Bhakti Patwardhan

16950 Fremont Ct Morgan Hill, CA 95037
(408) 329-8566
bhakti.patwardhan@ucsf.edu

I am interested in a career in cognitive neuroscience research or academics, with a focus on older adult populations, cognitive impairment in Alzheimer's, and neuroimaging. I am currently a Ph.D. student in the Integrative Neuroscience program at Stonybrook University.

Education

Stonybrook University / PhD

2025 - PRESENT

- Advisor: Dr. Xi Chen
- Department of Psychology

University of California, Davis / B.S. and B.A.

2018 - 2022

- Double Major: B.S. Neurobiology, Physiology, and Behavior, and B.A. Psychology
- Cumulative GPA: 3.70

Work Experience (more details provided below)

- October 2023 – June 2025: Full time Assistant Clinical Research Coordinator (ACRC) in Department of Neurology, UC San Francisco
- July 2022 – October 2023: Full time Research Assistant in Department of Psychology, UC Berkeley

Honors/Awards

- Student Scholarship Award for poster titled "Relation Between Parent Perception of Child Emotion Regulation and Parent Behavior", presented at the Western Psychological Association conference, April 2021.
- Award for Undergraduate Research, UC Undergraduate Research Conference, April 2021

Posters/Publications

Posters

- Bhakti Patwardhan, Nickilou Y. Krigbaum, Raana A. Mohyee, Ashby B. Cogan, Lauren Weittenhiller, Ann M. Kring, Ingrid R. Olson, Barbara A. Cohn, Mark D'Esposito, Thomas M. Olino, Piera M. Cirillo, Lauren M. Ellman , Ioannis Pappas, Ian Ballard. Exploring The Relationship Between Nicotine Use, Reward-Related Personality Measures, and Hemodynamic Latency In Dopaminergic Striatal Areas. Poster presented at: Cognitive Neuroscience Society: Mar 29 – Apr 1, 2025; Boston, Massachusetts.
- Patwardhan, Bhakti; Koshy, Alexander. Mediating Role of Negative Affect in Sleep Quality, Sensory Gating, and Psychotic Experiences. Poster to be presented at: Society for Research in Psychopathology conference: September 24-28, 2024; St. Louis, Missouri.
- Patwardhan, Bhakti (2021, April). Relation Between Parent Perception of Child Emotion Regulation and Parent Behavior. Virtual poster presented at: Western Psychology Association Conference.
- Hoffman, L. J., Smith, E., Kring, A. M., Breen, E. C., Cohn, B., Cirillo, P., Krigbaum, N., Cogan. A. B., Patwardhan, B., Olson, I. R., & Ellman, L. M. (2024, September) Fetal exposure to higher maternal inflammation is associated with lower memory capacities in late middle life. Poster presented to the annual meeting of the Fetal, Infant, & Toddler Neuroimaging Group (FIT'NG), Baltimore, MD.
- Moyhee, R., Elliott, B. L., Pike, M., Kring, A., Olson, I., Breen, E., Cohen, B. Cirillo, P., Krigbaum, N., Olino, T., D'Esposito, M., Cogan, A., Patwardhan, B., & Ellman, L. M. (2023, June) Decreased hippocampal neurite density in middle-aged adults following prenatal exposure to maternal inflammation. Poster presented at the annual meeting of the Psychoneuroimmunology Research Society. Boulder, CO.
- Moyhee, R., Elliott, B. L., Pike, M., Kring, A., Olson, I., Breen, E., Cohen, B. Cirillo, P., Krigbaum, N., Olino, T., D'Esposito, M., Cogan, A., Patwardhan, B., & Ellman, L. M. (2023, April) Decreased hippocampal neurite density in middle-aged adults following prenatal exposure to maternal inflammation. Poster presented at the annual meeting of the Society of Biological Psychiatry meeting. San Diego, CA.

Publications

- Charbonneau JA, Davis B, Raven EP, Patwardhan B, Grebosky C, Halteh L, Bennett JL, Bliss-Moreau E. Evaluation of registration-based vs. manual segmentation of rhesus macaque brain MRIs. Brain Struct Funct. 2024 Aug 13. doi: 10.1007/s00429-024-02848-7.

- Raana A. Mohyee*, Blake L. Elliott*, Madeline R. Pike, Emma Smith, Ann M. Kring, Ingrid R. Olson, Elizabeth C. Breen , Barbara A. Cohn, Piera M. Cirillo, Nickilou Y. Krigbaum, Thomas M. Olino, Mark D'Esposito, Ashby B. Cogan, Bhakti P. Patwardan, Lauren M. Ellman. Decreased hippocampal neurite density in middle-aged/aging adults following prenatal exposure to higher levels of maternal inflammation (in prep)

Ongoing Research Projects

Individual networks analysis using multiple session fMRI scans on older adults with mild cognitive impairment

Comparing hemodynamic lag in dopaminergic areas (striatum) between nicotine users and non-users

AUGUST 2024 – PRESENT

Mentor: Dr. Ian Ballard, Dr. Ioannis Pappas

- We used a python suite called "Rapidtide" which does time delay analysis and does time-lag correlations on low frequency fMRI data. We are currently comparing lags between people who have never used nicotine and people who currently are or have been nicotine users. We also plan to explore the relationship between hemodynamic lags and reward measures, cognitive performance, and maternal inflammation during utero.

Research and Clinical Experience

Full time Assistant Clinical Research Coordinator (ACRC) in Neuroscape (a Royball Center), Department of Neurology, UC San Francisco

OCTOBER 2023 – JUNE 2025

PIs: Dr. David Ziegler, Dr. Christine Walsh, Dr. Peter Wais

- Continuing as MRI operator and Neuroimaging technician, running MRI scans and EEGs on older adults.
- Main coordinator for a clinical trial, Medidream. The study involves 2 cohorts of people between the ages of 60-85, and studies the effect of a 6-week cognitive intervention (app-based attention-focused meditation) on cognitive performance, for both healthy older adults and older adults with mild cognitive impairment. Participants also get an at-home sleep device that records forehead EEG during sleep. I handle equipment orders/setup, recruitment into the study, eligibility screening, schedule visits, data collection (EEG, MRI scans, bloodwork, volunteer coordination), set up and train participants on equipment for at-home portions, contact during at-home portions, and compensation at the end of the study. I am the main point of contact for participants throughout the entire process.
- Score sleep data and work with sleep EEG device.
- Help launch Medidream – as main coordinator present before and at the start of the study, I prepared participant binder materials, visit protocol and scripts for the MRI and EEG visits, coordination documents and templates, participant tracking documents, and protocol for initial recruitment contacts and study sign ups.
- Helping with center recruitment: I got Neuroscape's google ad campaign functional, and set up ad tracking using google tag manager and google analytics. I am also the main contact for setting up and using ApeX/EPIC myChart recruitment. I am one of the proctors for automated cognitive assessment sessions and a scorer for cognitive assessment data.

Independent Project in Neuroscience Department, University of Southern California

JANUARY 2024 – JANUARY 2025

PIs/Mentors: Dr. Ioannis Pappas

- We used an ADNI dataset including people who are currently not showing any signs of disease, but do show some mild impairment in cognitive performance. We worked with a processing pipeline to get individual-level networks using multi-session hierarchal Bayesian modeling, using the pipeline outlined in Thomas Yeo's 2011 paper, and Ru Kong's 2019 paper.

Full time Laboratory Assistant in Emotion and Social Interaction Lab, UC Berkeley

JULY 2022 – OCTOBER 2023

PIs/Mentors: Dr. Ann Kring; Dr. Ian Ballard

- MRI operator and Responsible for data collection and processing of fMRI data for the Healthy Brains Project – a study that worked with a unique birth cohort, now middle-aged, whose mothers were part of a study during pregnancy in the 1960s. Responsible for all duties before, during, and after scanning sessions. Have run approximately 60 scans to date.
- Administer cognitive test battery to participants (approximate 40) including: Mini Mental State Exam, California Verbal Learning Test, Trail Making Test, Grooved pegboard, Digit Span, Peabody Picture Vocabulary test, and finger-tapping.
- Administer Clinical Assessment of Negative Symptoms (CAINS) and Family Interview for Genetic Studies (FIGS) with Healthy Brains Project participants. Approximately 30 participants to date.
- Run and coordinate participant visits, and complete visit tasks. Complete reimbursement requests and schedule visit follow-ups, and data entry, cleaning, and analyses.
- Used Freesurfer to do Morphometry analyses, and trained to use FSL for pre-processing. Using Matlab to develop an algorithm for checking movement in scan data.
- Develop independent project ideas and presented data at national conferences with Healthy Brains Project Data.

Part Time Research Assistant in Bliss-Moreau Lab / California National Primate Research Center, UC Davis

SUMMER 2019 – SUMMER 2022

Mentor: Dr. Eliza Bliss-Moreau

- Wet lab work included mounting on microscope slides, cover-slipping, and staining. As a paid research assistant, worked on skull-stripping, ventricle-trace using a segmentation program, and measuring skull lengths.
- Worked with social networking data: coded and rated monkey behavior, and transcribed data sheets

Part Time Research Assistant in Social Environment and Stress Lab, UC Davis

SUMMER 2020 – SUMMER 2022

Mentor: Dr. Camelia Hostinar; Graduate mentor: Anna Parenteau

- Part of Meta-Analysis Project which explored the link between synchrony and cognitive outcomes in children as they interact in a naturalistic way with a social other. Screened abstracts and full-texts for fit with study criteria.
- Used existing Trier Social Stress Test data from a previous study conducted in the SES lab to answer a research question on the link between parent perception of child emotion regulation, and parent behavior towards the child.

SFSU Clinical Medical Assistant course and externship at Davis Urgent Care

2018

- Completed a SFSU online Clinical Medical Assistant (CMA) course, grade: 87.96%, and a 160 hour externship at Davis Urgent Care as part of the CMA course requirements.