# Participant Technology Systems Center Informational Webinar



December 16, 2019

@AllofUsResearch #JoinAllofUs



# <u>of</u> **RESEARCH PROGRAM**









## AGENDA

- Introduction to the All of Us Research Program
- Timeline for the funding announcement
- Application components and process
- Objectives of the funding announcement
- OT award background
- Q & A session



# Introduction to the All of Us Research Program



#### All of Us Mission and Objectives

#### **Nurture relationships**

with one million or more participants, from all walks of life, for decades

## Catalyze a robust ecosystem

of researchers and funders hungry to use and support it

To accelerate health research and medical breakthroughs, enabling individualized prevention, treatment, and care for all of us

#### **Our mission**

**Deliver the** largest, richest biomedical data set ever that is easy, safe, and free to access





### Major building blocks of the All of Us Research Program consortium

#### **DATA AND RESEARCH** CENTER

Big data capture, cleaning, curation, & sharing in secure environment

Vanderbilt, Verily, Broad Institute

#### **BIOBANK**

Repository for processing, storing, and sharing biosamples (35+M vials)

Mayo Clinic

#### **PARTICIPANT CENTER / DV NETWORK**

Direct volunteer participant enrollment, digital engagement innovation, and consumer health technologies

> Scripps Research Institute (with multiple partners)

HPOs with clinical & scientific expertise, enrollment & retention of participants

30+ regional medical centers, FQHCs, VA, and future awards to grow network

#### PARTICIPANT **TECHNOLOGY** SYSTEMS CENTER

Web and phone-based platforms for participants

Vibrent Health

#### GENOMICS PARTNERS

Genotyping and whole genome sequencing of biosamples; counseling and educational resources for participants

Baylor College of Medicine, Broad Institute, University of Washington (with multiple partners), and Color

#### **HEALTH CARE PROVIDER ORGS NETWORK**

#### **COMMUNICATIONS** & COMMUNITY **NETWORK**

Communications, marketing, and design expertise; engagement coordination and community partners network

Wondros, HCM, University of Utah, and many community engagement partner organizations





## All of Us Consortium Members (beyond community partners)

**RESEARCH PROGRAM** 





## All of Us Community Engagement Partners (as of October 2019)









































## Stanford











#### How to become one in a million



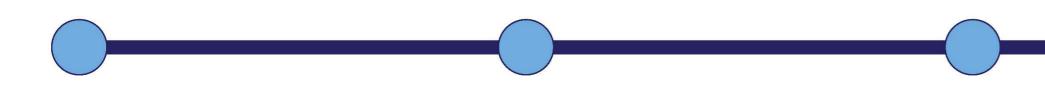
Complete consent and surveys

Have measurements taken



Registered participants 350,000+

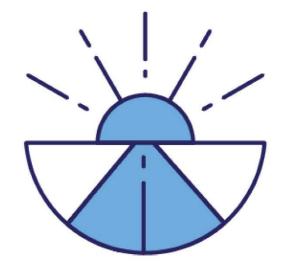




Provide blood and urine sample



You are now one in a million!



#### Core participants 235,000+

% participants underrepresented in biomedical research 75%

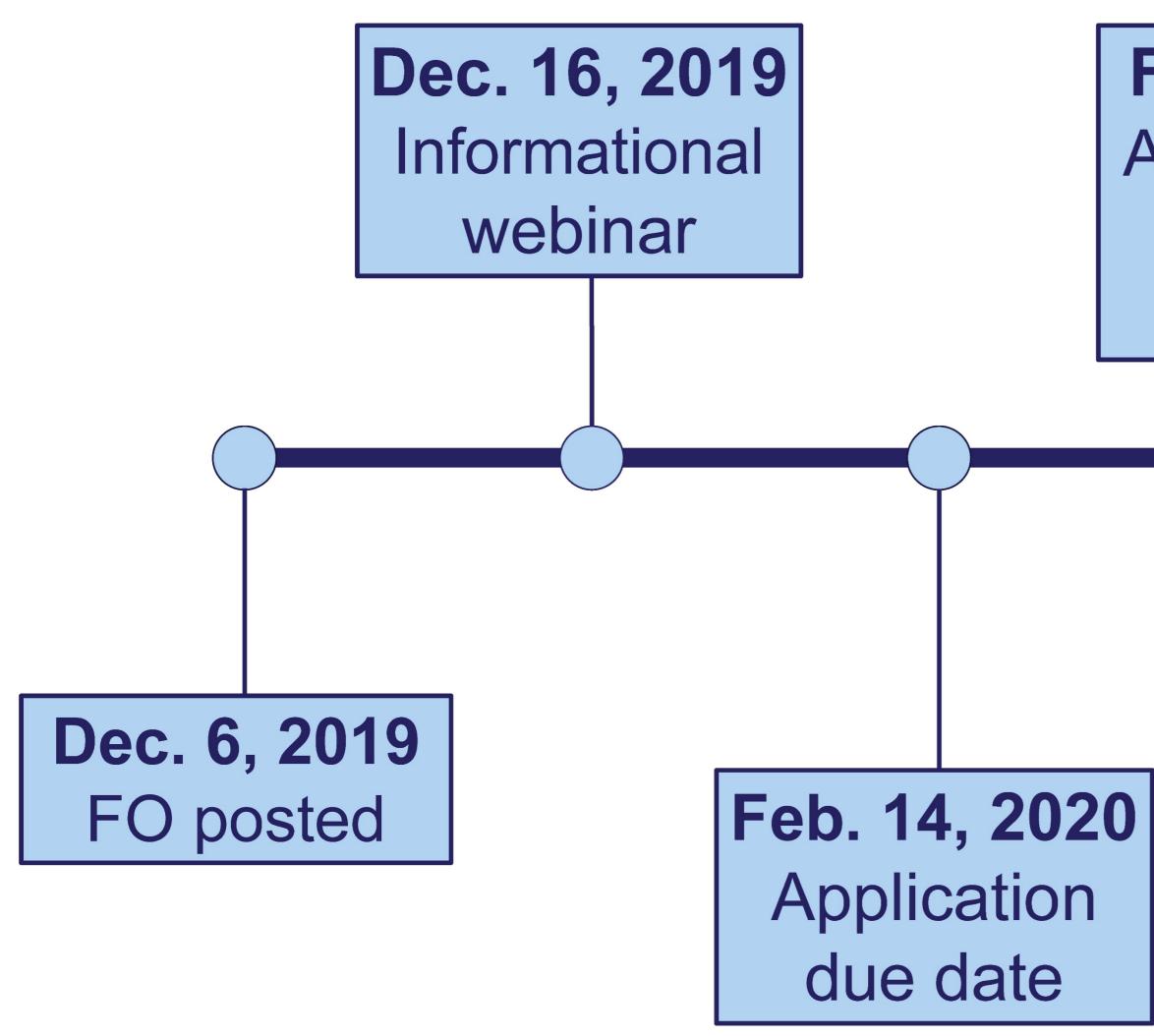




# Timeline for the funding announcement



#### **Important dates**



## July, 2020 Feb, 2020 (estimated) Application Orientation review begins June, 2020 (estimated) Award notices sent out



# Application components and process

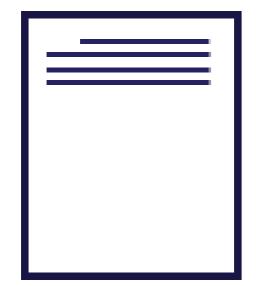


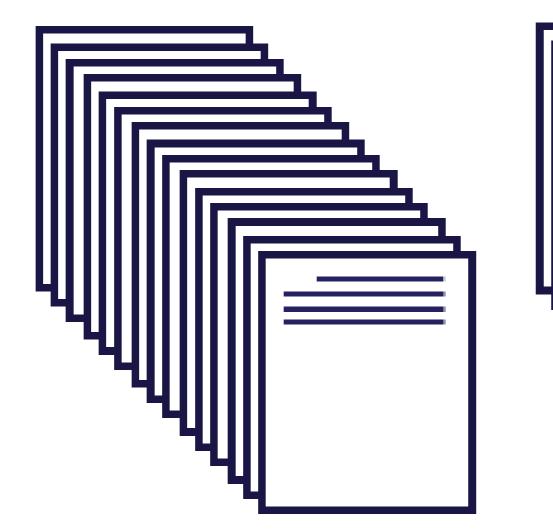
## **Application components ("Required Application Instructions", pg. 2-3)**

Page limit = 40 (excluding an optional cover letter)

Cover letter (1 pg, optional)

Technical Approach (25 pgs max)

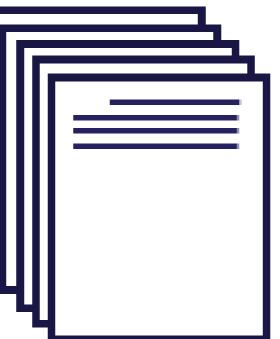


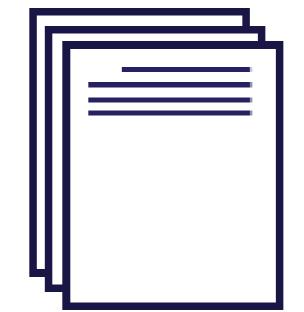


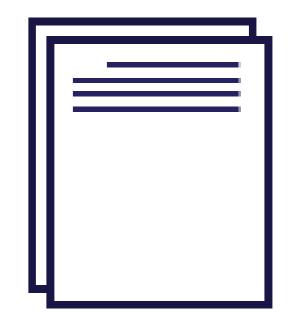
Past Performance (5 pgs max)

Key Personnel (4 pgs max)

Cost Proposal (6 pgs max)









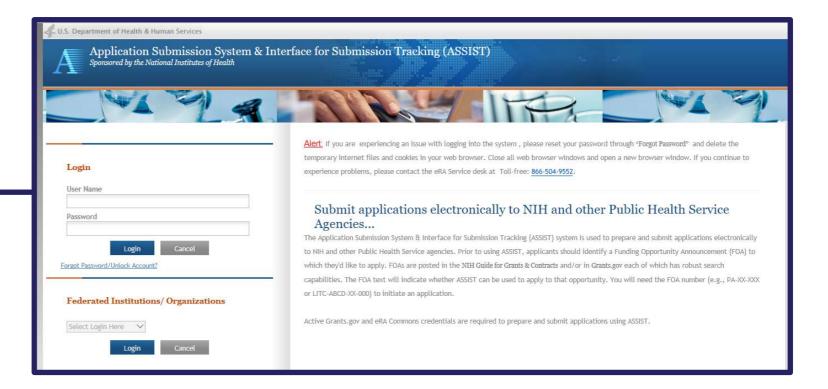
## Submission process ("Instructions for Application Submission", pg. 3-4)

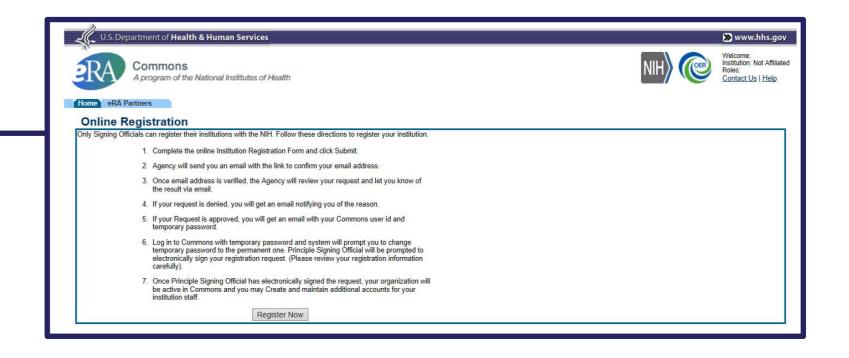
#### Applications must be submitted via NIH eRA ASSIST System

#### Applicant must be **registered in eRA** Commons

# Review "Instructions for Application Submission" section of FO

 Use OTA-20-001 in the field requesting Funding Opportunity Announcement





Instructions for Application Submission	Applications must be submitted via the NIH eRA ASSIST System by February 14, 2020 (5:00 p.m. local time). To submit an application via ASSIST, the applicant organization must be registered in eRA Commons (see instructions). Organizations already registered in eRA Commons do not need to reregister.
	Once the organization is registered, the individual(s) with the role of Signing Official (SO) and Program Director/Principal Investigator (PD/PI) must be affiliated with the organization and have eRA Commons credentials to complete the submission process. Use OTA-20-001 in the field requesting Funding Opportunity Announcement.



#### **Review process (pg. 5)**

1. Evaluate: Applications will be evaluated for responsiveness to the Funding Opportunity requirements and merit by an appropriate review group convened by the NIH



# 2. Select: Top applications will be selected





# Objectives of the funding announcement



### **Purpose and Objectives of the funding announcement (pg. 8)**

- including;
  - Platform operations and maintenance
  - Systems integration and support
  - Participant services development
  - Partner services development and support
  - Operational analytics and reporting.
- health status, socioeconomic status, and technical expertise.

The PTSC has multiple areas of responsibility for the All of Us Research Program,

Provide technology systems to support program participation from individuals across a broad spectrum of age, cultural background, digital access, educational attainment,





#### **Component 1: Platform Operations and Maintenance**

- development and operations
  - Ο
  - Ο software
  - Ο development life cycle.
  - Ο systems.

Demonstrate awareness of and capabilities to operate, maintain, monitor, and assess a cost-efficient, privacy- and security-compliant cloud environment for All of Us systems

Supporting platform operations and maintenance (O&M,) including security operations, privacy and security compliance (see Data Security and Privacy Management) Supporting development operations and managing commercial cloud platform and

Implementing quality assurance systems and processes to manage the software

Support O&M services for partners, to leverage shared resources among integrated



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- Component 2: Systems Integration and Support
  - partners for the All of Us Research Program.
  - innovation ecosystem to
    - Expand research data collection methods Ο
    - Enhance engagement and return of information to participants Ο
    - Ο

Demonstrate awareness of and capabilities to support system integrations and accelerate assessment, onboarding, and operational integration for technology or research service

The vision of the All of Us Research Program is to ultimately open application development opportunities to broader research and software development communities by leveraging an

Support customized user experiences for specific populations or research protocols





#### Component 3: Participant Services Development

- items highlighted below.
  - Ο
  - Ο enrollment, engagement, and long-term retention of participants.
  - Ο development or consideration for use.
  - Ο and adolescents), protocol-based substudies, and ancillary studies.

Propose solutions to support participation from diverse populations and settings. A few key

Implement current and future protocols for the All of Us Research Program, including informed consent materials, surveys, educational content, return/visualization of participant information, customization of content or experience based on participant profile or preferences, and user authorizations management for data sharing.

Consider user experience optimization and innovation for both facilitated and unassisted participant interactions in order to improve efficiency and effectiveness of

Support a testbed for rapid user testing and piloting of tools not yet deployed but in

Consider the needs of the program to support additional user populations (e.g., children





#### Component 4: Partner Services Development and Program Support

- Propose solutions to support engagement, enrollment, and retention of diverse participants within a variety of settings. Tools should support program staff for protocol implementation, facilitation, and management, including
  - Appointment scheduling and management. Ο
  - Multi-channel (e.g., email, SMS, push notifications, direct mail, phone) participant Ο communications and communications workflows.
  - Case management, including cohort, sub-cohort, and individual analytics data access Ο associated with participant status/demographics/region/et cetera.
  - Participant account management and user support. Ο
- Provide support for or coordinate implementation of essential services necessary for PTSC or partner/integrated systems including
  - UI/UX testing for iOS, Android, and web applications.
  - Section 508 compliance auditing and mitigation for PTSC-provided tools. Ο
  - Training and support resources for all PTSC-managed software/services. Ο







Component 5: Operational Analytics and Reporting 

- - Ο protocol(s).
  - Ο engagement, progression, and retention of participants.

Propose approaches and solutions to support and enhance capability for the All of Us Research Program to leverage rapid and iterative data science methods to increase the performance and efficiency of program components, including strategies for awareness, education, and recruitment, and participant communications for engagement and retention.

Analytics tools and services to support real-time visibility for study staff into cohort, subcohort, and individual participant status, activity, and engagement with the All of Us

Curated web and/or mobile platform analytics to optimize the program's ability to monitor and iteratively enhance content and experience to improve enrollment,





## **Data Security and Privacy Management (pg. 11-12)**

- Management Act (FISMA) Moderate requirement.
  - moderate standards.
- in accordance with FISMA review standards.
- ATO.

Design and implement technical and policy safeguards necessary to ensure data security including compliance with NIST standards to a Federal Information Security

The NIH All of Us may require additional security measures not included in the FISMA

• Prior to system use in All of Us, an Authority to Operate (ATO) from NIH will be required along with documentation describing the current security monitoring/practices in place

The NIH All of Us ISSO will request an annual independent review of security controls, in addition to continual review and testing, to ensure overall effectiveness against evolving threats and consistent implementation as a requirement of renewal of the







# OT award background



#### **Other Transactions Authority**

- or contract.
- For All of Us, the National Center for Advancing Translational Sciences (NCATS) manages the OT awards.
- Policy Statement does not apply to OT awards.)

The Other Transactions (OT) award mechanism is not a grant, cooperative agreement,

All applicants should read and be familiar with the Other Transaction Award Policy Guide for NIH Precision Medicine Initiative Research Programs. (The NIH Grants)

OT allows NIH the flexibility to alter the course of projects in real time to meet the overarching programmatic goal. This means awarded activity can be expanded, modified, partnered, not supported, or later discontinued based on program needs.

If selected for award, applicants should expect significant ongoing NIH involvement.





#### **Submission Process**

- All applicants must submit their application via the NIH eRA ASSIST System.
- To complete the application process, you must complete the NIH Commons reregister.

Please start the registration and application submission process early to avoid a late application submission due to technical issues.

Late applications will NOT be accepted!

Registration first. If you already have a Commons Registration, you do not need to

The deadline for application submission is February 14, 2020 by 5pm local time.



- 2. Release slide deck, questions, and answers
- 3. Application due date: February 14<sup>th</sup>, 2020
- 4. Review applications: March 2020
- 5. Send out award notices: June 2020
- 6. Hold orientation event (estimated): July-August

## 1. Submit additional questions to AllofUsFOAInquiries@nih.gov

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#### **Q&A – Open Session**

## Please use the <u>Q&A</u> box to submit additional questions.

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# Thank You!

