MSU-Molecular Discovery Grant Pilot Grant Application

Application Due Date: December 1st, 2026

E-mail complete application, which includes the proposal, Target Product Profile, Biosketch of PI and other Co-PIs, quotes from outside CROs as a single PDF to DD_IINFO@LIST.MSU.EDU and gonz1383@msu.edu

Background

The Michigan State University Molecular Discovery Grants (MSU-MDG) have been established through MSU Drug Discovery in the Department of Pharmacology & Toxicology to provide pilot funding ***to accelerate the discovery and development of therapeutic technologies*** with applications for human health, animal health and agricultural use (max $50,000 inclusive of the match). The primary aim of these funds is to advance projects toward extramural funding or creation/development of intellectual property, commercialization, and clinical application.

Work may include (but not limited to), assay development and high throughput screening, medicinal chemistry efforts, radiopharmaceutical development, therapeutic antibody development, or contract work with an outside CRO, if needed to advance an investigational therapeutic to its next milestone (e.g., safety screens, ADME screens, chemical libraries, etc).

Specific goals include:

- Assisting investigators in advancing their programs in the early phases of the discovery process with long-term commercialization in mind.
- Supporting activities (e.g. screening, therapeutic design, translational pharmacology) not readily funded by other sources.
- Providing additional data to support extramural grant applications.
- Aiding in the discovery or development of intellectual property.
- Accelerating therapeutics or diagnostics development toward clinical implementation.

Fifty percent of funds will be required to come from the Investigator and/or Co-Investigator's department and/or their college. (Please seek clarity on how your department and college will split funds.) The remaining 50% will come as matching support from the Office of Research and Innovation. In most cases, the funds (at least 90%) should be used to support work done in Cores or Facilities associated with the Drug Discovery Program (Assay Development and Drug Repurposing Core (ADDRC), Medicinal Chemistry Facility, RadCore, Therapeutic Antibody Facility, Translational Pharmacology Facilities, Center for Imaging and Image-Guided Therapy (CIIGT)).

Eligibility

- All tenure-stream or fixed-term faculty members employed by Michigan State University are eligible to submit applications.
- A faculty member may be the PI on only one proposal per cycle. If a PI was awarded a grant from a previous cycle, a final report must be submitted on the outcome of that work before being eligible for a new grant application.
- Co-investigators and collaborations are encouraged.

Evaluation Criteria

The primary goal of this pilot program is to advance toward commercial applications small molecule, biopharmaceuticals, or conjugate discovery or development for specific biomedical, veterinary, or agricultural applications. Successful applications will address the following points:

- Clearly outline the goal of the project.
- Describe how the proposed concepts, approaches, and/or methodologies are novel.
- Provide a compelling scientific rationale for the approach chosen.

- Describe how the strategy and methodology are appropriate to accomplish the specific aims of the project including IP development and projected product profile (commercial requirements and endpoints)
- Consider the liabilities/risks and how they can be mitigated.
- Explain how the project utilizes the MSU core laboratories.
- Describe how success in the project will lead to research funding, continued collaboration with the Drug Discovery Program, intellectual property (IP), or commercialization of existing IP.

Details of Proposal (6-page maximum -page number does not include Target Product Profile, Biosketches, or quotes from CROs)

Include in Submission (**items in bold are counted in the 6-page maximum, collectively**):

- **Title**
- **Principal Investigator/Co-Investigators and contact information**
- **Abstract**
- **Scientific background and significance**
- **Key work to be completed**
- **Plan for future funding or commercialization**
- **Citations**
- **Budget**
- **Commitment from department or college for 50% of funds**
- Quotes from outside CROs if appropriate
- Biosketch of PI's/Co-PIs
- Approval from relevant Drug Discovery Program Directors
- Target product profile (a detailed description of the primary commercial application and other attributes of the product – (please use attached template)

- Submit as a single PDF to the Drug Discovery Program at DD_IINFO@LIST.MSU.EDU and gonz1383@msu.edu

Deadline and other presubmission requirement

- All applicants must make an initial contact with the appropriate facility director at least 3 weeks prior to submission with their intent to submit an application. You do not need to have your proposal completed at that time – just a notice of intent.
- Application deadline Tuesday December 1st, 2026 at 5:00 PM

Review Process and Awards

Proposals will be reviewed by a joint internal/external review panel representing expertise across multiple industries. All information in the proposal will be kept confidential. If a proposal is not accepted, the applicant(s) will receive feedback and will have the opportunity to resubmit in the future. The review process is anticipated to be completed within four to six weeks. Funded proposals should expect funds to be available February 2027.

Contacts:

For budget quotations or information on the overall program, please contact the director (or staff) of the core that is most relevant to your project. If you are unsure, please contact Dr. Andrea Gonzales.

Core	Contact
MSU Drug Discovery Director Antibody Engineering Facility	Andrea Gonzales, PhD, Director gonz1383@msu.edu phone: (248) 982-3252

MSU Assay Design and Drug Repurposing Core (ADDRC)	Erika Lisabeth, PhD, Director matheser@msu.edu phone: (517) 432-4507
MSU Medicinal Chemistry Facility	Edmund Ellsworth, PhD, Director ellswo59@msu.edu phone: (517) 353-7145
RadCore	Kurt Zinn, DVM, PhD, Director zinnkurt@msu.edu
Translational Pharmacology Facilities	Bilal Aleiwi PhD aleiwibi@msu.edu
Center for Imaging and Image-Guided Therapy (CIIGT)	Jill Slade McMahon, PhD jslade@msu.edu

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Reporting

- Progress will be assessed by a mid-term presentation to the Drug Discovery Program leaders. A template for the presentation will be sent to each awardee when the update is due, likely mid-term.
- Final written report due 12 months after award date summarizing accomplishments, outcomes, publications, and any submitted grants. Any publications supported by these pilot grants should cite "Supported by MSU-Molecular Discovery Grant" (Note: all final reports from previous awards must be submitted before applicants apply for future MDG grants).
- Annual reports thereafter will be requested on outcomes including publications, grants, patents, etc.
- Reports submitted to DD_INFO@LIST.MSU.EDU and gonz1383@msu.edu