

Employment

Post-doctoral Fellow Dartmouth College, Hanover, NH <i>Computational Social Affective Neuroscience Lab</i> <i>PI: Luke J. Chang</i>	2019-present
Visiting PhD Research Intern Microsoft Research, New York, NY <i>Computational Social Science Group</i> <i>PIs: Duncan Watts & Sid Suri</i>	(summer) 2016
Lab Manager/Research Assistant Harvard University, Cambridge, MA <i>Social Cognitive and Affective Neuroscience Lab (SCAN)</i> <i>PI: Jason P. Mitchell</i>	2010-2012

Education

PhD, Dartmouth College <i>Degree: Cognitive Neuroscience</i> <i>Advisor: Luke J. Chang</i> <i>Thesis: Social Cognitive Maps: A Relational Account of Person Representation and Memory</i>	2012-2019
BA, University of Rochester <i>Major(s): Brain and Cognitive Science & Psychology; Minor: Music</i> <i>Advisor(s): Jessica F. Cantlon & Bradford Z. Mahon</i> <i>Thesis: Testing Domain Specificity: Conceptual Knowledge of Living and Non-living Things</i>	2006-2010

Research Experience

University of Rochester , Rochester, NY <i>PIs: Jessica F. Cantlon & Bradford Z. Mahon</i> Research Assistant + Honors Thesis Student	2009-2010
Baruch College , New York, NY <i>PI: Jennifer Mangels</i> Research Assistant	2008-2010
University of Rochester Mt Hope Family Center , Rochester, NY <i>PI: Sheree Toth; Mentor: Jack Peltz</i> Research Assistant	2008-2010

Publications

Chen, P.A., **Jolly, E.**, Cheong, J.H., Chang, L.J. (under review). Inter-subject representational similarity analysis reveals individual variations in affective experience when watching erotic movies. *bioRxiv*.

Jolly, E. & Chang, L.J. (under review). Gossip drives vicarious learning and facilitates robust social connections. *PsyArXiv*.

Chen, P.A., **Jolly, E.**, Cheong, J.H., Chang, L.J. (under review). Inter-subject representational similarity analysis reveals individual variations in affective experience when watching erotic movies. *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 review). Endogenous variation in ventromedial prefrontal cortex state dynamics during naturalistic viewing reflects affective experience. *bioRxiv*.

Chen, P.A., Cheong, J.H., **Jolly, E.**, Elhence, H., Wager, T.D., Chang, L.J. (2019). Socially transmitted placebo effects. *Nature Human Behavior*.

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), e02152138.
*Equal contribution

Jolly, E. & Chang, L.J. (2019). The Flatland Fallacy: Moving beyond low dimensional thinking. *Topics in Cognitive Science*, 1-22.

Chang, L.J., **Jolly, E.**, Cheong, J.C., Burnashev, A. & Chen, P.A. (2018). NLTools. *Zenodo*, cosanlab/nltools: 0.3.11. <http://doi.org/10.5281/zenodo.2229813>.

Jolly, E. (2018). Pymer4: Connecting R and Python for Linear Mixed Modeling. *Journal of Open Source Software*, 3(31), 862.

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.

Cheong, J. H., **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* (229-244). Wiley-Blackwell.

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
*Equal contribution

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

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

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.

Manuscripts in preparation

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

Jolly, E., Sadhukha, S., Cheong, J.C., Chang, L.J. (in prep). Measuring the efficacy and cost-benefit ratio of custom-molded head cases for use in MRI.

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

Jolly, E., Gangadharan, A. A. & Chang, L.J. (in prep). Interpersonal decision-making during end-of-life care: A comprehensive review.

Talks & Presentations

Jolly, E. (2019). *Introduction to Git and Github*. Lecture at Methods in Neuroscience Computational Summer School, Dartmouth College, Hanover, NH.

Jolly, E. (2018). *Introduction to Git and Github*. Lecture at Methods in Neuroscience Computational Summer School, Dartmouth College, Hanover, NH.

Jolly, E. (2018). *Introduction to Jupyter Notebooks for Interactive Data Analysis*. Lecture at Methods in Neuroscience Computational Summer School, Dartmouth College, Hanover, NH.

Jolly, E. (2018). *Introduction to functional alignment methods for fMRI*. Lecture at Sao Paulo School of Advanced Science on Social and Affective Neuroscience. Sao Paulo, Brazil.

Jolly, E. (2017). *Computational tools for neuroscience: Containers and Jupyter Notebooks*. Lecture at Methods in Neuroscience Computational Summer School, Dartmouth College, Hanover, NH.

Jolly, E. & Visconti di Oleggio Castello, M. (2017). *Introduction to Singularity: Running containers on a HPC*. Tutorial at Graduate research roundtable workshop, Dartmouth College, Hanover, NH.

Jolly, E. (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.

- Jolly, E.** & Chang, L.J. (2017). *Interpersonal dynamics and the inelasticity of social guilt*. Presentation at the Boston Area Moral Cognition Group, Boston, MA.
- Jolly, E.**, Cheong, J.H & Chang, L.J. (2017). *Interpersonal dynamics and the inelasticity of social guilt*. Presentation at Affectiva Boston, MA.
- Jolly, E.**, Cheong, J.H. & Chang, L.J. (2017). *Spontaneous impression-formation about parasocial relationships*. Presentation at the Annual Meeting of the Social and Affective Neuroscience Society, Los Angeles, CA.
- Jolly, E.** (2017). *Introduction to Jupyter Notebooks (and why you should love them!)*. Tutorial at Brainhack Dartmouth College, Hanover, N.H.
- Jolly, E.** (2017). *Research Methods for Conducting Synchronous Online Experiments*. Guest Lecture at Dartmouth College, Hanover, NH.
- Jolly, E.** (2017). *Contemporary fMRI pre-processing: Introduction to Nipype and Docker*. Tutorial at Dartmouth College, Hanover, NH.
- Jolly, E.**, Nastase, S. A., Sievers, B., Ma, F. & Huckins, J.F. (2017). *State of the Data: Annual Dartmouth Brain Imaging Center Quality Assurance Report*. Presentation at Dartmouth College, Hanover, NH.
- Jolly, E.**, Suri, S. & Watts, D.J (2016). *Field experiments on human prosociality using Mechanical Turk*. Presentation at Microsoft Research, New York, NY.
- Jolly, E.** (2016). *Research Methods for Conducting Synchronous Online Experiments*. Guest Lecture at Dartmouth College, Hanover, NH.
- Jolly, E.** (2016). *The Social Benefits of Gossip*. Guest Lecture at Dartmouth College, Hanover, NH.
- Jolly, E.** (2016). *The Social Benefits of Gossip*. Presentation at the Social Brain Sciences Brown Bag series at Dartmouth College, NH.

Posters & Conference Proceedings

- Jolly, E.** & Chang, L.J. (2019). Gossip drives vicarious learning and facilitates robust social connections. Poster presented at Social and Affective Neuroscience Society meeting, Miami, FL.
- Cheong, J.C., Chen, P.A., **Jolly, E.**, Elhence, H., Wager, T.D., Chang, L.J. (2019). Socially transmitted placebo effects. Poster presented 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 presented at Social and Affective Neuroscience Society meeting, New York, NY.
- Reddan, M.C., **Jolly, E.** Wager, T.D. (2018). *NeuroLIME: A novel tool for explaining the predictions of nonlinear neuroimaging classifiers*. Poster presented 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 presented 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 presented at the Annual Meeting of the Association for Psychological Science, Boston, MA.

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 presented at 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 presented at the International Conference on Computational Social Science, Evanston, IL.

Jolly, E., Tamir, D.I. & Mitchell, J.P. (2015). *The social value of sharing experiences*.* Poster presented at the Annual Meeting of the Social and Affective Neuroscience Society, Boston, MA.

*Winner, SANS Graduate Student Poster Award

Moran, J.M., **Jolly, E.**, & Mitchell, J.P. (2012). *Spontaneous mentalizing supports the fundamental attribution error*. Poster presented at the Annual Meeting of the Cognitive Neuroscience Society, Chicago, 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*. Poster presented at the Annual Meeting of the Association for Psychological Science, Boston, MA.

Awards & Honors

Kavli Summer Institute in Cognitive Neuroscience	2019
Dartmouth Thayer Consulting Case Competition 1 st Place	2019
Hack Dartmouth Finalist	2019
Hack Dartmouth Best Community Hack	2018
Sao Paulo Summer School 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
SANS Trainee Data Blitz Award	2017
Human Neuroimaging Methods Travel Award	2017
Hack Dartmouth 2 nd Place project award	2016
Hack Dartmouth DEN Business Innovation Prize	2016
Neurohackweek Summer School	2016
SANS Graduate Student 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

Teaching

Functional Alignment Techniques in fMRI (Guest Lecturer)	Sao Paulo, SPSAN, 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)	Dartmouth College 2015
<i>*Mentored award winning undergraduate group</i>	
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 2011

Mentorship

Hirsh Elhence '17 (Presidential Scholar)
 Arati A. Gangadharan '18 (Honors Thesis)
 Sushmita Sadhukua '18 (Honors Thesis + Full-time Research Assistant)
 Nathan P. Greenstein '19 (Presidential Scholar + Honors Thesis)
 Maryam Iqbal '21 (Presidential Scholar)
 Sushmita Sadhukha (Full-time Research Assistant)

Technical skills

Programming Languages: Python, R, MATLAB, Bash, Javascript
Frontend Web Development: HTML, CSS, Bootstrap, Bulma, Vue, Svelte
Backend/Fullstack Web/App Development: Node, Express, Meteor, MongoDB, Firebase, Flask, Electron
Stimulus presentation: Psychophysics toolbox, Psychopy, E-prime, Presentation
Data analysis: Scientific-Python, Statsmodels, Scikit-learn, Lme4, SPSS
Neuroimaging Analysis: FSL, AFNI, SPM, Nipype, Nilearn
Data visualization: Seaborn/Matplotlib, D3.js, Dash-Plotly, Markdown, ggplot
DevOps: Git/Github, TravisCI, Tox, Pytest, Moab-Torque

Professional Activities

Reviewer:
 Nature Communications (ad-hoc)
 Special Interest Group on Human Computer Interaction (SIGCHI) (ad-hoc)
 Frontiers in Psychology (ad-hoc)
 Social Cognitive Affective Neuroscience (ad-hoc)
 Journal of Personality and Social Psychology (ad-hoc)
 Journal of Open Source Software
 Neuroimage

PLoS One

Society Memberships:

Social and Affective Neuroscience Society

Society for Affective Science

Organization for Human Brain Mapping

Leadership, Community Involvement, & Software Development

DALI lab ([LineAtKAF Project](#))

2017-present

Partner

Dartmouth College

Dartmouth Brainhack

March 2017

Organizing committee member

Dartmouth College

Pymer4: Connecting R and Python for linear mixed-modeling

2017-present

Project Lead

Neuro-learn: Python tools for brain-imaging analysis

2016-present

Core Contributor

Introductory Data Analysis with Python

2016-present

Private Tutor

Web and Desktop Application Development

2017-present

Freelance Software Consultant

Social Brain Sciences symposium series at Dartmouth College

2013-2015

Primary Organizer

Dartmouth College

Social Area Graduate Representative at Dartmouth College

2013-2015

Graduate Representative

Dartmouth College

GWISE Science Day for local middle schools

2014

Station Leader

Dartmouth College

References

Luke J. Chang

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Jason P. Mitchell

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