

# Resume

## Summary

Current Ph.D. candidate in Psychology (Cognitive Neuroscience). 5+ years experience conducting open-science research, specifically in building predictive models of brain function. Passionate about science policy, improving transparency and accountability in academia, and making science more accessible. Motivated to pursue a public service career in government and science policy.

## Education

### Institution Name redacted

[Institution Location redacted](#)

PH.D. IN COGNITIVE NEUROSCIENCE (GPA: 3.96/4.00)

Sep. 2017 - Expected: May. 2022

- **Advisor: Richard Ivry, Ph.D.**
- Applied Data Science Certificate, School of Information. *Awards: Mark R. Rosenzweig Graduate Fellowship (2021); Cognitive Computational Neuroscience Travel Award (2020)*

### Institution Name redacted

[Institution Location redacted](#)

M.Sc. IN NEUROSCIENCE (GPA: 4.0)

Sep. 2015 - May. 2017

- **Advisor: Joern Diedrichsen, Ph.D.** *Awards: Gordon Cerebellum Student Travel Award (2017)*

### Institution Name redacted

[Institution Location redacted](#)

B.A. IN PSYCHOLOGY AND FRENCH (DOUBLE MAJOR; GPA: 4.0)

Sep. 2010 - May. 2014

- **Advisor: Redmond O'Connell, Ph.D.** *Awards: Irish Research Council Postgraduate Scholarship (2015); Ussher Fellowship, Trinity College Dublin (2015); US Fulbright Program (shortlisted); Wellcome Trust Biomedical Scholarship (2014); Entrance Scholarship, Trinity College Dublin*

## Research Experience

### Thesis: Mapping cerebro-cerebellar networks of the human brain during learning

[Github \[Link\]](#)

GRADUATE STUDENT RESEARCHER (2017-)

- The aim of my thesis is to use *machine learning* to predict cognitive function across learning in the *human cerebellum*.
- *Led a team of 9* (3 Ph.D. students, 5 research assistants, 1 postbac student) to design and collect *300 experimental hours* of *fMRI* and *eye-tracking* data. Co-wrote an *R35 grant* that received 5-year funding from the *NIH* and *managed* an *IRB protocol* for neuroimaging experiments.
- Created a widely adopted *mentorship agreement* for research assistants to ensure *transparency and accountability* in mentoring practices. Co-led a *journal club* for undergraduate research assistants, *instructing* them on the *scientific method*.
- *Mentored two undergraduate students* in designing and writing up honors thesis projects. One student was awarded a *Swann prize* for their work. Prioritized *recruitment* of students transferring from community college.

### Thesis: Understanding the functional organization of the human cerebellum

[Paper \[Link\]](#)

GRADUATE STUDENT RESEARCHER (2015-2017)

- My thesis used *machine learning* to map cognitive sub-domains of the human cerebellum.
- *Led a team of 2* (1 research assistant and one post-doctoral fellow) to design and collect a 26-task *fMRI* experiment.
- *Initiated a collaboration* with scientists from Stanford University to use *natural language processing and regularized regression* to assign cognitive labels ( *cognitiveatlas.org*) to the human cerebellum.
- Invested in *open-source science*. My data, which are publicly available on *openneuro.org*, have been downloaded by *hundreds of researchers*.

## Public Service & Outreach

### POLICY

#### Graduate Assembly Students of Psychology

[Member and RSO Signatory](#)

Sep. 2018 -

- Co-organized *faculty fundraisers* in Silicon Valley as well as *Psychology "Big Give"* to fund-raise \$15,000 for Psychology.
- Assembled *working committee* to create *policy* to improve *lab culture* and *mentor-mentee* relationships, co-wrote subsequent *mentorship and lab policy agreements* resulting in new departmental policies.
- *Created, managed, and edited* Psychology blog to *spotlight* graduate student research.
- *Co-founded and operated* Twitter account for Psychology.
- *Writer and contributor* of Psychology *newsletter*.
- *Data analysis, statistics and visualization* for Psychology *state of the department* annual meeting.

#### Schulich School of Medicine Graduate Council

[Secretary](#)

2015 - 2016

- Oversaw a *budget of \$5000*, did note-taking at biweekly meetings, and *voted* on council plans.

## Niteline (Student Helpline)

Publicity Officer

2011 - 2013

- *Publicized* student helpline services at *national events* and fund-raised to increase the *yearly budget*.

## EDUCATION

### Prison University Project

RICHMOND, CALIFORNIA

Volunteer and Lecturer

Sep. 2019 - Mar. 2021

- *Designed* and *lectured* a course in General Psychology to incarcerated students in *San Quentin State Prison*.
- Created care packages and holiday art for incarcerated people in California prisons during the *COVID-19 pandemic*.

### Bay Area Scientists in Schools (BASIS)

Volunteer

Jan. 2018 - Jan. 2020

- *Presented* multiple lectures on the "Feel Human Brains" to *elementary school children* in Bay Area schools.

### Journal of European Psychology Students

Junior Editor

EUROPEAN FEDERATION OF PSYCHOLOGY STUDENTS' ASSOCIATION

2014 - 2016

- *Edited* research/review paper submissions, *recruited* reviewers, copy editors, and *communicated* decision outcomes to authors.

## WOMEN IN STEM

### Inspiring Young Women in STEM Inaugural Conference

Organizing Member

2016

- *Co-organized* the first conference, *recruited* keynote speakers, and *evaluated* student research.

### Western Women Neuroscientists in Schools

Volunteer

Oct. 2015 - May 2017

- *Presented* multiple *lectures* on "Myths and the Brain" to *secondary school children* in London, Ontario schools.

## Selected Communication

Google Scholar [Link]

- |      |  |                         |
|------|--|-------------------------|
| 2021 | <b>Educational Symposium: Neuroanatomy for Neuroimaging</b> , Organization for Human Brain Mapping                 | <a href="#">Video</a>   |
| 2020 | <b>Transcriptomic Gradients Of The Human Cerebellum</b> , BioRxiv  | <a href="#">Paper</a>   |
| 2019 | <b>Functional boundaries in the human cerebellum revealed by a multi-domain task battery</b> , Nature Neuroscience | <a href="#">Press</a>   |
| 2019 | <b>Graduate School Advice: What we wish we had known</b> , Berkeley Blog   | <a href="#">Blog</a>    |
| 2017 | <b>Welcome to My Place, Berkeley, California</b> , The Irish Times   | <a href="#">Article</a> |

## Teaching

### General Psychology; English Literature

LECTURER; TUTOR

Sep. - Dec. 2019; Jan - Mar. 2021

Mount Tamalpais College

San Quentin State Prison

### Biological Psychology, PSYCH 110; Cognitive Neuroscience, PSYCH 127

GRADUATE STUDENT INSTRUCTOR

Aug. - Dec. 2018; Aug. - Dec. 2017

University Name redacted

University location redacted

### Introduction to Statistics, STAT 1024; Probability and Statistics, STAT 2857

GRADUATE STUDENT INSTRUCTOR

Jan. - May. 2017; Sep. - Dec. 2016

University name redacted

University location redacted

## Skills

### Programming Languages

Python, Stata, Tableau, SQL, R, MATLAB, HTML, Bash

### Frameworks and Tools

Keras, OpenCV, Git, Vim, Blender, Numpy, PsychoPy, Pyglet, Pandas, NumPy, Scikit-learn, Scipy

### Conceptual

High performance computing (Savio), MRI certificate from Henry H. Wheeler Jr. Brain Imaging Center

### Languages

English (Native), Irish (Native), French (Proficient), German (Basic)