CounterACT Preclinical Development Facility (CPDF)

The CounterACT program includes a Preclinical Development Facility. This facility is a resource for CounterACT investigators that enable them to conduct preclinical studies that would be needed for to support the drug discovery and development process and ultimate FDA approval. If approved by NIH, the studies are performed at no cost. Although the facility is primarily for CounterACT investigators, investigators outside the CounterACT network who have a promising medical countermeasure that would be responsive to one of CounterACT current FOAs, and meet other eligibility criteria outlined below, may submit to NIH for consideration.

The types of studies available at this facility include:

Initial non-GLP Preclinical Safety, Toxicity, and Pharmacodynamics/Pharmacokinetics (PD/PK) Services

- Determination of maximum tolerated dose and no observed effect levels (NOEL)
- Acute and subchronic toxicity; single and repeated dose toxicity studies
- Determination of relevant pharmacokinetic/toxicokinetic parameters
- Bioavailability studies; biotransformation assays conducted in vitro
- Absorption, distribution, metabolism, and excretion studies
- Various toxicity studies (e.g. genotoxicity, carcinogenicity, reproductive, cytotoxicity, immunotoxicity)
- Behavioral pharmacology
- Cell permeability

These limited studies will facilitate characterization and optimization of hits early in the development process. These studies may serve as a “go”/”no go” decision point for the project. Preliminary evidence of compound efficacy is required. Efficacy may be shown against the actual threat agent OR an acceptable surrogate agent.

Chemistry and Manufacturing Services

- Developing and performing analytical methods to characterize therapeutic agents
- Formulation and manufacture of drug appropriate for *in vivo* studies
- Synthesis, resynthesis, purchase, or acquisition of reagent grade or clinical grade compounds
- Manufacture laboratory-scale (i.e., non-GMP) quantities of bulk product and proposed formulated product

Intellectual Property Rights will be consistent with standard NIH guidelines. Applicants are free to establish a separate Material Tech-Transfer/Lab Service Agreement directly with the CPDF, if desired.

Procedures for Submitting Compounds to the CPDF

Goal: Conduct Pharmaceutical studies on selected candidate therapeutics

General Procedure:

1. NIH will accept Product Development Pre-Proposals from the individual PIs within and outside of the CounterACT program. PIs may consult with NIH to determine eligibility and general product development needs.
2. Cover Letter
    a. Project Director/Principal Investigator (PD/PI) name
    b. Titles of requested research effort and parent CounterACT-funded project
    c. Name and Title of the authorized organizational representative (AOR)
    d. Phone, email, and address information for both the PD/PI and the institutional official.
    e. Names and contact info of key collaborators, partnerships, etc.

    The cover letter must be signed by the AOR and PD/PI.
3. The Product Development Pre-Proposal should be 3-5-Pages. If they do not contain the following sections they will be returned without further review:
    a. Introduction – background information on the compound and what type of work you are requesting. Also indicate how these studies would impact the overall parent project, e.g., will you use these studies to chemically optimize promising compounds (hits)? Will these studies serve as a go/no go decision point for the project?
    b. Justification describing how your compound meets the eligibility criteria; include a brief description of efficacy data and any preclinical (safety, chemistry) studies that have already been completed.
    c. Research Needs summarizing, in general, what preclinical work needs to be done, e.g., pilot PK study to see if it reaches the brain, or shelf-life stability study, etc.
4. The NIH will begin accepting Pre-Proposals immediately, commencing July 1, 2007. There are no receipt deadlines.
5. Pre-proposals for the CPDF will be reviewed by the NIH, within 30 days of receipt.
6. Review criteria include, but not limited to, satisfying the eligibility criteria (efficacy data), impact on your overall project, programmatic priorities, regulatory input from relevant stakeholders, availability of NIH resources to include funds, capacity, etc.
7. If your preproposal is approved, the CPDF, in consultation with you and the NIH, will prepare a full Test Implementation Plan (TIP) for final review and approval by the NIH before the studies begin; typically within 90 days of initial approval of your Pre-Proposal.
8. The NIH will make arrangements for accepting the compound to be tested from the source (PI) and transfer to the CPDF for testing. Note: the compound *may* be synthesized by the CPDF under the contract.

Eligibility Criteria:

NIH will accept applications from individual Principle Investigators (PIs) from academic institutions, government laboratories, and/or companies. PIs may consult with NIH to determine eligibility.

a) Non-domestic (non-U.S.) Entities (Foreign Institutions) are not eligible to apply.
b) Non-domestic (non-U.S.) components of U.S. Organizations are not eligible to apply.

Submission Instructions:

Submit Pre-Proposals **by email** to:

Dave Yeung, Ph.D.
Project Manager, NIH CounterACT Program
dy70v@nih.gov