Minnesota Partnership for Biotechnology and Medical Genomics



Request for Research Proposals – Details and Instructions for Faculty

PLEASE READ CAREFULLY

Awards Description and Funding Areas:

Since 2003, the Minnesota Partnership for Biotechnology and Medical Genomics has helped establish Minnesota as a world leader in biotechnology and biomedical research. It has awarded over \$132M for >125 highly-competitive collaborative projects.

In 2022, the Partnership's focus will be on funding projects that specifically present a vision and plan for a large, highly-competitive center-level team application for funding within 3 years of the Partnership award. "Center-level funding" is defined as at least \$1M/year in direct costs for at least 3 years.

We anticipate granting at least 4 awards in the \$1,000,000 to \$1,500,000 range (total costs) for 2 years. **Applications from teams in all areas of human health are eligible**, but we are particularly interested in projects in involving:

- Antibiotic resistance
- o Cell and gene therapies including cellular engineering
- O Data science and machine learning applied to healthcare
- o Inflammation, Immunology and Infectious Diseases
- o Innovative diagnostics
- o Innovative therapeutics
- Neurotechnology
- Prevention, treatment, causes, and cures of Alzheimer's disease and other dementias (based on a commitment from the MN State Legislature, we anticipate supporting at least one Alzheimer's-related grant)
- o Regenerative medicine and transplant
- O Scaling multi-omics: Integration of multiple -omics datasets—genomics, transcriptomics, epi-genomics, proteomics, metabolomics, microbiome, etc. for population-level healthcare analysis
- o Trauma research

General Criteria:

- Must be a joint Mayo Clinic-UMN project that strongly leverages both institutions
- Must have two faculty Co-PIs one from the Mayo Clinic and one from UMN and a strong team of Co-Is from both institutions
- Must demonstrate a high probability for successful completion of project goals in **two years.** PIs will be required to identify project milestones which must be met to ensure continuation of funding past Year 1.
- Must provide a vision and strategies for how the funded project will help Mayo and UMN to submit a highly competitive team application for large, center-level funding within 3 years of the award. "Center-level funding" would be defined as at least \$1M/year in direct costs for at least 3 years. Examples include NIH P and U grants, NSF center grants, and numerous DOD, DARPA, and private foundation mechanisms.

Application Process:

If you have questions about this process, please contact Lauren Bigalke (bigal016@umn.edu).

Step 1: Competitive Letter of Intent Submission

- 1) The letter of intent is limited to **two pages** and must include:
 - I. The title of the application and the names and contact information for the two Co-PIs
- II. A brief description of the goals and research plan of the project
- III. The role of both Co-PIs and their respective research teams. You can use a figure/schematic.
- IV. Plans for advancing to a center-level grant application. Please provide specific result and proposal submission milestones to achieve this over the 2-year period of the grant. Examples might include the need for specific preliminary results, partnerships and contracts as needed (commercial or academic partners), and/or the submission of multi-PI R01 or other collaborative grant submissions that underline the team's competitiveness for the center-level grant application.
- V. The total budget requested for a two-year study. Applications requesting greater than \$1,500,000 in total costs must provide rigorous justification.

The letter of intent must be single spaced with ½ inch margins on all sides and with Arial or Helvetica typeface 11 pt. font or larger (9 pt. for text in tables and figure captions).

NIH (or other) biosketches (up to 5 pages per biosketch) for both Co-PIs and all Co-Is should be included in the same file.

2) The letter of intent is due by 4:30 pm on Friday, June 10, 2022. The letter must be electronically submitted using the online form available at the following link: LOI Submission Form.

Informational Webinar – May 12, 9:30-10:30am. This webinar will discuss this new funding opportunity with potential respondents and members of the UM Mayo Partnership grant program. Please register using the following link: Webinar Registration. Email Lauren Bigalke (bigal016@umn.edu) if you have questions regarding the webinar.

3) Each letter of intent will be reviewed by a joint Mayo-UMN panel for potential impact, strength of the research team and plan, degree to which project is enhanced by the Mayo-UMN collaboration, and potential for leading to a competitive center-level grant application.

Please note: A faculty member may apply as Co-PI for only one grant per cycle. There is no limit to the number of grants on which a faculty member can participate on as a Co-I.

Applicants invited to submit a full proposal will be notified in July 2022.

Step 2: Full Proposal Submission (by Invitation only)

- 1) Full proposals must include the following:
 - I. Basic Information:
 - Proposal title
 - Names, degree(s), academic rank, and institutions of Co-PIs and Co-Is. Identify the contact PI. For Co-Is, only include individuals who will play a prominent role on the project.
 - Funding request: direct and indirect costs for both UMN and Mayo and grand total
- II. <u>Abstract:</u> Provide a summary of the project (not to exceed 1/2 page).

- III. <u>Research Plan:</u> Provide a full description of the study: Background, Hypothesis and Specific Aims, Prior Work Summary (both separately and as a team), and Experimental Plan.
- IV. <u>Timeline:</u> Describe measurable project milestones over the 2-year project and why the achievement of these milestones is likely.
- V. <u>Synergy of Co-PIs and Teams:</u> Describe how the collaboration between Mayo and UMN is necessary to project success and a future center-level grant application. Also describe the role of the two Co-PIs (and their teams) on the project and which project components will be performed at Mayo and which at UMN. We encourage a figure, table, and/or schematic to visualize the team structure and individual roles.
- VI. <u>Center-level Grant Submission:</u> Describe how the proposed research will lead to a center-level grant application. Include an approximate timeline for submission and, if possible, the specific center-level mechanism you are aiming for (e.g., a large NIH P or U grant, DARPA and DOD centers, etc.). Again, we encourage a figure, table and/or schematic to illustrate your plans.
- VII. <u>Milestones:</u> Please provide specific result and proposal submission milestones that will be tracked over the course of the grant. For example, specific preliminary results, partnerships and contracts as needed (commercial or academic partners), and/or the submission of interim proposals that will support a center such as a multi-PI R01 or other grant submission.
- VIII. <u>Impact:</u> Describe the potential impact of the project on the medical field and on the State of Minnesota. What is the healthcare or societal impact of this work? What will the center lead to? Does this work support or synergize with other major initiatives or entities in the State?
 - IX. <u>Layperson Summary:</u> Provide a summary of the project that could be understood by a lay audience (not to exceed 1/2 page).
 - **Page limit for items I-IX is 10 pages, ½ inch margins on all sides, single-spaced, Ariel or Helvetica typeface, 11 pt. font or larger (9 pt. font for table and figure text), fully contained in a **single** PDF file. <u>Additional pages and attachments</u>, except as noted below, will be ignored.

X. References

- XI. <u>Letters of Support:</u> Include letters of support that do not exceed 1 page each. This can include letters from internal or external service providers that support submission and management of center-level grants; for example, UMN's <u>Center Accelerator</u> program (Michael Lotti <u>lotti010@umn.edu</u>) and Mayo's <u>Strategic Funding Office of Research</u> (Jon Zurn <u>zurn.jon@mayo.edu</u>).
- XII. <u>Biographical Sketches:</u> Include NIH-style biosketches for each Co-PI and all Co-Is. The "Ongoing and Completed Projects" section (below the Personal Statement) should highlight funding related to the proposed project.
- XIII. <u>Resources and Equipment:</u> Provide a listing of key resources and equipment at the two institutions available for the project.
- XIV. <u>Budget:</u> Provide a single line-item budget showing direct and indirect costs, along with two separate budgets for expenditures at the Mayo Clinic and UMN, each showing direct and indirect costs. Each institution should include full Facilities and Administrative (F&A) rates for their portion of the project (i.e., do not treat either institution as a subcontractor for purposes of determining indirect costs). Direct costs include all allowable NIH costs, and faculty salary requests should be based on the current NIH cap if appropriate. Indirect calculations for equipment, patient care costs, etc., should be consistent with NIH policies. Budgets should reflect a start date of January 1, 2023.
- 2) Special instructions for UMN faculty: A Proposal Routing Form (PRF) is not required. However, your department may wish to approve your proposal prior to submission.
- 3) The deadline for complete proposals is Friday, September 23, 2022 at 4:30 pm.
- 4) Applications must be submitted electronically as a **single** PDF file using the link sent in the invitation to submit a full proposal.

Review Dates and Process:

- LOI due: Friday, June 10, 2022.
- Full Proposal invitation: July, 2022
- Full Proposal due: Friday, September 23, 2022
- An internal peer review panel composed of Mayo and UMN faculty, appointed by the Partnership Executive Coordinating Committee, will review applications.
- Awards will be announced by the end of 2022 and begin in early 2023.

Reporting Requirements:

Reporting requirements will be issued upon notice of award. Co-PIs (with their teams) will be expected to have shown significant progress towards specific milestones identified at the end of year 1 in order to continue funding into the second year of the award.

Additional Information:

Questions about the application process should be directed to:

Lauren Bigalke, Grants Program Coordinator Office of Academic Clinical Affairs bigal016@umn.edu

or

Joshua A. Derr, Research Administration Mayo Clinic, Rochester <u>Derr.Joshua@mayo.edu</u>