INNOVATIVE TEAM RESEARCH PROGRAM SEED GRANTS
Request for Applications

Proposal Submission Deadline: Monday, April 14, 2025, 6:00 PM

- An application to this seed grant program must be prepared following the requirements outlined below and submitted as a single PDF file to **Nhpeter2@cougarnet.uh.edu** Combine all files into a single PDF, named LAST_FIRST_2025 where LAST is the last name and FIRST is the first name of the Contact PI.

Overview

The UH Drug Discovery Institute (DDI) aims to advance academic drug discovery through multi-disciplinary collaborations, integrating new technologies to streamline and augment drug discovery and development at UH. The purpose of this program is to develop, equip or catalyze multidisciplinary research teams with seed funds that facilitate preparation and submission of competitive extramural drug discovery and development research proposals. Pursuit and receipt of follow-on finding is a primary goal of this program, and is essential to continuation of the Institute. The seed funding grant program is aiming at supporting the University of Houston research priorities (https://www.uh.edu/research/about/priorities/) related to health and well-being. In addressing the unmet needs of current academic drug discovery centers, the DDI will encourage applicants to utilize innovative, advanced and cutting-edge technologies to discover and develop new therapeutics for human diseases. **DDI will support innovative drug discovery projects across two tracks, namely scientific track and technique expansion track (new to this cycle)**. The proposals from the teams which have not previously funded by DDI funds will be favored in this competition.

Funds may be requested to promote collaborative activities, including but not being limited to planning for innovative research platform development, preparation for large team -science grant applications (e.g., program project grant (PPG) and large MPI-RO1), or establishing a sustainable core service of broad benefit to members. Innovative ideas for implementing novel networking strategies to promote research collaborations and enable new research directions are encouraged. Funds from this program may also support innovative research projects (pilot projects) of the participants.

It is expected that funded teams and/or data from funded seed grants will be used to support strong federal or state grant applications. Applicants should include a plan and timeline for external grant submission (see Reporting Requirements below), and this will be a major

criterion for funding. Subsequent applications should represent a substantial return on investment.

Funding Level

For this fiscal year, we anticipate supporting innovative project development across two tracks.

- Scientific Track: This track focuses on fostering new, multidisciplinary collaborations among UH faculty members to advance drug discovery research at UH. Each application responding to this track should be submitted by an interdisciplinary research team with Co-principal investigators (Co-PIs) from at least two different colleges, each of whom receives at least 20% of the funds, aiming at building university-wide capabilities in drug discovery and development. We plan to support up to three awards of $50,000 each, totaling $150,000. The funding period is up to 18 months, with a starting date of July 1, 2025.
  While new collaboration is not required, proposals from teams without previous collaborative activities will be prioritized if similarly-scored proposals are received.
  Previous collaborative activity is defined as collaborations that have resulted in measurable outcomes, including but not limited to publications, grants, patents, etc.

- Technique Expansion track: This track focuses on the development of strong external grant applications in the drug discovery field by leveraging state-of-the-art equipment available in UH core facilities. These cores include, but are not limit to, the UH Sequencing core (UHsequencing@gmail.com), Houston Omics Collaborative (hoc@central.uh.edu), UH immunology core (jhou21@central.uh.edu), UH Electron Microscopy Core (ggao7@central.uh.edu), UH Animal Behavior Core (abc@uh.edu) and Biology & Biochemistry Imaging Core (kmgajewski@uh.edu). We plan to support up to three awards of $15,000 each, totaling $45,000. The funding period is up to 18 months, with a starting date of July 1, 2025.

Reporting Requirements

1. An external grant proposal must be submitted in Year 1 of the seed grant project period. If the applicant intends to apply for a competition that does not fit this timeline, an exception should be noted in the proposed timeline. An exception can be granted by petition provided this extension delays the grant submission for no more than 3 months.
2. A resubmission is expected in the next submission cycle following the receipt of reviewer comments until funding is secured or a new application can be submitted while awaiting the outcome of the previous submission. In Year 2, the PI is expected to submit either a second proposal or resubmit the proposal from Year 1.
3. For the 18-month grant mechanism, reports at 6 and 12 months are expected. A final report that captures the research output and funding garnered through this award will be due one month after the end of the project period. Outcomes also will be reported each Fall in support of the preparation of the DDI Annual Report to DOR.
4. Reporting of both technical and proposal progress at the annual DDI symposium is expected.
5. Should any reporting or submission requirements fail to be met, the DDI reserves the right

to terminate funding and the PI and research team as well as college Deans and department chairs will be notified.

Eligibility Criteria

Full-time University of Houston faculty members (tenured, tenure-track, or non-tenure-track research/clinical faculty) are eligible to apply for both tracks. Other investigators employed by UH may be listed as co-investigators. External investigators may serve as collaborators or consultants but are ineligible to receive seed grant funding. ***A faculty member may serve as PI, Co-PI or Contact PI on only one application and as co-investigator on one additional application in this cycle.***

While all UH faculty are eligible to apply, faculty not currently funded by DDI will be prioritized if similarly-scored proposals are received.

Budget Restrictions

Scientific Track:

1. Support for faculty salaries is limited to a total of $6,000 per grant (salary + fringe benefits ≤ $6,000) across all faculty involved in the application. Salary requests must be accompanied by a convincing justification.
2. Budgets will be critically reviewed. All budget items must have written justification, and the budget must include fringe benefits for salary requests.
3. Support for instructional development activities will not be considered for this program.
4. Support for travel must be well-justified.

Technique Expansion Track:

1. Support for purchasing reagents and animals is limited to a total of $5,000 per grant. The remaining non-personnel cost should be used to cover the service fees from UH core facilities.
2. Budgets will be critically reviewed. All budget items must have written justification, and the budget must clearly indicate each service requested, corresponding UH core facilities and the cost.
3. Support for personnel cost or instructional development activities will not be considered for this track.

Proposal Preparation and Approval for Submission

The application to this seed grant program must be prepared following the requirements outlined below and submitted as a single PDF file to ddicordinator@gmail.com. Combine all files into a single PDF, named LAST_FIRST_2025 where the LAST is the contact PIs last name and the FIRST is their first name.

No prior approval from Chairs and Deans is required unless the application requires a commitment of space or other resources, in which case a letter of commitment should be included. Emails will be sent to you, your department chair (or equivalent), and your associate dean for research after you submit the proposal, in lieu of the previously-required signatures.

Formatting Requirements

All documents must be prepared on US Letter size paper (8.5"x11") with 1-inch margins on all sides, Arial font size of at least 11 pt., single-spaced. An Arial font of no less than 8 pt. should be used for the captions to graphics and tables. Applications that fail to follow the formatting requirements will not be reviewed.

Proposal Documents

NOTE: All proposal documents must be submitted as a single PDF and include the titles/subheadings listed below.

I. *Cover Page*

Detach and complete the cover page template found on the last page of this document.

II. *Abstract/Summary*

A single-spaced abstract of no more than 200 words.

III. *Proposal Narrative (Up to 6 pages, including graphics, tables, equations, and formulas)*

a. The following sections should be included as applicable to the proposal:
   (1) Specific Aims
   (2) Significance, Innovation, and Impact
   (3) Preliminary Results if any
   (4) PIs
   (5) Program Participants
   (6) Research Design and Methods
   (7) Timeline and Plans for External Grant Submissions: Include specific grant mechanisms, planned submission date(s), and an estimate of the budget of the grant that will be pursued. Note any relevant previous submissions and results.
b. References Cited are in addition to the 6-page Proposal Narrative.
c. Facilities, equipment, and key instruments (no page limit)
d. Human subjects and animal use (no page limit)
e. Authentication of models and reagents (no page limit)

f. Data sharing plan (no page limit)
g. Supporting letters, if outside collaborators or consultants are involved.

IV. Biosketches

Provide an NIH- or NSF-formatted biosketch for each PI, MPI, co-PI and key personnel.

V. Current and Pending Support

Provide a list of current and pending support for each PI, MPI, and co-PI, including a clear description of any overlap with the seed grant proposal. Proposals seeking to improve a previously-submitted external proposal that received a high score but was not funded are eligible and of interest, and should provide the summary statement of the external proposal reviews and describe the specific steps that will be taken to address the noted weaknesses.

VI. Budget

The budget must be constructed and presented using the standard UH budget template http://www.uh.edu/research/resources/dor-forms/proposal-processing-forms/. Please work with your affiliated pre-award personnel to generate the budget. This person must sign the budget template indicating that they prepared and approved the budget. Prepare a budget for 12 months, but no-cost extensions of up to six months normally will be granted.

Allowable Budget Costs:

- Laboratory fees, data collection fees, instrument uses, surveys and supplies
- Animals and/or biological materials
- Essential travel required to execute the project*
- Computational services*
- Consulting fees*
- Software, with sufficient justification*
- Small equipment, with justification*
- Faculty salary support up to $6,000, with convincing justification*
- Meetings or Workshops*
- External grant review/editing*

*** indicates those items only allowed when applying for the scientific track**

Unallowable Budget Costs:

- Instructional development activities
- Equipment or maintenance fees
- Indirect Cost Recovery
- Office supplies
- Publication Costs unless well justified

VII. Budget Justification and Fiscal Accountability

Each budget must justify all aspects of the requested budget, including faculty salaries. Faculty salaries must be designated as academic or summer months.

VIII. *Commitments*

Cost sharing or matching is not required. Any financial or tangible commitments must be formally documented. If cost sharing or matching is proposed, written commitments signed by the sponsoring unit authorities (i.e., Dean, Center Director, and/or Department Chair) must be submitted.

Review Process and Criteria

All applications will be administratively reviewed against the eligibility criteria outlined above. After the initial screening, applications will be submitted to a review committee comprised of DDI representatives from participating colleges. Outside peer review may be included. Each proposal will be competitively reviewed and ranked for the following review criteria (Similar to NIH review criteria and scoring system): 1) Impact and Innovation; 2) Final product; 3) Approach; 4) Investigators, including collaborative nature of the project; and 5) Long Term Potential. The relevance to drug discovery and development must be demonstrated. Proposals with high-risk - high gain, innovative technologies and integrated team science will be given preference. Reviewers may comment on other non-scoreable items (in NIH review format). The review committee will make recommendations to the DDI Director, who will be responsible for awarding and administering the grant.

Each reviewer will score each of their assigned proposals in five domains using the NIH 9-point rating scale (1 = exceptional; 9= poor) and provide an overall score on the same scale. The overall score will be based on the likelihood that the proposal will result in a fundable application.

1. Short-term impact and innovation of proposed research:

Evaluate the short-term impact and novelty of the proposed research.

2. Final product, including feasibility and timeline, which must include a plan for grant submission:

Evaluate the proposed final product. A strong application will have a detailed plan for producing this product, which must include a plan for grant submission at the end of the funding period. It also will articulate the stage of development and the timeline/pathway for translation to a marketed drug or a useful drug development tool. The application should identify the targeted agency, funding mechanism, and program for grant proposals, with a clear timeline for submission and revision.

3. Quality of the approach:

Evaluate the approach taken to producing the proposed product. If the proposal is a research grant, examine the description of the aims, participants, procedures, and analysis of the data.

Other approaches to scholarship will be reviewed, but must be related to drug discovery and lead to a grant or other form of external support.

4. Investigator expertise and record of accomplishment:

Evaluate the evidence that the investigators have the relevant expertise to produce the product. A strong grant would have a publication record in the identified area or clearly show the capacity to move into a new area. A weak grant would have no demonstrable record of accomplishment. A history of prior funding can be considered but should not disadvantage junior investigators with clear evidence of expertise.

5. Long-term potential for substantive contributions to drug discovery and development:

Evaluate the potential long-term impact of the proposal for a sustained and important contribution to the selected area of research and scholarship and external funding.

Congruency Review

Congruency review by the Office of Research Integrity is required for all research submitted to this program. The review must be conducted within three months of the award announcement, or the funds will be suspended. Congruency review includes human subjects, animal usage, biological materials (rDNA, human samples, microorganisms, etc.), and radiation (radioactive materials, lasers, and x-rays). All projects involving human subjects must be reviewed and approved by the Institutional Review Board (IRB) before the grant cost center will be established. All projects involving the use of animals in research must be reviewed and approved by the Institutional Animal Care and Use Committee (IACUC) before the grant cost center will be established. All projects involving biological materials must be reviewed and approved by the Biological Safety Manager and the Institutional Biosafety Committee (IBC) before the grant cost center will be established. All projects involving radiation must be reviewed and approved by the Radiation Safety Officer (RSO) & Laser Safety Officer (LSO) and authorized by the Radiation Safety Committee (RSC) before the grant cost center will be established.

Intellectual Property

In accordance with University policy, faculty members and the University share in net income generated from intellectual property. For additional information, refer to the Faculty Handbook or contact the Office of Technology Transfer and Innovation.

Deliverables, Reporting, and Acknowledgment

An external grant proposal must be submitted during the first year of the award. If the applicant intends to apply for a competition that does not fit this time limit, an exception should be noted in the proposed timeline. An exception can be granted by petition, provided it does not delay the grant proposal submission by more than 3 months. A resubmission is expected in the next submission cycle following the receipt of reviewer comments until funding is secured, or a new application can be submitted while awaiting the outcome of the previous submission. In year 2, the PI is expected to either submit a second proposal or resubmit the proposal from year

-1. The PI must prepare 6-month, 12-month and final reports that capture the research output and funding garnered by using this grant. Investigators who fail to submit timely progress reports or show adequate progress may have their funding terminated. It is the responsibility of the PI to provide information to the DDI concerning all external grant applications that are submitted or awards received as a result of this funding. Such information should include the date of submission, the title of the project, inclusive dates, agency, total, direct and indirect cost amounts requested, and the status of each application. Failure to comply with this reporting requirement will disqualify the individual from future consideration for DDI Seed Funding. DDI will arrange professional proposal editing at its expense for proposals resulting from DDI support, and require such review of proposals (ideally before agency submission, else after review).

Notice must be given to DDI of all publications or presentations resulting from this award. The grantee must acknowledge the DDI seed grant in all publications or presentations resulting from the award.

Effective Date of Awards

The DDI Director and Steering Committee will make decisions on each proposal based on the recommendations of the seed grant review committee. All applicants will be notified of the review outcome by approximately June 1, 2025. Awards will be effective July 1, 2025, for an 18-month project period.

Program Dates

- Application deadline: April, 14 2025
- Announcement of successful applications: Approximately June 1, 2025
- Effective Date of Award: July 1, 2025

Progress report due dates:

- January 15, 2026
- July 1, 2026 (including update on external grant submission)
- *Final Report* -January 15, 2027 (including update on external grant submission)
- Reporting on technical and proposal progress at the DDI Symposium also will be required

Extensions

Extensions will routinely be granted, but only for up to 6 months, to the date of the final report. Recipients of these funds should understand that they are designed for short-term impact as reflected in successful external proposal submissions.

Assistance

All questions related to this program should be submitted to **Nhpeter2@cougarnet.uh.edu.**

Drug Discovery Institute
UNIVERSITY OF HOUSTON

2025 INNOVATIVE TEAM RESEARCH PROGRAM SEED GRANTS
COVER PAGE

I. COVER PAGE (detach and complete)

PI Name:		Employee ID#:	
Department:		College:	
Email:		Phone:	
Project Title:			
Total Funds Requested:			

Does this proposal involve:
(Double click the box and check all that apply and provide protocol number if applicable)

☐ Animals — Protocol Number:

☐ Biological Materials (rDNA, Cells, Microorganisms, Biological Toxins) — Protocol Number:

☐ Human Subjects — Protocol Number:

☐ Radioisotopes/Lasers/X-Rays — Registration/Sub-license:

SIGNATURES

Contact PI: _____ **Co-PI(s):** _____

Date _____ **Date** _____