



## National Institutes of Health

January 13, 2022

9000 ROCKVILLE PIKE  
BETHESDA, MD, 20892 USA

### Application for Program Specialist

To whom it may concern,

## About Me

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I'm currently a Ph.D. candidate in cognitive and computational neuroscience at the University of California, Berkeley. I have 6+ years of research experience, and leadership expertise in academia and non-profit work. My research consists of hypothesis- and data-driven experimentation. I apply machine learning and statistics to large and complex databases to build models of brain function. I have a strong track record of publishing in high-impact, peer-reviewed scientific journals (>350 citations), presenting at research conferences (>10 proceedings), and making science accessible (>200 downloads of open-access datasets and code). I also enjoy teaching and mentoring diverse groups of students, from undergraduates at UC Berkeley to incarcerated students at San Quentin State Prison. Furthermore, my research interests dovetail strongly with science and technology policy, and over the past 5 years, I have used data-driven solutions to promote issues concerning equity, transparency, and accountability within academia and non-profit organizations.

## Why NIH?

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As a neuroscientist, I am motivated to work at the NIH and use my scientific and data-driven expertise to support and strengthen research programs in U.S. institutions, and work on projects that lead the way in creative and collaborative discoveries. I am excited at the prospect of using my experience as a scientist, educator, and mentor to work at the foundation of medical and scientific innovation. Furthermore, the at-large PMF program at the NIH offers a unique opportunity for professional development training, and I am very eager to hone and develop my leadership skills and expertise through meaningful work assignments. Most importantly, I am excited at the prospect of working alongside colleagues who, as well as being innovative thinkers, are creative, thoughtful, and driven.

## Why Me?

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I have experience in managing and leading both non-technical and technical projects. Administrative and managerial projects have included: 1) leading a team of 5 to collect and analyze 300 hours of neuroimaging and eye-tracking data, 2) managing large and complex patient databases containing sensitive health and clinical information, and 3) maintaining ethics proposals and drafting guidelines for clinical neuroimaging experiments. Contract and grants projects have included 1) drafting mentorship contracts for the UC Berkeley psychology graduate program to promote mutual accountability in mentor-mentee relationships, and 2) co-writing two NIH grants with my Ph.D. supervisor (R35 was funded, R01 was not). As part of grant writing, I reviewed and analyzed 30 years of peer-reviewed neuroscience literature to propose a novel theory of cerebellar function. Finally, I have experience in using data science techniques and advanced statistics to recommend data-driven solutions to university leadership, resulting in targeted fund-raising efforts and increased stipends for psychology graduate students. My experience has taught me to maintain productive and collaborative relationships with colleagues from all over the world, and I regularly act as a liaison between team leaders in 1) establishing norms and guidelines for collaborative decision making, and 2) acting as a representative for cross-functional projects. Finally, it is because of funding from the NIH that I have been able to conduct high-quality scientific research during my Ph.D. For this reason, I would relish the opportunity to apply what I have learned, namely quantitative and communication skills, to high-impact projects that push the boundaries of scientific knowledge.

Sincerely,

**Maedbh King**