Eshin Jolly

Dartmouth College
Dept of Psychological and Brain Sciences
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Currently	Postdoctoral Fellow <u>Cosan Lab</u> , Dartmouth College, Hanover, NH	2019-
	Pl: 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	
	Thomseage of Living and Ivon Iving Timigs	
Employment	Visiting PhD Researcher	summer 2016
	Microsoft Research, New York City, NY	
	Pls: 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
Research Experience	Pls: Jessica F. Cantlon & Bradford Z. Mahon	2003 2010
	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

Manuscripts

Under review/revision

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. <u>bioRxiv</u>

PI: Sheree Toth; Mentor: Jack Peltz

Research Assistant

Jolly, E. & Chang, L.J. (under review). Gossip drives vicarious learning and facilitates robust social connections. <u>psyArXiv</u>

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. <u>bioRxiv</u>

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

Jolly, E.*, Sadhukha, S.*, Chang, L.J. (in press). Custom-molded headcases have limited efficacy in reducing head motion during naturalistic fMRI expreiments. NeuroImage. [Link] [data & materials] *Equal contribution

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]

Why Design Abstractions Matters for Analytics Tools: Neuroimaging analysis 2020 with Neuro-Learn. Symposium talk at Scientific Computing with Python Virtual conference (virtual talk). Spontaneous Neural Representations of Social Relationships in Naturalistic Contexts. Symposium talk at Society for Affective Science, San Francisco, CA. (conference cancelled). Methodological challenges in contemporary fMRI studies. Invited talk at Neuroimaging Analysis Methods meeting, Princeton University, Princeton, NJ. Introduction to Git and Github. 2019 Lecture at Methods in Neuroscience Computational Summer School, Dartmouth College, Hanover, NH. Introduction to Git and Github. 2018 Lecture at Methods in Neuroscience Computational Summer School, Dartmouth College, Hanover, NH. Introduction to Jupyter Notebooks for Interactive Data Analysis. Lecture at Methods in Neuroscience Computational Summer School, Dartmouth College, Hanover, NH. Introduction to functional alignment methods for fMRI. Lecture at Sao Paulo School of Advanced Science on Social and Affective Neuroscience. Sao Paulo, Brazil. The Social Benefits of Gossip 2017 Presentation at the New England Research on Decision-Making conference, Brown University, Providence, RI. Computational tools for neuroscience: Containers and Jupyter Notebooks. Lecture at Methods in Neuroscience Computational Summer School, Dartmouth College, Hanover, NH. Introduction to Singularity: Running containers on a HPC. Tutorial at Graduate research roundtable workshop, Dartmouth College, Hanover, NH. 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. Interpersonal dynamics and the inelasticity of social guilt. Presentation at the Boston Area Moral Cognition Group, Boston, MA. Interpersonal dynamics and the inelasticity of social guilt. Presentation at Affectiva, Boston, MA. Spontaneous impression-formation about parasocial relationships. Presentation at the Annual Meeting of the Social and Affective Neuroscience Society, Los Angeles, CA. Introduction to Jupyter Notebooks (and why you should love them!). Tutorial at Brainhack Dartmouth College, Hanover, N.H. Research Methods for Conducting Synchronous Online Experiments. Guest Lecture at Dartmouth College, Hanover, NH. Contemporary fMRI pre-processing: Introduction to Nipype and Docker. Tutorial at Dartmouth College, Hanover, NH. State of the Data: Annual Dartmouth Brain Imaging Center Quality Assurance

Presentation at Dartmouth College, Hanover, NH.

	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.	
	The Social Benefits of Gossip. Guest Lecture at Dartmouth College, Hanover, NH.	
	The Social Benefits of Gossip. Presentation at the Social Brain Sciences Brown Bag series at Dartmouth College, NH.	
Posters & Conference Proceedings	Jolly, E. (2020). Pymer4: Bringing R's Powerful Mixed-modeling to Python.* Virtual poster at Scientific Computing with Python Virtual Conference. (inperson cancelled). *Winner, Scipy Scholarship	2020
	Jolly, E. & Chang, L.J. (2020). Spontaneous Neural Representations of Social Relationships in Naturalistic Contexts.* Poster at Social Affective Neuroscience Society meeting, Santa Barbara, CA. (conference cancelled). *Winner, SANS Poster Award	
	Jolly, E. & Chang, L.J. (2019). Gossip drives vicarious learning and facilitates robust social connections. Poster at Social and Affective Neuroscience Society meeting, Miami, FL.	2019
	Cheong, J.C., Chen, P.A., Jolly, E. , Elhence, H., Wager, T.D., Chang, L.J. (2019). Socially transmitted placebo effects. Poster at Society for Affective Science meeting, Boston, MA.	
	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. Poster at Social and Affective Neuroscience Society meeting, New York, NY.	2018
	Reddan, M.C., Jolly, E. , Wager, T.D. (2018). NeuroLIME: A novel tool for explaining the predictions of nonlinear neuroimaging classifiers. Poster at the Organization for Human Brain Mapping meeting, Singapore, Singapore.	
	Reddan, M.C., Jolly, E. , Wager, T.D. (2018). NeuroLIME: A novel tool for explaining the predictions of nonlinear neuroimaging classifiers. Poster at the Computational and Systems Neuroscience meeting, Denver, CO.	
	Jolly, E. & Chang, L.J. (2017). Gossip drives vicarious learning and facilitates robust social connections. Poster at the Annual Meeting of the Association for Psychological Science, Boston, MA.	2017
	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. Poster the Annual Meeting of the Social and Affective Neuroscience Society, Los Angeles, CA.	
	Jolly, E. & Chang, L.J (2016). Groups, gossip and social dilemmas. Poster at the International Conference on Computational Social Science, Evanston, IL.	2016
	Jolly, E. , Tamir, D.I. & Mitchell, J.P. (2015). The social value of sharing experiences.* *Winner, SANS Poster Award	2015

	Poster at the Annual Meeting of the Social and Affective Neuroscience Society, Boston, MA.	
	Moran, J.M., Jolly, E. , & Mitchell, J.P. (2012). Spontaneous mentalizing supports the fundamental attribution error. Poster the Annual Meeting of the Cognitive Neuroscience Society, Chicago,	2012
	IL.	
	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.	2010
	Poster at the Annual Meeting of the Association for Psychological Science, Boston, MA.	
Awards	Scientific Computing with Python Scholarship Award	2020
	Social Affective Neuroscience Society Poster Award	
	Kavli Summer Institute in Cognitive Neuroscience	2019
	Dartmouth Thayer Consulting Case Competition 1st Place	
	Hack Dartmouth Finalist	
	Hack Dartmouth Best Community Hack	2018
	Sao Paulo Summer School on Social and Affective Neuroscience (SPSAN)	
	Dartmouth Graduate Arts and Science Travel Award	
	Dartmouth PBS Graduate Travel Award	
	Neukom Institute Travel Award	
	Dartmouth Graduate Alumni Research Award	2017
	Dartmouth PBS Graduate Travel Award	
	Methods in Neuroscience Computational Summer School	
	Summer School in Social Neuroscience and Neuroeconomics	
	Social Affective Neuroscience Society Trainee Data Blitz Award	
	Human Neuroimaging Methods Travel Award	
	Hack Dartmouth 2nd Place project award	2016
	Neurohackweek Summer School	
	Social Affective Neuroscience Society Poster Award	2015
	Dartmouth PBS Graduate Travel Award	
	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	
	Methods in Neuroscience Computational Summer School (TA) Dartmouth College	2017
	Experimental Study of Social Behavior (Guest Lecturer) Dartmouth College	
	Experimental Study of Social Behavior (Guest Lecturer) Dartmouth College	2016

	Social Psychology (Guest Lecturer) Dartmouth College	
	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	
	Experimental Design and Methodology (TA and Guest Lecturer) Dartmouth College	2014
	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	
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
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

Git/Github, TravisCI, Tox, Pytest, Moab-Torque

Dev Ops

Reviewer

SCAN, JOSS, Neurolmage, 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

Leadership & Community

	2020-Present
<u>Dartmouth College Postdoctoral Association</u> Contributing Member, Dartmouth College	
Inclusivity, Diversity, and Culture Committee Member, Dartmouth College	2019-Present
<u>Code for America</u> Member , Code for Upper Valley Brigade	
<u>Line@ Project</u> Co-Founder , Dartmouth College	2017-Present
<u>Pymer4</u> Project Lead , Open Source Software	2017-Present
Neuro-learn Core Contributor, Open Source Software	2016-Present
Web and Desktop Application Development Freelance Software Developer	2017-Present
Introductory data analysis with Python Private Tutor	2016-Present
Dartmouth Brainhack Organizing committee member , Dartmouth College	2017
Social Brain Sciences Symposium talk series Primary Organizer , Dartmouth College	2013-2015
Social Area Graduate Student Representative Graduate Representative , Dartmouth College	2013-2015
GWISE Science day for local middle schools Station Leader, Dartmouth College	2014

Last updated: August 2020