgers University, Newark, NJ, January 2015

TEACHING:

Introduction to Signal Processing for Neuroscientists (<i>Neuroscience 260</i>), Graduate Students, Co-faculty: Sotiris Masmanidis and Daniel Aharoni	Winter 2019-24
Behavioral and Cognitive Neuroscience (Neuroscience 101C), Undergraduate	Spring 2021-23
Competitive Edge Course for URM STEM Graduate Students (Topic: Presentation skills)	Summer 2013-23
Human Single Neuron and Oscillatory Mechanisms of Cognition (<i>Psychology 207b</i>), Graduate Students	Winter 2017
Medical Neurosciences, David Geffen School of Medicine, Medical Students Lead-faculty: James Bisley	Spring, 2015
Behavioral Neuroscience (<i>Psychology 115</i>), Undergraduate	Summer, 2015
Cognitive Neuroscience (<i>Psychology 119C</i>), Undergraduate	Fall 2012, Summer 2013-14
Introduction to Psychobiology (<i>Psychology 15</i>), Undergraduate	Spring 2013
Introduction to Psychology (<i>Psychology 10</i>), Undergraduate	Spring 2013
Physiological Psychology of Learning (<i>Psychology 119M</i>), Undergraduate	Spring 2013
Behavioral Neuroscience Laboratory (<i>Psychology 116</i>), Undergraduate Co-faculty: William Grisham	Summer 2012, Fall 2013

SERVICE:

Executive Committee, Department of Psychiatry, Member, UCLA	2023 - 2024
Internal Advisory Committee, Neuroscience Pathways Program, UCLA-HBCU (HBCU - Historically Black Colleges and Universities)	2020-2024
Postdoctoral Scholars Advisory Council, Graduate Division, Member, UCLA	2016-2024
Brain Research Institute Steering Committee, Member, UCLA	2015-2024
Reviewing Editor, eLife	2020-2023
Admissions Committee, MSTP Program, Member, UCLA	2020
Faculty search committee, Neuroscience theme, Member, UCLA	2019
Admissions Committee, Neuroscience Ph.D. Program, Chair, UCLA	2017
Admissions Committee, Neuroscience Ph.D. Program, Member, UCLA	2015
Ad hoc reviewer, Brain, Brain Stimulation, Cell, Current Biology, eLife, Journal of Neuroscience, Hippocampus, IEEE Design and Test, JAMA, NEJM, Nature, Nature Communications, Nature Human Behavior, Nature Medicine, Nature Neuroscience, Neuron, Neuroimage, PNAS, Science Advances, TICS	2014-present