

Gabriel Riegner

CONTACT

✉ email: griegner@ucsd.edu 📞 phone: (323) 459 - 3484 🌐 github: [griegner](#)

EDUCATION

2015-2020
3.83 GPA

University of Southern California, Dornsife College of Letters, Arts, and Sciences
*Bachelor of Arts in **Neuroscience** (with **departmental honors**) and **Cognitive Science***

Advisors: Assal Habibi PhD, Sarah Bottjer PhD, Irving Biederman PhD

Thesis: [Recognition Memory for Melody](#)

Selected coursework: Neuroscience Seminar, Introduction to Cognitive Neuroscience, Systems Neuroscience, Neurobiology, Research Methods and Statistics, Programming in Python

2016

University of Otago, Dunedin, New Zealand | international study

RESEARCH

2019 -

Senior Research Technician: University of California San Diego, [Brain Mechanisms of Pain and Health Lab](#)

Advisor: Fadel Zeidan PhD

Projects (ordered by level of involvement)

- Clinical trial on the brain mechanisms supporting chronic pain relief by meditation (MRI scanner operation)
- Prefrontal cortico-thalamic regulation of pain by mindfulness meditation (MRI data analysis)
- Clinical trial on the role of endogenous opioids in mindfulness-based pain relief (pain testing, drug infusion)
- The effects of mindfulness on awake craniotomy surgery (IRB writing)
- Neuropharmacologic mechanisms of mindfulness-based pain relief (IRB writing)
- The role of endogenous opioids in cannabis-induced analgesia (IRB writing)

2015 - 2019

Research Assistant: University of Southern California, [Brain and Creativity Institute](#), [Brain and Music Lab](#)

Advisor: Assal Habibi PhD

Projects (ordered by level of involvement)

- Honors thesis research on modeling recognition memory for musical melodies using signal detection theory.
- Longitudinal study of music training on brain (MRI, EEG), cognitive, and socioemotional child development.

PUBLICATIONS

2020

[Neurophysiological mechanisms supporting mindfulness meditation-based pain relief: an updated review](#)

A Jinich, E Garland, J Baumgartner, N Gonzalez, G Riegner, J Birenbaum, L Case, F Zeidan.

Current Pain and Headache Reports.

POSTERS

2020

Prefrontal cortico-thalamic regulation of pain by mindfulness meditation

G Riegner, J Baumgartner, G Posey, A Jinich, Y Jung, F Zeidan, N Gonzalez, J Birenbaum.

US Association for the Study of Pain Conference.

AWARDS

2015 - 2019

USC Tuition Exchange Scholarship | 80% tuition discount

2017 - 2018

USC Student Opportunities for Research Scholarship | summer research stipend

2015 - 2020

USC Dean's List | GPA \geq 3.5 per semester

SKILLS

Programming: Python (numpy, pandas, scipy, matplotlib) | **Shell** (Unix commands, scripting) | **Git-Github**

MRI: GE MRI scanner operation | **FSL** (preprocessing, general linear modelling, parametric and non-parametric tests) | **CONN toolbox** (seed-based and network connectivity) | **ANTs** (brain extraction, segmentation) | **MATLAB** (applying a MVPA signature of acute pain, mediation analysis) | **BIDs**

Data: Biopac (physiology) | **BrainVision** (EEG) | **RedCap**, **NIH Toolbox** (behavioral)

Design: Adobe, Affinity ([journal cover](#)) | **Web Design** ([chakravarthylab.com](#), [douleurtx.com](#))

Clinical: quantitative sensory testing, straight leg raise test of nerve pain

TRAINING

2020

Neurohackademy ([online](#)) | FSL course ([self-study](#)) | Pain Neuro journal club

2019

fMRI AFNI course (UCSD)

MEMBERSHIPS

2020

Society for Neuroscience | Cognitive Science Society | US Association for the Study of Pain

SERVICE

2018 - 2019

USC Outfitters Student Organization | Wilderness Guide

Organized and lead surfing, climbing, and hiking trips for groups of ~10 students.

2018 - 2019

Interaxon | Member

Traveled to K-12 schools in the community to teach STEM lessons and answer questions on careers in science.