



Research Fellows Program

Application Preparation Workshop

May 3rd, 2022

<https://aim-ahead.net/ResearchFellows>

Application Preparation Workshop

- Introduction
- What to expect as you start the application process
- Research proposal ideas
- Developing your bio-sketch
- Planning and preparing the budget
- What to expect post-application submission

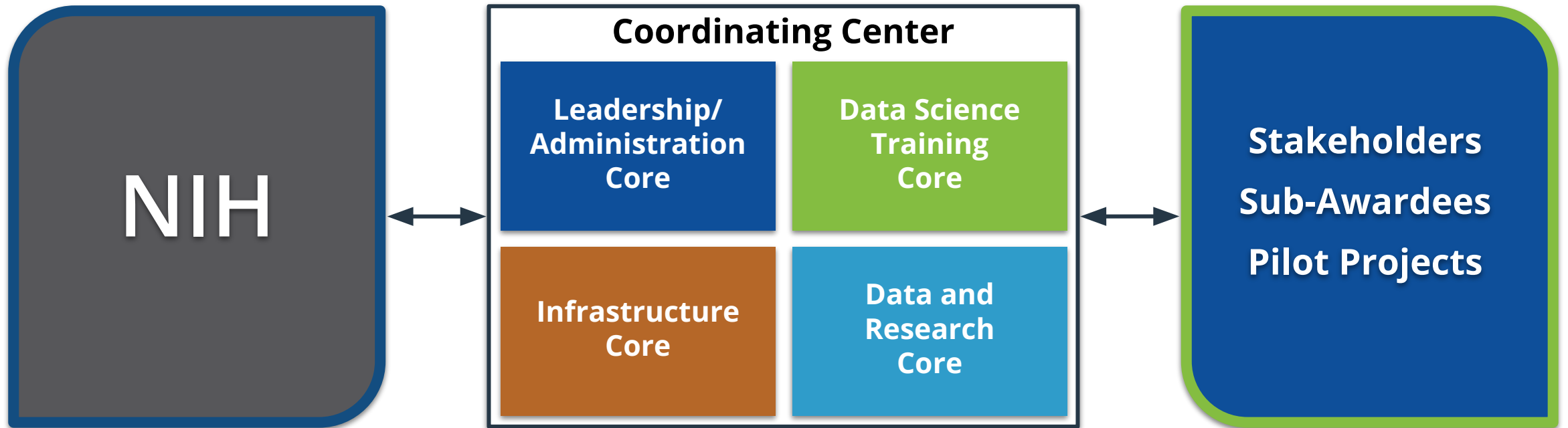


Artificial Intelligence/ Machine Learning Consortium to Advance Health Equity and Researcher Diversity

*Underrepresented communities have untapped potential to contribute new expertise, data, recruitment strategies, and cutting-edge science to the AI/ML field. This program seeks to **increase the participation and engagement** of the researchers and communities that are currently underrepresented in AI/ML modeling and applications through mutually beneficial partnerships.*

The AIM-AHEAD Coordinating Center's initial charge is to build a consortium of partners and engage with stakeholders. This planning, assessment and capacity building award will identify priority research aims in health equity and AI/ML, as well as the training and infrastructure needed to support these.

AIM-AHEAD Consortium





Research Fellows Program

AIM-AHEAD Research Fellows Program



Director:
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co-Director:
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AIM-AHEAD Research Fellows Program

- Engage a group of 20 early-career researchers
- from under-represented populations
- actively participate in biomedical research that involves the use of AI/ML methodologies
- Electronic Health Record Data.

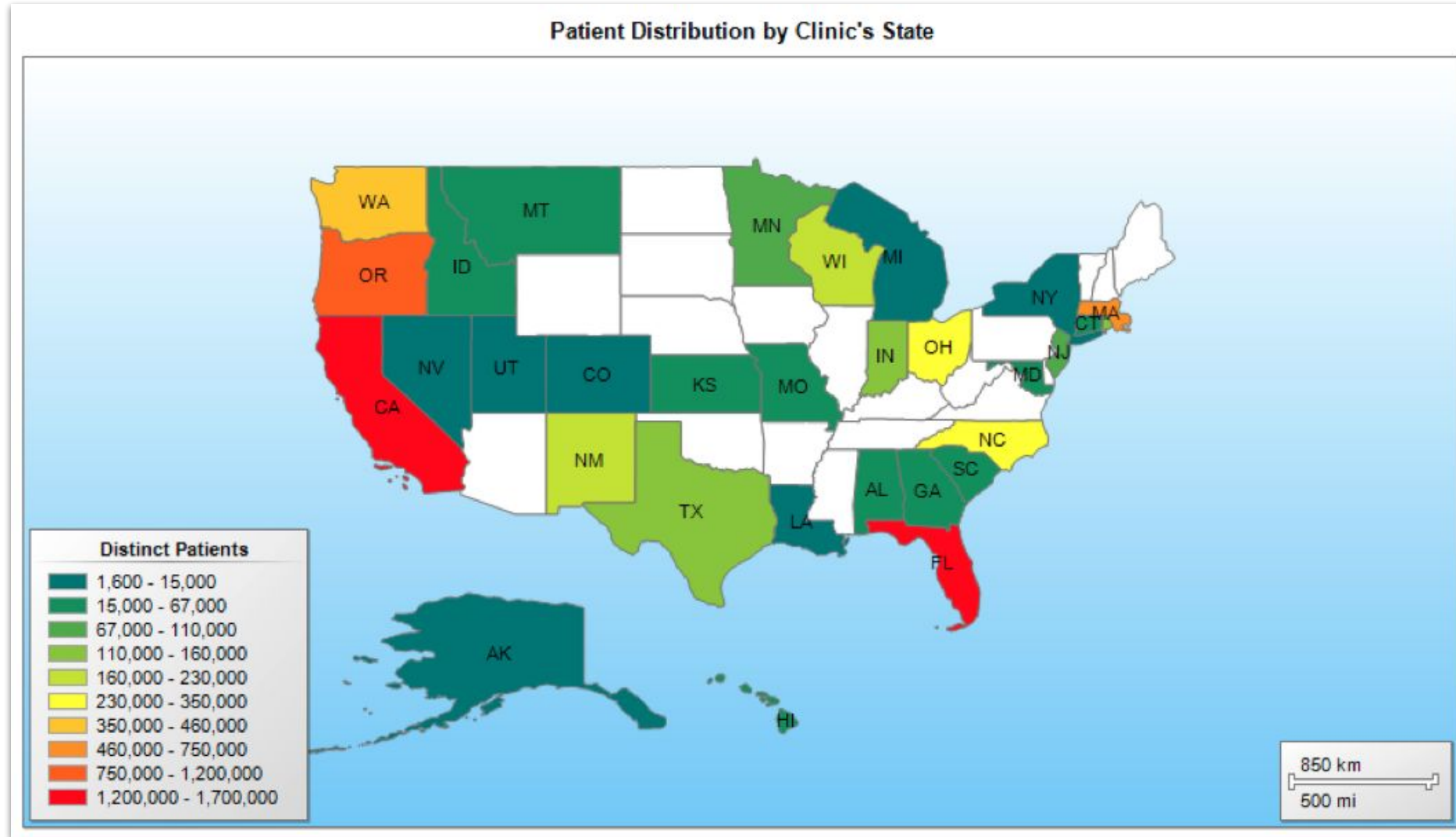
AIM-AHEAD Research Fellows Program

- AIM-AHEAD Research Fellows cohort # 1 (start date September 1st, 2022)
- Only limited access to AIM-AHEAD **data**, (OCHIN's ADVANCE EHR) **infrastructure** (Centralized cloud computing environment), and **training** will be made available starting in Q2 or Q3 2022.
- Each Fellow will be matched to an **AIM-AHEAD mentor**
- Each Fellow can also bring in an **Institutional mentor**
- Stipend for each Fellow
- FAQ and help desk
- As the AIM-AHEAD consortium develops, more **data, infrastructure** and **training** will be made available to the fellows.

Data made available

EHR ADVANCE

- 7,753,446 total distinct patients
- 184 community health care systems
- 1,733 clinic sites across
- 31 states



Infrastructure made available


Service Workbench on AWS

- Democratize access to public cloud computing
- Teaching and research
- Full billing control
- Secure enclave

The screenshot displays the 'Research Workspaces' interface. At the top, there are two main actions: 'Select Compute' (with a subtext 'Select a compute platform') and 'Create Workspace' (with a subtext 'Create the workspace'). Below these are six selectable workspace options, each with a radio button and a list of included software:

- EMR-v1**: An Amazon EMR research workspace that comes with:
 - Hail 0.2
 - Jupyter Lab
 - Spark 2.4.4
 - Hadoop 2.8.5
- SageMaker Notebook-v3**: An Amazon SageMaker Jupyter Notebook that comes with:
 - TensorFlow
 - Apache MXNet
 - Scikit-learn
- EC2 Linux-v2**:
 - An EC2 Linux instance with SSH access
 - Secure compute in the cloud
- EC2 Windows-v1**:
 - An EC2 Windows instance with RDP access
 - Secure compute in the cloud
- EC2-RStudio-Server-v1-v4-1-2**: An RStudio instance accessible over SSL which comes with:
 - RStudio Server version 1.4.1717
 - Connect securely via load balancer using Amazon issued certificates in ACM
 - Fully loaded with commonly used R packages.
- SageMaker Notebook-v2**: An Amazon SageMaker Jupyter Notebook that comes with:
 - TensorFlow
 - Apache MXNet
 - Scikit-learn

AIM-AHEAD Research Fellows Program Timeline



Thursday, April 7th, 2022	CFP public / Application Process Open
Tuesday, May 3rd, 2022 2-4pm ET	Application Preparation workshop
Sunday, May 22nd, 2022 11:59PM EST	Application Deadline
Beginning of August, 2022	Award notices released
Mid-August 2022	Matching AIM-HEAD Mentors / Fellows
Thursday, September 1st, 2022	Research Fellowship Program Begins
Thursday, August 31st, 2023	Research Fellowship Program Ends

What to expect as you start the application process

Tips for Application Preparation

- **Read** the Call for proposal **multiple times**
- **Check** Eligibility criterias
- **Read** the FAQ **multiple times**
- **Start** the application **ASAP**
- **Ask questions:** Zoom chat right now

or

https://helpdesk.aim-ahead.net/ticket/create/research_fellowship

Fellowship Eligibility

Eligible Organizations hosting Applicants

Higher Education Institutions

- Public/State Controlled Institutions of Higher Education
- Private Institutions of Higher Education

Consistent with the goals of the AIM-AHEAD Coordinating Center, the following types of Higher Education Institutions are highly encouraged to apply for Fellowship support:

- Hispanic-serving Institutions
- Historically Black Colleges and Universities (HBCUs)
- Tribally Controlled Colleges and Universities (TCCUs)
- Alaska Native and Native Hawaiian Serving Institutions
- Asian American Native American Pacific Islander Serving Institutions (AANAPISIs)
- Other Minority Serving Institutions

Nonprofits Other Than Institutions of Higher Education

- Nonprofits with 501(c)(3) IRS Status (Other than Institutions of Higher Education)
- Nonprofits without 501(c)(3) IRS Status (Other than Institutions of Higher Education)

For-Profit Organizations

- Small Businesses
- For-Profit Organizations (Other than Small Businesses)

Fellowship Eligibility

Eligible Applicants

Applicants must be:

- 1) early-career researchers (graduate students, postdocs, junior faculty (Early Stage Investigator), and others)
- 2) US Citizens, Permanent Residents and Non-Citizen Nationals

An Early Stage Investigator (ESI) is an investigator who has completed their terminal research degree or end of post-graduate clinical training—whichever date is later—**within the past 10 years** and who has not previously competed successfully as a Principal Investigator for a substantial, NIH independent research award.

The goal of the AIM-AHEAD coordinating center is to **diversify** the research workforce in AI/ML and Health Equity. Consistent with the NIH Interest in Diversity (NOT-OD-20-031: Notice of NIH's Interest in Diversity)

We are particularly interested in applicants from historically underrepresented groups in AI/ML, such as women, racial/ethnic minorities, people with disabilities, individuals from rural or socially disadvantaged backgrounds, and those of LGBTQIA identity.

Live demo of the application process in InfoReady

Research Proposal Ideas

- Link to data dictionary has been provided for reference to available data for scientific inquiry

De-identified Electronic Health Records Data made available to the fellows:

- [EHR datashort guide](#) 
- [EHR Data Dictionary \(Download zip file\)](#) 

- Sample proposal topics:
 - opioid use
 - telemedicine and native language
 - disparities and social determinant predictions

Developing your Biosketch

Biographical Sketch

- NIH biosketch (not to exceed 5 pages) is required.
- <https://grants.nih.gov/grants/forms/biosketch.htm>
- Template: Fellowship Biosketch
- Instructions
- Predoctoral Fellowship biosketch sample
- Postdoctoral Fellowship biosketch sample

BIOGRAPHICAL SKETCH

Provide the following information for the Senior/key personnel and other significant contributors.

Follow

NAME:

eRA COMMONS USER NAME (o

POSITION TITLE:

EDUCATION/TRAINING (Begin with the baccalaureate or other initial professional education, such as nursing, include postdoctoral training and residency training if applicable. Add/delete rows as necessary.)



INSTITUTION AND LOCATION

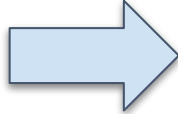
DEGREE
(if applicable)

Start Date
MM/YYYY

Completion Date
MM/YYYY

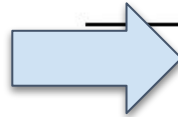
FIELD OF STUDY

eRA Commons login info

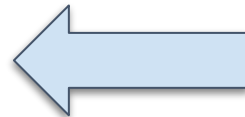


BioSketch should not exceed 5 pages

Begin with the baccalaureate or other initial professional education

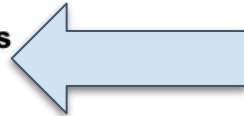


A. Personal Statement



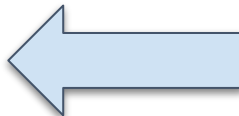
Briefly describe why you are well-suited for your role(s) in this project.

B. Positions, Scientific Appointments and Honors



In reverse chronological order **all** current positions and scientific appointments.

C. Contributions to Science



Briefly describe up to five of your most significant contributions to science

D. Scholastic Performance



Predoctoral applicants/candidates (including undergraduates and post-baccalaureates): List by institution and year **all** undergraduate and graduate courses, with grades

YEAR	COURSE TITLE	GRADE
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Postdoctoral applicants: List by institution and year **all** graduate scientific and/or professional courses with grades

Planning and Preparing the Budget

AIM-AHEAD Research Fellows Program in AI/ML Call for Proposals

 PDF

▼ Dates

Internal Submission Deadline: Sunday, May 22, 2022

[ADD TO CALENDAR](#)

▼ Details

Administrator(s): Paul Avillach (Owner)

Category: Research Fellowship

Cycle: Summer 2022

Number of Applications Allowed Per Applicant: 1

Number of Possible Awardees: 20

Reference Letters Required per Applicant: 2

Supporting Documents: [Budget Template](#)

[Example of Budget](#)

[Details](#)

[My Application](#)

Supporting Documents

[Budget Template](#)

Download, Complete and Upload the completed budget template in Budget section

[Example of Budget](#)

Ruth L. Kirschstein National Research Service Award (NRSA) Stipends, Tuition/Fees and Other Budgetary Levels Effective for Fiscal Year 2022

<https://grants.nih.gov/grants/guide/notice-files/NOT-OD-22-108.html>

Planning and Preparing the Budget


Budget Template

Updated: 5/3/2022	Announcement #:	AIM-AHEAD Research Fellowship - Summer 2022		
	Participant Name:	Jane Doe		
	Project Title:	AI/ML in breast cancer disparities		
AIM-AHEAD Research Fellowship Budget Worksheet				
Begin Date:	09/01/22			
End Date:	08/31/23			
A. PERSONNEL		12 Months		
Name	Project Role / Position at Intitute	Base Salary	% effort	Funds Requested
Jane Doe	Postdoc - 2 years of experience	55,631	50.000%	27,816
PERSONNEL SUBTOTAL		55,631	1	27,816
B. TRAVEL				
[domestic trip 1]: AIM-AHEAD Meeting - dateTBD				2,000
[domestic trip 2]: AIM-AHEAD Annual Meeting - July 2023				2,000
TRAVEL SUBTOTAL				4,000
C. OTHER DIRECT COSTS				
<i>Materials and Supplies:</i>				200
<i>Publication Costs:</i>				3,000
OTHER EXPENSES SUBTOTAL				3,200
D. TOTALS				
TOTAL REQUESTED				35,016



What to Expect Post-Application Submission

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