

## Illuminating the Druggable Genome Overview

### **1. What is the Common Fund?**

The NIH Common Fund was enacted into law by Congress through the 2006 NIH Reform Act and is managed by the Office of Strategic Coordination within the NIH Office of the Director. The Common Fund supports cross-cutting trans-NIH initiatives to catalyze new areas of science. Common Fund programs address emerging scientific opportunities and pressing challenges in biomedical research that no single NIH Institute or Center (IC) can address on its own but are of high priority for the NIH as a whole. The Common Fund is a unique resource at NIH, functioning as a “venture capital” space where high-risk, innovative endeavors with the potential for extraordinary impact can be supported. Common Fund programs are short-term, goal-driven strategic investments, with deliverables intended to catalyze research across multiple biomedical research disciplines. More information is available at <http://www.commonfund.nih.gov>.

### **2. What is the goal of the Illuminating the Druggable Genome (IDG) Program?**

The overarching goal of the Illuminating the Druggable Genome (IDG) Program is to improve our understanding of the properties and functions of proteins that are currently not well studied within commonly drug-targeted protein families. The overall long-term goals of the IDG Program are two-fold:

- To advance research through the development, broad dissemination, and use of community scientific resources to study human proteins for which publicly available information or active research is lacking in order to catalyze the discovery of novel biology, with a particular focus on understudied members of the protein kinase, ion channel, and non-olfactory GPCR families.
- To demonstrate the feasibility and benefits of illuminating the roles of understudied proteins, permitting the expansion of such approaches to a broader array of protein families beyond the three families of proteins in the IDG Program.

More information is available at <https://commonfund.nih.gov/idg>.

### **3. What are the experimental approaches being taken in the IDG Program?**

The IDG program experimentally is focused on three families of proteins, protein kinases, G protein-coupled receptors and ion channels. Detailed information about the goals of each of these projects along with milestones and experimental workflow can be found [here](#). Please email [DruggableGenome@mail.nih.gov](mailto:DruggableGenome@mail.nih.gov) if you have additional questions.

## Opportunity Pool R03 Objectives

### **1. What kind of research falls under this FOA?**

This FOA is intended to fund small research projects on [eligible proteins](#) that can be carried out in within one year and limited to \$100,000 direct costs. They should focus on pilot/validation studies of eligible proteins, and the testing and validation of IDG reagents, data and approaches. See also [FOA Objectives and Scope](#).

### **2. The FOA mentions that applicants are strongly encouraged to use available resources in Pharos and the [DruggableGenome](#) when applying. What does this mean?**

All relevant datasets and capabilities associated with understudied proteins collected by the IDG can be found in [Pharos](#). Applicants are strongly encouraged to use available resources in [Pharos](#) when applying to this FOA as part of the justification for the approach selected and/or to assist in accomplishing the goals of the project. Applicants should also review [DruggableGenome](#), the IDG Consortium website, to explore available tools developed by the IDG Consortium and to ensure proposed work does not overlap with ongoing studies being performed by the IDG Consortium. Current progress on IDG projects can be found [here](#).

**3. *What should I do if I believe there are understudied proteins that I wish to work with that are not on the list in the FOA?***

Projects that propose work on proteins not listed in the FOA will not be responsive and will not be reviewed. Proteins included on the [IDG-eligible list](#) have been found to be of the highest priority to the IDG program and are the focus of this FOA. Priority and assignment of “understudied” to these proteins is based on low publication count, no or minimal R01 funding and expert human curation. Additional proteins, including well studied proteins, may only be used in projects proposed as controls for experiments involving IDG-eligible proteins from the approved list. The control proteins may not be the focus of experimental work.

**4. *Is it acceptable to use an approach that explores more than one protein from the IDG-eligible list?***

This is acceptable. However, applicants should remember that their project must be achievable within one year and that direct costs are capped at \$100,000. Applicants should not propose an overly ambitious project that proposes the study of more proteins or methods than would be feasible for this award budget.

**5. *Who is the NIH Contact for [RFA-RM-18-021](#) and should I contact them before applying to this FOA?***

While not mandatory, contacting NIH early in the process will help you determine if you are eligible and if you are proposing something that would be responsive for this FOA. The NIH Contact for [RFA-RM-18-021](#) is:

**Christine Colvis, Ph.D.**

National Center for Advancing Translational Sciences (NCATS)

Email: [DruggableGenome@mail.nih.gov](mailto:DruggableGenome@mail.nih.gov)

## Application Budget and Submission Requirements

**1. *R03 project periods are typically 2 years. If I submit an application for \$100,000 direct costs to be spent over a two-year period, will NIH accept it?***

No. For this FOA the project period is limited to 1 year and \$100,000 direct costs.

**2. *Will applicants be required to attend the annual IDG face to face meeting?***

Yes. The applicant should allocate funds in the budget to allow for travel costs associated with attending the annual IDG face to face meeting.

**3. *Can an institution/research team submit more than one application to the RFA?***

Yes, there is no prohibition on the number of applications an institution may submit, provided the applications are scientifically distinct.

**4. Do I need to send a letter of intent?**

Although a letter of intent is not required, is not binding, and does not enter into the review of a subsequent application, the information that it contains allows NIH to estimate the potential review workload and plan the review.

**5. Is collaboration with other IDG investigators required to submit an application?**

This is not required.

**6. Can work be performed outside the US?**

Foreign components, as [defined in the NIH Grants Policy Statement](#), **are** allowed.

Non-domestic (non-U.S.) Entities (Foreign Institutions) **are not** eligible to apply.

Non-domestic (non-U.S.) components of U.S. Organizations **are not** eligible to apply.

**7. What are the plans for data and resource sharing for this FOA?**

Consistent with achieving the goals of this program, the NIH expects that information such as collected data, technical protocols, and any other metadata collected under this FOA is to be made accessible via [Pharos](#). Data should be submitted to an appropriate repository and this information provided to the Resource Dissemination and Outreach Center (RDOC) consistent with the IDG Consortium's data sharing [policy](#). All applications, regardless of the amount of direct costs requested for any one year, should address a Data Sharing Plan. The Plan should include how the data will be shared through [Pharos](#), the type of data to be shared and the timeline for sharing data. Applicants should consider how the data will be made Findable, Accessible, Interoperable and Reusable.