Who: Full time faculty and current senior post-doctoral fellows with a faculty appointment effective as of July 1, 2021 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 Brian DeBosch, MD, PhD
Director, P&F Program
E-mail: deboschb@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: Letter of Intent Due Date: Any time before February 18, 2022
Application Due Date: March 4, 2022
Funding Period: July 1, 2022-June 30, 2023

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

ELECTRONIC SUBMISSIONS ONLY
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, Drosphila, 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 Brian DeBosch, MD, PhD, Director, P&F Program (deboschb@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, 2021 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. Historically, 97% of our past awardees fall into this track.
- 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: Applicants MUST submit a Letter of Intent anytime before Friday, February 18 to be approved for the final submissions. Once approved, applications must be submitted for review by 5:00 p.m. on Friday, March 4, 2022.
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, May 4, 2022.** (The PI’s presentation will be scheduled between 8am and 1pm on 5/4/22). The DDRCC External Advisory Board will make the final funding decisions, which will be communicated to the investigator by Dr. DeBosch, May 2022. 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 May 1, 2022.

In addition to the main award, the DDRCC will provide an additional $5,000 supplement to be used in any of the DDRCC Cores (ARAC, AITAC Facility, Biobank Core, and PAMOC Core) during their year of DDRCC P&F Funding. This supplement can only be used during the funding period of 7/1/2022-6/30/2023 for either the ARAC, AITAC, PAMOC, or Biobank Core.

**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 Brian DeBosch, MD, PhD at (314) 747-2692 or by email at deboschb@wustl.edu.
WASHINGTON UNIVERSITY
DIGESTIVE DISEASES RESEARCH CORE CENTER
PILOT/FEASIBILITY STUDIES PROGRAM

Instructions for Application

Letter of Intent Due Date: February 18, 2022 (or anytime before this date)
Application Due Date: 5:00 p.m. CT, Friday, March 4, 2022
Funding Dates: July 1, 2022 – June 30, 2023

Please submit to: DDRCC Administrator
Email: pfddrcc@dom.wustl.edu
Washington University Digestive Diseases Research Core Center

LETTER OF INTENT:

The Letter of Intent is a new requirement for the NIH funded, DDRCC P&F Award applications. If you are interested in submitting an application, we please submit a letter of intent electronically to Dr. Brian DeBosch and Anastasia Zylka. This letter of intent can be submitted anytime between the first call for applications until the final due date, February, 18, 2022.

Once received, the letter and biosketch will be reviewed by the DDRCC Internal Advisory Board for approval. If your application is approved, you will be able to move forward with the application process.

The letter of intent must include the following information:

- Descriptive title of proposed activity
- Short, 1-2 paragraph, description of the scope of the project and how it relates to the DDRCC 3 themes
  - THEME 1: Host-microbial interactions, inflammation & mucosal immunity
  - THEME 2: Stem cells, epithelial renewal, paligenosis & cancer
  - THEME 3: Metabolic homeostasis, nutrient transport & enterohepatic signaling
- Intended DDRCC Core usage
- Name, department and contact of PI
- NIH Biosketch and Other Support

Letters should be sent to deboschb@wustl.edu and cc zylka@wustl.edu by February 18, 2022.
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)
  - Please include on your NIH Biosketch Personal Statement any circumstances that you think the EAB should additionally consider when reviewing your application. Some examples may include: extended leave of absence, relocation, or a recent switch between clinical track/research staff and investigator tracks.
- Other Support
- NIH Resources
- Research plan (5-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.
- 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. 03/20) forms.

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**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 57.5%.

The following headings should be used for the research plan (1-7 maximum 5 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)
   - 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
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 & Gwendalyn Randolph, 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
  Contacts: Nicholas Davidson, MD, DSc  Anastasia Zylka, DDRCC Administrator 362-2027
  nod@wustl.edu  zylka@wustl.edu,

☐ 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:** Ta-Chiang Liu, 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 fluorescence 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)*