The William H. Gates Sr. Fellowship from the AD Data Initiative

Fellowship Rules

About Us

The AD Data Initiative is a coalition of leading academic, government, industry, and non-profit organizations that recognizes the need for dementia researchers to have easier ways to share unpublished data, analytical tools, and scientific findings. These partners are working together to accelerate progress towards new diagnostics, treatments, and cures in Alzheimer's disease and related dementias (ADRD). In 2020, the AD Data Initiative publicly launched a non-profit organization, referred to as ADDI to help achieve its goals.

The *William H. Gates Sr. Fellowship from the AD Data Initiative* has been established to encourage and support researchers from around the world to be bold, creative, and innovative in their approach to ADRD research. This may include generating new hypotheses about the biology of dementia or challenging existing ones. A successful applicant's research proposal will include using innovative data analysis ideas or statistical approaches on human or human-derived anonymized data to make new discoveries in ADRD.

Named after William H. Gates Sr., this fellowship honors his legacy of advocacy and philanthropy. In 2020, Mr. Gates Sr. passed away from Alzheimer's disease and we hope he can be an inspiration to the research community. As the inaugural (Year 1) cohort, the 2023 fellows will be at the forefront of building a community and increasing collaborations.

The Fellowship

The AD Data Initiative is creating new possibilities for over 55 million people worldwide living with Alzheimer's or related dementia. To accelerate novel discoveries in ADRD, this program will support fellows to engage in research, share their findings, and grow the dementia data sharing community spearheaded by the AD Data Initiative.

Fellows may also be asked to collaborate with the AD Data Initiative on data analysis activities, use and promote analytical tools available on the [AD Workbench](#) (ADDI's online data sharing and analysis platform), help identify and develop new tools, data, and capabilities, and engage in community forums such as [AD Connect](#) (ADDI's online community).

Successful fellows will use human or human-derived anonymized data that is accessed, with permission, on the AD Workbench or from other sources. They will conduct their analyses on the AD Workbench and address a question in the ADRD field. The question may, *but is not required to* include one or more of those suggested by the AD Data Initiative:

- Can we combine existing and new data to track aging and disease progression?
    - Can we predict and delay the conversion of mild cognitive impairment to Alzheimer's disease?
    - Do diverse genetic and environmental backgrounds change the risk of onset or progression of Alzheimer's disease?

- Can we identify biological pathways that might be:
  - Targets for intervention?
  - Signatures of pathology, which could facilitate clinical trials that are agnostic to existing clinical diagnostic categories?
  - Used to stratify patients?

- Can we optimize how to stratify patients for clinical trials?
  - Can we redefine Alzheimer's disease (go beyond stratification)?

- How can we rapidly, repeatedly, and consistently measure cognitive function?

- Can we assess the validity and reliability of proposed novel biomarkers and diagnostics?
  - Can we extract meaning from less structured data (such as speech) using artificial intelligence, machine learning, or other methods?

- Are there lifestyle or behavioral changes that will pause or delay Alzheimer's disease symptoms?

This fellowship is *not* intended to address hypotheses outside the dementia field, collect new data, recruit new subjects as part of a new or existing clinical study, involve non-human derived data, or prepare data for broader sharing without specific analyses.

Fellows will continue to work at their home organization and not be employed by ADDI. However, our fellows will not work alone. The program will consult with each fellow to identify mentors, provide opportunities to engage with other fellows and AD Data Initiative partners, support conference participation and publications, and more.

Eligibility

Approximately five fellows will be selected for our two-year program. Applicants must be researchers currently employed by an academic, government, industry, or non-profit organization. If employed by an academic organization, applicants must not hold a tenured faculty position (tenure is defined as an indefinite academic appointment that can only be terminated for cause). Due to United States financial restrictions, applicants cannot reside or work for an organization located in Afghanistan, Belarus, Central African Republic, Cuba, Democratic Republic of Korea, Democratic Republic of the Congo, Ethiopia, Iran, Iraq, Lebanon, Libya, Mali, Myanmar, Nicaragua, Russian Federation, Somalia, South Sudan, Sudan, Syria, Ukraine, Venezuela, Yemen, or Zimbabwe.

It is preferred that applicants have a doctoral degree relevant to this program and approximately five to ten years of relevant work experience after receiving their highest degree. Applicants should have expertise in computational, machine learning, statistical, or other data science methods, and a demonstrated interest in brain research, neuroscience, or other relevant fields.

We believe high-quality science needs to include different perspectives, so we are building a diverse and inclusive environment. We encourage people from all cultural, geographical, and technical backgrounds to apply, including those who are from underrepresented backgrounds in their field.

Applications will be assessed on the following:

- Topic Responsiveness. How well does the proposed research address a key need illustrated in the topic description?

- Innovative Approach. Does the idea offer an unconventional, creative approach to address the important problem outlined in the topic?

- Significance and Impact Potential. Does the proposed research have the potential to generate new hypotheses about the biology of dementia or challenge existing ones? Does it align with the mission of the AD Data Initiative?

- Execution Plan. Is the work described feasible given the resources needed, time allocated, and efforts anticipated?

Benefits

Each fellow in our Year 1 cohort will receive a financial award of up to $100,000 USD, to be used to support their research. The award will be divided and distributed over the course of the two-year program. Fellows will also be offered opportunities to develop their professional networks within the ADRD field, including identifying mentors. The program will offer fellows financial assistance to attend and present findings at relevant scientific conferences and publish findings in peer-reviewed journals and other publications.

There will also be opportunities for the fellows to connect with their peers on AD Connect by leading discussions, answering questions, or offering expertise. Finally, as the inaugural cohort, Gates Sr. AD Fellows will have the unique experience of helping shape this program for future participants.

Application Materials

A complete application will include:

- Profile details (as requested in the online application).

- Brief resume or curriculum vitae, including links to any relevant publications (maximum 2 pages).

- Personal statement describing how receiving this fellowship will help the applicant accelerate new discoveries in the diagnosis, treatment, or cure of ADRD (maximum 1 page).

- Research statement answering these questions (maximum 2 pages):
    - What question in the ADRD field will you address?
    - What is your hypothesis?
    - What human or human-derived anonymized data will you use, including data that is discoverable on the AD Workbench or from other sources?
    - What data analysis tools will you use? Confirm that you will do your analyses on the AD Workbench. If not, please explain.
    - What is your schedule of activities and anticipated research milestones?

During the review period, applicants may be contacted if further clarification is needed.

Software Code

ADDI requires fellows to share the software code they develop and make it available on GitHub (or a similar public service). All new code must be released under a permissive open-source license (MIT, BSD 2-Clause, BSD 3-Clause, or Apache v2.0). All pre-existing and derivative codes must be licensed under the most permissive license possible, given the licensing terms of the pre-existing code. All analysis packages must be released through the appropriate language-specific package manager (PyPi for Python, Bioconductor, or CRAN for R as examples) with documentation, example data, and interactive demos (Jupyter notebooks as an example). Docker or similar container technologies must be used to ensure portability and reproducibility.

ADDI requires software code developed with ADDI support to be archived and easy to reference, when applicable. Exceptions may be considered if counterproductive to the research.

Privacy and Confidentiality

All submitted applications will be kept confidential, except: (1) as noted below; (2) as necessary for our evaluation; (3) to comply with any applicable laws; and (4) if the application is made public or available to others through no fault of ADDI. Unfunded applications will remain confidential. Successful applications may be shared publicly after reasonable notice to the applicant or with parties related to the fellowship program to enable the management of the program. Application materials will not be returned to applicants. For further details about ADDI's privacy policies and use of any personal data that may be submitted with your application, please refer to ADDI's privacy policy.

Publicity and Marketing

Fellows may be asked to collaborate with ADDI on publicity and marketing related to their research, which may use information included in their application. Any information that will be publicly disseminated that specifically references the fellow or their work will be shared with the fellow prior to being shared with others.

No Third-Party Infringement

By applying, the applicant is representing to ADDI that they have the right to provide the information submitted and the materials do not infringe any third-party intellectual property rights. Applicants with questions concerning the contents of their application may contact ADDI at:
GatesSrADFellows@alzheimersdata.org.

How to Apply

Provide *all* application materials by 11:00 PDT (18:00 GMT) on Sunday, June 11, 2023, using the application portal. Final decisions are expected to be made in July 2023.

Questions

Visit AD Connect, our online community, to post questions, read what others are asking, or review our FAQs.