Grant Opportunity in Drug Discovery

Center for the Discovery of New Medicines (CDNM) at the University of Michigan is set up to accelerate the discovery and development of therapeutic agents to treat the unmet medical needs in all therapeutic areas. To facilitate this process, CDNM offers seed funding for investigators whose translational projects have potential to serve as the basis for finding new therapeutics.

CDNM is pleased to announce grant funds up to $50,000 per award, to support research activities in the drug discovery core labs such as the following: Assay development, screening, cloning and expression of proteins that are drug targets, x-ray crystallography of these targets, medicinal chemistry to advance hits to leads and for lead optimization, assays of early ADME and in vivo pharmacokinetics.

Eligibility

All faculty members (instructional and research track) employed by the University of Michigan are eligible to submit applications.

Criteria

The research proposal should have a therapeutic focus. Priority review will be given to projects that may lead to new ways of treating disease or result in novel disease-focus technologies, methodologies and/or models. Reviewers will consider the following items:

General
- The proposed intervention should address an unmet medical need.
- The research plan should be consistent with a milestone-driven experimental approach.
- The results, whether positive or negative, should support “go/no-go” decisions about further development or testing of the intervention.
- The research plan should result in important scientific information about disease mechanisms and/or factors mediating treatment effect, even if the proposed intervention does not look promising.

Significance
- Briefly explain the rationale and significance of the proposal.
- If successful how will the new therapeutic be used clinically? What will its impact be?
- Propose clear hypotheses and describe how the project will advance knowledge of intervention and/or disease mechanisms.
- Present a concise plan for translating the preclinical data into clinical development.

Investigator(s)
- Provide information the expertise of the key members of the research team.
- Provide information on past productivity of the key members of the research team.

Innovation
- Provide information on the novel drug target (i.e., mechanism of action) and/or a novel approach to engaging an established target. Include how the proposed intervention stems from a basic observation which and can then be translated into clinical efficacy.

Approach
- Provide a compelling scientific rationale for the approach chosen. The approach should describe hypotheses that are scientifically grounded and theory-driven, about the mechanisms involved in triggering or maintaining the disorder and the mediators or mechanisms of the intervention’s effect. The applicant should describe how the approach will ensure that the underlying hypothesized target mechanisms will be tested.
- Project feasibility should be addressed.
- Liabilities/risks should be listed.
- The aims must utilize the drug discovery core laboratories.
Deadlines and Notifications

The proposals will be due on the second Friday in November and in June each year. The deadline for submission is by the close of business (Eastern Time).

Funding decisions will be announced approximately six weeks after proposals are submitted.

Review Process

Each proposal will undergo two levels of review. The first level of review is based on the scientific merits of the project. In this phase each proposal will be scored according to above criteria using the NIH’s nine point scoring system. A second and independent level of review will be done by the CDNM Executive Committee, who will verify the scientific merit of the project and also factor in drug discovery core group utilization and the portfolio management of projects. All information in the proposal will be kept confidential. If a proposal is not accepted, the author(s) will receive constructive feedback and may be provided an opportunity to resubmit.

Budget

Grant funds, up to $50,000, must be for services provided by the core laboratories including the Center for Chemical Genomics, the Center for Structural Biology, the Vahlteich Medicinal Chemistry Core, and the Pharmacokinetics Core. Up to 10% of the award can be used for project work outside the drug discovery core labs, however, approval from the CDNM director is required. Funds must be spent within 12 months of award date.

Proposals should include a quote directly from the core(s) for their proposed project. Please consult the staff of each core for availability.

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Format and Elements of the Grant Application

Save the proposal in a pdf format and upload it to the CDNM website. The proposal should be no longer than six pages, excluding cover page, literature citations, core laboratory quote(s) and biosketch. Letters of support are neither required nor encouraged.

Required elements of the full proposal are:

1. Cover Page (please download this cover page and include at the beginning of the proposal)
2. Specific aims (bullet points)
3. Innovation (one paragraph)
4. Background including unmet medical with validation of the drug target or phenotype (one page)
5. Research plan including time line, decision matrix and feasibility (three pages)
6. Impact (one paragraph)
7. If successful, list downstream plans for future funding (bullet points)
8. Opportunity for patentability (one paragraph)
9. Literature citations
10. Quote from core(s) (please contact the leaders of cores to obtain quotes)
11. Biosketches and other Support Pages for Principal Investigator(s) and key personnel using the latest NIH-format (core lab personnel biosketches not required)

Mentoring

If you are new to drug discovery and have questions, please email Rebecca Epstein (rebeps@umich.edu). Rebecca will schedule a meeting with you and one of the experts in the CDNM.

Reporting

If a proposal is awarded CDNM funding reporting requirements will apply. Specifically, progress reports are due 12 months after award date and archive reports are due 24 months after award date.

Note: If a CDNM grant leads to publications please acknowledge "University of Michigan’s Center for the Discovery of New Medicines."