

2021 Minnesota Neuroimaging Postdoctoral Fellowship Program

Deadline to Apply: November 3, 2021

Neuroimaging using optical and magnetic resonance techniques has enabled anatomical, connectional and functional imaging of the brain that has revolutionized medical research. The last decade has ushered in amazing advances in neuroimaging due to transformative developments in magnetic resonance, optical imaging techniques and computational modeling. Multi-disciplinary teams among medical researchers, engineers, physicists, mathematicians, and data scientists are driving these advances. In order to continue the pace of technical advances in neuroimaging, and to exploit their unique capabilities for brain research and medical applications, it is critical to train the next generation of neuroimaging specialists in a setting with an abundance of state-of-the-art tools, a programmatic interest in developing novel neuroimaging technologies and biomedical applications, and where trainees can carry out groundbreaking research under multi-disciplinary mentorship.

The University of Minnesota College of Science and Engineering and the Medical School has received a \$1,074,000 NIH training grant to support postdoctoral fellows to become leaders in neuroimaging using magnetic and optical imaging tools. The training program will support 8 postdoctoral fellows for two years each over the next 5 years (2021-2026). Each fellow will receive up to \$70,000 per year in financial support. A major goal of this fellowship is to increase diversity in neuroimaging and train future researchers within the neuroimaging field. The fellowship aims to provide recipient's multi-disciplinary skills in neuroimaging technology, development in advanced biomedical applications, guidance in career development, and social/networking support through this intense two-year neuroimaging fellowship program. Each fellow's primary research will be conducted on a multi-disciplinary project that combines their background with another field with the express goal of developing new neuroimaging technologies.

This fellowship will invite and encourage postdoctoral applicants from across the United States to apply. Selected fellows will receive 2 years of funding to work in a neuroimaging laboratory at the University of Minnesota and will be mentored by two of the over forty faculty affiliated with this NIH training grant. The training grant executive committee will select applicants and match them with faculty mentors. Each project will be developed to match the fellow's skills and to provide them training in two of the four neuroimaging research represented by their faculty mentors. The goal of the program will be to train fellows in cutting edge interdisciplinary research and develop them into leaders in the neuroimaging field.

Check out our website to learn more about the Postdoctoral Neuroimaging Fellowship Program.

PROGRAM DESCRIPTION

The maximum award is for two years and up to \$70,000 per year to complete a primary project. We expect to support two project proposals.

■ The award is open to postdoctoral trainees whose research focus is on developing new neuroimaging technologies.

Selected recipients will be matched with mentors:

- Each fellow recipient will be matched with two faculty mentors who will be selected from the 40+ participating faculty from the training grant: one who will directly supervise the research project and one that represents a core area related to the research project.
 - Mentors will be required to submit letters of confirmation once matched with the recipient.

Fellow recipients will be expected to:

- Fellows will take at least two courses to broaden their skillset and prepare for either an academic or industry research career.
- Fellows will participate in an Annual Retreat and twice-monthly seminars that will cover research and career development topics such as responsible conduct of research, scientific rigor and reproducibility, grant writing, and other key subjects.
- Fellows will also participate in UMN's numerous neuroscience conferences, symposia, and workshops, along with well-established UMN outreach programs to high schoolers and undergraduates from communities under-represented in STEM fields.
- Provide 6 month progress reports through the project period (with continued funding contingent on progress). A final report is also due at the end of the award.
- Acknowledge the T32 Minnesota Neuroimaging Training Grant's support if discussing the project in media engagements, professional presentations (eg., talks, posters, community outreach), grant submissions, and publications.

CRITERIA FOR SELECTION

Fellowship recipients will be selected based on academic record, relevance of the proposed research to neuroimaging, evidence of past and future research productivity, training experience, diversity, equity, and inclusion (DEI) statement, and research project quality.

Postdoctoral Fellowships: We seek outstanding postdoctoral trainees who are planning on, or already working with, University of Minnesota faculty mentors on neuroimaging research at the University of Minnesota. Upon starting the fellowship at the University, a recipient must be a postdoctoral trainee in a job classification reflective of that role (e.g., recipients must have a PhD at the time they start the fellowship; PhDs in professional positions at the University are not eligible for the fellowship.) Applicants must also be a citizen or a noncitizen national of the United States or have been lawfully admitted for permanent residence at the time of appointment.

The University of Minnesota is an affirmative action/equal opportunity educator and employer.

APPLICATION INSTRUCTIONS

There are two parts to the application, all must be completed and submitted no later than November 3, 2021 by 5 pm (Central Time). Recipients will be notified of awards in December 2021. Projects can begin as early as January 2022.

- Applications should be submitted electronically by completing the <u>online application survey</u>, which will include uploading required materials.
- The following link will take you to the online survey: https://umn.qualtrics.com/ife/form/SV_b9QsChbclOui8N8

REQUIRED INFORMATION AND APPLICATION MATERIALS

The online application survey will ask applicants to upload the following required information as a single PDF file (font and margins should be no smaller than 10 pt., and 0.5 inches, respectively):

PART 1: Online fellowship application form.

Applicant should complete the online fellowship application form, which calls for the following required information:

Project Cover Sheet - cover sheet with the following:

- Applicant name and contact information (telephone, email, current and permanent address).
- Names and contact information of two individuals who will write LETTERS OF SUPPORT on behalf of the applicant.

Applicant will also upload a PDF document to the application containing the following sections in the order shown:

- 1. PROJECT TITLE and SUMMARY (1/2 page, font no smaller than 11 pt font).
- 2. STATEMENT of AREAS of INTEREST. The applicant should provide a BRIEF general STATEMENT of the PROJECT'S SIGNIFICANCE 1 to 4 sentences in language appropriate for the general public.
- 3. STATEMENT of DIVERSITY, EQUITY & INCLUSION. Applicant should provide a brief statement on how they or their project contribute to increasing diversity, equity, and inclusion 1 to 5 sentences.
- 4. STATUS of IRB or IACUC APPROVALS. Applicant should indicate the status of IRB and/or IACUC protocols (or indicate that IRB or IACUC protocols are not required for the proposed project). It is not expected that protocols will be approved before submission, but an indication of plan and status of protocols will help determine feasibility of the study in the two years of funding.

- 5. PROJECT NARRATIVE (limit = 1 page, no smaller than 11 pt font). The PROJECT NARRATIVE should provide a succinct description of the research project, state how the research will advance the field of neuroimaging technology.
- 6. OPTIONAL SUPPLEMENTAL INFORMATION for the PROJECT NARRATIVE. One image containing up to two graphs or diagrams to support the PROJECT NARRATIVE (limit = 1/2 page), AND/OR one page of bibliographic references.
- 7. STATEMENT of TRAINING. Describe what new knowledge, skills, and techniques the applicant will acquire through the fellowship, and how these will advance the applicant's career aspirations.
- 8. TIMELINE, KEY MILESTONES and DELIVERABLE(S). The TIMELINE with KEY MILESTONES in the award period should be described or illustrated (with anticipated dates of IRB/IACUC submission and approval dates indicated if IRB/IACUC protocol approval has not yet been obtained), and, in 1 or 4 sentences, applicant should clearly state the project DELIVERABLE(S) expected at the end of the award period.
- 9. APPLICANT CV. The applicant should provide a CV that includes previous education, honors/awards, research experience, publications, conference abstract titles, and IP (e.g., disclosures/patents) (limit = 2 pages). The CV should also contain the applicant's GPA for all academic institutions attended.

PART 2: LETTERS OF SUPPORT from two professional references. Applicant should arrange for a LETTER OF SUPPORT to be submitted by each of TWO professional references who can comment on the applicant's qualifications and research potential (each letter should be no longer than 2 pages). Letter writers should submit letters by email to mnbc-fel@umn.edu no later than November 3, 2021.

REVIEW PROCESS

The program will be managed by an Executive Board that represents the diversity of the participating faculty across the Medical School and the College of Science & Engineering. Management plans include a rigorous, ongoing evaluation process that incorporates an external Advisory Board and the University of Minnesota's internal research and assessment services. Applications will go through an extensive review process through an internal review committee by a committee composed of faculty members of the T32 Neuroimaging Training Grant.

Applicants will be evaluated on:

- 1. Scientific merit of the proposed study
- 2. Scientific impact of proposed study
- 3. Feasibility of proposed study
- 4. Qualifications and productivity of applicant
- 5. Contributions of the applicant and project to promoting diversity, equity and inclusivity in science.

The committee will also take into consideration:

- 1. Balancing fellowships between magnetic resonance and optical imaging projects
- 2. Balancing gender and creating diversity among fellows
- 3. Preference will be given to new applicants from outside the University over existing post-docs at the University
- 4. Promoting and developing new candidates that have technical backgrounds and are interested in transitioning to Neuroimaging field

For questions please contact us at: MNNeuroimaging@umn.edu

Visit our website to learn more about the Neuroimaging Postdoc Program: https://z.umn.edu/MNNeuroimagingPostdoc