#### **<u>REQUEST FOR RESEARCH APPLICATIONS</u>** NEW FACULTY PILOT GRANT - MEDICAL COLLEGE OF WISCONSIN RESEARCH AFFAIRS COMMITTEE (RAC) INSTITUTIONAL GRANT

The Research Affairs Committee is requesting applications for seed funding for new faculty under MCW's Institutional Research Grant mechanism, New Faculty (Pilot) Grant.

# Key Dates:

Request for Applications (RFA) Release Date: **March 1, 2021** Application Submitted to Sponsor through eBridge – Office of Research: **April 19, 2021 (5 pm)** Research Affairs Committee Review: **June 2021** Anticipated Start Date: **July 1, 2021** 

# Overview:

New Faculty (Pilot) Grants provide "seed" money for the initiation of new projects.

- The primary goal of the award is to help applicants obtain preliminary results that will enable them to compete successfully for extramural funding (foundation, clinical trials, etc.).
- The application should contain an explanation of how the pilot project relates to plans for future research.
- Applicants are **strongly encouraged to seek mentorship** from senior and successfully funded faculty members when writing the application.
- Maximum award in this category is **\$35,000** for one year.

# Eligibility:

- Applicants must have a primary faculty appointment at MCW and apply within the 4 years of their first faculty appointment at MCW. Established MCW faculty or post-doctoral fellows are not eligible.
- Applicants can be at Assistant or Associate Professor rank at time of application.
- Faculty with previous R01 or equivalent grant funding are not eligible to apply as Principal Investigator. Coinvestigators with previous R01 or equivalent grant funding are permitted.
- It is inappropriate to receive funds for similar projects from more than one funding source (i.e. CTSI, Cancer Center, Digestive Diseases, CVC, AHW, NIH, American Heart Association etc.).
- Faculty may receive funding in this category one time only.

## **Review Process**

- The Research Affairs Committee (RAC) will review applications approximately 4-5 weeks after the deadline.
- Assess the scientific merit of each application according to the review criteria, which include consideration of scientific premise, rigor, and consideration of relevant biological variable. Following the review, the RAC will score applications <u>based on potential for future extramural funding</u>, scientific merit, feasibility and grantsmanship (overall grant organization and quality of writing).
- Scoring is similar to the rating scale used by the NIH (priority scores 1.0-9.0 [1.0=outstanding, 9.0=poor]).

# **INSTRUCTIONS AND CONTENTS**

## **Submission of Application**

- If there are any questions, contact Lynne M. Prost, Office of Research (955-8508); <u>lprost@mcw.edu</u>.
- Applications must be submitted through ebridge to Sponsor Office of Research by April 19, 2021. NOTE: answer to question 4.0 (Type of Organization) should be" Internal" and 4.1 funded by 103 should be "yes".

## **General Guidelines**

- Font size (either Arial or Helvetica) should be no smaller than 11 point with a margin width of at least 0.50" on all sides.
- Text for the research application should **not exceed 3 pages (including ½ page for specific aims)** (see Research Proposal below).
- For revised applications, include an 'Introduction' (not to exceed ½ page) detailing how the application was revised in response to the critiques of the previous review.
- Application will be returned if instructions are not followed.

# APPLICATION CONTENT

## **Budget Justification**

Use this section to list the name, title and associated months for each person in the Budget Section. Include a brief description of their expertise and role in the project.

• Salary support for the PI or Co-investigator is not allowed. Immigration costs are not allowed.

- Include a justification for any equipment (over \$3,000), consumable supplies, travel (limited to \$1,000) and other expenses (user fees, animals, per diem, etc.).
- Include justification for salary support for students/postdocs/techs.

# **Personnel Justification**

State the role of a mentor and other participants, consultant or co-investigators working on the project. Letters of support are encouraged. All mentors, PIs and Co-PIs (no salary support) need at least 1% effort on all projects they are named in. (Cost sharing form for effort committed to the project is required if awarded.)

## **Biographical Sketches**

Include biographical sketches in **current** NIH format (not to exceed 5 pages per investigator) for the Principal Investigator and all key personnel (i.e. faculty co-investigators). <u>https://grants.nih.gov/grants/forms/biosketch.htm</u> The biography lists the degree(s); awarding institution(s); professional positions held; professional experiences; relevant honors; publications and funding history (title of project, specific aims, page, PI's role, awarding entity, and dates of award).

**Introduction:** For revised applications only: Include a response to reviewer's comments (not to exceed ½ page) explaining how the application was revised.

## Specific Aims (1/2 page)

State concisely the goals of the proposed research and summarize the expected outcome(s), including the impact that the results of the proposed research will exert on the research field(s) involved.

List succinctly the specific objectives of the research proposed, e.g.:

- To test a stated hypothesis,
- Create a novel design,
- Challenge an existing paradigm or clinical practice,
- Address a critical barrier to progress in the field or develop new technology.
- Plan for future extramural funding.

## Research Strategy (Not to Exceed 3 pages includes specific aims page)

Organize the Research Strategy in the specified order and using the instructions provided below. Start each section with the appropriate section heading – Significance, Innovation, Approach. Cite published experimental details in the Research Strategy section and provide the full reference in the Bibliography and References Cited section.

#### Significance

Explain the importance of the problem or critical barrier to progress in the field that the proposed project addresses. Ensure that the underlying scientific foundation of the project – concepts, previous work, and data (when relevant)- is sound. How it will pertain to the underlying evidence/data for the project. Identify strengths and weaknesses in prior work in the field. How it is proposed to fill a significant gap in the field. Cite appropriate work and/or preliminary data. Explain how the pilot project relates to plans for future research and procurement of extramural funding.

#### Innovation

Describe any novel theoretical concepts, approaches or methodologies, instrumentation or interventions to be developed or used, and any advantage over existing methodologies, instrumentation, or interventions. Explain any refinements, improvements, or new applications of theoretical concepts, approaches or methodologies, instrumentation, or interventions.

#### Approach

Preliminary data is not necessary but can be an essential part of a research grant application and help to establish the likelihood of success of the proposed project. If you have data, include only the most relevant preliminary data to demonstrate the compelling points of the research initiative. Remember that the reviewers are not always experts in the same area as you, although they are accomplished scientists. If there is no preliminary data, describe why you are qualified to do the proposed research.

If a substantial amount of the budget is for equipment, discuss the closest source of suitable equipment; whether a plan exists for shared purchase and other pertinent considerations.

Ensure a strict application of scientific method that supports robust and unbiased design, analysis, interpretation, and reporting of results, and sufficient information for the study to be assessed and reproduced.

Describe the overall strategy, methodology, and analyses to be used to accomplish the specific aims of the project. Include how the data will be collected, analyzed, and interpreted as well as any resource sharing plans as appropriate.

Discuss potential problems, alternative strategies, and benchmarks for success anticipated to achieve the aims.

Describe any strategy to establish feasibility and address the management of any high-risk aspects of the proposed work. Include timeline demonstrating feasibility within one year.

## Sections below are not included in the page count of the Research Proposal:

**<u>Vertebrate Animal</u>** – If using animals address the three points below:

- (1) Description of Procedures: Provide a concise description of the proposed procedures to be used that involve vertebrate animals. Identify the species, strains, ages, sex and total number of animals by species to be used. If dogs or cats are proposed, provide the source of the animals. **Indicate IACUC approval number (AUA#) if there is one assigned.**
- (2) Justifications: Provide justification that the species are appropriate for the proposed research. Explain why the research goals cannot be accomplished using an alternative model (e.g. computational, human, invertebrate, in vitro).
- (3) Minimization of Pain and Distress: Describe the interventions to minimize discomfort, distress, pain and injury. These include analgesia, anesthesia, sedation, palliative care, and humane endpoints.

# Human Subjects

(1) Provide a brief description of the proposed use of human subjects and if IRB approval has been received or is pending. (Include PRO# if one is assigned)

## **Bibliography and References Cited**

Provide a bibliography of any references cited in the Project Narrative. Each reference must include the names of all authors (in the same sequence in which they appear in the publication), the article and journal title, book title, volume number, page numbers, and year of publication.

## Letters of Support

Attach all appropriate letters of support, including any letters necessary to demonstrate the support of collaborators such as Senior/Key Personnel, mentors and other significant contributors included in the grant application. A letter of support from the Department Chair or Division Chief is highly recommended to ensure applicant will have sufficient mentorship and time to conduct the project.

## **COMMITTEE REVIEW PROCESS**

At least 2 reviewers will be assigned to each application. They will give separate scores for each of the 5 core review criteria and a preliminary impact score for that application. The top half of the most meritorious applications will be discussed at the Committee meeting and assigned a new impact score, based on the discussion and score of each member on the Committee. The final impact score for each discussed application will be determined by calculating the arithmetic average of all the eligible members' impact scores. All applicants will receive a written critique representing a combination of the reviewers' written comments and scores for individual criteria.

#### **Research Project Evaluation Criteria**

**Overall Impact.** Reviewers will provide an overall impact/priority score to reflect their assessment of the likelihood for the project to gain extramural funding if completed, and to exert a sustained, powerful influence on the research field(s) involved, in consideration of the following five core review criteria, including overall grantsmanship (overall grant organization and quality of writing).

#### **Core Review Criteria**

*Significance/Scientific Premise:* Does the project address an important problem or a critical barrier to progress in the field? If the aims of the project are achieved, how will scientific knowledge, technical capability, and/or clinical practice be improved? How will successful completion of the aims change the concepts, methods, technologies, treatments, services, or preventative interventions that drive this field? Assess the scientific merit of each application according to the review criteria, which include consideration of scientific premise, rigor, and consideration of relevant biological variables, and the adequacy of the authentication of key biological and/or chemical resources as an administrative issue. Evaluations are based on current best practices in the field.

Investigator(s): Are the PIs, collaborators, and other researchers well suited to the project?

*Innovation:* Does the application challenge and seek to shift current research or clinical practice paradigms by utilizing novel theoretical concepts, approaches or methodologies, instrumentation, or interventions? Are the concepts, approaches or methodologies, instrumentation, or interventions novel?

**Approach/Scientific Rigor:** Are the overall strategy, methodology, and analyses well-reasoned and appropriate to accomplish the specific aims of the project? Are potential problems, alternative strategies, and benchmarks for success presented? Will the strategy establish feasibility, and will particularly risky aspects be managed? Ensure a strict application of scientific method that supports robust and unbiased design, analysis, interpretation, and reporting of results, and sufficient information for the study to be assessed and reproduced. Other possible considerations, if appropriate for the scientific field and research question, include plans for: 1) determining group sizes, 2) analyzing anticipated results, 3) reducing bias, 4) ensuring independent and blinded measurements, 5) improving precision and reducing variability, 5) including or excluding research subjects, 6) managing missing data.

<u>**Checklist**</u> - (Grant page order when preparing to upload into eBridge)

- 1. Budget Justification (not to exceed 1 page)
- 2. Biographical Sketches (not to exceed 5 pages per investigator)
- 3. Introduction (for revised applications only) (not to exceed 1/2 page)
- 4. Specific Aims (not to exceed 1/2 page)
- 5. Research Proposal (not to exceed 3 pages, specific aims is included)
- 6. Vertebrate Animals
- 7. Human Subjects
- 8. Bibliography and References Cited
- 9. Letters of Support