



DIGESTIVE DISEASES RESEARCH CORE CENTER PILOT AND FEASIBILITY AWARDS 2020-2021 Cycle CALL FOR APPLICATIONS

Who: Full time faculty and current senior post-doctoral fellows with a faculty appointment effective as of July 1, 2019 at Washington University, including:

- (1) Junior investigators without independent grant support (excluding career development awards) seeking to establish independence in this field of research;
- (2) Investigators with independent grant support (past or present) who have not been involved in digestive diseases-related research wishing to enter this field;
- (3) Investigators with independent grant support who have previously worked in this field but wish to pursue a new research direction.

Questions: Please contact Jason Mills, MD, PhD,
Director, P&F Program
E-mail: jmills@wustl.edu.

Why: Support will be provided for the purposes of testing innovative hypotheses (or, if well justified, generating innovative hypotheses) which may have significant impact on the field of **digestive diseases** research and for obtaining preliminary data sufficient for extramural funding of future research grant applications by conventional mechanisms.

What: Awards of up to \$30,000 in **DIRECT COSTS**, per year, for one to two years (latter based on competitive renewal).

When: **New Application Due Date: Friday, January 31, 2020**

Funding Period: May 1, 2020-August 30, 2021

Where: Email completed application files to pfddrcc@dom.wustl.edu.

ELECTRONIC SUBMISSIONS ONLY

WASHINGTON UNIVERSITY DIGESTIVE DISEASES RESEARCH CORE CENTER PILOT/FEASIBILITY STUDIES PROGRAM

Call for Applications

Guidelines

Purpose: The overall objective of this program is to provide support for the purposes of testing innovative hypotheses which may have significant impact on digestive diseases research. In selected situations, hypothesis-generating research is also considered. Our hope is that the investigator can then develop preliminary data sufficient for extramural funding of a research grant application (e.g. R01). This program seeks to encourage young investigators and more established investigators in other fields to approach problems which are relevant to our understanding of normal gastrointestinal, liver and pancreatic function and to digestive diseases. We are particularly interested in projects that address issues in mucosal immunity, epithelial injury/repair, microbial interactions with intestinal, hepatic and pancreatic tissues. We encourage efforts addressing the application of novel genetic models (e.g., *C. elegans*, *Drosophila*, etc) to questions in GI tract development/inflammation/cancer. We also encourage submission of proposals to examine the role of the microbiome/virome in GI research, particularly in relation to host/commensal interactions.

Questions concerning the relevance of potential applications should be discussed with Jason Mills, MD, PhD, Director, P&F Program (jmills@wustl.edu). Preference will be given to projects that will:

- Likely lead to further extramural, preferably NIH-funded, research support
- Utilize one of the four Core facilities

Who is Eligible? Full time faculty and current senior post-doctoral fellows with a faculty appointment effective July 1, 2019 who are **United States citizens or possess a permanent visa** and fall into the following categories:

- Junior investigators without independent grant support (excluding career development awards) seeking to establish independence in this field of research
- Investigators with independent grant support (past or present) who have not been involved in digestive diseases-related research wishing to enter this field
- Investigators with independent grant support who have previously worked in this field but wish to pursue a new research direction.
- *PLEASE NOTE: Applications can only have one PI. There cannot be multiple PIs on applications.*

Deadline and Review Process: Applications must be submitted for review by **5:00 p.m. on Friday, January 31, 2020**. Following initial review by the External Scientific Advisory Board, a group of semifinalists will be invited to present their proposal, in person, at the annual DDRCC meeting. The PI is required to present in person in order to be considered for possible funding. The annual DDRCC meeting is scheduled for **Wednesday, April 1, 2020**. (The PI's presentation will be scheduled between 8am and 12pm on 4/1/20). The DDRCC External Advisory Board will

make the final funding decisions, which will be communicated to the investigator by Dr. Mills, later in May 2020. Competitive renewals for a second year of funding require a similar application process, including a project progress presentation to the DDRCC External Advisory Board.

Awards: The DDRCC will award approximately four grants in amounts of up to \$30,000 (**DIRECT COSTS**) for one year. Review of an annual progress report may result in an additional year of funding. No more than two years of funding will be awarded. All awards must have appropriate institutional regulatory approvals (Human Studies Committee, Animal Studies, etc) before monies will be made available. **Please note, the DDRCC does not fund clinical trials.** In general, the award date will not be extended due to delays in receiving regulatory approvals; therefore, Principal Investigators are encouraged to have paperwork in process or ready for submission by April 1, 2020.

Terms of Awards: Grantees will be required to submit to the DDRCC Internal Executive Committee an annual progress report describing the results of their work, as well as related publications and funding. Acceptance of funds implies a firm commitment to provide this progress report to the committee in a timely manner. **All resulting publications should acknowledge the Washington University DDRCC Cores (Grant #P30-DK052574).**

It is expected that the Grantee will completely utilize the full amount of funding awarded during the one-year term of the award. All unexpended funds at the end of the term will be returned to the DDRCC Administrative Core. Extensions or changes to the terms of the award (length of funding period and budget) will only be made in exceptional circumstances. A grantee may request a second year of funding only if the first year's funding has been completely expended.

If there are any questions about this award, or individual eligibility concerns, please contact Jason Mills, MD, PhD at (314) 362-4213 or by email at jmills@wustl.edu.

**WASHINGTON UNIVERSITY
DIGESTIVE DISEASES RESEARCH CORE CENTER
PILOT/FEASIBILITY STUDIES PROGRAM**

Instructions for Application

Application Due Date: 5:00 p.m. CT, Friday, April 1, 2020
Funding Dates: May 1, 2020 – April 30, 2021

Please submit to: DDRCC Administrator
Email: pfddrcc@dom.wustl.edu
Washington University Digestive Diseases Research Core Center
Room 910, Clinical Science Research Building, North Tower
Phone: (314) 362-0799

LETTER OF INTENT:

If you are interested in submitting an application, we recommend sending a letter of intent electronically to Dr. Mills that includes the following information:

- Descriptive title of proposed activity
- Name, department and contact of PI
- Short, 1-2 paragraph, description of scope of project and how it relates to digestive disease research

Note: Letters are not scored and are optional but will be used to notify applicants if their application is likely to be outside the normal scope of funding for the program.

Letters should be sent to jmills@wustl.edu by January 15, 2020.

**APPLICATION PACKET MUST INCLUDE THE FOLLOWING
FOR BOTH NEW & RENEWAL APPLICATIONS:**

- NIH Face Page (**Signature from Grants office NOT needed**)
- NIH Description, Performance Site and Key Personnel
- NIH Table of Contents
- NIH Budget pages (2 pages)—Up to \$30,000 DIRECT Costs
- New 5 Page NIH Biographical Sketch (format page - maximum 5 pages)
- Other Support
- NIH Resources
- Research plan (4-page maximum, excluding references), to include:
 - (1) Aims;
 - (2) Significance;
 - (3) Innovation;
 - (4) Approach;
 - (5) Relevance of Proposed Project to the GI Field;

- (6) Anticipated Use of the DDRCC Cores; and
- (7) Description of how the results of this study will lead to future investigations/grant applications.

If necessary, additional materials such as reprints or figures, can be submitted as an appendix.

- Core Facilities Usage and Required Approvals Form (see below)

- **NEW HUMAN RESEARCH REQUIREMENTS FOR NIH:**

- Indicate whether the pilot project involves exempt Human Subjects research, nonexempt Human Subjects Research, or Vertebrate Animals. If none of these, indicate the source of materials/data to be evaluated (ex: established cell lines).
- If the Pilot Project involves [exempt Human Subjects research](#), indicate source of materials
- If the Pilot Project involves non-exempt Human Subjects research, indicate if it proposes a Clinical Trial, if the IRB verified that the project is minimal risk, or if the project involves more than minimal risk. If the project is an ancillary study to a clinical trial, please indicate this as well.
- Also indicate if human embryonic cell lines will be used. If they are, list them. They must be from the NIH Embryonic Stem Cell Registry.
- For any P&F program involving Human Subjects research, upload enrollment tables (and inclusion management tables, if applicable) using the Inclusion Management System (IMS)

PLEASE NOTE: The DDRCC P&F Program does NOT fund Clinical Trials

- Copy of approval letter, if project involves human or animal subjects
- If applicant is a junior faculty member or postdoctoral fellow, a letter of support from his/her Division Chief or Department Chair, confirming the plans to establish an independent research career must accompany the application.
- If project requires a sponsor, consultant or collaborator, this individual must write a letter of support for the application and should clarify any potential overlap between their support and the subject of the proposal. This letter should accompany the application.

Applicants are requested to use the current NIH PHS 398 (Rev. 01/18) forms.

ADDITIONAL INSTRUCTIONS:

1. Please list the Principal Investigator's Name (PI) on the top right-hand corner of every page of the application.
2. When completing the budget page, please refer to the list of expenditures allowed and not allowed included with these instructions. Use an F&A rate of 52.5%.

The following headings should be used for the research plan (**1-7** maximum 4 pages):

1. **Aims:** State concisely the hypothesis to be tested and the specific aim(s) to be achieved during the grant period. The aims must be reasonable to achieve during the one-year period of the grant.
2. **Significance:** State the relevance of the proposed project to basic, clinical or prevention and control.
3. **Innovation:** Discuss how your project will push frontiers forward and/or develop new tools to study an important problem. Describe how your proposed research is new and unique.
4. **Approach:** Concisely present your experimental design and the methods to be used to accomplish your specific aims relating to that of digestive diseases and to longer term funding objectives. Also indicate how the results will be interpreted and how they will lead to future investigations. Well-known methods and standard procedures may be described very briefly or referenced, but novel experimental approaches should be outlined in more detail. The experimental design section should indicate which of the Digestive Diseases Core Facilities will be utilized.
5. **Relevance of Proposed Project to the GI Field**
6. **Anticipated Use of the DDRCC Cores**
7. **Description of how the results of this study will lead to future investigations/grant applications.** If necessary, additional materials, such as reprints or figures, can be submitted as an appendix.
8. **Appendix:**
 - References (maximum 1 page)
 - Table or Figures relevant to this proposal (maximum 2 pages)
 - Pertinent recent publications (maximum 3)
 - IRB/IACUC approvals for any animal and human proposals
 - Inclusion Enrollment Report, if applicable for human studies

ALLOCATION AND EXPENDITURE OF FUNDS:

Expenditures Allowed:

- Staff salary support
- Research supplies and animal maintenance
- Minor equipment costing less than \$5,000. Special justification is necessary for items exceeding this amount, and permission must be obtained from the Washington University Digestive Diseases Research Core Internal Executive Committee for the purchase of such equipment.
- Special fees (pathology, photography, etc.)

Expenditures NOT Allowed:

- **Principal Investigator salary support**
- Secretarial/administrative personnel salary support
- Office equipment and supplies
- Computers
- Tuition
- Domestic or Foreign Travel
- Publication costs, including reprints
- Dues and membership fees in scientific societies
- Purchasing and binding of periodicals and books
- Honoraria and travel expenses for visiting lecturers
- Rental of office or laboratory space
- Construction or building maintenance
- Recruiting and relocation expenses
- Clinical Trials and related patient fees

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DIGESTIVE DISEASES RESEARCH CORE CENTER
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Core Facilities Usage and Required Approvals Form

Principal Investigator: _____

Project Title: _____

Please indicate which DDRCC-sponsored Core(s) you will use for your proposed project and describe specific needs:

ADMINISTRATIVE & RESOURCE ACCESS CORE (ARAC)

Core Director: Nicholas O. Davidson, MD, DSc;

Core Associate Directors: Phillip I. Tarr, MD & Jason C. Mills, MD, PhD

ARAC Core: Services available include RNA/DNA Sequencing, Microarray, qPCR, Affymetrix Panomics, Fluidigm High Throughput Sequencing and Proteomics.

Location: Suite 910, CSRB-North Tower Suites 411 and 401 East McDonnell Building

<u>Contacts:</u> Nicholas Davidson, MD, DSc 362-2027 nod@wustl.edu	Anastasia Zylka, DDRCC Administrator 362-0799 zylka@wustl.edu
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Precision Animal Models and Organoids Core (PAMOC)

Core Directors: Jeffrey Miner, PhD and Matthew Ciorba, MD;

Mouse Genetics: Services for construction of transgenic or knockout mice by microinjection of DNA or embryonic stem cells; consultation on transgenes or targeting vectors relevant to GI tissues; derivation of speed congenics; in vitro fertilization and rederivation.

Organoids Core: Assist investigators in the culture of human and mouse gastrointestinal epithelial cell organoids to address cell biological questions relevant to digestive diseases and host-environment interactions.

Location: Suites 411 and 401 East McDonnell Building

Contacts: Jeffrey Miner, PhD; 362-8235; minerj@wustl.edu
Matthew Ciorba, MD; mciorba@wustl.edu

ADVANCED IMAGING & TISSUE ANALYSIS CORE (AITAC)

Core Director: Deborah Rubin, MD;

Core Co-Director: Jason C. Mills, MD, PhD

AITAC Core: Processing of GI tissues for light microscopy, for routine histologic and special stains, immunohistochemistry and immunocytochemistry, laser capture microdissection, confocal imaging and electron microscopy. The WUCCI facility provides confocal, two-photon, light-sheet, super-resolution, and florescence Microscope services.

Location: 924 Clinical Science Research Building, North Tower

Contacts: Kymberli Carter; 362-8949; ckcarter@wustl.edu
Deborah Rubin, M.D.; 362-8935; drubin@wustl.edu

BIOBANK AND CLINICAL DATA CORE

Core Director: Rodney Newberry, MD

Biobank Core: This facility is banking coded samples of blood and tissue collected from patients with digestive diseases that is linked to clinical information and genotyping information.

Location: 927 Clinical Science Research Building, North Tower

Contact: Rodney Newberry, MD; 362-8940; rnewberry@wustl.edu

Required Approvals:

Human Studies Committee? Yes No Pending If pending, date submitted _____

Animal Studies Committee? Yes No Pending If pending, date submitted _____

Include all appropriate approvals with application (include in appendix)