

Eshin Jolly

Dartmouth College
Dept of Psychological and Brain Sciences
6207 Moore Hall, Hanover, NH, 03755
(917) 376 3340
eshin.jolly@gmail.com

[website](#) | [github](#) | [twitter](#) | [linkedin](#)

Currently **Postdoctoral Fellow** 2019-
Cosan Lab, Dartmouth College, Hanover, NH
PI: Luke J. Chang

Education **Dartmouth College**, Hanover, NH 2012-2019
PhD, Cognitive Neuroscience
Thesis: Social Cognitive Maps: A Relational Account of Person Representation and Memory

University of Rochester, Rochester, NY 2006-2010
BA, Brain and Cognitive Science/Psychology
Minor, Music
Thesis: Testing Domain Specificity: Conceptual Knowledge of Living and Non-living Things

Employment **Visiting PhD Researcher** summer 2016
Microsoft Research, New York City, NY
PIs: Duncan Watts & Sid Suri

Lab Manager 2010-2012
Harvard University, Cambridge, MA
PI: Jason P. Mitchell

Research Experience **University of Rochester**, Rochester, NY 2009-2010
PIs: Jessica F. Cantlon & Bradford Z. Mahon
Honors Thesis Student

Baruch College, New York City, NY 2008-2010
PI: Jennifer Mangels
Research Assistant

Mt Hope Family Center, University of Rochester, Rochester, NY 2008-2010
PI: Sheree Toth; Mentor: Jack Peltz
Research Assistant

Manuscripts

Under review/revision **Jolly, E.***, Sadhukha, S.*, Cheong, J.C. & Chang, L.J. (under review). Custom-molded headcases have limited efficacy in reducing head motion for fMRI.
[OSF](#)
*Equal contribution

Gao, X., **Jolly, E.**, Yu, H., Liu, H., Zhou, X., Chang, L. J. (under review). The hidden cost of receiving favors: A theory of indebtedness. [bioRxiv](#)

Jolly, E. & Chang, L.J. (under review). Gossip drives vicarious learning and facilitates robust social connections. [psyArXiv](#)

Chang, L.J., **Jolly, E.**, Cheong, J.H., Rapuano, K., Greenstein, N., Chen, P.A. & Manning, J.R. (under revision). Endogenous variation in ventromedial prefrontal cortex state dynamic during naturalistic viewing reflects affective experience. [bioRxiv](#)

In Prep

Jolly, E., Cheong, J.C. & Chang, L.J. (in prep). Neural models reflect spontaneous impression formation about parasocial relationships.

Jolly, E., Smith A., Gangadharan, A.A., Hoidal, A.S. & Chang, L.J. (in prep). Guilt-aversion motivates harm-minimization in surrogate decision-making.

Published

2020

Chen, P. H. A., **Jolly, E.**, Cheong, J. H. & Chang, L. J. (2020). Intersubject representational similarity analysis reveals individual variations in affective experience when watching erotic movies. *NeuroImage*, 116851. [\[PDF\]](#)

2019

Chen, P.A., Cheong, J.H., **Jolly, E.**, Elhence, H., Wager, T.D., Chang, L.J. (2019). Socially transmitted placebo effects. *Nature Human Behavior*, 3, 1295-1305. [\[PDF\]](#)

Jolly, E.*, Tamir, D.I.*, Burum, B.A. & Mitchell, J.P. (2019). Wanting without enjoying: The social value of sharing experiences. *PLoS One*, 14(4), e0215318. [\[PDF\]](#)

*Equal contribution

Jolly, E., & Chang, L.J. (2019). The Flatland Fallacy: Moving Beyond Low Dimensional Thinking. *Topics in Cognitive Science*, 1-22. [\[PDF\]](#)

2018

Jolly, E. (2018). Pymer4: Connecting R and Python for linear mixed modeling. *Journal of Open Source Software*, 3(31), 862. [\[PDF\]](#)

Chang, L. J. & **Jolly E.** (2018). Emotions as computational signals of goal error. In A. Fox, R. Lapate, A. Shackman & R. Davidson (Eds), *The Nature of Emotion* (343-351). Oxford University Press. [\[PDF\]](#)

2017

Cheong, J.C., **Jolly, E.**, Sul, S. & Chang, L.J. (2017). Computational Models in Social and Affective Neuroscience in Moustafa, A. (Eds), *Computational Models of Brain and Behavior* (229-245). Hoboken, NJ: Wiley. [\[Link\]](#)

Rane, S.*, **Jolly, E.***, Park, A.*, Jang, H*. & Craddock, R.C. (2017). Developing predictive biomarkers using whole-brain classifiers: Application to the ABIDE I dataset. *Research Ideas and Outcomes*, 3:e12733. [\[PDF\]](#).

*Equal contribution

2011-2016

Moran, J.M., **Jolly, E.** & Mitchell, J.P. (2014). Spontaneous mentalizing predicts the fundamental attribution error. *Journal of Cognitive Neuroscience*, 26(3), 569-576. [\[PDF\]](#)

Moran, J.M., **Jolly, E.** & Mitchell, J.P. (2012). Social-cognitive deficits in normal aging. *Journal of Neuroscience*, 32(16), 5553-5561. [\[PDF\]](#)

Jolly, E. (2011). Testing domain specificity: Conceptual knowledge of living and non-living things. *The Yale Review of Undergraduate Research in Psychology*, 2, 94-118. [\[PDF\]](#)

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| Spontaneous Neural Representations of Social Relationships in Naturalistic Contexts. Symposium Talk at Society for Affective Science, San Francisco, CA. (conference cancelled) | 2020 |
| Introduction to Git and Github. Lecture at Methods in Neuroscience Computational Summer School, Dartmouth College, Hanover, NH. | 2019 |
| Introduction to Git and Github. Lecture at Methods in Neuroscience Computational Summer School, Dartmouth College, Hanover, NH. | 2018 |
| Introduction to Jupyter Notebooks for Interactive Data Analysis. Lecture at Methods in Neuroscience Computational Summer School, Dartmouth College, Hanover, NH. | 2018 |
| Introduction to functional alignment methods for fMRI. Lecture at Sao Paulo School of Advanced Science on Social and Affective Neuroscience. Sao Paulo, Brazil. | 2018 |
| The Social Benefits of Gossip Presentation at the New England Research on Decision-Making conference, Brown University, Providence, RI. | 2017 |
| Computational tools for neuroscience: Containers and Jupyter Notebooks. Lecture at Methods in Neuroscience Computational Summer School, Dartmouth College, Hanover, NH. | 2017 |
| Introduction to Singularity: Running containers on a HPC. Tutorial at Graduate research roundtable workshop, Dartmouth College, Hanover, NH. | 2017 |
| Introduction to git and github for psychologists. Presentation at the Reproducible Psychological Science workshop at the Annual Meeting for the Association for Psychological Science, Boston, MA. | 2017 |
| Interpersonal dynamics and the inelasticity of social guilt. Presentation at the Boston Area Moral Cognition Group, Boston, MA. | 2017 |
| Interpersonal dynamics and the inelasticity of social guilt. Presentation at Affectiva, Boston, MA. | 2017 |
| Spontaneous impression-formation about parasocial relationships. Presentation at the Annual Meeting of the Social and Affective Neuroscience Society, Los Angeles, CA. | 2017 |
| Introduction to Jupyter Notebooks (and why you should love them!). Tutorial at Brainhack Dartmouth College, Hanover, N.H. | 2017 |
| Research Methods for Conducting Synchronous Online Experiments. Guest Lecture at Dartmouth College, Hanover, NH. | 2017 |
| Contemporary fMRI pre-processing: Introduction to Nipype and Docker. Tutorial at Dartmouth College, Hanover, NH. | 2017 |
| State of the Data: Annual Dartmouth Brain Imaging Center Quality Assurance Report. Presentation at Dartmouth College, Hanover, NH. | 2017 |
| Field experiments on human prosociality using Mechanical Turk. Presentation at Microsoft Research, New York, NY. | 2016 |
| Research Methods for Conducting Synchronous Online Experiments. Guest Lecture at Dartmouth College, Hanover, NH. | 2016 |
| The Social Benefits of Gossip. Guest Lecture at Dartmouth College, Hanover, NH. | 2016 |

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| <p>The Social Benefits of Gossip.</p> <p>Presentation at the Social Brain Sciences Brown Bag series at Dartmouth College, NH.</p> | <p>2016</p> |
| <p>Posters & Conference Proceedings</p> | |
| <p>Jolly, E. & Chang, L.J. (2019). Spontaneous Neural Representations of Social Relationships in Naturalistic Contexts.*</p> <p>*Winner, SANS Poster Award</p> <p>Poster at Social Affective Neuroscience Society meeting, Santa Barbara, CA. (conference cancelled).</p> | <p>2020</p> |
| <p>Jolly, E. & Chang, L.J. (2019). Gossip drives vicarious learning and facilitates robust social connections.</p> <p>Poster at Social and Affective Neuroscience Society meeting, Miami, FL.</p> | <p>2019</p> |
| <p>Cheong, J.C., Chen, P.A., Jolly, E., Elhence, H., Wager, T.D., Chang, L.J. (2019). Socially transmitted placebo effects.</p> <p>Poster at Society for Affective Science meeting, Boston, MA.</p> | <p>2019</p> |
| <p>Jolly, E., Reddan, M.C., Gianaros, P.J., Manuck, S.M. Chang, L.J., Wager, T.D. (2018). NeuroLIME: A novel tool for explaining the predictions of complex brain models.</p> <p>Poster at Social and Affective Neuroscience Society meeting, New York, NY.</p> | <p>2018</p> |
| <p>Reddan, M.C., Jolly, E., Wager, T.D. (2018). NeuroLIME: A novel tool for explaining the predictions of nonlinear neuroimaging classifiers.</p> <p>Poster at the Organization for Human Brain Mapping meeting, Singapore, Singapore.</p> | <p>2018</p> |
| <p>Reddan, M.C., Jolly, E., Wager, T.D. (2018). NeuroLIME: A novel tool for explaining the predictions of nonlinear neuroimaging classifiers.</p> <p>Poster at the Computational and Systems Neuroscience meeting, Denver, CO.</p> | <p>2018</p> |
| <p>Jolly, E. & Chang, L.J. (2017). Gossip drives vicarious learning and facilitates robust social connections.</p> <p>Poster at the Annual Meeting of the Association for Psychological Science, Boston, MA.</p> | <p>2017</p> |
| <p>Cheong, J.H., Jolly, E. & Chang, L.J. (2017). A window into the mind: A computational approach to measuring emotions in response to naturalistic stimuli.</p> <p>Poster the Annual Meeting of the Social and Affective Neuroscience Society, Los Angeles, CA.</p> | <p>2017</p> |
| <p>Jolly, E. & Chang, L.J (2016). Groups, gossip and social dilemmas.</p> <p>Poster at the International Conference on Computational Social Science, Evanston, IL.</p> | <p>2016</p> |
| <p>Jolly, E., Tamir, D.I. & Mitchell, J.P. (2015). The social value of sharing experiences.*</p> <p>*Winner, SANS Poster Award</p> <p>Poster at the Annual Meeting of the Social and Affective Neuroscience Society, Boston, MA.</p> | <p>2015</p> |
| <p>Moran, J.M., Jolly, E., & Mitchell, J.P. (2012). Spontaneous mentalizing supports the fundamental attribution error.</p> <p>Poster the Annual Meeting of the Cognitive Neuroscience Society, Chicago, IL.</p> | <p>2012</p> |
| <p>Peltz, J.S. Toth, S.L., Rogosch, F.A., Jolly, E., & Cicchetti, D. (2010). Paternal emotional availability's effects on children's socioemotional functioning in maternal depression contexts.</p> | <p>2010</p> |

Poster at the Annual Meeting of the Association for Psychological Science, Boston, MA.

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| Awards | Social Affective Neuroscience Society Poster Award | 2020 |
| | Kavli Summer Institute in Cognitive Neuroscience | 2019 |
| | Dartmouth Thayer Consulting Case Competition 1st Place | 2019 |
| | Hack Dartmouth Finalist | 2019 |
| | Hack Dartmouth Best Community Hack | 2018 |
| | Sao Paulo Summer School on Social and Affective Neuroscience (SPSAN) | 2018 |
| | Dartmouth Graduate Arts and Science Travel Award | 2018 |
| | Dartmouth PBS Graduate Travel Award | 2018 |
| | Neukom Institute Travel Award | 2018 |
| | Dartmouth Graduate Alumni Research Award | 2017 |
| | Dartmouth PBS Graduate Travel Award | 2017 |
| | Methods in Neuroscience Computational Summer School | 2017 |
| | Summer School in Social Neuroscience and Neuroeconomics | 2017 |
| | Social Affective Neuroscience Society Trainee Data Blitz Award | 2017 |
| | Human Neuroimaging Methods Travel Award | 2017 |
| | Hack Dartmouth 2nd Place project award | 2016 |
| | Hack Dartmouth DEN Business Innovation Prize | 2016 |
| | Neurohackweek Summer School | 2016 |
| | Social Affective Neuroscience Society Poster Award | 2015 |
| | Dartmouth PBS Graduate Travel Award | 2015 |
| | National Science Foundation Graduate Research Fellowship | 2013–2016 |
| | University of Rochester BCS Dept: Highest Honors in research | 2010 |
| | University of Rochester Wilde-Trustee Scholarship | 2006–2010 |
| Teaching | Functional Alignment Techniques in fMRI (Guest Lecturer) Mackenzie Presbyterian University, SPSAN, Sao Paulo, Brazil | 2018 |
| | Methods in Neuroscience Computational Summer School (TA) Dartmouth College | 2018 |
| | Methods in Neuroscience Computational Summer School (TA) Dartmouth College | 2017 |
| | Experimental Study of Social Behavior (Guest Lecturer) Dartmouth College | 2017 |
| | Experimental Study of Social Behavior (Guest Lecturer) Dartmouth College | 2016 |
| | Social Psychology (Guest Lecturer) Dartmouth College | 2016 |
| | Brain Mapping with functional MRI (TA and Guest Lecturer) Dartmouth College | 2015 |
| | Laboratory in Psychological Science* (TA and Guest Lecturer) *Mentored award winning undergraduate group Dartmouth College | 2015 |
| | Experimental Design and Methodology (TA and Guest Lecturer) Dartmouth College | 2014 |

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| Laboratory in Psychological Science (TA and Guest Lecturer) Dartmouth College | 2013 |
| Introduction to MATLAB for Behavioral Research (ad-hoc workshop) Harvard University | 2011 |
| Mind Perception (ad-hoc workshop) Harvard University | |

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| Mentorship | Maryam Iqbal '21 Presidential Scholar/Honors Thesis Dartmouth College | 2017- |
| | Nathan P. Greenstein '19 Presidential Scholar Dartmouth College | 2017-2019 |
| | Sushmita Sadhukua '18 Full-time Research Assistant Dartmouth College | 2017-2019 |
| | Arati A. Gangadharan '18 Honors Thesis Dartmouth College | 2015-2018 |
| | Hirsh Elhence '17 Presidential Scholar Dartmouth College | 2015-2017 |

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| Technical Skills | Programming Languages Python, R, Matlab, Javascript, Bash |
| | Frontend Web Development HTML, CSS, Bootstrap, Bulma, Vue, Svelte |
| | Backend/Fullstack/App Development Node, Express, Meteor, MongoDB, Firebase, Flask, Electron |
| | Stimulus Presentation Psychopy, Psychophysics toolbox, E-prime, Presentation |
| | Data Analysis Scientific-Python, Statsmodels, Scikit-learn, Lme4 |
| | Neuroimaging Analysis FSL, AFNI, SPM, Nipype, Nilearn |
| | Data Visualization Seaborn/Matplotlib, D3, Dash/Plotly, ggplot |
| | Dev Ops Git/Github, TravisCI, Tox, Pytest, Moab-Torque |

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| Professional Activities | Reviewer SCAN, JOSS, NeuroImage, PLoS One ad-hoc: Nature Communications, SIGCHI, Frontiers in Psych, JPSP |
| | Society Memberships Social and Affective Neuroscience Society, Society for Affective Science, Organization for Human Brain Mapping, Cognitive Neuroscience Society |

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| Leadership & Community | <u>Code for America</u> Member , Code for Upper Valley Brigade | 2019-Present |
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| <u>Line@ Project</u> | 2017-Present |
| Co-Founder , Dartmouth College | |
| <u>Pymer4</u> | 2017-Present |
| Project Lead , Open Source Software | |
| <u>Neuro-learn</u> | 2016-Present |
| Core Contributor , Open Source Software | |
| Web and Desktop Application Development | 2017-Present |
| Freelance Software Developer | |
| Introductory data analysis with Python | 2016-Present |
| Private Tutor | |
| Dartmouth Brainhack | 2017 |
| Organizing committee member , Dartmouth College | |
| Social Brain Sciences Symposium talk series | 2013-2015 |
| Primary Organizer , Dartmouth College | |
| Social Area Graduate Student Representative | 2013-2015 |
| Graduate Representative , Dartmouth College | |
| GWISE Science day for local middle schools | 2014 |
| Station Leader , Dartmouth College | |

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Last updated: April 2020