



UTHSC/Southern Research CORNET Awards Collaborative Research Network in Drug Discovery and Development



Purpose: The primary objective of the CORNET Awards in Drug Discovery and Development between **The University of Tennessee Health Science Center (UTHSC) and Southern Research (SR)** is to launch drug discovery programs that are based on new and unique biology of disease that will fill significant unmet medical needs. This initiative should be viewed as much more than a mechanism for seed money for future funding opportunities – it is a unique opportunity for developing a broad collaborative program in drug discovery that will yield the generation of new intellectual property (IP) and patents, and the establishment of new academic-industry partnerships that could lead to the founding of new companies.

UTHSC and SR will fund up to **two** pilot grants for **\$50,000 per year for up to two years**, with funding of Year 2 dependent upon progress made in Year 1. Funds can be utilized for various aspects of drug discovery and development for any human disease, including, but not limited to, assay development for high-throughput screening (HTS), molecular modeling and medicinal chemistry efforts, or proof of concept studies in animals with newly discovered lead molecules. The novelty of the biology/pathology targeted by drug discovery/development is an essential component of this program.

Guidelines

1. Only small molecule-directed efforts are eligible for funding at this time.
2. The following topics are beyond the scope of the solicitation and will not be considered:
 - Target identification
 - Target validation, without an accompanying proposal to discover new therapeutic molecules that manipulate said target
 - Development of compounds for which other parties own the IP, or for which no IP can be reasonably developed

Proposal Review and Selection Process (two stages)

1. **Stage 1:** PI(s) submit a 2-page pre-proposal to be reviewed by a scientific panel with expertise in various aspects of target validation and drug discovery. After review, an invitation with instructions for a full proposal will be sent to select PIs.
2. **Stage 2:** Full proposals (6-page limit) will be reviewed by a minimum of three scientific experts from each institution with significant expertise and experience in drug discovery. The CORNET Advisory Board will select the final proposals based on these reviews and the CORNET portfolio.
3. Access to Southern Research's expertise and resources (e.g., HTS, medicinal chemistry, pharmacokinetic evaluation and toxicity studies) will be provided to facilitate and guide the proposals.
4. Following selection and award, a multi-disciplinary team, consisting of members with relevant expertise, including cell biology, pharmacology, medicinal chemistry, HTS assay development, as

well as clinical knowledge will be assembled for all projects. This team will help fine tune and finalize a compound progression pathway and guide the project through the drug discovery and development pipeline.

This team will also be available to:

- Meet with the PIs selected for submission of full proposals
- Assist with the development of the statement of work, appropriate metrics and milestones to monitor success
- Offer feedback to interested applicants whose projects were not selected for submission of a full proposal

Pre-Proposal Submission Requirements

1. All UTHSC faculty and Southern Research investigators are eligible to apply, regardless of affiliation or rank.
 - There is no cross-institution research team requirement for this Award
 - Single PI submissions are eligible
 - Research teams from the same campus, college and/or departments are eligible
2. Submit your pre-proposal package as a single PDF via the UTHSC InfoReady Review (IRR) portal <https://uthsc.infoready4.com/> by May 15, 2017. Submissions not routed through IRR will be returned to applicant for resubmission through the IRR portal.
3. The pre-proposal package should include:
 - Face Sheet: (not included in 2-page limit)
 - Title of project, PI name(s), and PI affiliation(s)
 - NIH Biosketch for each PI (5-page limit)
 - Address each item listed below (2-page limit)
 - Title of the project
 - Identify at what stage your drug discovery/development project is:
 - ✓ HTS assay development and/or screening
 - ✓ Lead optimization/medicinal chemistry
 - ✓ Proof-of-concept in animal models
 - ✓ If other, please describe
 - Provide a description of the pathway or protein you propose to target and/or any compounds you have developed. For a target, make sure to describe the validation done to-date (e.g. biochemical, cell-based and/or animal data; biomarkers in patient samples, etc.); make sure to highlight the significance of your target or compounds. For example, how does it address an unmet medical need? How is this approach different from existing therapies, or competitors' strategies?
 - Summarize a potential research plan to achieve a lead candidate or IND-ready compound
 - ✓ If HTS is needed, describe the (to be) developed assay
 - ✓ Describe additional independent assays that can be used to confirm activity of identified active compounds, either in vitro or in vivo
 - Reference List (not included in 2-page limit)

Timeline and Important Deadlines:

Pre-proposal deadline via IRR: 5/22/2017

PIs selected for a full proposal submission will be notified by: 6/8/2017

Full proposal submission deadline via IRR: 7/15/2017

Anticipated Award start date: 9/1/2017

For any questions, contact Lisa Youngentob, UTHSC Director of Research Development, at lyoungen@uthsc.edu or 901-448-1277