

A scientist with over 10-years of experience in academic and biomedical research. I am a detail-oriented, reliable and independent worker who can offer technical versatility and intellectual creativity to your team. I have a Ph.D. in cognitive neuroscience and I routinely use experimental paradigms in combination with neuroimaging techniques and perform exploratory analysis or hypothesis-testing with big data to understand the relationship between the brain and behavior.

EDUCATION

UNIVERSITY OF MÜNSTER, MÜNSTER, GERMANY – PHD COGNITIVE NEUROSCIENCE, 2007

UNIVERSITY OF OREGON, EUGENE – MS COGNITIVE PSYCHOLOGY, 2004

UNIVERSITY OF CALIFORNIA, LOS ANGELES – BS PHYSIOLOGICAL SCIENCES, 2001

EXPERIENCE

RESEARCH SCIENTIST 2014-PRESENT

- ❖ Developing experimental paradigms to describe brain activity in infants and children during speech discrimination and language cognition tasks.
- ❖ Translating research to characterize abnormalities in autism with multimodal imaging data and A/B or two-sample hypothesis testing between clinical and normally developing populations. [Biological Psychiatry 2011](#).
- ❖ Making use of Python scientific computing tools (Numpy, Scipy, PANDAS, Seaborn, Matplotlib, scikit-learn) to carry out analysis including machine learning classification of brain activity to speech stimulus.
- ❖ Perform hypothesis testing on behavioral or time-series data using analysis of variance techniques (univariate, repeated measures, mixed) and communicating results at professional conferences including [Organization for Human Brain Mapping](#): Seattle, WA 2013, Honolulu, HI 2015, Vancouver, CA 2017, Singapore 2018.
- ❖ Using general regression (linear, mixed-linear) or correlation methods to link prospective or concurrent multimodal bio-behavioral metrics.
- ❖ Contribute to the open science community by contributing to Python computing software for dense array signal processing and analysis tools. [Journal of Open Source Software 2019](#).

POSTDOCTORAL RESEARCHER 2008-2014

- ❖ Awarded \$500K+ from **Bezos Family Foundation** and **Simms/Mann Institute** to develop and deploy basic research into auditory language learning during early childhood development.
- ❖ Improved the reliability of pre-operative diagnostic mapping of language brain function in pediatric patients.
- ❖ Designed experimental paradigms for studying brain physiology during speech discrimination and semantic processing. [Neuroreport 2011a](#), [2011b](#).