

March 2024

Employment

- 2022 - Present **Associate Professor**, Department of Psychological and Brain Sciences, Quantitative Biomedical Sciences Affiliate, Cognitive Science Affiliate, Quantitative Social Science Affiliate, Dartmouth College
- 2015 - 2021 **Assistant Professor**, Department of Psychological and Brain Sciences, Dartmouth College
- 2012-2015 **Postdoctoral Fellow**, University of Colorado Boulder (with Tor Wager, PhD)
- 2011 – 2012 **Predoctoral Clinical Psychology Intern**, University of California Los Angeles Semel Institute for Neuroscience (Health Behavior Track)

Education & Training

- 2006 – 2012 **University of Arizona**, Tucson, AZ
PhD in Clinical Psychology (with Alan Sanfey, PhD & John Allen, PhD)
- 2004 – 2006 **New School for Social Research**, New York, NY
MA in Clinical Psychology (with David Silbersweig, MD, Marcel Kinsbourne, DM)
- 1998 – 2002 **Reed College**, Portland, OR
BA in Psychology (thesis with Jennifer Henderlong-Corpus, PhD)

Funding

- Pending **PI**, 2R01MH116026 National Institute of Mental Health (\$3,653,813).
Dynamic brain representations underlying emotional experience
- Pending **Co-I**, The Royal Society Te Aparangi Catalyst Seeding (PI: Hedwig Eisenbarth)
Dyadic DysSynchronies
- 2022-Present **Co-PI**, R01DA053311 National Institute on Drug Abuse (\$1,078,025)
Neural mechanisms of social connection
- 2021-Present **Co-I**, BRAINS National Institute of Mental Health, (PI: Emily Finn)
Modeling and manipulating social percepts in individuals
- 2021-Present **Co-I**, R01HL157422 National Heart, Lung, and Blood Institute, (PI: Keely Muscatell;
subaward=\$516,825)
Neural and Molecular Mechanisms Underlying Stress-Induced Inflammatory Responses
- 2021-2023 **Co-I**, R21MH124674 National Institute of Mental Health, (PI: Krzysztof Bujarski;
subaward=\$101,674)
Modulation of emotion perception and memory via basolateral amygdala stimulation in humans

2020-2021	PI , Remote Experiential Learning Mini-Grant (\$3,210) Dartmouth Center for the Advancement of Learning Experiential learning in an online neuroimaging methods laboratory course
2019-Present	PI , CAREER 1848370 National Science Foundation (\$886,457) Neural and computational basis of guilt in decision-making
2018-Present	PI , R01MH116026 National Institute of Mental Health (\$3,540,813). Dynamic brain representations underlying emotional experience
2018-2020	PI , R56 MH080716 National Institute of Mental Health (\$810,000). Prefrontal-Amygdala interaction in social-learning
2017 – 2019	PI , The Nelson A. Rockefeller Center at Dartmouth College, Faculty Research Grant (\$14,998.28). Improving healthcare decisions: Managing emotions in social decision-making with exogenous constraints
2017 – 2018	Co-PI , Chiang Ching-kuo Foundation for International Scholarly Exchange (\$35,000). Towards a computational understanding of social status and mianzi in Chinese and American Cultures
2016 – 2017	PI , Neukom Institute for Computational Science, CompX Grant (\$25,000) Crowd sourced development and validation of Neuro-computational models of affect
2014 – 2016	Co-I , National Institute of Health, Big Data to Knowledge (PI: Tor Wager; \$104,572) fMRI-based Biomarkers for Multiple Components of Pain
2012 – 2015	Co-I , National Institute of Health (PI: Tal Yarkoni) Large-scale automated synthesis of functional neuroimaging data
2009 – 2012	PI , National Institute of Mental Health, National Research and Service Award (\$91,746). Mechanisms Underlying Social Cooperative Behavior

Awards & Fellowships

2024	Mid-Career Award , Social Affective Neuroscience Society
2022 – 2023	McLane Family Fellowship , Dartmouth College
2019	Fellow Association for Psychological Science
2019	Janet Taylor Spence Award for Transformative Early Career Contributions , Association for Psychological Science
2018	Junior Faculty Fellowship , Dartmouth College
Summer 2010	Cognitive Science Center Neuroeconomics Summer School , University of Amsterdam
2009	Graduate and Professional Student Council Student Showcase - 1st place , University of Arizona
2009	Technology Research Initiative Fund Graduate Student Imaging Fellowship , University of Arizona
Summer 2008	Neuroimaging Training Program Fellowship , University of California Los Angeles
Summer 2007	Summer Institute in Cognitive Neuroscience Fellowship , University of California Santa Barbara
2006 – 2007	Graduate Minority Fellowship , University of Arizona

2006 – 2007 **Deans Fellowship**, New School for Social Research (Declined)
 2004 – 2006 **University Scholars Award**, New School for Social Research

Publications (h-index=36, citations=7,489)

Underlined authors are current or former trainees (postdoctoral, graduate, undergraduate, and research assistants). Ω indicates comments, reviews, or chapters that were not peer reviewed.

- 1) Chen, P.Y., Fareri, D., Güroğluj, B., Delgado, M.R., & **Chang, L.J.** (In Press). Towards a neurometric-based construct validity of trust. *eLife*.
- 2) Gao, X., Jolly, E., Yu, H., Liu, H., Zhou, X.*, & **Chang, L.J.*** (2024). The hidden cost of receiving help: A theory of indebtedness. *Nature Communications*, (15) 68. *denotes equal contributions.
- 3) Cheong, J.H., Molani, Z., Sadhukha, S., & **Chang, L.J.** (2023). Synchronized emotions in shared experiences increase social connection. *Nature Communications Biology*, 6 (1), 1099.
- 4) Delgado, M.R., Fareri, D.S., & **Chang, L.J.** (2023). Characterizing the emerging mechanisms of social connection. *Neuron*.
- 5) Wheatley, T., Thornton, M.A., Stolk, A., & **Chang, L.J.** (2023). The emerging science of interacting minds. *Perspectives in Psychological Science*.
- 6) Cheong, J.H.*, Jolly, E.*, Xie, T.K., Byrne, S.K., Kenney, M., & **Chang, L.J.** (2023). Py-Feat: Facial expression analysis toolbox. *Affective Science*, 1-16.
- 7) Templeton, E.M., **Chang, L.J.**, Reynolds, E.A., LeBeamont, M.D., & Wheatley, T.P. (2023). Clicking in conversation: Long gaps between turns are awkward for strangers, but not friends. *Philosophical Transactions of the Royal Society B 378 (1875)*, 20210471
- 8) Weaverdyck, M.E., Du, M., Li, Y.C., **Chang, L.J.** & Parkinson, C. (2022). Similarity among friends serves as a social prior: The assumption that “birds of a feather flock together” shapes social decisions and relationship beliefs. *Personality and Social Psychology Bulletin*.
- 9) Jolly, E., Farrens, M., Greenstein, N., Eisenbarth, H., Reddan, M., Andrews, E., Wager, T.D., & **Chang, L.J.** (2022). Recovering individual emotional states from sparse ratings using collaborative filtering. *Affective Science* 3(4), 799-817.
- 10) Templeton, E.M., **Chang, L.J.**, Reynolds, E.A., LeBeamont, M.D., & Wheatley, T.P. (2022). Clicking in conversation: Short gaps between turns signal connection. *Proceedings of the National Academy of Science*, 119(4).
- 11) Bujarski, K., Song, Y, Xie, T., Kolankiewicz, S., Aronson, J., **Chang, L.J.**, Jobst, B. (2022). Modulation of emotion perception in amygdala stimulation in humans. *Frontiers in Neuroscience*, 15, 795318.
- 12) Muscatell, K.A., Merritt, C.C., Cohen, J.R., **Chang, L.J.**, & Lindquist, K.A. (2021). The stressed brain: neural underpinnings of social stress processing in humans. *Neuroscience of Social Stress*, 373-392.
- 13) Han, X.C., Ashar, Y.K., Kragel, P., Petre, B., Schelkun, V., Atlas, L., **Chang, L.J.**, Jepma, M., Koban L., Losin, E.A., Roy, M., Woo, C.W., & Wager, T.D. (2021). Effect size and test-retest reliability of the fMRI-based Neurologic Pain Signature. *Neuroimage*.

- 14) **Chang, L.J.**, Jolly, E., Cheong, J.H., Chen, P.H.A., Rapuano, K., & Manning, J.R. (2021). Endogenous variation in ventromedial prefrontal cortex state dynamics reflects affective experience in naturalistic viewing. *Science Advances*, 7 (17), 1-17.
- 15) Jolly, E. & **Chang, L.J.** (2021). Gossip drives vicarious learning and facilitates robust social connections. *Current Biology* 31, 1-11.
- 16) Gonzalez, B. & **Chang, L.J.** (2021). Computational models of mentalizing. In *The Neural Basis of Mentalizing*. Gilead, M & Ochsner, K. (Eds). Springer.
- 17) Mollick, J.A., **Chang, L.J.**, Krishnan, A., Hazy, T.E., Krueger, K.A., Frank, G.K.W., Wager, T.D., O'Reilly, R.C. (2021). The neural correlates of cued reward omission. *Frontiers in Human Neuroscience*.
- 18) Jolly, E., & **Chang, L.J.** (2021) Spatial feature selection in multivariate pattern analysis. *Social Cognitive Affective Neuroscience*.
- 19) Clark, M.D., & **Chang, L.J.** (2021). Surprise signals changing affective experiences in naturalistic sports spectating. *Neuron*. Ω
- 20) van Baar, J., Klaassen, F., Ricci, R., **Chang, L.J.**, & Sanfey, A.G. (2020). Stable distribution of reciprocity motives in a population. *Scientific Reports*,10, 18164.
- 21) Jolly, E.*, Sadhukha, S., & **Chang, L.J.** (2020). Response to Lynch et al: On measuring head motion and effects of head molds during fMRI. *Neuroimage*. Ω
- 22) van der Meer, J., Breakspear, M., **Chang, L.J.**, Sonkusare, S., & Cocchi, L. (2020). Movie viewing elicits rich and reliable brain state dynamics. *Nature Communications*.
- 23) Jolly, E.*, Sadhukha, S.*, & **Chang, L.J.** (2020). Headcases do not reduce head motion during natural viewing and speech. *Neuroimage*. *denotes equal contributions.
- 24) Gonzalez, B., & **Chang, L.J.** (2020). Arbitrating computational models of observational learning. *Neuron* 106, 558-560. Ω
- 25) Chen, P.H., Jolly, E., Cheong, J.H., & **Chang, L.J.** (2020). Inter-subject representational similarity analysis reveals individual variation in affective experience when viewing erotic movies. *Neuroimage*, 216.
- 26) Yu, H., Koban, L., **Chang, L.J.**, Wagner, U., Krishnan, A., Vuilleumier, P., Zhou, X., & Wager, T.D. (2020). The neural signature of cognitive antecedents and behavioral responses of interpersonal guilt. *Cerebral Cortex*, 30 (6) 3558-3572.
- 27) Chen, P.H.A., Cheong, J.H., Jolly, E., Elhence, H., Wager, T.D., & **Chang, L.J.** (2019). Socially transmitted placebo effects. *Nature Human Behavior*, 1-11.
- 28) Cheong, J.H., Brooks, S., & **Chang, L.J.** (2019). FaceSync: Open source framework for recording facial expressions. *F1000 Research*, 8.
- 29) Gong, X, Brazil, I.A., **Chang, L.J.**, & Sanfey, A.G. (2019). Psychopathic traits are related to diminished guilt aversion and reduced trustworthiness during social decision-making. *Scientific Reports*.

- 30) Van Baar, J., **Chang, L.J.**, & Sanfey, A.G. (2019). Neural and computational substrates of moral phenotypes in social decision-making. *Nature Communications*, 10 (1) 1483.
- 31) Fareri, D.S., **Chang, L.J.**, & Delgado, M.R. (2019). Mechanisms of social learning. In *The Cognitive Neurosciences* 6th edition. Gazzaniga, M.S (Ed). MIT Press.
- 32) Jolly, E., & **Chang, L.J.** (2019). The Flatland Fallacy: Moving beyond low dimensional thinking. *Topics in Cognitive Science*, 11(2), 433-454.
- 33) FeldmanHall, O. & **Chang, L.J.** (2018). Social Learning: Emotions aid in optimizing goal-directed social behavior. In *Understanding Goal-Directed Decision-Making: Computations and Circuits*, Bornstein, A & Shenhav, A (Eds). Elsevier.
- 34) **Chang, L.J.** & Jolly, E. (2018). Emotions as computational signals of goal error. In *Nature of Emotion*, Fox, D., Lapate, R., Shackman, A., & Davidson, R.J (Eds). Oxford Press. Ω
- 35) Taylor, V., Roy, M., **Chang, L.J.**, Gill, L. N., Mueller, C., & Rainville, P. (2018). Reduced Fear-Conditioned Pain Modulation in Experienced Meditators: A Preliminary Study. *Psychosomatic medicine*.
- 36) Vavra, P., & **Chang, L.J.**, & Sanfey, A.G. (2018). Expectations in the Ultimatum Game: Distinct Effects of Mean and Variance of Expected Offers. *Frontiers in Psychology*, 9, 992.
- 37) Cheong, J.H., Jolly, E., Sul, S., & **Chang, L.J.** (2017). Computational models in social neuroscience. In *Computational Models of Brain and Behavior*, Moustafa, A (Ed), Wiley-Blackwell. Ω
- 38) Sul, S., Guroglu, B., Crone, E.A., & **Chang, L.J.** (2017). Medial prefrontal cortical thinning mediates shifts in other-regarding preferences during adolescence. *Scientific Reports*, 7(8510), 1-10.
- 39) Shermohammed, M., Mehta, P.H., Zhang, J., Brandes, C., **Chang, L.J.**, & Somerville, L.H. (2017). Does psychosocial stress impact cognitive reappraisal? Behavioral and neural evidence. *Journal of Cognitive Neuroscience*.
- 40) Taylor, V., **Chang, L.J.**, Rainville, P., & Roy, M. (2017). Learned Expectations and Uncertainty Facilitate Pain during Classical Conditioning. *Pain*, 158(8), 1528-1537.
- 41) Ashar, J.Y., **Chang, L.J.**, & Wager, T.D. (2017). Brain mechanisms of the placebo effect: An affective appraisal account. *Annual Reviews of Clinical Psychology*.
- 42) Woo, C.W., **Chang, L.J.**, Lindquist, M., & Wager, T.D. (2017). Brain signatures and models in translational imaging. *Nature Neuroscience*, 20 (3), 365-377.
- 43) Eisenbarth, H., **Chang, L.J.**, & Wager, T.D. (2016). Multivariate brain prediction of heart rate and skin conductance responses to social threat. *Journal of Neuroscience*, 36(47):11987-11998.
- 44) De La Vega, A., **Chang, L.J.**, Banich, M.T., Wager, T.D., & Yarkoni, T. (2016). Meta-analytic functional analysis of human medial frontal cortex reveals tripartite organization. *Journal of Neuroscience*.
- 45) Krishan, A., Woo, C.W.*, **Chang, L.J.***, Ruzic, L., Jackson, P., Wager, T.D. (2016). Somatic and vicarious pain are represented by dissociable multivariate brain patterns. *eLife*. *denotes equal contributions.

- 46) Wager, T.D., Atlas, L.Y., Botvinick, M., **Chang, L.J.**, Coghill, R.C., Davis, K.D., Iannetti, G.D., Poldrack, R.A., Shackman, A.J., & Yarkoni, T. Pain in the ACC? Commentary on Lieberman and Eisenberger. (2016). *Proceedings of the National Academy of Science*. Ω
- 47) Lindquist, M.A., Krishnan, A., Lopez-Sola, M., Jepma, M., Woo, C.W., Roy, M., Atlas, L.Y., **Chang, L.J.**, Losin, L., Eisenbarth, H., Ashar, Y.K., Koban, L., Delk, Z., & Wager, T.D. (2015). Group-regularized individual prediction: Theory and application to pain. *Neuroimage*.
- 48) **Chang, L.J.** & Smith, A. (2015). Social emotions and psychological games. *Current Opinions in Behavioral Sciences*, 5:133-140.
- 49) Yu, H., Shen, B., Yin, Y., Blue, P., & **Chang, L.J.** (2015). Dissociating guilt- and inequity-aversion in cooperation and norm compliance. *Journal of Neuroscience*, 35(24), 8973-8975. Ω
- 50) Fareri, D.S.*, **Chang, L.J.***, Delgado, M.R. (2015). Neural and computational mechanisms underlying interpersonal collaboration. *Journal of Neuroscience*, 35(21), 8170-8180. *denotes equal contributions.
- 51) **Chang, L.J.**, Gianaros, P., Manuck, S., Krishnan, K., & Wager, T.D. (2015). A sensitive and specific neural signature for picture induced affect. *PLoS Biology*, 13(6), 1-28.
- 52) **Chang, L.J.**, Reddan, M., Ashar, Y.K., Eisenbarth, H., & Wager, T.D. (2015). The challenges of forecasting resilience. *Behavioral Brain Sciences Commentary*, 38, 26-27.
- 53) Sanfey, A.G., Stallen, M., & **Chang, L.J.** (2014). Norms and expectations in social decision-making. *Trends In Cognitive Science*, 18(4), 172-174. Ω
- 54) **Chang, L.J.** & Koban, L. (2013). Modeling emotion and learning of norms in social interactions. *Journal of Neuroscience*, 33(18), 7615-7617. Ω
- 55) **Chang, L.J.**, Yarkoni, T., Khaw, M.W., & Sanfey, A.G. (2013). Decoding the role of the human insula in human cognition: Functional parcellation and large-scale reverse inference. *Cerebral Cortex*, 23(3), 739-749.
- 56) **Chang, L.J.**, & Sanfey, A.G. (2013). Great expectations: Neural computations underlying the use of social norms in decision-making. *Social Cognitive Affective Neuroscience*, 8(3), 277-284.
- 57) Brown, A.D., Root, J.C., Romano, T., **Chang, L.J.**, & Hirst, W. (2013). The limits of memory and imagination: Overgeneralized autobiographical Memory and future thinking in combat veterans with posttraumatic stress disorder. *Behavior Therapy and Experimental Psychiatry*, 44(1), 129-134.
- 58) Fareri, D.S., **Chang, L.J.**, Delgado, M.R. (2012). Effects of experienced social information on trust decisions and neural reward circuitry. *Frontiers in Decision Neuroscience*, 6, 1- 17.
- 59) Kahnt, T., **Chang, L.J.**, Park, S.Q., Heinzle, J., Haynes, J.D. (2012). Connectivity based parcellation of the human orbitofrontal cortex. *Journal of Neuroscience*, 32(8), 6240-6250.
- 60) Harle, K.M., **Chang, L.J.**, van't Wout, M., & Sanfey, A.G. (2012). The neural underpinnings of mood-driven biases in social economic decision-making. *Neuroimage*, 61(1), 32-40.
- 61) **Chang, L.J.**, Smith, A., Dufwenberg, M., & Sanfey, A.G. (2011). Triangulating the neural, psychological, and economic bases of guilt aversion. *Neuron*, 70, 560-572.

- 62) Van't Wout, M, **Chang, L.J.**, & Sanfey, A.G. (2010). Emotion regulation and social interactive decision-making. *Emotion*, 10(6), 815-821.
- 63) **Chang, L. J.**, Doll, B., Van't Wout, M., Frank, M., Sanfey, A.G. (2010). Seeing is believing: Trustworthiness as a dynamic belief. *Cognitive Psychology*, 61(2), 87-105.
- 64) **Chang, L.J.**, & Sanfey, A.G. (2009). Unforgettable Ultimatums? Expectation violations promote enhanced social memory following economic exchange. *Frontiers in Behavioral Neuroscience*, 3, 1-12.
- 65) **Chang, L.J.** & Sanfey, A.G. (2008). Emotion, decision-making, and the brain. In D. Houser & K. McCabe (Eds.), *Neuroeconomics*. Elsevier, 31-53.
- 66) Sanfey, A.G. & **Chang, L.J.** Multiple systems in decision-making. (2008). In W.T. Tucker, S. Ferson, A. Finkel, T.F. Long, D. Slavin, P. Wright (Eds.), *Strategies for risk communication: Evolution, evidence, experience*. *New York: Annals of the New York Academy of Science*, 1128, 53-62.
- 67) Protopopescu, X., Pan, H., Tuescher, O., Root, J., **Chang, L.**, Altemus, M., Polanecsky, M., McEwen, B., Stern, E., & Silbersweig, D. (2008). Toward a Functional Neuroanatomy of Premenstrual Dysphoric Disorder: Differential Amygdalar, Orbitofrontal and Ventral Striatal Activity. *Journal of Affective Disorders*, 108, 87-94.
- 68) Butler, T., Pan, H., Tuescher, O., Engeliem, A., Goldstein, M., Epstein, J., Weisholtz, D., Protopotescu, X., Root, J. C., Cunningham-Bussell, A.C., **Chang, L.**, Xie, X.H., Chen, Q., Phelps, E.A., Ledoux, J.E., Stern, E., Silbersweig, D.A. (2007). Human fear-related motor neurocircuitry. *Neuroscience*, 150 (1) 1-7.
- 69) Butler, T., Imperato-McGinley, J., Pan, H., Voyer, D., Cunningham-Bussel, A. C., **Chang, L.**, Zhu, Y. S., Cordero, J., Stern, E., Silbersweig, D. (2007). Sex specificity of ventral anterior cingulate cortex suppression during a cognitive task. *Human Brain Mapping*, 28 (11), 1206-12.
- 70) Root, J.C., Robbins, R., **Chang, L.**, & Van Gorp, W.G. (2006). Detection of suboptimal effort on the California Verbal Learning Test, Second Edition: analysis and normative data for forced choice recognition. *Journal of the International Neuropsychological Society*, 12 (5), 688-96.

Manuscripts Under Review (n=4)

- Jolly, E., Sadhukha, S., Iqbal, M., Molani, Z., Walsh, T.M., Manning, J., & **Chang, L.J.** *People are represented and remembered through their relationships with others*. Manuscript Under Review at Psych Science. DOI: 10.31234/osf.io/bw9r2
- Chang, L.J.**, Li, X., Nguyen, K., Ranger, M., Begunova, Y., Chen, P.H.A., Castrellon, J., Samanez-Larkin, G., Zald, D., Fareri, D., Delgado, M., & Tomova, L. *A Neural Signature of Reward*. Manuscript Under Review Nature Human Behavior.
- Xie, T.K., Cheong, J.H., Manning, J.R., Brandt, A.M., Aronson, J., Jobst, B., Bujarski, K., & **Chang, L.J.** *Minimal functional alignment of ventromedial prefrontal cortex intracranial EEG signals during naturalistic viewing*. Manuscript Under Review.
- Fox, A.S., **Chang, L.J.**, Gorgolewski, K., & Yarkoni, T. *Bridging genetics and psychology using large-scale spatial analysis of neuroimaging and neurogenetic data*. Manuscript Under Revision at Nature Neuroscience

White Papers

Chang, L.J. (2017). The science of trust. Commission on Trust, Media, and American Democracy. The Aspen Institute.

Online Books

Chang, L.J., Huckins, J., Cheong, J.H., Brietzke, S., Lindquist, M.A., & Wager, T.D. (2020, June). DartBrains: An online open access resource for learning functional neuroimaging analysis methods in Python (Version 1.0). Zenodo. <http://doi.org/10.5281/zenodo.3909718> (**140k visits**)

Chang, L.J., Manning, J.R., Baldassano, C., de la Vega, A., Fleetwood, G., Geerligs, L., Haxby, J., Lahnakoski, J., Parkinson, C., Shappell, H., Shim, W.M., Wager, T.D., Yarkoni, T., Yeshurun, Y. & Finn, E. (2020, July). Naturalistic-Data: An online open access resource for learning how to analyze naturalistic neuroimaging data (Version 1.0). Zenodo. <http://doi.org/10.5281/zenodo.3937849> (**51k visits**)

Selected Open-Source Software Packages

nltools. A suite of Python tools for conducting multivariate analysis of neuroimaging data
<http://nltools.org/> (169,592 Downloads)

neuro-learn. Cloud-based predictive modeling of neuroimaging
<http://neuro-learn.org>

neighbors. A Python toolbox for performing collaborative filtering on emotion datasets
<https://neighbors.cosanlab.com/> (12,808 Downloads)

py-feat. A Python toolbox for analyzing and visualizing facial expression data
<https://py-feat.org/> (39,731 Downloads)

facesync. A Python toolbox for synchronizing videos based on audio features.
<https://github.com/cosanlab/facesync> (31,720 Downloads)

Chaired Symposia, Workshops, & Summer Schools

2023	Co-Director of 9-day Methods in Neuroscience at Dartmouth Computational Summer School on “Interacting Minds”, Hanover, NH
2022	Co-Organizer of Naturalistic Data Analysis Challenged presented at Social Affective Neuroscience Society.
2020	Co-Director of 9-day Methods in Neuroscience at Dartmouth Computational Summer School on “Interacting Minds”, Hanover, NH
2020	Co-Organizer of SANS preconference workshop on “Computational Social and Affective Neuroscience” (Cancelled due to Covid-19)
2019	Co-Chair 8 th Annual Affective Computing and Intelligent Interaction Meeting Special Session “Neural & Psychological Models of Affect”, Cambridge, UK
2019	Co-Director of 9-day Methods in Neuroscience at Dartmouth Computational Summer School on “Cognitive Maps”, Hanover, NH
2019	Co-Director of 14-day Summer Institute in Cognitive Neuroscience Summer School on “Computational Social Neuroscience: Advances, Challenges, and New Directions”, Santa Barbara, CA

2019	Co-Organizer of SANS preconference workshop on “Computational Social and Affective Neuroscience”
2018	Co-Director of 9-day Methods in Neuroscience at Dartmouth Computational Summer School of “Narratives and Natural Contexts”, Hanover, NH,
2017	Co-Director of 8-day Methods in Neuroscience at Dartmouth Computational Summer School of “Multiscale Network Dynamics”, Hanover, NH
2017	Co-Organizer of Dartmouth BrainHack (4-day department neuroscience hackathon), Hanover, NH
2016	Co-Chair Society for Neuroscience Nanosymposium “Insights into human cognition and emotion using large-scale neuroinformatics” Nanosymposium, San Diego, CA
2016	Co-Chair for “Dartmouth Affective Neuroscience Symposium”, Hanover, NH
2014	Co-Chair for “Computational approaches to social affective neuroscience” at the 7th Annual Social Affective Neuroscience Society Meeting, Denver, CO
2010	Co-Organizer of a 3-day workshop, University of Arizona School, Tucson, AZ, “Introduction to the R statistical language”

Professional Service

2021	NIH Computational Psychiatry Special Review Panel
2020 – Present	Editorial Board - Current Opinions in Behavioral Science
2020	NSF CAREER Panel, Dartmouth College
2020	NSF Adhoc Reviewer
2020	NIH Computational Psychiatry Special Review Panel
2019 – Present	Affective Computing & Intelligent Interactions Program Committee
2019 - Present	Editorial Board - Affective Science
2019 - Present	Max Planck Center for Language, Music, & Emotion Affiliate
2019	NIH Computational Psychiatry Special Review Panel
2018	NIH MESH Review Panel
2018 - Present	Society for Affective Science Journal Advisory Board
2018 - 2020	Program Committee Social Affective Science Meeting
2018 - Present	Scientific Advisory Board for Mind Trace https://mind-trace.com/
2016	Reviewer Cosyne Meeting
2016 – Present	Review Editor for Emotion
2015- 2016	Organizing Committee Social Affective Neuroscience Meeting
2014 – 2016	Review Editor Frontiers in Emotion Science
Summer 2013	Guest Lecturer in University of Colorado Science Discovery Program for adolescents
2008	Psychology Department Mini-Convention Organizer
2006 – 2008	Psychology Department Graduate Student Representative

Invited Talks (n=85)

Apr 2024	Social Affective Neuroscience Society , Toronto, CA
Nov 2023	Princeton Summit on Affective Science , Princeton, NJ
Feb 2023	Dartmouth College Family Fellows Weekend , Hanover, NH
Feb 2023	University of Arizona , Tucson, AZ
Dec 2022	American College of Neuropsychopharmacology , Phoenix, AZ
Jun 2022	MIT Brain & Cognitive Sciences , Cambridge, MA
May 2022	Social Affective Neuroscience Society , Virtual
Mar 2022	Computational Properties of Prefrontal Cortex , Oxford, UK
Mar 2022	University of Toronto , Toronto, CA
Dec 2021	Sungkyunkwan University , Seoul, Korea

Nov 2021 University of Zurich, Zurich, Switzerland
 Sep 2021 Rutgers University, New Brunswick, NJ
 Jun 2021 Social Neuroscience in Ecologically Valid Conditions Conference, Moscow Russia
 May 2021 University of Maryland College Park, College Park, MD
 Oct 2020 Technology in Psychiatry Summit, Boston, MA
 Mar 2020 Transforming the Practice of Mental Health Care, NIMH Panel
 Mar 2020 Program in Placebo Studies & Therapeutic Encounters, Harvard Medical School
 Jun 2020 Organization for Human Brain Mapping, Montreal, Quebec
 Jun 2020 Interdisciplinary Symposium on Decision Neuroscience, Philadelphia, PA (Cancelled)
 Mar 2020 University of Southern California, Los Angeles, CA
 Feb 2020 Brown University, Providence, RI
 Feb 2020 Johns Hopkins University, Baltimore, MD
 Jan 2020 Columbia University, New York, NY
 Dec 2019 New York University, New York, NY
 Dec 2019 Princeton University, Princeton, NJ
 Nov 2019 Max Planck Institute for Empirical Aesthetics, Frankfurt, Germany
 Sept 2019 Affective Computing and Intelligent Interactions, Cambridge, UK
 July 2019 Reinforcement Learning & Decision-Making, Montreal, Quebec
 June 2019 Summer Institute in Cognitive Neuroscience, Santa Barbara, CA
 May 2019 Association for Psychological Science, Washington DC
 Mar 2019 Victoria University, Wellington, NZ
 Mar 2019 Brain functional organization and connectivity workshop, Noosa, Australia
 Feb 2019 Center for Healthy Minds, Madison, WI
 Feb 2019 University of Wisconsin Madison Colloquium, Madison, WI
 Nov 2018 Society for Neuroscience Nanosymposium, San Diego, CA
 Nov 2018 Society for Neuroscience Minisymposium, San Diego, CA
 Sep 2019 Austen Riggs Computational Neuroscience Workshop, The Berkshires, MA
 Aug 2018 Dartmouth Hitchcock Medical Center Department of Neurology, Lebanon, NH
 May 2018 Association for Psychological Science, San Francisco, CA
 Apr 2018 Society for Affective Science, Los Angeles, CA
 Mar 2018 Computational Systems Neuroscience Meeting, Breckenridge, CO
 Mar 2018 Society for Personality and Social Psychology, Atlanta, GA
 Feb 2018 Templeton Roundtable, Hanover, NH
 Jan 2018 Science Pub, Lebanon, NH
 Oct 2017 Dartmouth Hitchcock Medical Center Department of Psychiatry, Lebanon, NH
 Oct 2017 Princeton University, Princeton, NJ
 Oct 2017 New York University, NY, NY
 Sep 2017 Harvard University, Boston, MA
 Aug 2017 Social Neuroeconomics Summer School, Duke University, Durham, NC
 July 2017 Beyond the Lab Psychonomics Workshop, Madison, WI
 May 2017 Dartmouth 21st Annual Neuroscience Day, Hanover, NH
 May 2017 Multimodal Neuroimaging Training Program, Pittsburgh, PA
 May 2017 New England Research Decision-Making Group (Brown University)
 May 2017 Boston Area Moral Cognition Group, Harvard University, Boston, MA
 May 2017 Afectiva, Boston, MA
 Apr 2017 Dartmouth Interdisciplinary Network Research Group, Hanover, NH
 Apr 2017 Society for Affective Neuroscience, Boston, MA
 Mar 2017 Society for Social and Affective Neuroscience, Los Angeles, CA
 Jan 2017 Society for Social and Personality Psychology, San Antonio, TX
 Nov 2016 Society for Neuroscience Nanosymposium, San Diego, CA
 Jun 2016 Dartmouth Affective Neuroscience Symposium
 May 2016 Hanover Rotary Club, Hanover, NH

Nov 2015	Yale University , New Haven, CT
Oct 2015	Harvard University , Cambridge, MA
Oct 2015	Society for Neuroscience Nanosymposium , Chicago, IL
Sep 2015	University of New Hampshire , Durham, NH
May 2015	University of College London , London, UK
May 2014	American Psychological Science , SF, CA
Apr 2014	Social Affective Neuroscience Society , Denver,
Jan 2014	University of California Santa Barbara , Santa Barbara, CA
Dec 2013	Princeton University , Princeton, NJ
Nov 2013	University of Colorado , Boulder, CO
Nov 2013	Dartmouth College , Hanover, NH
Oct 2013	Harvard University , Cambridge, MA
Sep 2013	University of Amsterdam , Amsterdam, The Netherlands
Sep 2013	Donders Institute for Brain, Cognition, and Behavior , Nijmegen, The Netherlands
Aug 2013	European Society for Cognitive Psychology , Budapest, Hungary
Apr 2013	University of Denver , Denver, CO
Jan 2013	University of Colorado , Boulder, CO
May 2012	UCLA, Department of Psychiatry , Los Angeles, CA
Apr 2012	Duke University , Durham, NC
Apr 2012	Virginia Tech Carilion Research Institute , Roanoke, VA
Mar 2012	University of Colorado , Boulder, CO
Feb 2012	Stanford University , Palo Alto, CA
Jun 2010	Leiden University , Leiden, Netherlands
Sep 2009	Society for Neuroeconomics , Evanston, IL.
Nov 2006	Clinical Psychology Datablitz , Tucson, AZ.

Teaching

Principles of fMRI Data Analysis, Dartmouth College

http://cosanlab.com/static/syllabi/PSYC60_Syllabus.pdf

<https://dartbrains.org/>

Social and Affective Motivations in Decision-Making, Dartmouth College

http://cosanlab.com/static/syllabi/PSYC53_Syllabus.pdf

Experimental Study of Social Behavior, Dartmouth College

http://cosanlab.com/static/syllabi/PSYC63_Syllabus.pdf

<https://github.com/lichang/psyc63>

The Power of Beliefs, Dartmouth College

http://cosanlab.com/static/syllabi/PSYC84_Syllabus.pdf

Research Methods in Psychology, University of Arizona

Graduate Statistics, University of Arizona

Mentoring & Research Advising

Postdoctoral Trainees (n=7)

2015-2016 **Sunhae Sul** (Faculty: Pusan National University)

2015-2018 **Seth Frey** (Faculty: University of California Davis)

- 2016-2019 **Pin-hao (Andy) Chen** (Faculty: National Taiwan University)
 Neukom Postdoctoral Fellowship
 Young Scholar Fellowship, Ministry of Science & Technology, Taiwan
 Chiang Ching-Kuo Foundation for International Scholarly Exchange
 Best Poster Award, Social & Affective Neuroscience Society
 Best Poster Award, Social Personality Health Network
- 2019-Present **Eshin Jolly**
 2022-Present **Nir Jacoby**
 2022-Present **Dae Houlihan** (Neukom Postdoctoral Fellowship)
 2023-Present **Emma Templeton**

Primary Doctoral Students (n=11)

- 2015-2021 **Jin Cheong** (UX Research Scientist at Meta)
 Crowdfunding Support Grant, Magnuson Center for Entrepreneurship, Dartmouth
 AI Grant, Artificial Intelligence Grant
 Best Talk Award, Society for Affective Science
 Best Poster Award, Social & Affective Neuroscience Society
 Best Poster Award, Association for Psychological Science
 Guarini Graduate Community Award
 Smith Promise Award for Lifetime achievement in Psychological Brain Sciences
- 2015-2019 **Eshin Jolly** (Postdoc: Dartmouth College)
 NSF Graduate Research Fellowship
 Best Poster Award, Social & Affective Neuroscience Society
 Best Community Hack, Hack Dartmouth
 Thayer Consulting Competition, 1st place, Dartmouth Thayer
- 2017-2019 **Daisy Burr** (Transferred to Duke University)
 Best Poster Award, Society for Affective Science
- 2017-2018 **Kristina Rapuano** (Postdoc: Yale University)
 NSF Graduate Research Fellowship
 Smith Promise Award for Lifetime achievement in Psychological Brain Sciences
- 2016-2023 **Emma Templeton** (co-advised with Thalia Wheatley)
 Best Poster Award, Social & Affective Neuroscience Society
- 2017-2023 **Bryan Gonzalez** (co-advised with Jonathan Phillips)
 2018-2021 **Marissa Clark** (Data scientist at HomeChef)
 T32 Predoctoral Fellowship, NIDA
- 2019-2023 **Tiankang Xie** (Applied Research Scientist at Amazon)
 Big data in life sciences fellowship from Burroughs Wellcome Fund
- 2021-Present **Wasita Mahaphanit**
 2021-Present **Paxton Fitzpatrick** (co-advised with Jeremy Manning)
 2022-Present **Menghan Yang**

Visiting Students (n=4)

- Fall 2013 **Hongbo Yu** (Peking University; Now Faculty at UC Santa Barbara)
 Spring 2017 **Jeroen van Baar** (Donders Institute; Now postdoc at Brown University)
 Fall 2017 **Xiaoxue Gao** (Peking University; Now Faculty at East China University)
 2022-Present **Jisu Ro** (Sunkyunkwan University)

Full Time Research Assistants (n=4)

- 2022-Present **Younji (Grace) Choi**
 2017-2021 **Amanda Brandt**
 2018-2019 **Sushmita Sadhukha** (now in grad school at Dartmouth)

2016-2017 **Antonia Hoidal** (now in med school)

Dissertation Committee (n=10)

2021 – Pres **Matthew Schaefer**, Icahn School of Medicine at Mount Sinai (Advisor: Daniela Schiller)
 2021 – Pres **Soo Jung Na**, Icahn School of Medicine at Mount Sinai (Advisor: Xiaosi Gu)
 2021 – Pres **Jeff Brooks**, NYU (Advisor: Jon Freeman)
 2019 – Pres **Dae Houlihan**, MIT (Advisor: Rebecca Saxe)
 2018 – Pres **Yu Han**, University of Vermont (Advisor: Patricia Prelock)
 2016 – 2019 **Feilong Ma**, Dartmouth College (Advisor: James Haxby)
 2016 – 2018 **Beau Sievers**, Dartmouth College (Advisor: Thalia Wheatley)
 2016 – 2017 **Rachel Pizzie**, Dartmouth College (Advisor: David Kraemer)
 2016 – 2017 **Sam Nastase**, Dartmouth College (Advisor: James Haxby)
 2015 – 2017 **Briana Robustelli**, University of Colorado Boulder (Advisor: Mark Whisman)

Specialist Committee (n=13)

2022 **Dhaval Bhatt** (Advisor: Meghan Meyer)
 2022 **Paxton Fitzpatrick** (Advisor: Jeremy Manning)
 2022 **Xinming Xu** (Advisor: Jeremy Manning)
 2022 **Sushmita Sadhukha** (Advisor: Arjen Stolk)
 2022 **Byeol Kim** (Advisor: Tor Wager)
 2020 **Chris Welker** (Advisor: Thalia Wheatley)
 2020 **Caroline Lee** (Advisor: Jeremy Manning)
 2019 **Kirsten Ziman** (Advisor: Jeremy Manning)
 2019 **Mira Nenchev** (Advisor: Thalia Wheatley)
 2018 **Sophie Wohltjen** (Advisor: Thalia Wheatley)
 2018 **Lucy Owen** (Advisor: Jeremy Manning)
 2017 **Feilong Ma** (Advisor: James Haxby)
 2017 **Vassiki Chauhan** (Advisor: Ida Gobbin)

Undergraduate Thesis & Independent Research Project (n=32)

2024 **Sade Francis** (QSS)
 2022 **Maxwell Ranger** (Neuroscience Thesis) – won Robert N. Leaton Prize for Best Neuroscience Thesis
 2022 **Helen Horan** (Neuroscience Thesis)
 2021 **Ashley Post** (Independent Research Project)
 2021 **Anthony Milne** (QSS Independent Research Project)
 2021 **Matt Kenny** (Neuroscience & Computer Science Independent Research Project)
 2021 **Maryam Iqbal** (Neuroscience Thesis; Presidential Scholar; Leave Term Grant)
 2021 **Liza Begunova** (Neuroscience Thesis) – won Robert N. Leaton Prize for Best Neuroscience Thesis
 2021 **Emily Chen** (Neuroscience Thesis; Junior Research Scholar)
 2021 **Kenny Ngyuen** (Neuroscience Independent Research Project)
 2021 **Xiao Li** (Neuroscience Independent Research Project)
 2020 **Paige Whittemore** (Psychology Thesis) – won Benjamin G. Benner 1969 Award for Excellence in Psychology
 2020 **Hailey Scherer** (Cognitive Science Thesis; Honors Thesis Grant)
 2020 **Sophie Byrne** (Psychology Thesis; Leave Term Grant) – won Lt. William Brewster Nickerson 1964 Psychology and Brain Sciences Prize
 2020 **Max Farrens** (Neuroscience Thesis) – won Robert N Leaton Prize for Best Neuroscience Thesis
 2020 **Julia Potter** (Psychology Thesis)
 2020 **Jessica Kobsa** (Senior Fellowship Examining Committee)
 2019 **Madeleine Waters** (Psychology Thesis w/ Sarah Lord)

2019	Tucker Brown (QSS Thesis; Honors Thesis Grant)
2019	Karina Lopez (Neuroscience Independent Research Project)
2019	Nathan Greenstein (Cognitive Science Independent Research Project; Presidential Scholar)
2019	Samantha Milne (Cognitive Science Independent Research Project; Junior Research Scholar)
2019	Caitlyn Lee (Psychology/Computer Science w/ Thalia Wheatley)
2019	Paxton Fitzpatrick (Psychology Thesis w/ Jeremy Manning) – won Lt. William Brewster Nickerson 1964 Psychology and Brain Sciences Prize
2018	Arati Gangadharan (Neuroscience Thesis; Presidential Scholar)
2018	Sushmita Sadhukha (Neuroscience Independent Research Project; Presidential Scholar; Leave Term Grant; Honors Thesis Grant)
2018	Zohra Aslami (Neuroscience Thesis w/ Wilder Doucette; Leave Term Grant)
2018	Elizabeth Reynolds (Psychology Thesis w/ Thalia Wheatley)
2017	Dawit Workie (QSS Thesis; Honors Thesis Grant)
2017	Hirsh Elhence (Neuroscience Independent Research Project; Presidential Scholar; Leave term Grant)
2017	Helen Schlactenhaufen (Psychology Independent Research Project)
2016	Dan Whitcomb (Computer Science Independent Research Project)

Dartmouth Undergraduate Research Assistants (n=32)

Ann Tran, Ash Cinta, Jonathan Lim (Junior Research Scholar), **Ashley Post** (Junior Research Scholar), **Helen Horan** (Junior Research Scholar), **Kaitlyn Kelley** (Presidential Scholar), **Jessica Hernandez** (Sophomore Research Scholar), **Emma Gustafson** (Sophomore Research Scholar), **Patricia Yeonas** (Presidential Scholar), **Elliott Tang, Mara Stewart, Stanley Rozentsvit, Zainab Molani** (Junior Research Scholar), **Darien Jones, Ziyi Feng, Antonia Hoidal, Sam Greydanus** (Presidential Scholar), **Taylor Morrell, Andrew Boghossian, Aimee Sung, Kiera Carey** (Junior Research Scholar), **Breiana Campbell, Meredith Geaghan-Breiner, Emma Langfitt, Halla Hafermann, Itish Goel, Jonathan Lim, Lex Kang, Nathan Skinner, Sandra Reiss, Robert Wright, Akiyah Watts**

Non-Dartmouth Research Assistants, Summer Research Interns, Winter Research Interns (n=7)

Sawyer Brooks (Oberlin College), **Hakeem Brooks** (Xavier University), **Jenna Perry** (University of North Carolina), **Eric Andrews** (University of Arizona), **Delenn Solis** (Reed College), **Samantha Westelman** (Oberlin College), **Connor Bentivoglio** (Middlebury)

Ad-hoc Reviewing (Papers, Grants, Proposals)

Behavioral Sciences, Brain and Cognition, Brain Research, Cerebral Cortex, Cognitive Affective Behavioral Neuroscience, Cognitive Computation, DFG – German Research Federation, eLife, Emotion, Rotterdam School of Management, Erasmus University, Evolution and Human Behavior, Frontiers in Neuroscience, Journal of Cognitive Neuroscience, Journal of Neuroscience, Journal of Economic Psychology, Human Brain Mapping, Nature Communications, Nature Human Behavior, Nature Neuroscience, Neuroimage, Neuron, NSF – National Science Foundation, Perspectives in Psychological Science, PLoS One, PLoS Computational Biology, Proceedings for the National Academy of Science, Psychological Science, Science Advances, Psychological Review, Science, Scientific Reports, Social Cognitive Affective Neuroscience, Trends in Cognitive Science, University of Trento, Vermont Genetic Network

Software/Programming Skills (<http://github.com/ljchang>)

Scientific Computing (Python, Matlab, Bash), Statistics (R, Stan, SAS), Brain Imaging (Nipy, FSL, SPM), Web Development (Flask, Meteor)

Professional Memberships

Society for Neuroscience, Society for Affective Neuroscience, Society for Social Neuroscience, Society for Social Affective Neuroscience, Association for the Advancement of Affective Computing, Society for Social and Personality Psychology, Society for Neuroeconomics, Organization for Human Brain Mapping, Cognitive Neuroscience Society, American Psychological Society

Media Coverage, Awards, and Scientific Commentary

Clicking in Conversation – Templeton, Chang, Reynolds, LeBeamont, & Wheatley (2022) ([Altmetric](#)=359)
Press

[Washington Post](#), [Yahoo](#), [ScienMag](#)

Gossip – Jolly & Chang, 2021 ([Altmetric](#)=274)

Commentary

[Gossip: More than just trash talk](#) – Richard Huskey

Press

[New York Times](#), [Vermont Public Radio](#), [National Academy of Science](#), The Tonight Show Jimmy Fallon, Late Night with Seth Meyers, [The Times](#), [The Telegraph](#), [South China Morning Post](#), [New York Post](#), [Daily Mail](#), [Newstalk](#), [The Ladders](#), [Mind Body Green](#), [Study Finds](#), [Reed College Magazine](#)

Efficacy of Headcases – Jolly, Sadhukha, & Chang, 2020 ([Altmetric](#)=16)

Commentary

[On measuring head motion and effects of head molds during fMRI](#) – Lynch et al., 2021
[Response to Lynch et al., 2021](#)

Press

[practical fMRI](#)

Socially transmitted placebos – Chen et al., 2019 ([Altmetric](#)=915)

Commentary

[Subtle cues transmit placebo effects](#) – Harald Walach

Press

[NPR](#), [NIH Research Matters](#), [ParsingScience](#), [PsyPost](#), [Healio](#), [Elemental](#), [Medical News Today](#), [Cosmos Magazine](#), [Daily Mail](#), [The Telegraph](#), [Medical Economics](#),

Brain Dynamics during Movie Watching - van der Meer et al., 2019 ([Altmetric](#)=99)

Press

[Science of Learning](#)

Flatland Fallacy – Jolly & Chang ([Altmetric](#)=151)

Awards

TopiCS - Top Downloaded Paper 2018-2019

Moral Opportunism - van Baar, Chang, & Sanfey, 2018 ([Altmetric](#)=213)

Press

[AAAS](#), [TechTimes](#), [Science Codex](#), [The Tribune](#), [The Pioneer](#), [Business Standard](#)

Other-Regarding Preferences, Sul et al., 2017 ([Altmetric](#)=152)

Press

[MedicalXpress](#), [Business Standard](#), [Health Medicine Network](#)

Trust - Fareri*, Chang*, & Delgado, 2015 ([Altmetric](#)=48)

Press

[CNN](#), [Forbes](#), [Psychology Today](#), [Newsy](#), [Madam Noire](#), [Salon](#)

Picture Induced Negative Emotion Signature – Chang, et al., 2015 ([Altmetric](#)=176)

Press

[Quartz](#), [Forbes](#), [Mental Floss](#), [Medical Daily](#), [Forbes](#), [PsyBlog](#), [PsyPost](#), [Science World Report](#),
[Boulder Daily Camera](#)

Awards

[PloS biology top 10%](#)

Guilt – Chang, et al., 2011 ([Altmetric](#)=27)

Press

[Tucson Weekly](#), [Science Daily](#), [Big Think](#), Epoch Times, Il Corriere, [Med India](#), [BMED Report](#),
[UA News](#)

Interviews

[“Your Brain: Who’s in Control?”](#) - Public Broadcasting Service (PBS) NOVA

[Making Research Personal](#) – Association for Psychological Science

[Transmitting Placebo Effects](#) – Parsing Science Podcast

[2019 Janet Taylor Spence Award](#) – Association for Psychological Science