

Pre-Application Information Session

All of Us Data Training and Engagement for Academic Libraries Program

An Initiative to Increase Awareness and Meaningful
Use of the *All of Us* Researcher Workbench



Presented August 29, 2023

Agenda

- The *All of Us* Research Program
- *All of Us* Data Training and Engagement for Academic Libraries Program
- Application and Eligibility
- Additional Information
- Questions?

The *All of Us* Research Program

The *All of Us* Research Hub

The *All of Us* Researcher Workbench

One of the world's largest, most diverse biomedical datasets of its kind

Inviting at least

1 Million people from across the United States



Data available from **413,450+** participants

75%

are from communities underrepresented in biomedical research



45%

are from racial and ethnic minority groups



Data as of April 2023

Enabling research discoveries that drive more precise approaches to care

Engages **people & communities who have been left out of medical research** in the past



Combines **biological factors and social determinants** on a large, inclusive scale



Easily accessible to any researcher with a secure internet connection and data use agreement

Follows participants as they move, age, and grow

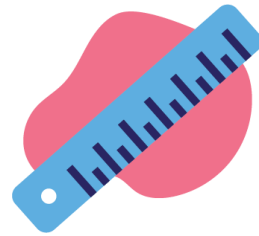


By securely capturing a range of different data types

The *All of Us* Research Program's Data and Research Center (DRC) curates a range of different data types as part of the data collection process.



413,350+
Survey Responses



337,500+
Physical Measurements



312,900+
Genotyping
Arrays



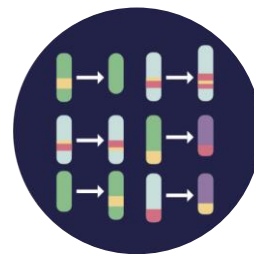
287,000+
Electronic Health
Records



245,350+
Whole Genome
Sequences (WGS)



15,600+
Fitbit Records
NEW! Sleep Data



11,350+
Structural Variants
NEW! In 2023




1,000+
Long-Read Sequences
NEW! In 2023


Data as of April 2023

Including the largest set of WGS widely available for research


As of April 2023, the *All of Us* Researcher Workbench contains the **largest set of whole genome sequences** widely available for research.




Genomics
Only available via the Controlled Tier




312,900+
Genotyping Arrays



245,350+
Whole Genome Sequences




1,000+
Long-Read Sequences




Genomics Analysis Tools
Hail and PLINK in addition to R, Python, and Jupyter Notebooks

The whole genome sequence dataset includes variation at more than **1 billion** locations, which is nearly **one-third** of the entire human genome.


Genomic Data Are Paired With Rich Phenotypic Data




206,100+
Have Whole Genome Sequences + Electronic Health Records + Physical Measurements + Survey Responses



245,100+
Have Whole Genome Sequences + Physical Measurements + Survey Responses



206,150+
Have Whole Genome Sequences + Electronic Health Records



8,800+
Have Whole Genome Sequences + Fitbit Records Representing >25% of all participant Fitbit Records

Data as of April 2023

Along with the Social Determinants of Health Survey

By connecting biological and social determinants of health data on a large, inclusive scale and following participants as they move, age, and grow, the *All of Us* dataset is driving new insights into health and disease.

Social Determinants of Health (SDOH) Survey data



from 117,750+ responses

Data as of April 2023

DATA: Access Flowchart and Tools

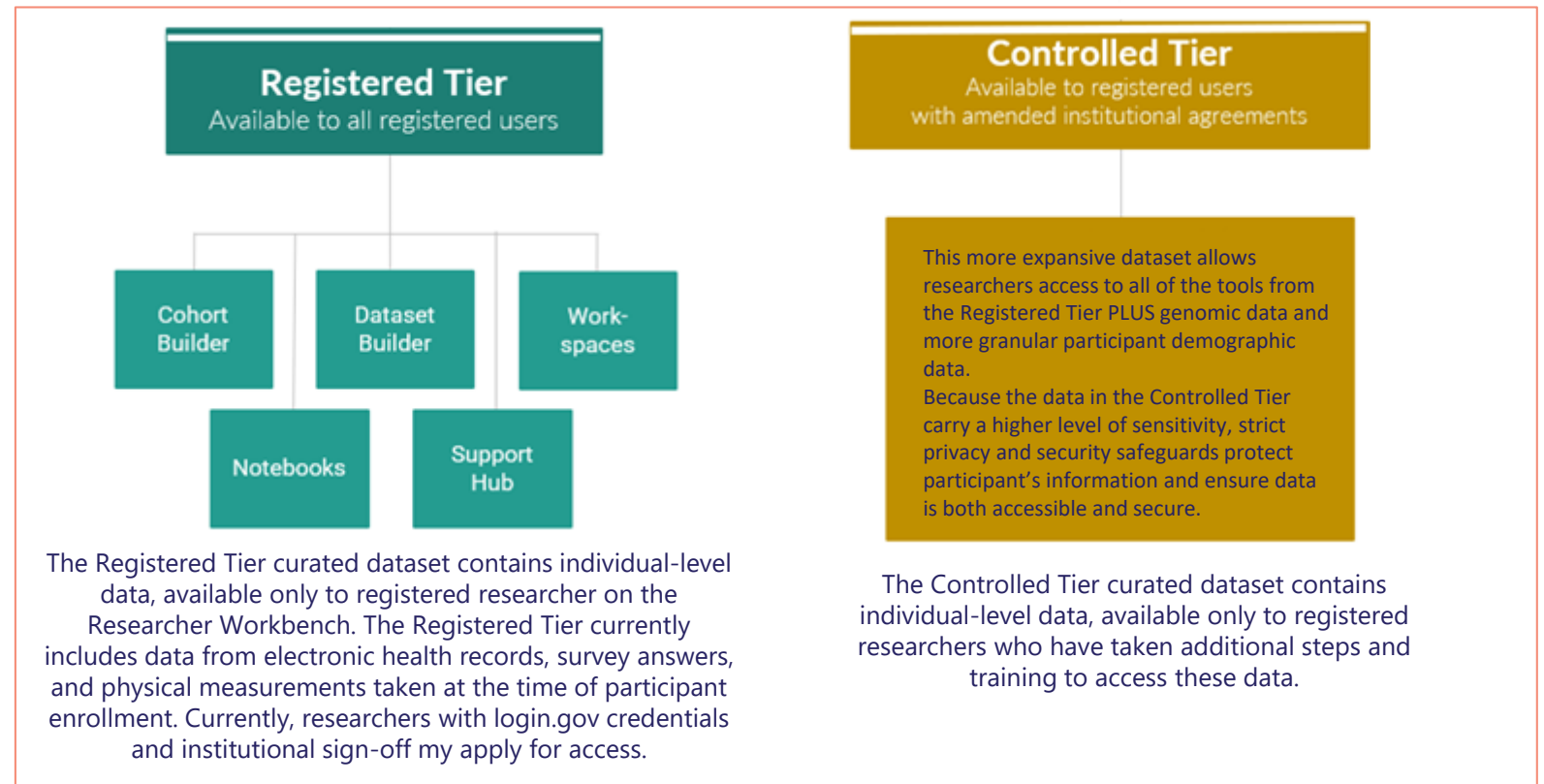
ResearchAllofUs.org

Known as "The *All of Us* Research Hub," it is researchers' main point of entry to the *All of Us* Research Program

Researcher Workbench



The Public Tier dataset contains only aggregate data with identifiers removed. These data are available to everyone through Data Snapshots and the Data Browser. Other public resources such as the Research Project Directory, Survey Explorer and Publications List offer non-data-based program summaries.



The Registered Tier curated dataset contains individual-level data, available only to registered researcher on the Researcher Workbench. The Registered Tier currently includes data from electronic health records, survey answers, and physical measurements taken at the time of participant enrollment. Currently, researchers with login.gov credentials and institutional sign-off my apply for access.

The Controlled Tier curated dataset contains individual-level data, available only to registered researchers who have taken additional steps and training to access these data.

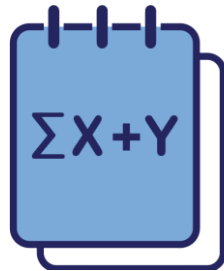
Supported by Workbench tools and resources



WORKSPACES

USES:

- Organizing research projects
- Collaboration
- Transparency



NOTEBOOKS

USES:

- Analyses
- Queries

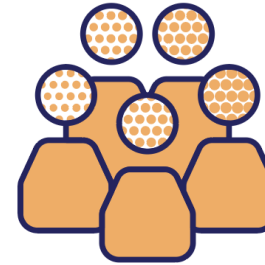
*Uses programming languages
R, Python, HAIL, and PLINK*



DATASET BUILDER

USES:

- Pre-populated analyses
- Dataset previews



COHORT BUILDER

USES:

- Cohort creation

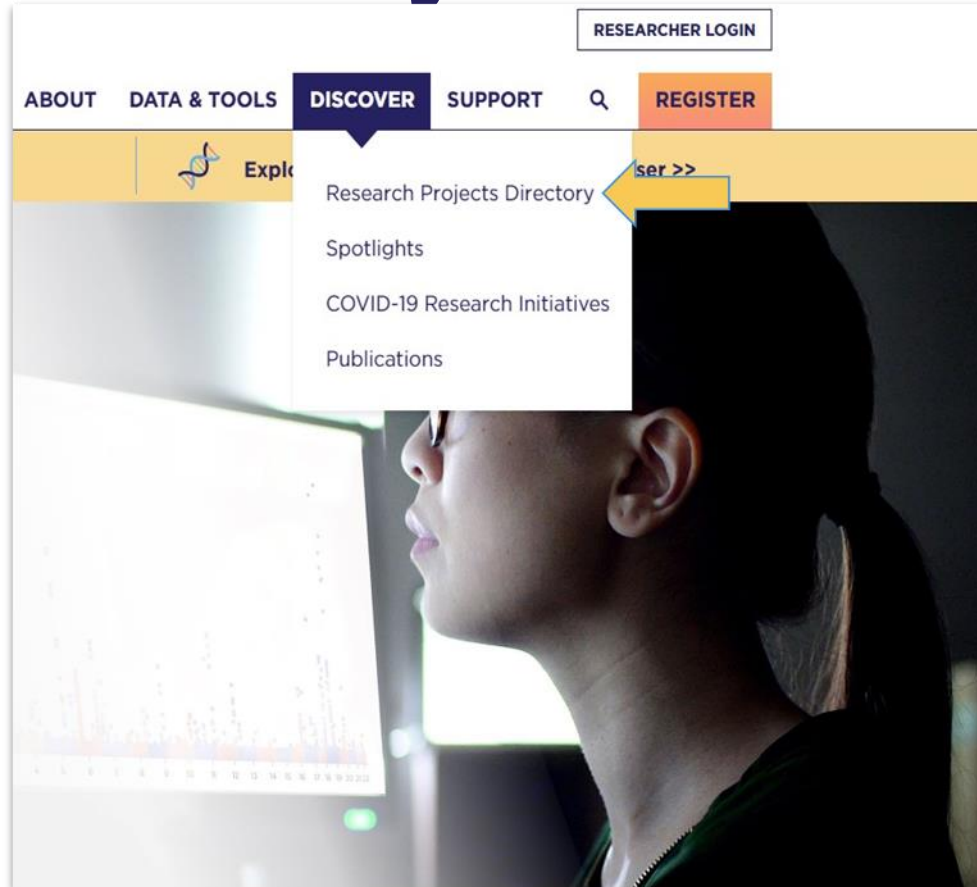


USER SUPPORT HUB

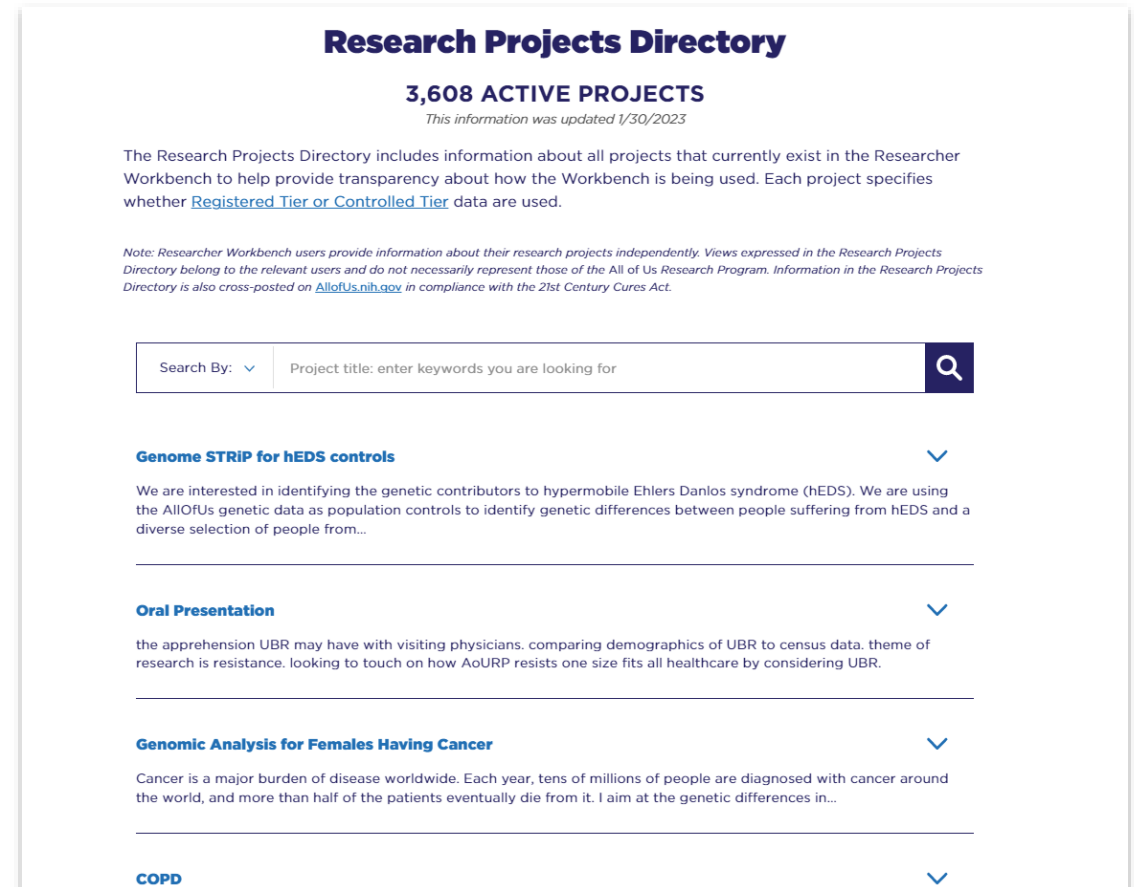
USES:

- Workbench training and resources
- Articles on Data and Tools
- Live office hours

The Research Hub: Research Project Directory

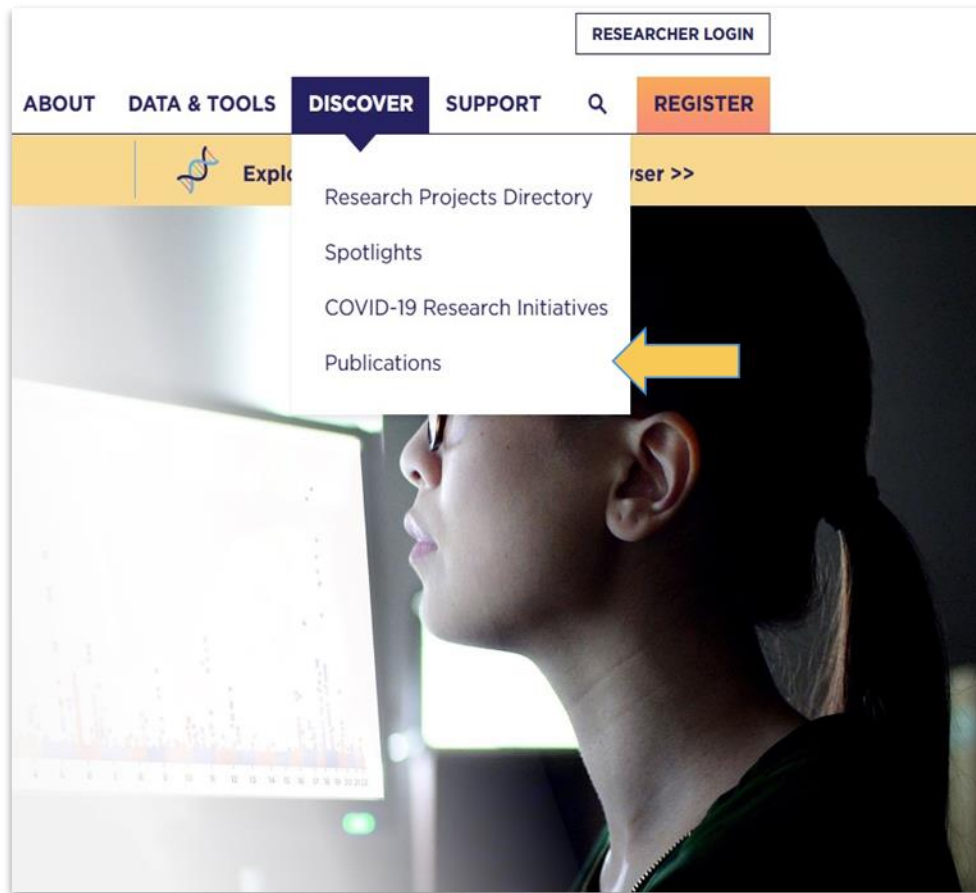


<https://www.researchallofus.org>

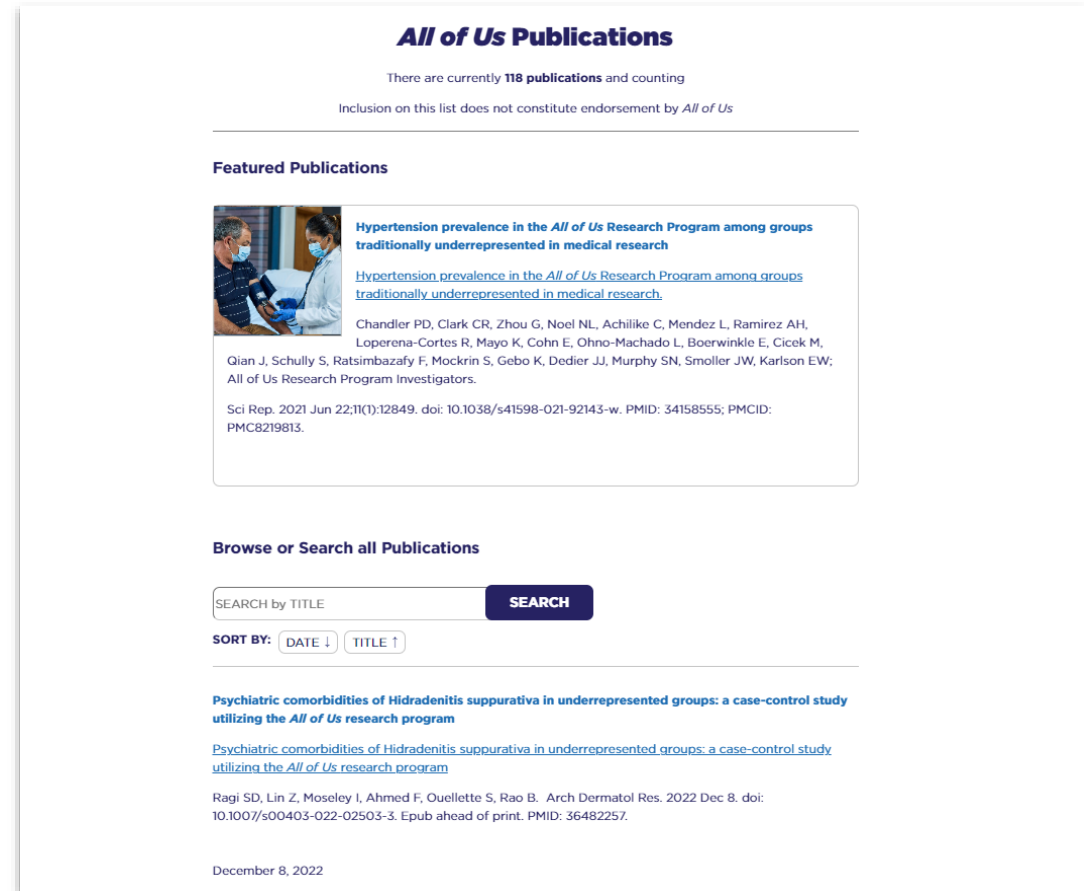


<https://www.researchallofus.org/research-projects-directory>

The Research Hub: Free, Peer-Reviewed Publications Using *All of Us* Data



<https://www.researchallofus.org>



<https://www.researchallofus.org/publications>

All of Us Data Training and Engagement for Academic Libraries Program

Reasons to Participate

Program Benefits

Program Requirements and Expectations

All of Us Data Training and Engagement for Academic Libraries Program

Through the provision of this program, the National Library of Medicine (NLM) aims to provide opportunities to build and strengthen the research capacity of libraries at institutions with a historic and current commitment to, or track record of, educating underrepresented students.

The Program will position the participating library(ies) as a place for biomedical and public health data knowledge, skills, and abilities to flourish by:

- Increasing data skills and knowledge of library workers
- Building, and strengthening research capacity through technology and software
- Creating instructional library resources
- Promoting the *All of Us* data set throughout the campus community.

Reasons to Participate

- Libraries are at the Center of Campus Communities
 - Responsive to the needs of academic institutions for data-driven research
 - Utilize training materials to assist campus communities
 - Introduce the *All of Us* database to researchers from various disciplines
 - Provide basic instruction in applied data science skills to early career and seasoned researchers, faculty, and students
- Libraries Provide Access to Data-Driven Research
 - Data-driven research continues to be a priority for academic institutions
 - The [All of Us Research Program dataset](#) offers access to a diverse, longitudinal dataset that includes biological and social determinants of health data on a large, inclusive scale.
 - The [All of Us Researcher Workbench](#) is a cloud-based platform and data browser
- Libraries Serve as Facilitators to Research
 - Access to this robust dataset along with training materials and resources from the library may
 - increase the research capacity for your institution
 - increase academic publication rates, grant awards, and research activity, and more

Program Benefits

Institutions selected for the Academic Libraries Program will also be eligible for a Capacity Building Award up to \$40,000 for participation in this program.



This award will be administered by ORAU, on behalf of the National Library of Medicine. This is not a research or training grant, and therefore any National Institutes of Health grant-negotiated rates do not apply.

Capacity Building Award – Potential Uses

- Funding awards can be used for a variety of purposes that best serve the institution.
- Funding awards are intended to build research capacity for use of the *All of Us* Researcher Workbench and conducting biomedical and public health data science research on campus communities.



- Computers and accessories
- Cloud space to use the *All of Us* Researcher Workbench
- Personnel
- Data Engagement Activities
- Laptop Lending
- Secure, encrypted Wi-Fi hotspots
- Other equipment, technology, software acquisition, and computing costs to increase capacity to use the *All of Us* Researcher Workbench
- Workstation creation for physical access to the *All of Us* Researcher Workbench at campus library/libraries
- Additional education, tutorials, or trainings for R, Python, and/or SQL for library workers and campus communities

Program Requirements and Expectations

***Development Phase:** November 2023 – March 2024

Engagement Phase: April 2024 – September 2024

Institution will

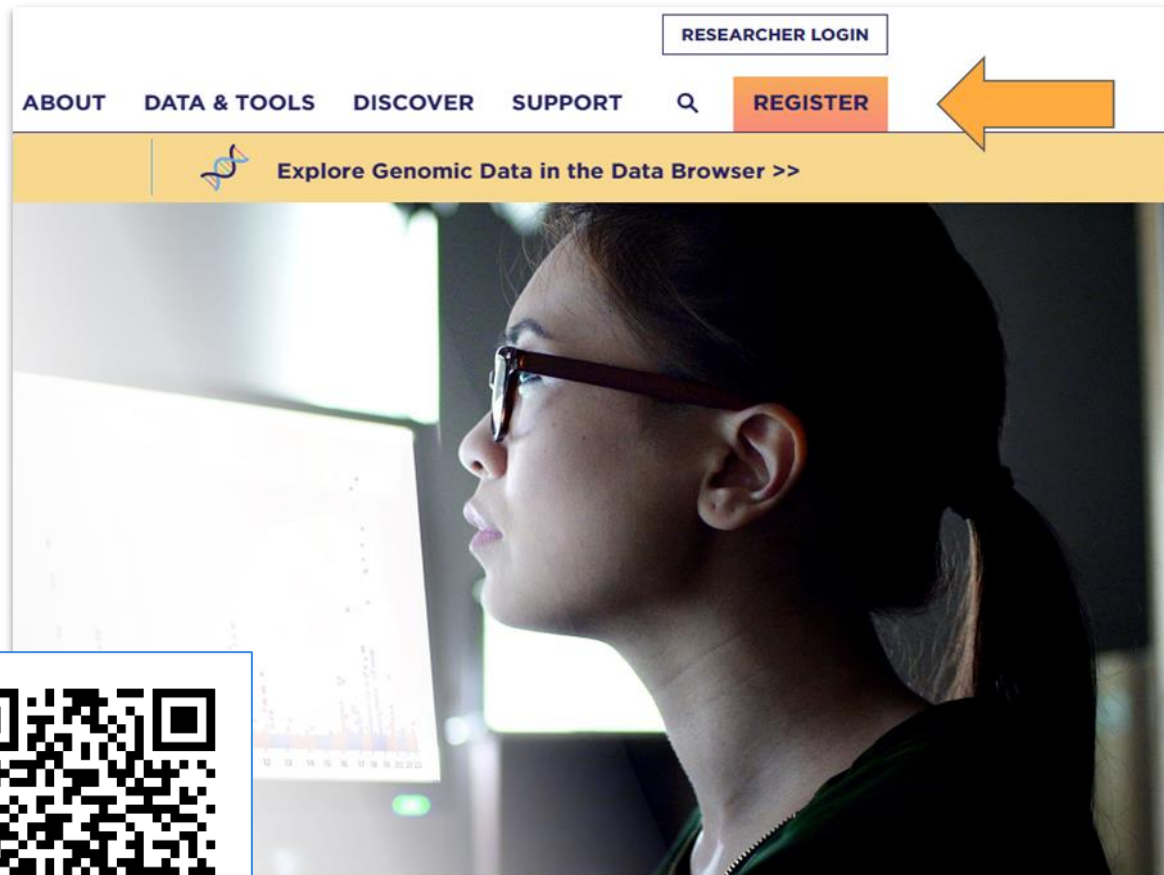
- Obtain a signed [Data Use and Registration Agreement \(DURA\)](#)
- Complete an online questionnaire
- Develop a plan for data engagement activities, including budget plan for Award
- Develop and promote a resource (such as a LibGuide) on institutional library website

**Additional opportunities are planned in late 2024 and 2025 to provide opportunities for additional professional development and promotion of completed projects and program impacts.*

A minimum of 1 Participating Library Worker will

- Obtain access to the Research Workbench and complete a Data User Code of Conduct (DUCC).
- Attend monthly cohort meetings
- Complete all trainings, including
 - Research Workbench Basics
 - Basic Coding Training series on R software
 - Data Engagement Activities Training series

Registration



<https://www.researchallofus.org>



How to Register

STEP 1

CONFIRM YOUR INSTITUTION'S AGREEMENT

Before you can create an account, your institution must have a Data Use and Registration Agreement (DURA) in place with *All of Us*. [Confirm DURA](#).

STEP 2

CREATE AN ACCOUNT AND VERIFY IDENTITY

After creating your Researcher Workbench account, you will be asked to verify your identity through [login.gov](#). [Learn more](#).

STEP 3

COMPLETE THE MANDATORY TRAINING

The training focuses on conducting responsible and ethical research using the Researcher Workbench. Additional training is required to access the Controlled Tier. [Learn more](#).

STEP 4

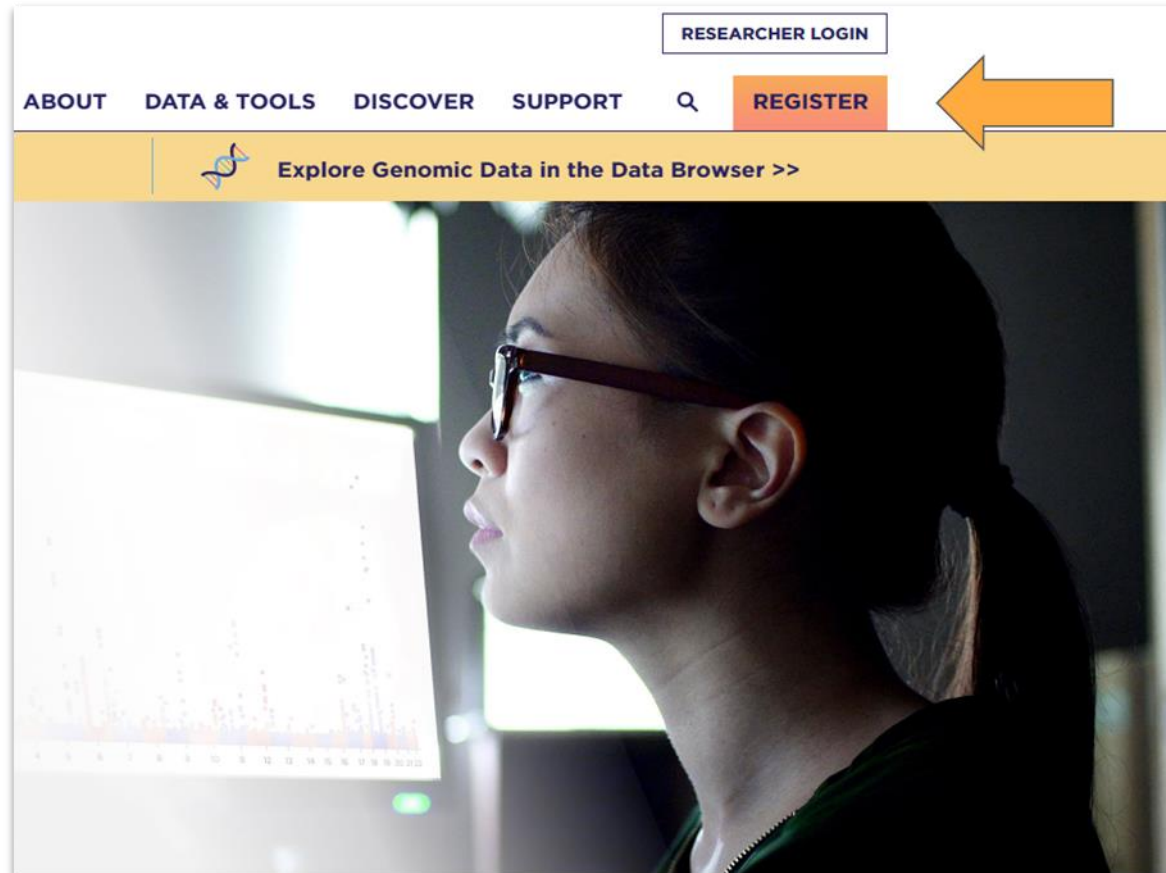
SIGN THE DATA USER CODE OF CONDUCT (DUCC)

This agreement outlines the program's expectations for researchers who use the Researcher Workbench and describes how program data may be used. [View the DUCC](#).

[CREATE AN ACCOUNT](#)

<https://www.researchallofus.org/register>

Data Use and Registration Agreement



<https://www.researchallofus.org>

Institutional Agreements

Access to the *All of Us* Researcher Workbench Controlled and Registered Tier data is available to researchers with an institutional agreement in place. Any U.S.-based academic, nonprofit, or health care institution can enter into our Data Use and Registration Agreement. Below is the growing list of institutions that have already signed agreements.

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Institutions Have Agreements in Place

If your institution currently has an agreement that includes access to your preferred data tier, [create an account](#).

If your institution does not have an agreement that includes access to your preferred data tier or requires individual agreements, [submit a request](#).

Key: R Registered Tier C Controlled Tier i Individual agreements required by institution e eRA Commons required by institution

Institution	Access Level	Contact at Institution
A.T. Still University of Health Sciences	R C	Gayla Sublette
Above and Beyond Family Recovery Center	R C	Daniel Hostetler
Al LA Community, Inc	R C	Todd Terrazas
Alabama Agriculture and Mechanical University	R	Damian Clarke
Alabama College of Osteopathic Medicine	R C	Carmen Lewis
Albany State University	R C	Louise Wrensford
Albert Einstein College of Medicine	R C	John M. Grealy

<https://www.researchallofus.org/institutional-agreements>

Application and Eligibility

Application Questions

Eligibility Criteria

Accessing and Using the Application Portal

Application Questions

- Contact Information
- Eligibility Criteria
- Scored Questions

Helpful Links

[Application Portal](#)

[Application Job Aid – includes
Application Questions](#)

[Application Question Rubric](#)

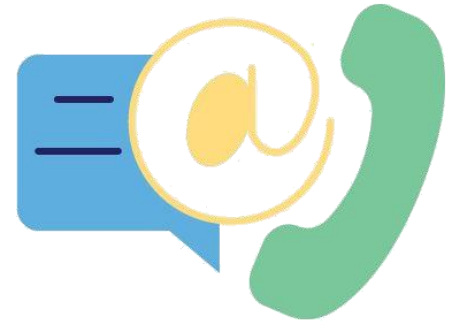


Program Administrator

As part of the application process, each institution should designate one individual to be the *All of Us* Libraries Program Administrator for their campus(es).

This person is encouraged to reside within a participating library and/or administrative position that can support key decision making regarding the Capacity Building Award.

Program Administrator contacts can be changed or modified upon selection for the program.



Letter of Commitment

A **Letter of Commitment** from the Director or Dean of your institutional library supporting program requirements and your participation in the training program is required.

A signed uploaded letter on institutional letter head is preferred, however a formal email from an institutional email address with full signature block may also be accepted. Emailed letters should be directed to NLMAIlofUs@orau.org.

Eligibility Criteria

The applicant must be the institutional library. Multiple libraries from the same institution may apply jointly. Only one application per institution is eligible for selection.

To be eligible for the Program, institutions must meet the following criteria:

- Be an [accredited U.S. Institution](#).
- Be a library within an [institution with a historic and current commitment to, or track record of, educating underrepresented students](#).
 - Please refer to detailed information about this requirement on our webpage.
- Your institution or organization must have a Data Use and Registration Agreement (DURA) in place with *All of Us* or be willing to establish one with *All of Us*. Institutional DURA status can be confirmed on the [All of Us Research Hub](#)

Historic and Current Commitment to, or Track Record of, Educating Underrepresented Students

- NIH defines “Underrepresented Populations in the U.S. Biomedical, Clinical, Behavioral and Social Sciences Research Enterprise” in the Notice of NIH’s Interest in Diversity.
- Institutions that have a track record of successfully training diverse researcher populations, including those at HBCUs (i.e., institutions described in section 4(b) of Executive Order 14041 (incorporating by reference the institutions listed in 34 C.F.R. 608.2)) and other minority-serving institutions, are also encouraged to apply.

The Data Use and Registration Agreement (DURA) Process



Submit a DURA Request



Visit the All of Us Research Hub to get started

<https://allof-us.org/DURAFORM>

Scored Questions

1. The expected impact of this program on your library and library staff. (15 points)
2. The expected impact of this program on your campus community, including students, administration, faculty, and/or researchers. (15 points)
3. Your library/campus community's data readiness based on the following (10 points):
 - a) People: the expertise, receptivity, and commitment to using data among administrators, faculty, and staff.
 - b) Process: the interactions among people and guidelines necessary to ensure that data are shared widely, and processes are in place to produce information that the institution can use.
 - c) Data Management: storing and retrieving information and how information that is critical to the institution becomes transparent through data management.
4. How this program will enhance your institution's ability to train and support "Underrepresented Populations in the U.S. Biomedical, Clinical, Behavioral and Social Sciences Research Enterprise." (10 points)

Data Readiness

This program is intended to build capacity for data readiness at your institution.

Institutions are not required to be data ready or to have these elements already in place.

Applicants who feel they are not data ready are encouraged to apply and should describe their current state of readiness.

Accessing and Using the Application Portal



<https://peernet.orau.org/Intake/Submission/Index?id=5234f80d-c5e5-4439-56c3-08db8de09791>

PeerNet
ORAU Further Together

Already have a PeerNet account? Log In.

Email

Password

[Reset/Forgot Password?](#)

New to PeerNet?

Registering for the Application Portal



Applicant Registration

First Name: *

Last Name: *

Organization: *

Email: *



Applicant Registration Confirmation

Thank you for registering. Instructions have been sent to [REDACTED] on how to verify your account before you login. If you have questions, please contact us at PeerNet@orau.org.

[← BACK TO LOGIN](#)

Reset Your Password

Reset Your Password

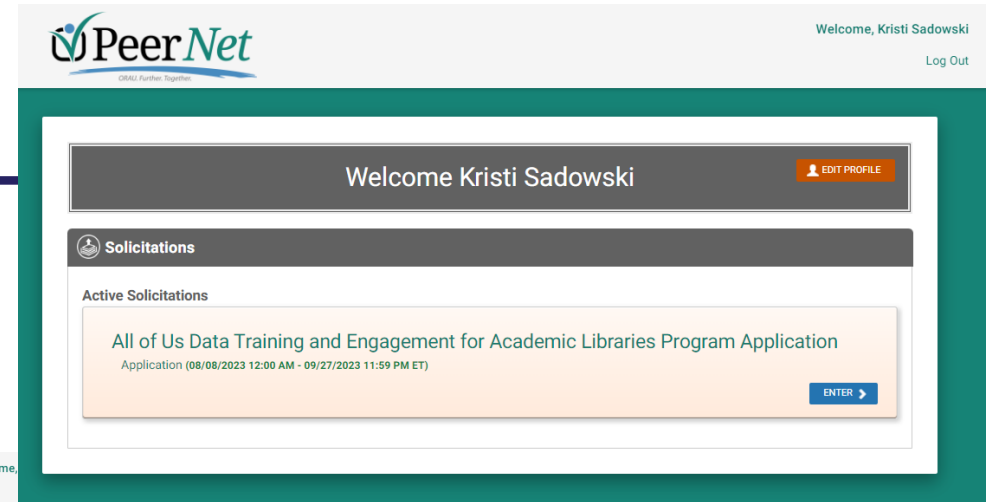
New Password *

Confirm Password *

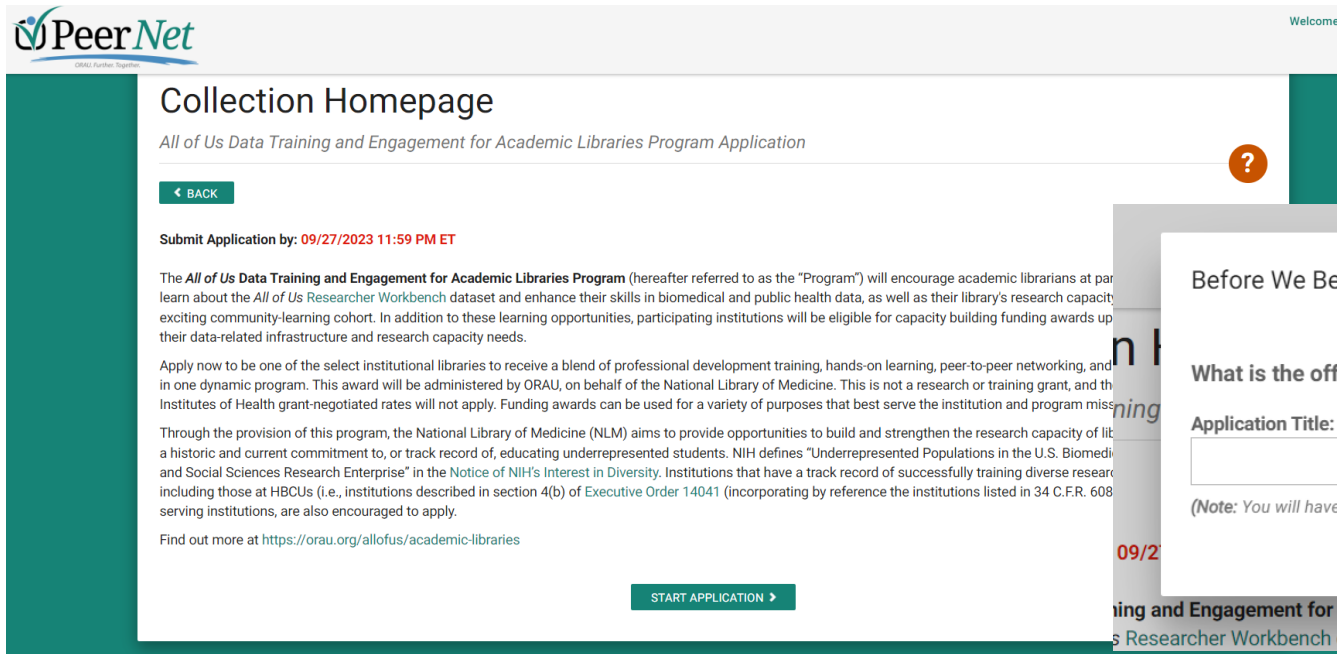
Password Requirements

- ⓘ Password cannot be one of your previous five passwords
- ✘ Contains at least eight non-blank characters
- ✘ Contains at least three of the four following character sets:
 - Lower-case letter
 - Upper-case letter
 - Number
 - Special Character
- ✓ Cannot contain angle brackets ('<' or '>')
- ✘ Password and Password Confirmation fields match

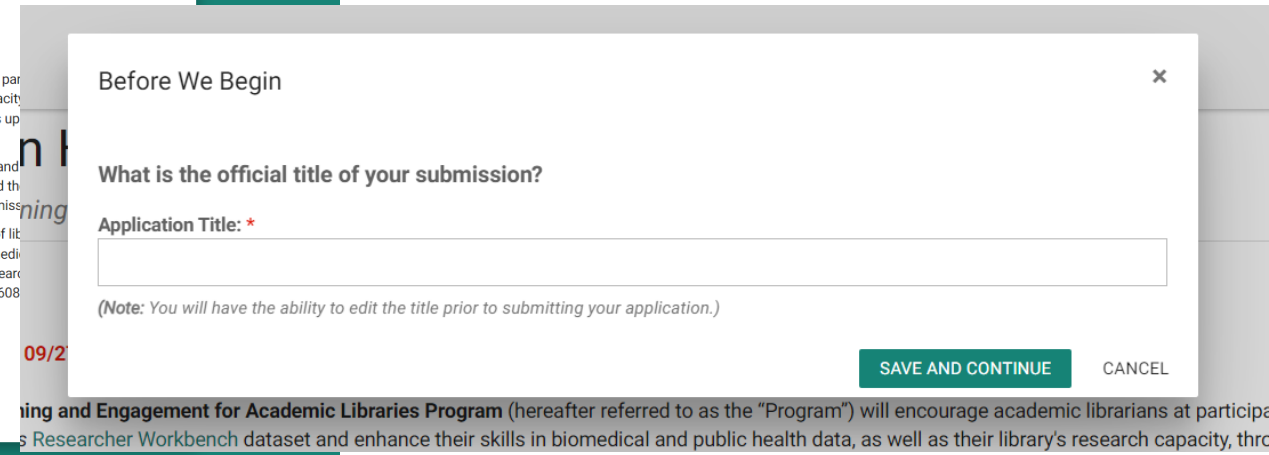
Start the Application



This screenshot shows the PeerNet user interface for Kristi Sadowski. At the top right, it says "Welcome, Kristi Sadowski" and "Log Out". Below the header, there is a "Welcome Kristi Sadowski" banner with an "EDIT PROFILE" button. Underneath is a "Solicitations" section with a sub-section for "Active Solicitations". A prominent orange box highlights the "All of Us Data Training and Engagement for Academic Libraries Program Application" with the dates "Application (08/08/2023 12:00 AM - 09/27/2023 11:59 PM ET)" and an "ENTER" button.



This screenshot shows the PeerNet "Collection Homepage" for the "All of Us Data Training and Engagement for Academic Libraries Program Application". It features a "Collection Homepage" title, a breadcrumb trail, a "BACK" button, and a red deadline: "Submit Application by: 09/27/2023 11:59 PM ET". The main text describes the program's goals and eligibility. A "START APPLICATION" button is visible at the bottom right. A question mark icon is present in the top right corner of the page content.



This screenshot shows a "Before We Begin" modal window. The title is "Before We Begin" with a close button (X). The main question is "What is the official title of your submission?". Below this is a form field labeled "Application Title: *". A note below the field states: "(Note: You will have the ability to edit the title prior to submitting your application.)". At the bottom right, there are two buttons: "SAVE AND CONTINUE" and "CANCEL".

Submit the Application

Title	PI Name	Contributors	Last Modified	Status	
Application Example	Kristi Sadowski	MANAGE	08/10/2023 11:26 AM ET By Kristi Sadowski	Application Submitted	UPDATE APPLICATION... VIEW APPLICATION DELETE APPLICATION TAKE SURVEY

Application Selection

- ORAU will review applications for eligibility and completeness.
- Applications will then be reviewed by a review committee, who will make final selections based on reviewer results.
- An [Evaluation Rubric](#) is provided.
- ORAU will notify applicants if they are selected for the program in October 2023.

Additional Information

Key Dates

Administrative Information Session

Key Dates

September 29, 2023, at 11:59 p.m. Eastern Time - Application Deadline

Mid to Late October - Selection Notification

Candidates are notified of selection and will receive an offer email to accept or decline participation in program.

November – September 2024 - Program Participation

Institution onboarding will begin in late October or early November 2023.

Info Session for Administrators

- Benefits to Institution
- Benefits to the Campus Community

Garner Support and Invite your Leadership!

Wednesday, September 13th at 1pm EST

[Webinar Registration - Zoom \(zoomgov.com\)](#)

Questions?



Submit in the Q&A

Email us at NLMAllofUs@orau.org

Visit <https://orau.org/allofus/academic-libraries.html>

for FAQs, application link, and more!