

PURPOSE

The UW Center for Translational Muscle Research (CTMR) provides a unifying resource to accelerate and expand skeletal muscle research at the UW. With funding from the National Institute of Arthritis and Musculoskeletal and Skin Diseases of the National Institutes of Health, the UW CTMR offers tools, facilities and expertise to facilitate novel insights into muscle pathologies and move new therapeutics towards the clinic and the marketplace. The Center supports the development of exciting new muscle research on campus through a pilot grant program that allows investigators to (1) obtain preliminary data needed to apply for follow-on funding and/or (2) receive training in new skills.

Proposals must include the use of one or more Core services. The Center houses three research cores: Mechanics and Devices, Metabolism, and Quantitative Analysis. Each of these Cores has state-of-the art facilities and expertise for training, data collection and data analytics.

AVAILABLE FUNDING

Two categories of funding are offered:

Pilot Grants will provide up to \$25,000 (direct costs) per award to support projects designed to collect preliminary data for new research with the purpose of obtaining follow-on funding. Priority will be given to new and junior faculty doing innovative research. The CTMR will also support more senior faculty who are changing career objectives in order to study skeletal muscle. In both cases, this funding allows investigators rapid accumulation of evidence needed to demonstrate feasibility for novel studies and (especially for new investigators) training in new skills. Pilot Grant funding may be used for salaries and benefits for graduate students, undergraduate students, postdoctoral scholars, and research staff; materials and supplies; and CTMR core services.

Mini Pilot Grants will provide up to \$5000 for pilot studies to new users of CTMR core services who need a limited, specified set of data from one of the cores. Examples of the use of this grant mechanism would be (1) to collect preliminary data on muscle mechanical performance for a small set of animals or to create a device prototype using the Mechanics and Devices Core; (2) to use the Metabolism Core to obtain metabolomic data for 10-20 animals (~\$100/sample), and (3) to work with the Quantitative Analysis Core to develop computational models or algorithms for a specific set of simulations. Another possible use of is funding NMR time on the 14T magnet at the University of Washington to develop protocols, or troubleshoot or run preliminary imaging studies. This magnet is run as part of a High-Resolution Imaging (HRIM) user group. Please contact Dan Raftery (draftery@uw.edu) or Mike Regnier (mregnier@uw.edu) if your proposal includes this research. Mini Pilot Grant funding may be used for materials and supplies and CTMR core services, but not salaries and benefits.

DATES

- **Submission deadline:** 5:00pm on Wednesday, February 15, 2023
- **Target project period:** May 1, 2023 – February 28, 2024 **See note under "budget"

ELIGIBILITY

The Principal Investigator (PI) of the proposal must have a faculty-level appointment at the UW. An applicant may serve as PI on only one proposal and as an investigator (co-PI or PI) on no more than two proposals. Current CTMR senior investigators may not receive pilot award funding but can participate in the proposed work as unfunded collaborators.

HOW TO APPLY

Submission. Proposals are due by 5:00 PM on Wednesday, February 15, 2023. Submissions after this deadline will not be considered. Please submitted by email as a single attachment in PDF format. Send to katiejd8@uw.edu with a file name and email subject line of "CTMR Pilot Grant Proposal - PI NAME."

Proposal Preparation

- **Formatting:** 11-point Arial or Helvetica; 0.5" margin.
- **Sections:**
 1. Cover Page
 - a. Project title
 - b. Funding category (Pilot Grant or Mini Pilot Grant)
 - c. Contact PI information: Name, Position Title, UW Department, Mailing Address, Phone Number, Email Address
 - d. Name of Co-PI, if applicable
 - e. Name(s) of Co-I(s), if applicable
 - f. CTMR Cores that will be utilized (Mechanics & Devices, Metabolism, and/or Quantitative Analysis)
 - g. Human subjects research? (Yes/No). IRB approval is required before submission.
 - h. Vertebrate Animals (Yes/No). IACUC approval is required before submission.
 - i. Abstract (250 words maximum)
 2. Project Description. The page limit for Pilot Grant applications is **4 pages**, the page limit for Mini Pilot Grant applications is **2 pages**.
 - a. Specific Aims
 - b. Research Plan
 - i. Significance and potential impact
 - ii. Innovation
 - iii. Approach
 - iv. Use of CTMR Cores. How will the project make use of the Cores? How might CTMR support of the project lead to follow-on funding, and/or the broader CTMR program?
 - v. Project timeline
 - c. References (not included in page limit)
 3. Human Subjects. If applicable, describe the use of human subjects. IRB approval is required before submission.
 4. Vertebrate Animals. If the project involves the use of vertebrate animals, address the criteria listed in section 5.5.5 Vertebrate Animals of [Instructions for Grant Applications using PHS 398](#). IACUC approval is required before submission.
 5. Budget. Download the [PHS 398 Detailed Budget for Initial Budget Period](#) form and complete only the following sections, if applicable:
 - a. Project period. From 05/01/2023 Through 02/28/2024

****NOTE:** After proposals have been reviewed and selected for funding, they are sent NIH for approval. We must receive a Notice of Award from NIH before we can distribute funds. Due to uncertainty in timing, it is ideal to budget for an 8- or 9-month project.
 - b. Personnel (N/A for mini pilot grants). Funding can be used to support graduate students, undergraduate students, postdoctoral scholars, and research staff. Other salary types are not allowed.
 - c. Supplies (itemize by category)
 - d. Other Expenses (itemize by category). Include CTMR Core services. Facilities/instrumentation expenses will be charged for data collection and analysis if data

REQUEST FOR PROPOSALS

RFP: UW CTMR Pilot Grants

Submission deadline: 5:00pm, February 15, 2023

are collected by Core staff. For project personnel, training for instrumentation use is provided at no cost, but a fee for the time of Core instrument use by trained individuals will be assessed. Contact the Core Director to determine costs (see INQUIRIES below for contact information).

6. Budget Justification

7. [NIH-formatted Biosketches](#) for the PI and any Co-PIs.

Proposals longer than the stated page limits, deviating from the stated instructions, or omitting information requested above will not be reviewed.

SELECTION CRITERIA

1. Will the application substantially contribute to the applicant's career development? Is the applicant a junior investigator who would be likely to derive greatest benefit from the relatively modest Pilot support or, if not, from a more senior investigator who is likely, if funded, to change career direction towards muscle research?
2. Does the proposal have high scientific merit? Is the proposed project designed to pursue a new finding or timely research opportunity and will it, if successful, lead to a significant scientific contribution to the understanding of muscle biology, pathology, or therapeutic development?
3. Will the proposed research capitalize on the strengths of one or more CTMR cores so the CTMR can maximize the impact of the modest level of Pilot funding?
4. What are the prospects that the Pilot proposal will lead to demonstration of feasibility sufficient to support successful new external peer reviewed funding?

TERMS AND CONDITIONS

All selected proposals are subject to terms and conditions that will be detailed in the award notification letter, including:

- Each publication, press release, or other document of research supported by CTMR funding must include an acknowledgment of the CTMR support and a disclaimer such as "Research reported in this publication was supported by the National Institute of Arthritis and Musculoskeletal and Skin Diseases of the National Institutes of Health under Award Number P30AR074990. The content is solely the responsibility of the authors and does not necessarily represent the official views of the National Institutes of Health."
- All funded PIs must submit a brief pilot proposal report and an NIH "highlight" slide for inclusion in the CTMR annual progress report, as requested by the Center Director.
- All purchases and HR appointments will be conducted in the home departments of the Pilot Grant PI.
- All funded PIs will present their work at the annual CTMR symposium

INQUIRIES

For help with determining a budget for CTMR Core Services, contact the appropriate Core Director(s):

- **Mechanics and Devices Core:** Michael Regnier, mregnier@uw.edu
- **Metabolism Core:** Dan Raftery, draftery@uw.edu
- **Quantitative Analysis Core:** Tom Daniel, daniel@uw.edu

For other inquiries, contact katiejd8@uw.edu.

<http://ctmr.washington.edu/>