The NIH Data Commons Pilot Phase

Informational Webinar for ROA-RM-17-026

June 23, 2017



Features of NIH Common Fund Programs

- Address important **challenges/obstacles** in biomedical research, and/or capitalize on **emerging scientific opportunities** where strategic investment can have an impact
- Are **catalytic**: Programs must achieve a defined set of high impact goals within 5-10 years
- Are **goal-driven**
- Promote the missions of **multiple NIH Institutes and Centers (ICs)**
- Can require a high level of **coordination**

Each Common Fund program addresses unique scientific needs and opportunities, and so each program has a unique implementation plan driven by the science.



NIH Data Commons Pilot Phase Overview

- The NIH Big Data to Knowledge (BD2K) is entering a second program phase that will test the feasibility of, and develop best practices for, making NIH-funded datasets, semantics and computational tools available through communal, collaborative platforms on public clouds.
- **Purpose**: The goal of the NIH Data Commons is to accelerate new biomedical discoveries by providing a cloud-based platform where investigators can store, share, access and compute on digital objects (data, software, etc.) generated from biomedical research and perform novel scientific research including hypothesis generation, discovery, and validation.
- The NIH plans to implement a Data Commons initially as a Pilot Phase in which three high-value datasets (TOPMed, GTex and MODs) will serve as test cases for the principles, policies, processes, and architectures that need to be developed. NIH expects the Pilot Phase will occur over 3-4 years.

\$21 million over a 4-year period



Other Transactions (OT)

Unique funding mechanism that is neither a grant, cooperative agreement, nor a contract

- Funding Announcement
- Publication on the website NIH Data Commons website
- Encourages nontraditional partners
- The NIH Data Common Pilot Phase uses objective review
 Interactive discussion with Program staff and external experts as needed
 Selection of pieces of a proposal

	Awarded activity can be:
	• Expanded
Award	 Modified
Management	• Partnered
	 Not supported
	 Discontinued

Based on:

- Program needs
- Emerging methods
- Technologies or approaches
- Availability of funds

NIH

NIH Data Commons Pilot Phase – OT

- 8 Key Capabilities have been identified + 6 minimum standards of operation for the NIH Data Commons
- Applicants are encouraged to develop innovative approaches to one or more key capabilities of the Data Commons
- A proposal need not address all key capabilities to be competitive.
- Additional capabilities can be suggested, but must be fully described and justified.
 - Projects using additional capabilities not described in the solicitation may be included with any key capabilities



NIH Data Commons Pilot Phase – OT

- ROA-RM-17-026 (OT3)
- Stage 1 the NIH expects to award OTs to support multiple projects that are deemed responsive to this solicitation and judged to include high impact, cutting-edge ideas for implementation.
 - Awardees will be expected to form a consortium which will also include investigators funded through TOPMed, MOD, and GTEx. The consortium will work closely with NIH staff, and contractors the NIH will engage to assist with administration of the consortium and evaluation of business models and practices.
 - Data Commons Pilot Phase Consortium (DCPPC)
- Stage 2 the NIH expects to evaluate, negotiate, and revise terms of existing awards as appropriate or may award additional OTs to extend and fully implement the Data Commons Pilot Phase based on the design strategies and capabilities developed as part of Stage 1.



NIH Data Commons Pilot Phase – OT

- ROA-RM-17-026 (OT3)
- Letter of intent (LOI) is required and is due by June 30, 2017 (5:00 PM United States Eastern Time)
- LOIs will be reviewed for programmatic relevance by July 7, 2017.
- Selected groups will be invited to submit an application by July 12, 2017. Only those who are invited may apply.
- Applications due by July 31, 2017
- Mandatory kick-off meeting October 23-25, Bethesda, MD, United States



OT3 Letter of Intent

Submission of a Letter of Intent is required

Prospective applicants are required to submit a Letter of Intent that includes the following information:

- Number and title of this research opportunity
- Descriptive title of proposed activity
- For each Key Capability:
 - o Designated project lead with address, phone number, email address, and organizational affiliation
 - o Name and organizational affiliation for all key personnel
 - o Description of relevant expertise for all key personnel, not to exceed 100 words per person
 - o Description of planned activity to address the objective(s) not to exceed 800 words
 - o Description of resources available to accomplish the activity, not to exceed 500 words
- If the intent is to apply for more than one Key Capability, a description of how objectives will interact, **not to exceed 500 words**

Email to commonspilot@od.nih.gov by June 30, 2017



OT3 Full Application

This is not a typical NIH grant application

- **Cover page** (up to 1 page)
- Summary vision statement (up to 500 words)
- **Detailed activity plan** (up to 4000 words and 2 figures)
 - o Applicants encouraged to provide links to videos, demos, and simulations
- Letter of institutional support (no more than 2 letters)
- **Bibliography** (up to 1 page)
- **Major tasks and milestones** (this is a scorable selection factor for Stage 1 award)
- Budget
- Budget justification



Evaluation

The NIH Data Common Pilot Phase uses objective review

Letter of Intent (LOI) will be evaluated on:

- Expertise of the team members and key personnel
- Past performance relevant to the Data Commons
- Outline of planned activities
- The adequacy and appropriateness of available resources

Application will be evaluated on:

- The potential impact of the team's vision statement if it were successfully implemented
- The plan for developing relevant components of the Data Commons
- Plans for engaging the community, including, where relevant, any plan for developing a demonstration project
- Past performance and expertise of the team members and complementarity with other awardees; and
- The adequacy and appropriateness of the budget, resources, and data sharing and collaboration plans



Other Considerations

Budget

The OT component of the DCPPC budget is currently planned for \$21 million over a 4-year period. However, Common Fund procedures and OT mechanisms allow for significant flexibilities to make adjustments that may be needed to pursue catalytic and transformative initiatives.

Award levels and total budget may increase or decrease over time based on programmatic needs, funding availability and awardee performance.

Period of performance

Project duration is anticipated to be 3 - 4 years



Advice

Read the research opportunity Read the research opportunity Read the research opportunity Read the FAQ Be specific Don't distort reality Don't waste pages Don't be late Justify



NIH Data Commons Contacts and Resources

Scientific/Research Contact(s)	Vivien Bonazzi, Ph.D. Office of the Director, NIH Email: commonspilot@od.nih.gov
Financial/Agreement Officer Contact(s)	Teresa Marquette National Heart, Lung, and Blood Institute (NHLBI) Email: commonspilot@od.nih.gov

