



Request for Proposals, Funding Opportunity Announcement

Two-Year Developmental Research Pilot Project
Transformative Research in Metabolism (TRiM)

Announcement Date: September 4, 2020

Preproposal Due: October 5, 2020, 5:00 PM*

**Opportunity to *Pitch* Your Specific Aims and Recruit Team Players (10-minute presentation):
October 9, 2020 at 12:00 noon – 2:00 PM (not required, but *strongly encouraged*)**

Submission Date & Time: January 11, 2021 at 5:00 PM

Awards Announced and Forwarded to NIH for Approval: April 2, 2021

Funding Period: July 1, 2021 – June 30, 2023

Submit Completed Proposals to Denise Daniello, Program Coordinator, dldaniello@alaska.edu

I. BACKGROUND

The Transformative Research in Metabolism (TRiM), supported by a grant from the National Institutes of Health (NIH), National Institutes of General Medical Sciences (NIGMS) using the Centers of Biomedical Research Excellence (COBRE) Phase 1 award (P20GM130443), provides pilot awards for developmental research projects in the biomedical and health sciences to the University of Alaska Fairbanks and the University of Alaska Anchorage to improve competitiveness for obtaining independent support for research. The purpose of the TRiM Pilot Project Program is to prepare new and junior investigators to become successful Project Leaders who will further the research and career development goals of the TRiM program.

TRiM's central scientific focus is on the regulation of metabolic flexibility, anabolic sensitivity, and energy homeostasis and includes basic, translational, and clinical research informed by hibernation biology. Prospective research pilot projects should (1) complement an existing TRiM project or enhance the sustainability of a TRiM supported Research Core; (2) be cost effective and able to synergize with ongoing TRiM supported Research Projects and Research Cores; (3) and bring needed infrastructure to complete a therapeutic discovery platform offered by TRiM. Collaborations with TRiM key personnel are strongly encouraged.

* If this date is not feasible, please contact Kelly Drew at kdrew@alaska.edu or Denise Daniello at dldaniello@alaska.edu. The preproposal process is designed to increase likelihood of funding but is not required to be eligible for submission of a full proposal.

II. ELIGIBILITY

The principal investigator (PI) must be a junior investigator or be initiating a new line of research that is distinctly and significantly different from his/her current investigative program, and have a tenure-track or research faculty appointment at the University of Alaska Fairbanks or University of Alaska Anchorage at time of award. Investigators are encouraged to contact the TRiM Principal Investigator (PI), Kelly Drew (kdrew@alaska.edu) or Denise Daniello (dldaniello@alaska.edu) Program Coordinator (PC) to confirm their eligibility and discuss their ideas for a pilot project in advance. PIs will need to have sufficient time to execute the funded research. NIH guidelines expect that at least 6 out of 12 months during the award period will be available to the Pilot Project PI for research, graduate training and professional development. Therefore, the proposal applicants must include a letter from their supervisor to ensure that their workload distribution for research will be compatible with these expectations if a TRiM pilot grant is awarded. For faculty, this typically is accomplished through a plan for full-time research during the three summer months and assignment of no more than three formal courses during the 9-month academic year. PIs cannot have two research projects supported at the same time from the National Institute of General Medical Sciences (NIGMS) IDeA program (INBRE, CTR, or COBRE).

In addition, the pilot project applicant must have a letter of support from an established NIH-funded investigator who will help guide development of the project and can be a project collaborator.

III. AMOUNT & DURATION OF AWARD

The TRiM Developmental Research Pilot Project Award is a two-year award with funds provided as follows:

Year 1: July 1, 2021 – June 30, 2022: \$25,000 to \$80,000

Year 2: July 1, 2022 – June 30, 2023: \$25,000 to \$80,000 with EAC review and approval

IV. SCIENTIFIC ADVISOR

Each principal investigator of a pilot award must have a science advisor with expertise relevant to the proposed research, a willingness to mentor the PI, and who may be a collaborator on the project. The advisor's name must be provided at time of submission and will be confirmed by TRiM's External Advisory Committee (EAC) as having the appropriate research expertise and experience with NIH (or other federal) funding. Science advisors serve to help oversee the proposed research and professional development. Science advisors can aid in the development of hypotheses, research design, and methodology relevant to the investigator's research, and provide technical training in their laboratory, if appropriate. Advisors will be expected to mentor PIs and review manuscripts and proposals. Prior to award, a mentoring plan describing their scientific and developmental goals, meeting frequency, and the types of collaborative input will be generated by the PI and their advisor. **Advisor costs of \$2,000** each budget period (plus additional costs if needed) **must be included in the submitted project budget.** Advisor costs may include travel between the PI and advisor's laboratories, salary support for the science advisors, and other mentoring plan support. **A report to the TRiM PI from the scientific advisor describing the scientific progress and professional development of the project PI and any associated challenges will be provided as part of all reports submitted by the project PI.**

As needed, TRiM has a pool of scientific advisors available to Pilot Project investigators with track records of NIH funding and expertise in metabolism microbiota, hibernation or translational research. Please contact kldrew@alaska.edu or dldaniello@alaska.edu for more information.

V. APPLICATION INSTRUCTIONS

A complete application will follow the instructions for a [R03 proposal](#) and will consist of the single PDF document which includes forms provided for the [PHS 398 Grant Application](#). Page limits, as noted by section in the PHS 398 grant application guidelines, are described below. Or you can work with your grant administrator and create your application using [ASSIST](#). If using ASSIST, please download your completed PDF application by selecting “preview application,” then “generate preview,” followed by “downloading the PDF.” Please submit the completed PDF application to dldaniello@alaska.edu.

Section 1:

- a. **Form Page 1: Face Page**
- b. **Form Page 2: Summary, Relevance, Project Performance Sites, and other items will amount to no more than 3 pages if one project PI or 4 pages for two or more project PIs**

Section 2: Specific Aims – Limited to one page (Continuation Format Page)

Section 3: Research Strategy – Limited to no more than 6 pages (Continuation Format Page) to include the following 4 sections:

Significance

Innovation

Approach

Timeline

If a proposal has multiple Specific Aims, then the applicant may address Significance, Innovation, and Approach for each Specific Aim individually or collectively. Regardless of the option selected, the page limit remains the same.

Section 4: Budget – Submit a detailed budget justification for the entire proposed project period (Form page 5) AND your institutional budget spreadsheet. Please note: Do not include indirect costs.

Helpful Hints:

- a. Describe how you will meet the 6 person-month commitment for research, graduate student training, and professional development.
- b. Use only calendar months OR academic year and summer months, but not both.
- c. Include costs for your scientific advisor in the budget (as noted in IV, Scientific Advisor, page 2).
- d. Covering tuition for a graduate student is “tuition remission” in NIH terminology. Please use this terminology.
- e. Include costs for travel and publication fees to disseminate results including travel for student/trainees, if appropriate.

Section 5: Biographical Sketch – Limited to 5 pages per investigator. Applicants must use the current NIH [biosketch format](#) for their application. Please view the [biosketch site](#) for instructions and samples. Your biosketch should be tailored to meet the needs of this project and highlight why you

are well-suited for your project role based on your expertise, knowledge, and previous academic/work experience. For projects involving multiple PIs, please include a separate biosketch for each PI. Applicants must have an eRA Commons User Name to include in their biosketch. If you do not have an eRA Commons User Name and need assistance to acquire one, please contact Denise Daniello, Program Coordinator, at dldaniello@alaska.edu.

Section 6: Multiple PIs – Applications for multi-disciplinary studies with multiple PIs from different disciplines are allowed one extra page for the multiple PI rationale and leadership plan. Co-PIs do not require a leadership plan. For tips on writing successful NIH project leadership plans, please click [here](#). A current NIH biosketch must be included for each PI. The pilot grant application must include:

- Name, department, areas of specialization, and contact information for each of the multiple PIs representing different disciplines or areas of specialization.
- Rationale for choosing the multiple PI approach including an explanation of how each of the distinct disciplines will contribute to moving science forward and why the specific aims cannot be met without including more than one discipline.
- A leadership plan addressing communication plans, the process for making decisions on scientific direction, and procedures for resolving conflicts.

Section 7: Letter of Support from your Department Supervisor – Applicants must include a letter from their supervisor (typically an administrator with authority to approve workload) to ensure that their workload distribution for research will be compatible with expectations if an award of a TRiM pilot grant is made. For faculty, this is typically accomplished through a plan for full-time research during the three summer months and teaching assignments of no more than three formal courses during the 9-month academic year. Additionally, PIs cannot have two research projects supported at the same time from the National Institute of General Medical Sciences (NIGMS) IDeA program (INBRE, CTR, or COBRE).

Section 8: Letter of Support from Your Scientific Advisor, an established NIH-funded Investigator
All pilot project applicants must also include a letter of support from an established NIH-funded investigator who will help guide development of your project and who may be a project collaborator. In addition, please provide the name and contact information of your scientific advisor with expertise relevant to the proposed research.

Section 9: Appendix – Please attach References Cited and letters from collaborators. The appendix does not count against the page limits of your proposal.

SUBMISSION: Submit a single PDF document of the completed application to dldaniello@alaska.edu. Please follow your institutional requirements for departmental approvals and signatures.

PDF FORMAT IS REQUIRED: Save all files as follows: “Researcher(s) last name MAU TRiM2021 Pilot Project proposal.” Examples: Smith UAF TRiM2021 Pilot Project Proposal” or “Smith and Jones UAA TRiM2021 Pilot Project Proposal.”

SPECIFIC INSTRUCTIONS REQUIRED FOR SECTIONS 2, 3, & 5:

FORMAT REQUIREMENTS

- **Font:** Use an Arial typeface, a black font color, and a font size of 11 points or larger. (A Symbol font may be used to insert Greek letters or special characters; the font size requirement still applies.) Type density, including characters and space, must be no more than 15 characters per inch. Type may be no more than six lines per inch.
- **Paper Size and Page Margins:** Use standard paper size (8 ½" x 11") with at least one-half inch margins (top, bottom, left, and right) for all pages. No information other than page numbers should appear in the margins, including the PI's name.
- **Page Formatting:** Use only a standard, single-spaced, single-column format for the text. Number all pages sequentially and centered at the bottom of each page.
- **Figures, Graphs, Diagrams, Charts, Tables, Figure Legends, and Footnotes:** You may use a smaller type size but it must be in a black font color, readily legible, and follow the font typeface requirement. Color can be used in figures; however, all text must be in a black font, clear, and legible.
- **Grantsmanship:** Use plain English and avoid jargon. If terms are not universally known, please spell out the term the first time it is used and note the appropriate abbreviation in parentheses. The abbreviation may be used thereafter. Consider adding a section of acronym definitions in your application.

VI. EVALUATION CRITERIA

Complete applications will be evaluated for scientific and technical merit by the review committee and EAC members based on the following six criteria for pilot projects. Reviewers will assign a separate score for each criterion:

Overall Impact	Likelihood for the project to exert a sustained, powerful influence on building and developing a thematic multi-disciplinary research center and to develop into a competitive research project grant (RPG) proposal.
Significance	Does the proposed research <i>fit the central scientific focus on the regulation of metabolic flexibility, anabolic sensitivity and energy homeostasis</i> <u>and/or</u> <i>include basic, translational or clinical biomedical research involving hibernation biology?</i>
Investigator(s)	Is the project leader prepared and committed to succeed with the proposed research and will the efforts contribute to the establishment of a multi-disciplinary research center? Will the pilot project leader be more competitive for a RPG after successful completion of the pilot project?
Innovation	Is the proposed research novel?
Approach	Is the approach well-reasoned and appropriate? Will the strategy establish feasibility? Does the strategy address rigor, bias, and reproducibility?
Environment	Will the scientific environment contribute to the probability of success? Are equipment and other physical resources available to the investigators adequate for the project proposed? Will the project benefit from unique

	features of the scientific environment provided through TRiM supported research, research cores, or services?
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Additionally, reviewers will consider whether the budget and the requested period of support are fully justified and reasonable in relation to the proposed research.

Sample Features of a Pilot Project that meets review criteria and mission of TRiM include:

1. Complements an existing project or enhances the sustainability of a TRiM supported Research Core.
2. Has preliminary data to demonstrate feasibility of the proposed approach.
3. PI has a plan and timeline to develop the pilot project into an external grant application.
4. Is cost effective and synergizes with other ongoing TRiM supported Research Projects and Research Cores.
5. Brings needed infrastructure to complete a therapeutic discovery platform offered by TRiM.

VII. REVIEW PROCEDURES

Step 0: Early submission is encouraged. If submitted before January 5, 2021 at 5 pm AKST, an administrative review will be conducted and feedback on compliance to directions will be provided no later than January 8 so that corrections can be made in advance of the 5 pm January 11 deadline.

Step 1: Submission deadline is January 11, 2021 at 5 pm AKST. All submissions will receive an email confirmation of receipt within 48 hours of submission. Late submissions will not be reviewed.

Step 2: The proposal will be reviewed by a committee comprised of selected members of TRiM's Internal Steering Committee, the PI, and two established NIH-funded investigators with project-specific expertise based on criteria as described above under VI. Review Criteria.

Step 3: Scores and written critiques will be forwarded to the EAC for review and approval of projects selected for funding.

Step 4: The PC will share critiques from the reviewers after recommendations are received from the EAC, and request just-in-time submission of IACUC or IRB protocols if protocols are not yet approved. IACUC, IRB, and other information needed to comply with federal policies, rules, and guidelines for research involving human subjects, vertebrate animals, and/or biohazards must be received by NIH before a Pilot Project award can be made.

Step 5: The pilot project leader and their scientific advisor will develop and submit a mentoring plan to dldaniello@alaska.edu. The plan will describe the scientific and developmental project goals and meeting frequency. If the advisor is a collaborator, the pilot project leader and collaborator will also submit a collaboration plan to dldaniello@alaska.edu. Please use the indicators noted in the [collaboration plan](#) template.

Step 6: The PI will forward those proposals, along with the EAC recommendations, ranking, and proof of full compliance with federal policies, rules, and guidelines, to the NIH National Institute of General Medical Sciences (NIGMS) for programmatic review.

Step 7: Upon confirmation from NIH, TRiM's COBRE funds can be used for the pilot projects.

VIII. CONFLICT OF INTEREST

The Transformative Research in Metabolism follows the NIH Guidelines for [Conflicts of Interest](#).

IX. AWARD CONDITIONS

To maintain an active award, pilot recipients will provide a substantive report of research progress by April 1, 2022 to the Program Coordinator that will be reviewed by TRiM's EAC for scientific progress to determine continued funding. These reports will also contribute to the annual progress report. Additional reporting details will be provided in the award notification.

Pilot awardees are required to serve on the Internal Steering Committee, review future pilot project proposals, participate in reporting and other Center activities, attend TRiM's weekly Journal Club meetings and other professional development opportunities, complete all required compliance trainings, and will be expected to attend and present at EAC meetings. Further, Pilot Project PIs will communicate preliminary results through quarterly Journal Club presentations and during monthly meetings with the PI. The EAC will monitor progress, based on presentations at EAC meetings, and discussion of individual development plans with PI Drew. Dr. Drew will meet with individual Pilot Project Leaders once a month to establish and update individual development plans detailing specific milestones for the acquisition of independent status. Senior investigator advisors will participate in the meetings or review plans as they develop. PI Drew will formalize these plans by working with Pilot Project Leaders to create an individual development plan defining strategic milestones and incentives for each pilot project investigators to reach these milestones, with input from the EAC and senior advisors.

Presentations (oral or poster) and publications must include the following acknowledgement and disclaimer:

“Research reported (on this poster/in this presentation) was supported by an Institutional Development Award (IDeA) from the National Institute of General Medical Sciences of the National Institutes of Health under Award Number P20GM130443. The content is solely the responsibility of the authors and does not necessarily represent the official views of the National Institutes of Health.”

Pilot Project recipients must implement the planned activities outlined in the budget section of the application. The expenditures and activities must adhere to applicable NIH rules and regulations that will be listed in the award letter and adhere to institutional policies. Overruns, unliquidated encumbrances, and unallowable costs will be moved to the pilot recipients department funding. Failure to progress reasonably throughout the year of funding could result in dollar reallocation or reduction. All funds must be appropriately expended within the requested time frame. **No carryover is allowed each year.**

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