Council of Councils

January 29, 2026

Vivian OTA WANG, PhD, FACMG, CGC
Acting Director
Office of Strategic Coordination - The Common Fund

National Institutes of Health
Office of Strategic Coordination–The Common Fund

»COMMON FUND = Catalyzing Discovery

COMMON FUND= Uncommon Approaches + Research + Solutions

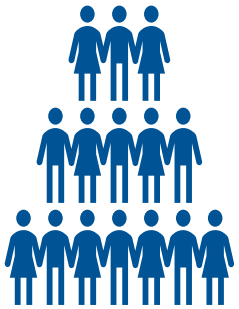
- Substantial investments in time-limited, *ambitious goal-driven* programs
- *Significantly change trajectory* of biomedical research



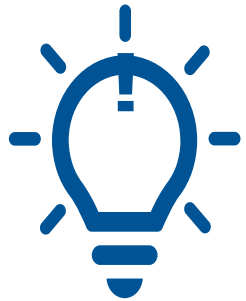
Accelerate Emerging Science



Remove Research Roadblocks



Enhance Research Workforce



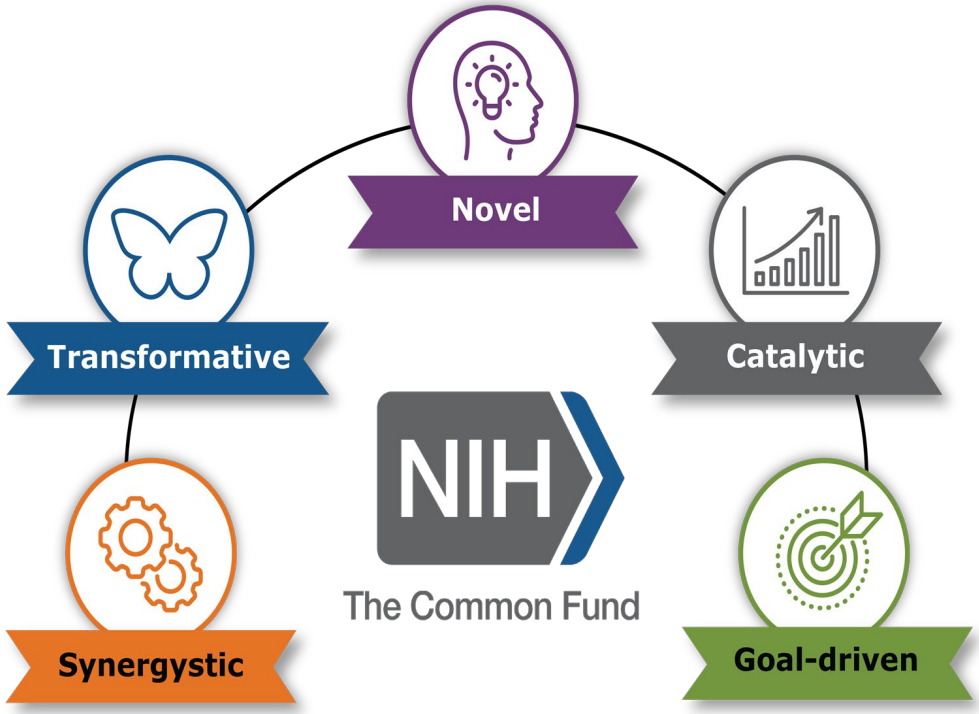
Support High-risk, High-reward Science

The NIH Common Fund

COMMON FUND= Uncommon Approaches + Research + Solutions

Common Fund Mission

- Support bold scientific programs that **catalyze discovery** across all biomedical and behavioral research.
- Investigators and multiple NIH Institutes, Centers, and Offices **collaborate on innovative research**
- **Address high priority challenges** for the NIH
- Make **broader impact** in the scientific community

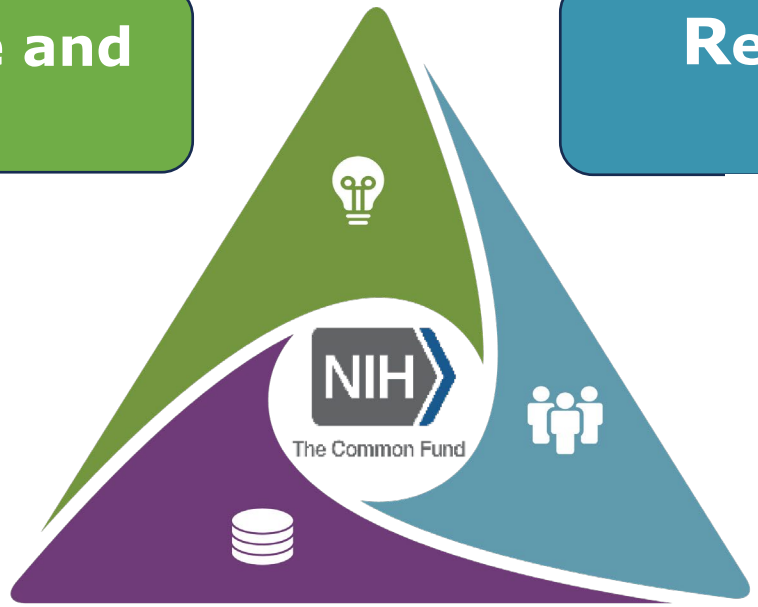


Common Fund Program Areas

Transformational Science and Discovery (TSD)

Transform Scientific Knowledge

- Create paths to discovery
- Establish new scientific principles, models, and research resources



Re-Engineering the Research Enterprise (RRE)

Transform Biomedical and Behavioral Research

- Make robust research workforce
  - Contribute new perspectives and ideas
    - to discovery
    - transform research into prevention and therapies
    - share findings broadly

Catalytic Data Resources (CDR)

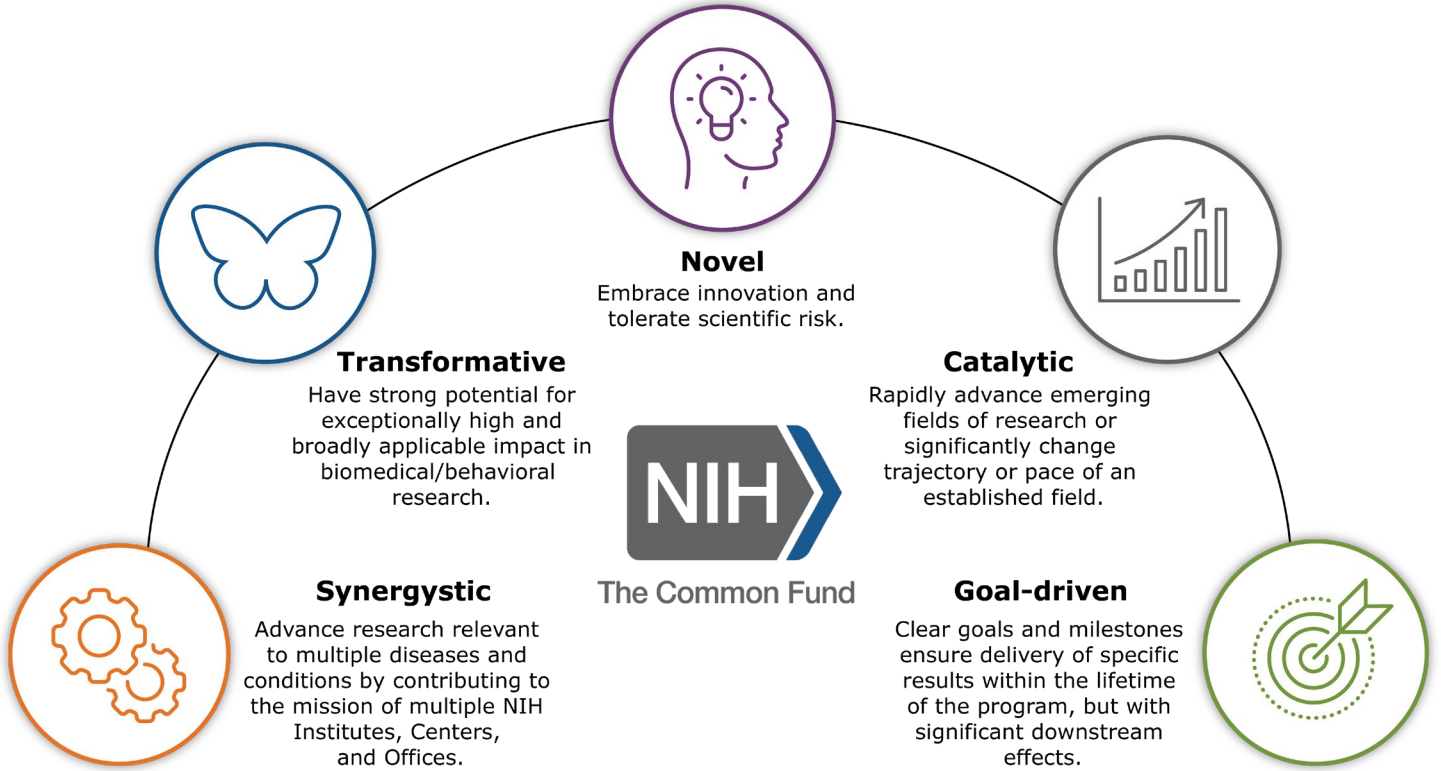
Accelerate Research Through Data Resources

- Manage and develop data for scientific discoveries

Common Fund Criteria

COMMON FUND = Uncommon

Approaches + Research + Solutions



January 2026 Council of Councils

OSC-Common Fund Presentations

- **Concept Clearance**: Bridge to Artificial Intelligence (B2AI) Stage 2
  Presenter(s): Stephen Sherry, Ph.D., Acting Director, National Library of Medicine, NIH; Bruce J. Tromberg, Ph.D., Director, National Institute of Biomedical Imaging and Bioengineering, NIH

  - Builds on Stage 1 to create AI solutions with tangible impact on patient care and enable readiness for future laboratories, utilizing basic scientific insights to translational and clinical applications.
  - Impact: Bringing together interdisciplinary researchers within the community to deliver best practices in AI model-building principles, evaluating and accessing models, and developing guiding principles for future AI laboratories while creating multidisciplinary cross-training to strengthen the American AI Workforce.

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OSC-Common Fund Presentations Cont.

- **Concept Clearance**: Research Rigor and Replication to Promote Excellence, Accuracy, and Translation in Science (R3PEATS) Program
  Presenter(s): Michael Chiang, M.D., Director, National Eye Institute, NIH
  - Addresses the need for increased rigor and replicability in biomedical research to advance reliability and innovative knowledge to improve health outcomes and extend healthy lifespan through research quality, data sharing, education, and community outreach.
  - Impact: Create synergy in research, partnership, engagement, and coordination to drive culture change to better promote rigorous, transparent, and replicable practices that can broadly benefit NIH-funded research, the scientific community, and the public.

Bridge2AI (Stage 2)

Bruce Tromberg, PhD
Director, NIBIB

Stephen Sherry, PhD
Acting Director, NLM

National Institutes of Health
Office of Strategic Coordination–The Common Fund

OSC (Common Fund) – Bridge2AI

Concept Clearance: Continuing/Stage 2 Common Fund Program

TITLE: Bridge to Artificial Intelligence (Bridge2AI)

Objective: Deliver AI-based solutions to biomedical Grand Challenges and support AI-enabled discovery for health via trustworthy:

1. AI-enabled solutions
2. Scientific methods for AI-enabled discovery

Funds Available and Anticipated Number of Awards: $18M per year for 4-6 meritorious awards (contingent upon funding availability)

Program Duration: 5 years

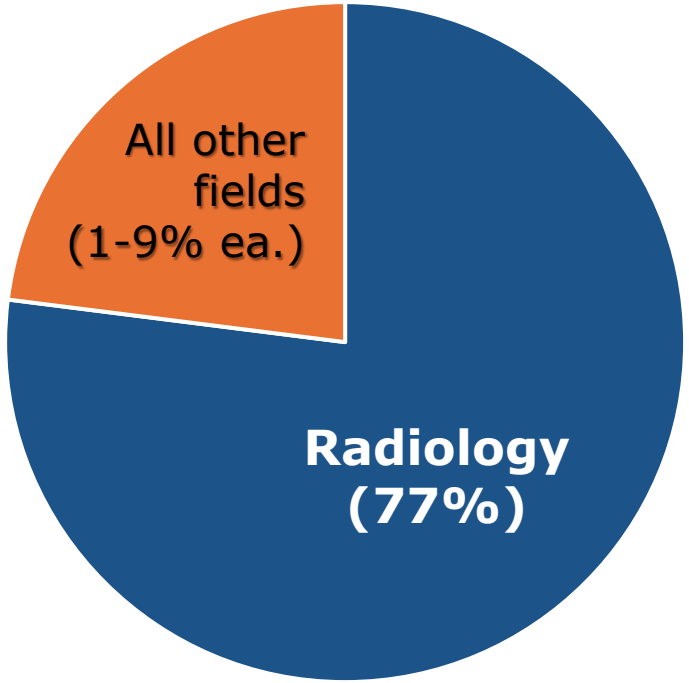
Council Action: Vote for approval of the concept for Bridge2AI continuation

Background & Motivation

- **Opportunity:** Apply AI methods to accelerate health discovery and solutions

- **Address Concerns:**
  - How do we utilize AI models, agents, and the agentic research enterprise to produce trustworthy, replicable, reproducible, and transparent results?
  - What principles and guardrails are needed at each stage of AI health science?

Example: FDA Authorized AI/ML-enabled devices
(November 2025)



Bridge2AI Stage 1 – Outputs and impact

People:

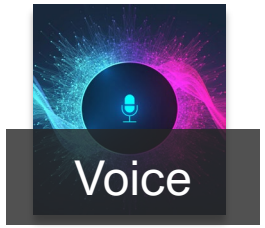
- Bridge2AI Scholars (~40 mentees)
- AIM-AHEAD Bridge2AI Training Pathway
- Publicly Available Webinars
- ~280 annual learners engaging with consortium-wide activities

Ethics:

- Ethical and trustworthy biomedical AI ecosystem
- Consent principles, user agreements and custom license for data reuse
- AI-readiness criteria

Consortium Wide: >200 publications to date with >1,800 citations

Data: https://bridge2ai.org/datasets/



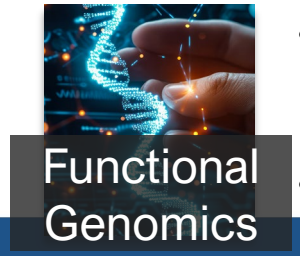
- 833 adult, 300 pediatric participants on PhysioNet
- ***Weekly requests*** for voice data access



- 50,000 unique patient admissions from 14 ICU sites Dataset release **planned for Jan 2026**



- 2,000+ T2 diabetic participants
- ***700+*** data access requests granted



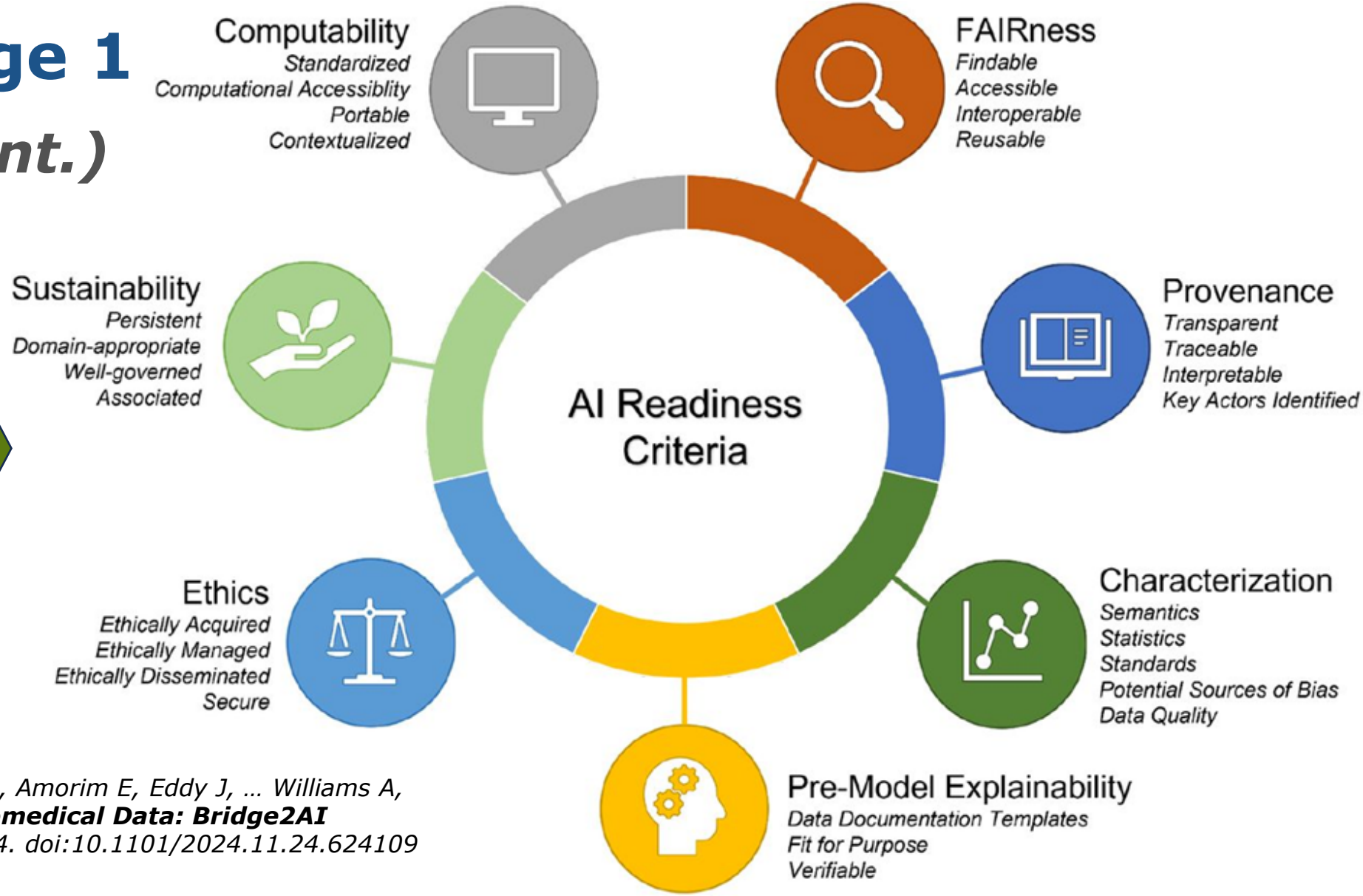
- 1,700+ proteins investigated, 1,300+ protein interactions; 50,000+ IF images
- Next data **update - Jan 2026**

Note: Currently in year 4

Bridge2AI Stage 1

Deliverables (cont.)

Core Principles & Tools for AI-Readiness



Clark T, Caufield H, Parker J A, Al Manir S, Amorim E, Eddy J, … Williams A, Muñoz-Torres M C. ***AI-readiness for Biomedical Data: Bridge2AI Recommendations****. bioRxiv, 2024-11-24. doi:10.1101/2024.11.24.624109 / PMID:39484409*

Stage 2 Planning Activities

Planning Activities:

- Portfolio Analysis (iSearch)
- Federal AI R&D Landscape Scan
- *Iterative* Landscape Scans to understand non-federal/corporate use of health AI to identify needs and gaps
- Subject Matter Expert (SME) Group Discussions



Gaps Remaining:

- ethical/responsible/**trustworthy** AI
- data privacy, security
- **regulatory frameworks**
- workforce training for **labs of the future**
- challenges associated with **AI-enabled solution development**

Conducted by Federal Working Group in collaboration with the Bridge2AI Co-Chairs

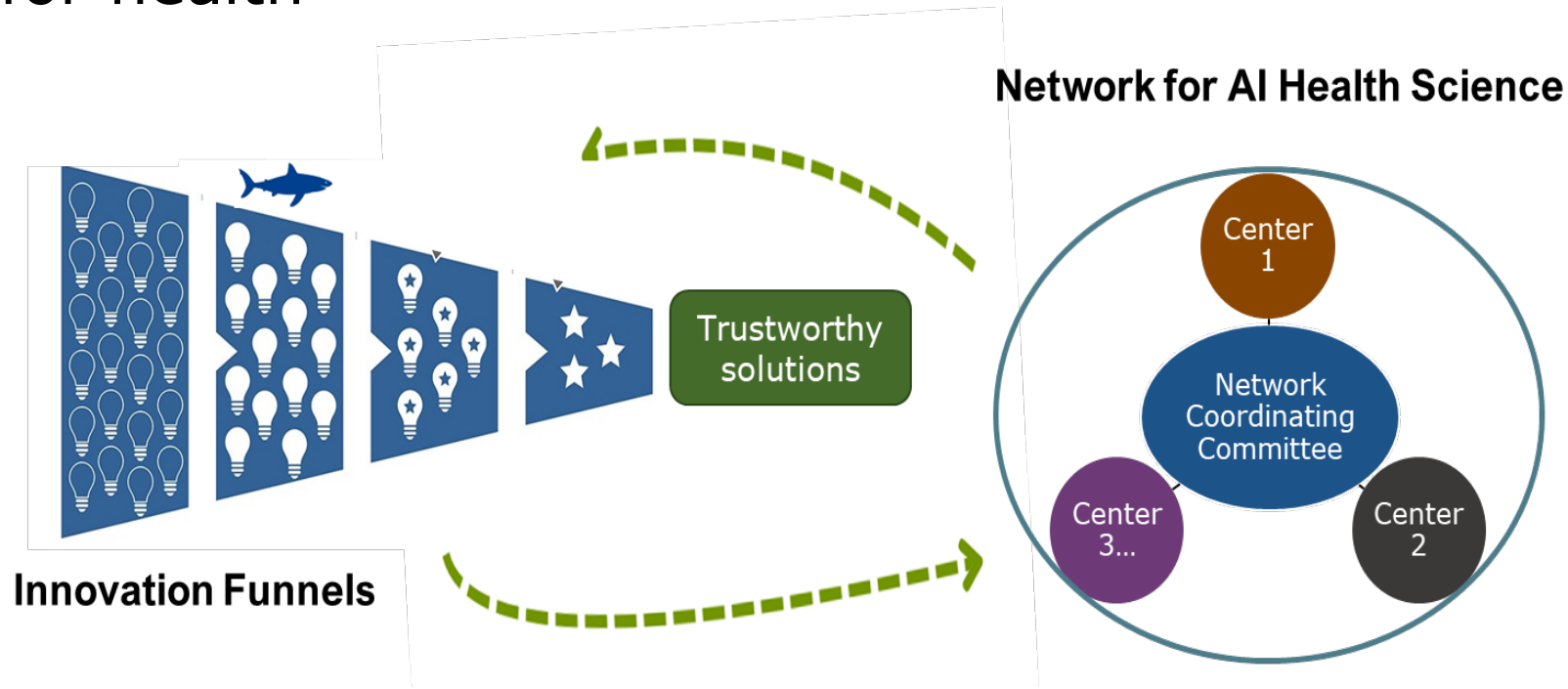
Program Goal and Initiatives

Goal:

Deliver AI-based solutions to biomedical Grand Challenges and support AI-enabled discovery for health

Two Initiatives:

1. Innovation Funnels
   for safe, rigorously developed AI-enabled solutions
2. Network for AI Health Science
   build the framework for AI health science of the future



Bridge2AI Innovation Funnel Initiative

From AI-ready data to discovery-driven medical solutions

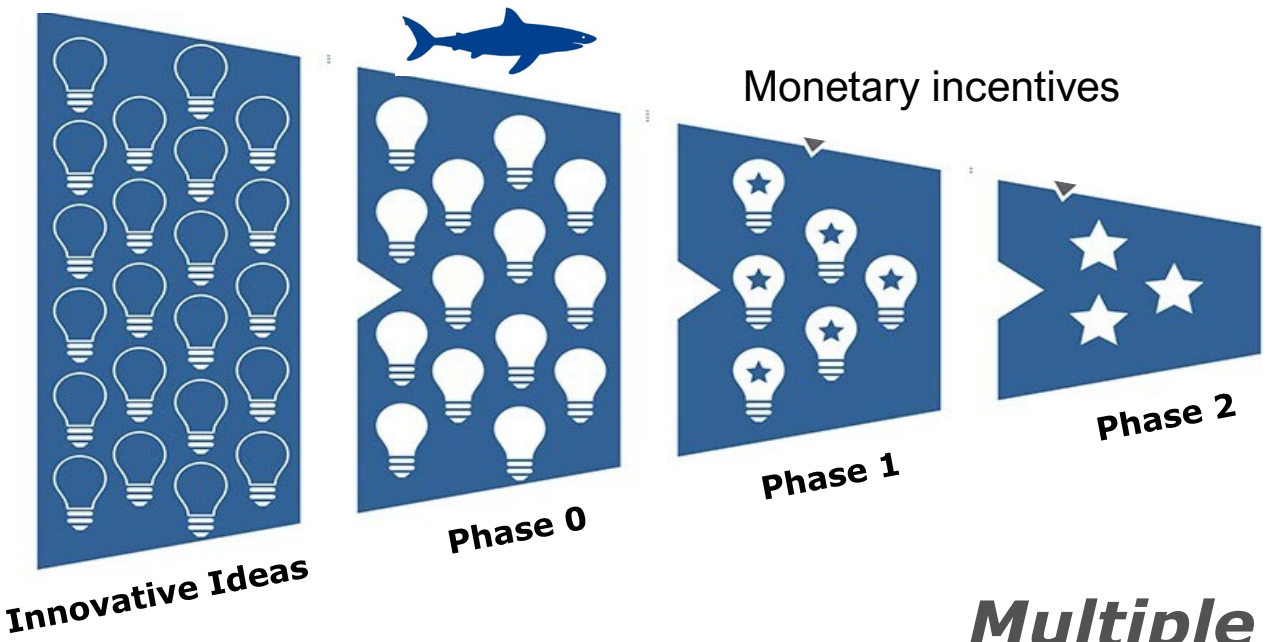
Innovation Funnel modeled after NIH RADx® *"Shark Tank"* *(existing contract)*

\+ **Leading Researchers**

\+ **Wrap-Around Support**

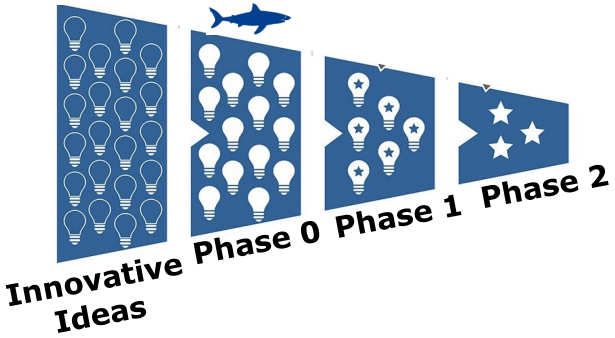
= **AI-enabled solutions** *discoveries, devices, clinical impact*

100's of ideas *based on Bridge2AI data + Grand Challenges*



Trustworthy solutions

Multiple funnels per year



Inside the Funnel

(EXAMPLE: Voice as a biomarker for Alzheimer's Disease, AD)



Rapidly de-risk and validate solutions with stage-gated, milestone-based, cash prize awards

Phase 0: Project Team Acceptance

Concept/Prototype: AD Detection Tool

Based on partnership, Bridge2AI voice data, proposed models, science, technology

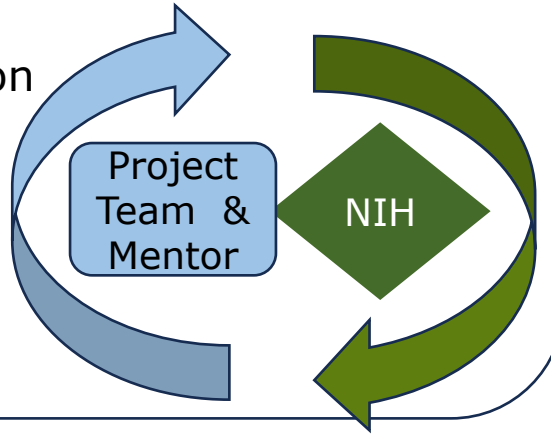
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Failed Selection

Phase 1: Viability & Risk Assessment

wrap-around support;
daily/weekly mentored interactions

- Regulatory expertise
- Clinical expertise
- Validation & verification
- Bridge2AI tools



$$

Move to **Phase 2**

Failed Feasibility

Bridge2AI Network for AI Health Science

Building the framework to enable AI health science of the future

3-5 Centers focused on high priority AI science methodological topics

Bridge2AI outputs
Other NIH AI programs
Funded AI health activities…

Center Activities

Ethical Frameworks For AI Health Research Methods

Interdisciplinary AI health workforce development and dissemination activities

Network Coordinating Committee

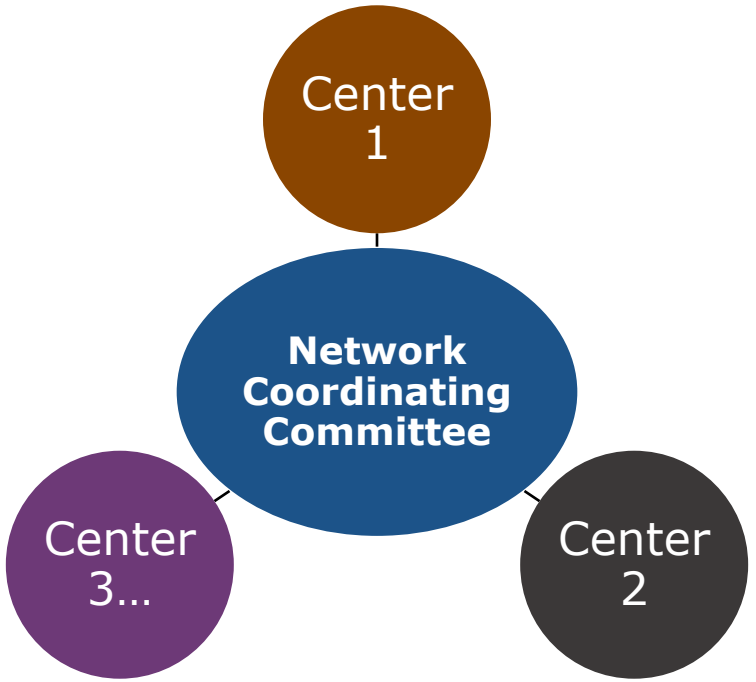
- Develop and implement coordinated multidisciplinary training activities
- Community outreach & partnerships
- Multipronged dissemination efforts

Catalyzed use of best practice frameworks for AI health science

Bridge2AI Network for AI Health Science

Potential High Priority Topics

- Creating a framework for **trustworthy, explainable, replicable, reproducible**, and **transparent** AI in biomedical and behavioral science
- **Providing data and model readiness and interoperability** for the research enterprise of the future.
- Developing **gold-standard methods** for building **Digital Twins** using AI and multimodal data.
- Moving ethically and securely **towards agentic autonomous labs of the future** with humans in the loop.

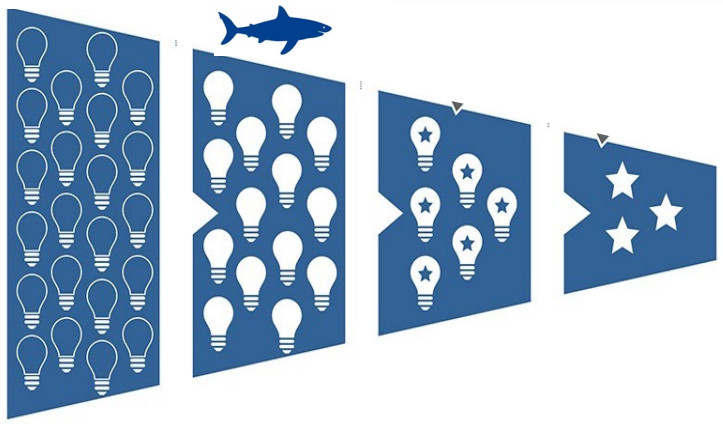


Products

- Ethical **best practice frameworks** to support the growing complexity of AI-enabled health science
- Adaptive interdisciplinary cross training to develop an **AI-Health Research Workforce**
- A **broad community of AI users** fully equipped to apply new methods for tackling new biomedical and behavioral grand challenges
- **Enhanced trust** in AI-biomedical and behavioral research

Bridge2AI Ecosystem

Solution ideas may enter the Innovation Funnel from the Network activities.

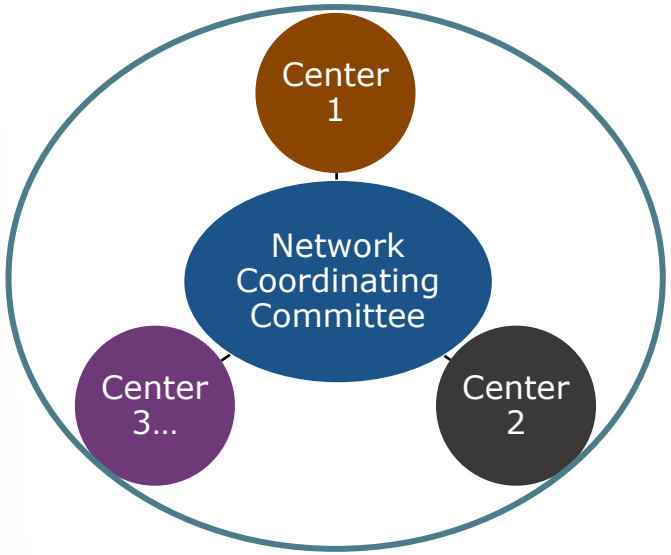


Trustworthy solutions

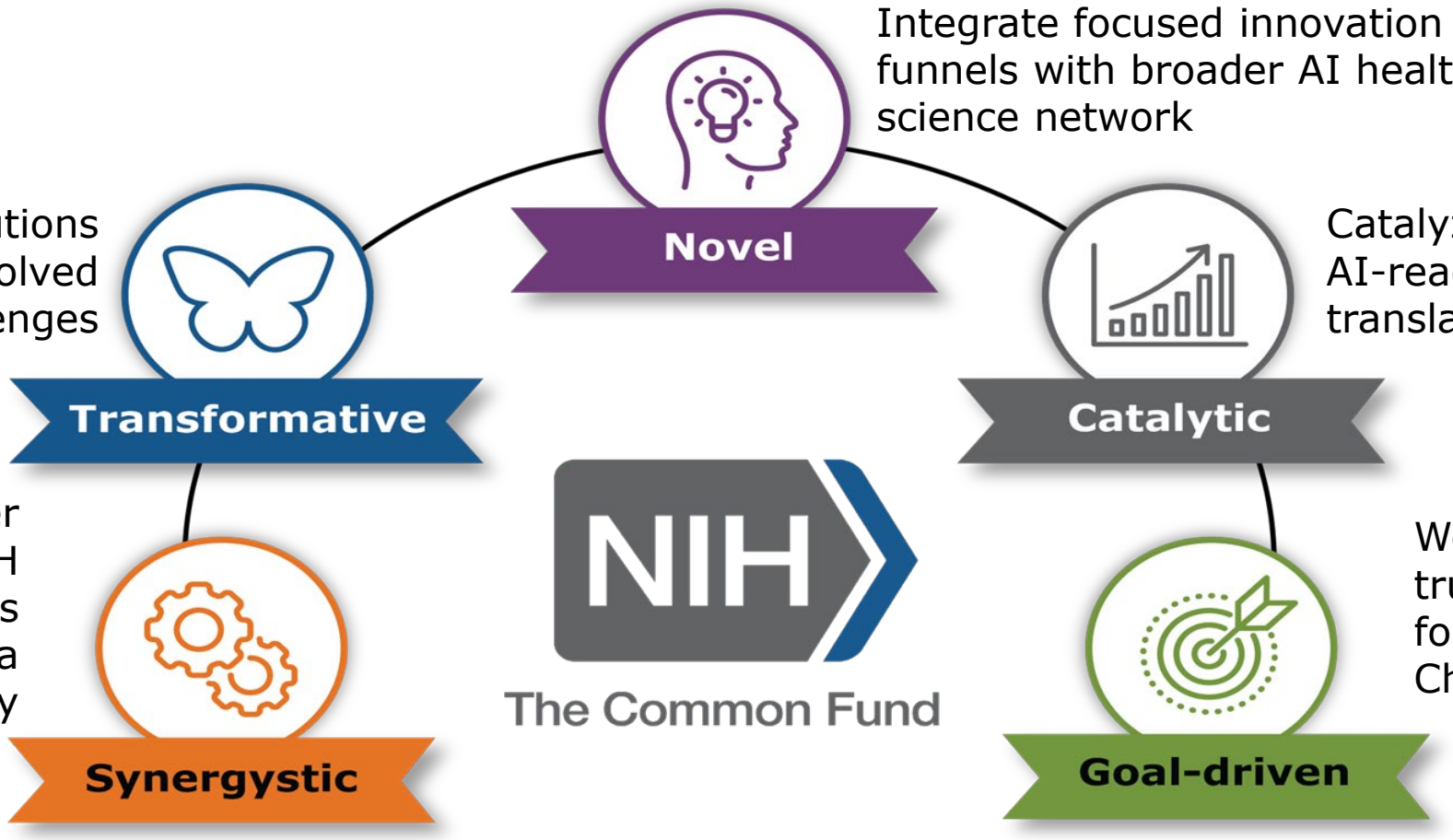
Innovation Funnels

Some solution concepts may be further incubated in the Science Networks.

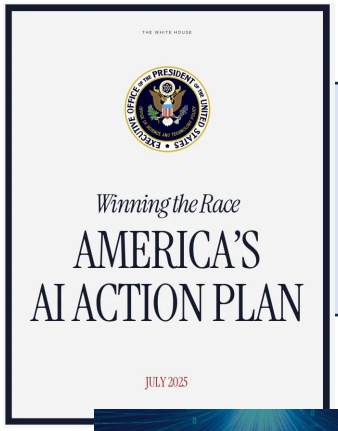
Network for AI Health Science



Common Fund Criteria



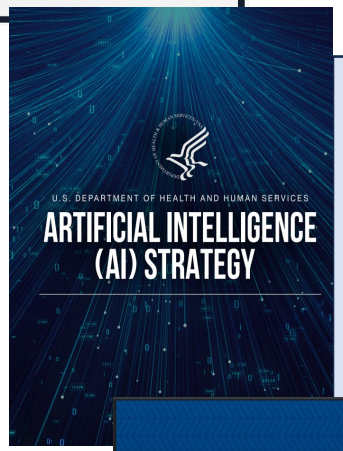
Alignment and Synergy



Supports Pillar I to Invest in AI-Enabled Science, Build World-Class Scientific Datasets (Bridge2AI Stage 1), and Advance the Science of AI.

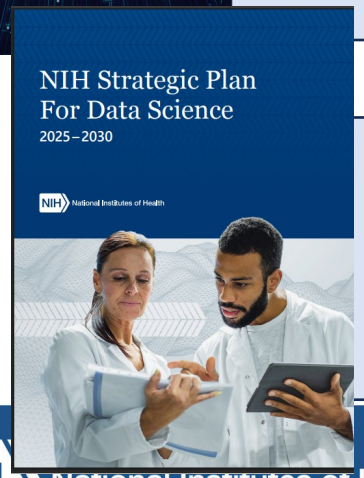
Genesis Mission

Harness scientific datasets toward agentic science of the future.



Strongly Aligned with:

- Pillar I: public trust in AI
- Pillar IV: Health research & reproducibility through gold-standard science
- Pillar V: modernize care for better outcomes.



- Ethical AI
- Data infrastructure
- Accelerate discoveries using trustworthy AI

Aligned with NIH Director's Priorities

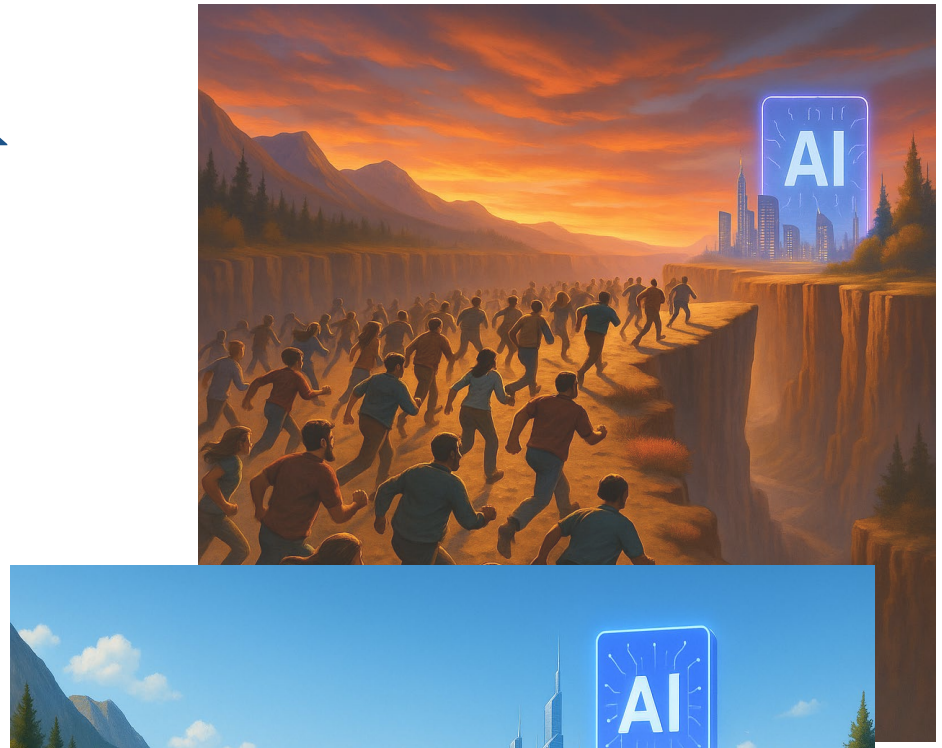
- Training future biomedical scientists
- Replication and Reproducability
- Artificial Intelligence

Complementary to, and synergistic with, other NIH programs

- Ethical Multimodal AI
- PRIMED-AI
- ICO initiatives focused on specific disease states and/or organ systems

Anticipated Impact & Deliverables

- Public trust in rigorous, responsibly-developed AI-enabled solutions for health
- Via deliverables:
  - Accelerated **trustworthy** solutions to Grand Challenges in health
  - Frameworks for responsible AI Health Science to improve health
  - Interdisciplinary AI Health Science Workforce & broad community of users





Proposed Bridge2AI Stage 2 Budget

Initiative	Lead IC(s)	FY27	FY28	FY29	FY30	FY31
#1 Innovation Funnels (add to 1 existing contract) *4 funnels per year; multiple projects per funnel; cash awards to projects at each stage.*	OSC, NIBIB	$8.75M	$9.25M	$9.25M	$9.75M	$9.75M
#2 Research Network (3-5 U24 Awards) *Includes seed funding for select projects*	OSC, NCCIH	$7M	$7M	$7M	$7M	$7M
Data Sustainability	OSC	$1.5M	$1M	$1M	$500K	$500K
RMS (NIH staff salary and travel)	OSC	$750K	$750K	$750K	$750K	$750K
Total	**$90M**	**$18M**	**$18M**	**$18M**	**$18M**	**$18M**

NIH Bridge2AI Program Management Team

Co-Chairs
Michael Chiang (NEI)
Valentina Di Francesco (NHGRI)
David Shurtleff (NCCIH)
Stephen Sherry (NLM)
Bruce Tromberg (NIBIB)

Common Fund Program Leader
Haluk Resat

Common Fund Program Officer
Laurel Kuxhaus

Program Analyst
Milan Yorke, NHGRI

Common Fund Staff
Natalie Vineyard (SPEC)
David Dzamashvili (Ops)
Kristina Faulk (Prog Coord)

Working Group Coordinators
James Gao, NEI
Lanay Mudd, NCCIH
Grace Peng, NIBIB
Shurjo Sen, NHGRI

Federal Working Group (100+ Members)
CC, CIT, FIC, NCATS, NCI, NCCIH, NEI, NHGRI, NIA, NIAID, NICHD, NIBIB, NIDA, NIDDK, NIAMS, NIGMS, NIMH, NIMHD, NINDS, NLM, OBSSR

Other Federal Agencies:
DOE, FDA, NSF

Awards Management
Isaiah Whittaker (DOTM)
Erna Petrich (DOTM)
Devon Bumbray-Quarles (NHGRI)

Project Scientists of Awards, WGs
Toyin Ajisafe, NICHD
Tyler Beck, NCATS
Shubha Chandrasekharan, OD
Deborah Duran, NIMHD
Keyvan Farahani, NHLBI
Samson Gebreab, OD
Ilana Goldberg, NHLBI
Sean Hanlon, NCI
Dave Kaufman, NHGRI
Lisa Kopf, NIDCD
Dawei Lin, NIAID
Lori Scott-Sheldon, NIMH
Xujing Wang, NIDDK
Qilu Yu, NCCIH
Jean Yuan, NIA

Council Action:

Vote for approval of the concept for Bridge2AI

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