New Therapeutic Uses: NIH-Industry Partnerships Initiative

DRUG DEVELOPMENT PARTNERSHIPS PROGRAM
NEWTHERAPEUTICUSES@MAIL.NIH.GOV
NCATS Mission

To catalyze the generation of innovative methods and technologies that will enhance the development, testing and implementation of diagnostics and therapeutics across a wide range of human diseases and conditions.
Drug Development Partnerships Initiative

Goals

• **Overall:** Enable the broader research community to identify new therapeutic uses of proprietary Assets from pharmaceutical companies.

• **Short term:** Efficient drug repurposing partnerships.
  - **Template agreements:** Shorten the time to establish collaborations.
  - **Crowdsourcing:** Effective way to launch collaborations.

• **Long term:** Widespread application.
Accelerating Therapeutic Development

New Therapies for Patients

RESEARCHERS
- Provide new therapeutic use ideas.
- Access patient populations.
- Conduct clinical trial.

AGREEMENTS

PHARMA
- Create drugs.
- Provide Assets.

COLLABORATION

FUNDING

NIH/NCATS
- Post Asset information.
- Develop agreement templates.
- Crowdsource ideas.

ALLIANCES
FOA issued. Info on Assets provided.  
March 15, 2017

X02 applications submitted.  
April 17, 2017

Top tier applicants identified.  
February 2018

CDA and CRA executed. Additional info on compounds provided. Full application prepared.  

UG3/UH3 apps submitted.  
September 15, 2017

Full applications reviewed.  
December 2017

Advisory Council  
January 2018

Awards are made.  
February 2018

Projects conducted/managed.  
3 – 5 years
NCATS invites prospective pharmaceutical companies to partner with NCATS to explore new indications for drug candidates (Assets) across a broad range of human diseases. Asset characteristics include the following:

- Mechanism of action is known.
- Pharmacokinetics are suitable to explore the mechanism in a new indication.
- Phase 1 clinical trial has been completed - safety profile is understood.
- Assets currently in clinical development can be included. http://www.ncats.nih.gov/ntu/Assets/current/
Major company responsibilities include:

• Provide Asset information to be posted on the NCATS website.
• Provide pre-clinical and clinical supply for studies (both drug and placebo).
• Provide regulatory documents (i.e., cross reference letter or study reports) to enable a funded investigator to file an Investigational New Drug application in the U.S. in time to meet project timeline and milestones.
• Use template agreements that are negotiated with NCATS.

http://www.ncats.nih.gov/ntu/Assets/agreements
Crowdsourcing

NCATS publicly posts limited confidential information about experimental assets to a public web site to collect ideas for new uses from scientists.

<table>
<thead>
<tr>
<th>Drug</th>
<th>Mechanism of Action</th>
<th>Original indication</th>
<th>Route of Administration</th>
</tr>
</thead>
<tbody>
<tr>
<td>AZD0530</td>
<td>Src Tyrosine kinase inhibitor</td>
<td>Cancer</td>
<td>oral</td>
</tr>
</tbody>
</table>

Additional information

- Suitable for/exclusions
- Safety/tolerability
- Clinical Trials
- Additional characteristics
- Publications

https://ncats.nih.gov/ntu/Assets/current
Once an Asset is selected

- Investigators are strongly encouraged to consult with the appropriate office (such as the Technology Transfer office) within their organization to consider the institution’s willingness to agree to the conditions in the appropriate Confidential Disclosure Agreement (CDA) and Collaborative Research Agreement (CRA) for the selected Asset. Learn more: https://ncats.nih.gov/ntu/Assets/agreements
Letter of Intent (LOI)

- Assists NIH with preparing for review of applications.
- Not binding
- Not required
- Will not be provided to reviewers.
- Will not factor into review of the application.
- The LOI should be sent by email to: Lambert@mail.nih.gov
Follow instructions in the funding opportunity for the application structure.

The following should NOT be included in the X02 pre-application.

- Resource Sharing Plan
- Human Subjects section - even if human subjects are involved
- Vertebrate Animal section - even if animals are involved
- Consortium/Contractual arrangements attachment
- Budget
- Appendices
Top tier applications identified.

- Successful applicants will receive notification of the contingent* opportunity to submit a UG3/UH3.
- Notification will include contact information for the pharmaceutical partner identified in the X02 application.

*UG3/UH3 application submission is contingent upon applicant having access to the Asset.
Confidential Disclosure Agreement (CDA)

• Executed by the applicant institution authorized signing official.

• Executed by pharmaceutical company authorized signing official.

• Enables the parties to share confidential and proprietary information about the Asset in order to prepare a full application for RFA-TR-17-002 or RFA-TR-17-003.
Collaborative Research Agreement

- A letter of support from the pharmaceutical company partner must be included in the UG3/UH3 application, documenting that the applicant(s) will have access to the Asset and associated data needed for conducting the proposed pre-clinical and/or clinical studies.
Staged (UG3/UH3)

• Prior to funding an application, the Program Official will contact the applicant to discuss the proposed UG3 and UH3 milestones and potential changes suggested by NIH staff or the NIH review panel. The Program Official and the applicant will negotiate and agree on a final set of approved UG3 milestones, which will be specified in the Notice of Award. These milestones will be the basis for judging the successful completion of the work proposed in the UG3 stage and progress towards interim milestones in the UH3 stage.

• The Program Official will be responsible for determining if the awardee has met the milestones and feasibility requirements for transition of the project from the UG3 to the UH3 stage.

• The Program Official reserves the right to obtain periodic external peer review and recommend reviewers for an assessment of progress and achievement of milestones.
NIH Cooperative Agreements “U” Awards

- Awardee has primary responsibility for the project.
- NIH Project Scientist will have substantial involvement, including participation in quarterly project update meetings.
- NIH Program Official will be responsible for normal scientific and programmatic stewardship of the award.
- Each project will have a Steering Committee (SC).
  - PD/PI(s) and designated key personnel
  - Pharma collaborator, *ex officio*
  - NIH Project Scientist(s) and Program Official
  - External Scientists (invited by the PD/PI in consultation with other SC members)
GENERAL GUIDANCE FOR APPLYING
Do not submit an idea to repurpose a therapy that is not one of the 2017 industry-provided Assets.

- This funding opportunity is limited to those Assets provided by pharmaceutical company collaborators for the New Therapeutic Uses program through a Memorandum of Understanding with NIH. The program will not provide support for Assets not listed in the tables on the Industry-Provided Assets page. We encourage inquiries concerning this funding opportunity and welcome the opportunity to answer questions from potential applicants.
Do not try to obtain the Asset before the pre-application is submitted.

- Applicants should not contact the pharmaceutical companies before the X02 is submitted. Applicants whose X02 pre-applications are identified as being highly meritorious and relevant to NIH program priorities will be notified of the opportunity to submit UG3/UH3 applications. The notification will indicate the appropriate pharmaceutical company contact. However, applicants should work with their institution in advance to discuss the conditions in the collaborative research agreement for the selected Asset prior to submitting the X02 pre-application.
Do not use the program to obtain the collection of Assets.

- This program does not support screening of the Assets. The primary focus of applications should be on clinical trials (Phases I and II). If proposed, pre-clinical studies should be justified and tied to go/no-go decisions to test the Asset in the patient population.
Do not forget to include a letter of support confirming the institution’s willingness to engage in the necessary negotiations with the pharmaceutical company.

- Applicants MUST include a letter from an appropriate institutional official, generally a dean or provost, documenting institutional commitment to the project, including provision of resources, space, and available faculty. Include in the letter confirmation of the Institution’s willingness to engage in the necessary negotiations with the pharmaceutical company regarding the terms and conditions of the template CDA and CRA for the selected Asset or mechanism of action. A successful UG3/UH3 application will be contingent on the applicant’s ability to provide the NIH with documentation of access to the selected Asset and associated data needed for conducting the proposed pre-clinical studies and for filing an investigator-sponsored IND in order to conduct the proposed clinical trials (e.g., an executed CRA or letter from the pharmaceutical partner).
Do not propose changing the formulation of the Asset.

- The pre-clinical and clinical data on safety and tolerability is based on the formulation listed. Applicants must propose trials using the existing formulation.

- The only exception is for pediatric indications, which may need to be formulated as a solution/suspension for oral administration (ages 6 to 11) or a small tablet/capsule (ages 12 to 18). Palatability issues also may have to be addressed for pediatric administration.