MIT Aging Brain Initiative "Ia Caixa" Foundation Postdoctoral Fellowships

Program Description

We all want to be able to do something to change the course of diseases that today have no cure and limited treatment options, but potentially transformative opportunities to do so are rare. Recent technology developments and groundbreaking research approaches from MIT are creating new ways to combat neurodegenerative disorders such as Alzheimer's disease as well as offer new strategies to promote healthy brain aging.

MIT, in partnership with "la Caixa" Foundation, are joined to move this work forward to help millions of people worldwide. By supporting research, education and the innovative technologies developed in MIT's Aging Brain Initiative (ABI) through "la Caixa" Postdoctoral Fellowships, we have the potential to help revolutionize treatment for neurodegenerative diseases and improve quality of life.

"Ia Caixa" Foundation offers two postdoctoral fellowships for up to three years in Aging Brain Initiative laboratories across MIT to the most talented PhD graduates. Preference will be given graduates from institutions in Spain or Portugal** who have a strong record of academic excellence, outstanding PhD research, proven scientific productivity, and evidence of potential in their research paths.

**Exceptionally, graduates from other European institutions will be considered.

MIT's Aging Brain Initiative

The ABI unites MIT faculty members representing expertise, knowledge, and technical resources from across the university to solve the mysteries of the aging brain. It spans neuroscience, fundamental biology, genetics, investigative medicine, engineering and computer science, economics, chemistry, urban planning, and artificial intelligence to enable a comprehensive, systems-level approach. Its ultimate mission is to deliver the fundamental research that makes possible new tools to address the challenges of brain aging and to create a better future for millions of families for generations to come.

For further information, please visit the Aging Brain Initiative website: <u>https://picower.mit.edu/about/aging-brain-initiative</u>

Program Structure

One of the most emphasized needs of MIT faculty and for continued success of the ABI is support for postdoctoral fellows. Postdoctoral fellows are the undeniable work force of a laboratory and support for these positions becomes particularly critical in later years when the researchers are the most experienced but funding is the most challenging to obtain. Support for international postdocs and those from

underrepresented minorities is also getting much harder as fewer fellowships are available each year.

Benefits of the Program

The "Ia Caixa" Foundation Postdoctoral Fellowships within MIT's Aging Brain Initiative would support the fellows with:

- Gross stipend (\$65,000 USD per year)
- Health insurance and benefits
- Research allowance

Fellows will be given the space, resources and support needed to run their own programs and pursue an independent research agenda within the Aging Brain Initiative. Fellows will also receive access to mentoring and career development programming hosted by the Picower Institute for Learning and Memory that will help them launch their careers as independent scientists.

Selection criteria

Candidates must submit:

- The support and **nomination** of an MIT ABI faculty mentor.
- An outstanding two or three-page fellowship proposal to Picower Institute's Program Coordinator, Ms. Abby Reynolds, areynol2@mit.edu for review by the Strategic Director of MIT's Aging Brain Initiative, Dr. E. Niederst and an MIT faculty member. The proposal must include a brief description of a rationale, research project, and research methods that will be used over the three-year period.
- **NIH biosketch** (US National Institutes of Health) or equivalent curriculum vitae detailing their individual research experiences accomplishments.

Eligibility

- Researchers of any nationality may apply.
- Preference will be given to top candidates that graduated from a Spanish, Portuguese or European Research Centre or university in the disciplines of Life Sciences, Bioengineering, Chemistry, Physics or Computer Sciences or similar.
- Candidates must start the postdoctoral training within 5 years of obtaining their Ph.D. degree.

Selection process

Following faculty and strategic director review, a final review process and approval will be required by the ABI Director to be elected to receive fellowships. The ABI Director will ensure that only those proposals with an outstanding quality be approved.

Application process would begin once the program is initiated and continue for three months. If no qualified applications are received, further applications will be accepted on a rolling basis until the fellowships are filled. Once approved, the funded fellow will submit progress updates to the Strategic Director of the ABI once per year. Fellows would be required to participate in department, lab, and center activities including lab meetings, one-on-one mentoring, seminar series and encouraged to participate in the career mentoring activities and academic programming of the institute.

Application process and Calendar

- Applicants should contact a potential principal investigator (P.I.) mentor from MIT's Aging Brain Initiative (core or collaborating member) with whom they would like to pursue their scientific research. Outreach should include an account of their interest in the lab's work, and how their experience could be helpful along with a formal curriculum vitae detailing their research experience and results.
- Candidate outreach will be reviewed by the potential P.I. and those candidates with outstanding qualifications will be contacted for further review. Top candidates may be invited to MIT to present their work and interview with the lab in person. References will be requested.
- Once an appropriate P.I. has been identified and confirms interest, they will work with the applicant to prepare and submit the documents required for evaluation by the program.
- For more details please see the webpage and application: (<u>https://picower.mit.edu/about/aging-brain-initiative</u>)

<u>Calendar</u>

Call opening: May 2020

Deadline for applications: Accepted until the first deadline of September 1, 2020. If insufficient high-quality applications are received by the first deadline, further application will be accepted on a rolling basis until fellowships are filled

Information of results: As fellowships are filled

Fellowship start: Fellowships may begin as soon as qualified applications are chosen, beginning as early as Summer 2020.

Fellows must complete a lay friendly and scientific report on their activities and progress each year and near the end of the grant period.