



Background and Purpose of Funding Opportunity

The microbiome consists of multispecies communities of bacteria, fungi, archaea, and viruses living within humans or other animal hosts in a predominantly commensal or mutualistic relationship. Microbiome composition and activity vary between individuals and across individual lifecycles, shaped by deterministic and stochastic processes. Reciprocally, the composition and activity of the microbiome can impact diverse aspects of host biology, including metabolism, pathogen exclusion, and immunity. Research aimed at understanding the reciprocal interactions between the microbiome and the host immune system is a rapidly expanding field of study. Many recent studies have identified associations between the diversity and composition of the microbiome and the development, differentiation, or functionality of immune responses to infectious diseases and in response to vaccination. At present, substantial gaps in knowledge remain regarding how the relationship between host and microbiome are maintained, and how perturbations of those relationships affect immunity and pathogenesis.

The purpose of this funding opportunity is to support research aimed at elucidating the interplay between the microbiome and immune responses relevant to HIV-1, AIDS, or AIDS-related opportunistic infections and malignancies. The funding opportunity is a joint partnership between the [Duke University Center for AIDS Research \(CFAR\)](#) and the [Duke Microbiome Center \(DMC\)](#) and is intended to foster new inter-center collaborations. The award is for up to \$60K in direct costs for up to 1 year.

RFP Schedule

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|---------------------------------|----------------------------|
| • Due Date for Letter of Intent | Friday, April 16, 2021 |
| • Due Date for Proposals | Monday, May 3, 2021 |
| • Application Pre-Review | by Tuesday, April 20, 2021 |
| • Projected Award Date | July 2021 |
| • Period of Award | Award period is 12 months |

Eligibility for CFAR-DMC Pilot Grant Award

- The proposal must be submitted by a faculty-level CFAR investigator or DMC investigator and must address an [NIH HIV/AIDS Research Priority](#).
- Post-doctoral and Clinical fellows are eligible as co-investigators or co-PIs on proposals led by a faculty-level collaborator (T32 awardees cannot use CFAR award for training or stipends).
- Faculty must have no prior R01 level funding in the HIV/AIDS field.
- Applicants with a current K award must have an approval letter from the K award program officer.

Questions on eligibility should be directed to the CFAR Developmental Core.

Letter of Intent

A letter of intent is not binding and does not enter into the review of a subsequent application, however, the information that it contains allows the Duke CFAR to estimate the potential review workload and plan the review.

Email your LOI to [CFAR Developmental Core](#) on or before April 16, 2021.

Please include the following information:



1. Principal Investigator
2. Title of proposed research
3. Project Summary
4. Collaborators
5. Mentors

Applications and Submission

Applications must contain the following components *in order*, submitted as one complete PDF document. (No SPS Record required)

1. The completed [CFAR-DMC Pilot Grant Cover Sheet](#) *with signatures*
2. The [CFAR-DMC Pilot Grant Checklist](#).
3. Document addressing the “Authentication of Key Biological and/or Chemical Resources” as discussed in [NIH notice NOT-OD-17-068](#)
4. Research Proposal using the current NIH R03/R21 format (Specific Aims 1 page. Research Strategy 6 pages inclusive of all figures and tables. Bibliography is not included in the 6-page limit.). The Research Strategy should include sections to address Significance, Innovation and Approach. In the Significance section, applicants should address “... the strengths and weaknesses in the rigor of the prior research (both published and unpublished) that serves as the key support for the proposed project.” In the Approach section, applicants should “describe plans to address weaknesses in the rigor of the prior research that serves as the key support for the proposed project.” <https://grants.nih.gov/grants/guide/notice-files/NOT-OD-18-228.html>
5. A current NIH Biosketch of PIs: [NIH format page](#)
6. For a multi-PI application, include a Project Leadership Plan, [per NIH guidelines](#).
7. Budget and Budget Justification on [NIH 398](#) form pages.

Applicants may request up to \$60,000 in total direct costs for 1 year.

- Research effort is allowed on the grant (no admin or clerical). *Faculty effort must comply with primary department policy.*
- Sub awards for external collaborations are allowable and will incur F&A fees. Sub-awards must comply with [Duke Sub-award policies](#).
- Travel must be in support of presenting results from the Project Award.

Applications should be prepared as a single PDF file, using the proper naming convention (e.g. first initial.lastname.cfar.dmc2021), and uploaded directly to: CFAR_DM.vkhwu9I3lod6qpjo@u.box.com

Simply email your completed Application to the above address. You will receive a confirmation email stating that your upload was successful. *If you do not receive a confirmation within a few minutes of submission, your application was not submitted, and you should try again.*

Questions concerning the application or submission should be directed to the [CFAR Developmental Core](#).



Review Process

Applications will be reviewed by the CFAR and DMC Review Committee that will be comprised of highly-qualified scientific leaders within the Duke CFAR and DMC, and will be appointed by the CFAR and DMC leadership. If necessary, the Review Committee may request outside expertise to evaluate the scientific merit of a proposal.

The Committee will review the application based on the following criteria:

- [NIH HIV/AIDS Priority Areas](#)
- Overall scientific merit, level of innovation, and relevance of the proposal to AIDS research.
- Utilization of [CFAR](#) and/or [DMC Core services](#).
- Potential for generating independent funding
- Potential for drawing investigators from other fields into AIDS and microbiome research
- Potential for developing new interactions between Immunology and Microbiome Scientists.

Awardees will be notified in writing. All applicants will receive a written review of their proposals, regardless of funding.

Available Resources

Statistical/Bioinformatics Review: Pre-submission consultation and review is available at no cost to all applicants, if requested by April 20, 2021. Applicants are encouraged to utilize this service, as each application will be scored by the CFAR Quantitative Sciences Core in the final review process. Please email [the CFAR QS Core](#) to schedule a consultation.

Specific Aims Review: Pre-submission consultation and review is available at no cost to all applicants, if requested by April 20, 2021. Applicants are encouraged to utilize this service. Please email [the CFAR Developmental Core](#) to schedule a consultation.

Cores: Applicants are expected to utilize CFAR and/or DMC Cores pre- and post-award when applicable.

[CFAR cores](#) can provide state of the art immunologic assays, clinical research support and/or database and biorepository access, and innovative quantitative analysis and computational tools. See the [CFAR Scientific Cores page](#) describing the full range of services available through CFAR Cores.

[DMC Cores](#) provide microbial genomic analysis services and bioinformatics support in close collaboration with the Duke Center for Genomic and Computational Biology, Division of Laboratory Animal Medicine, and other Duke Cores. See the [DMC Core Resources page](#) describing the full range of services available through the DMC.

Additional National Institutes of Health approval may also be needed before initiation of a project and before CFAR funds are disbursed. The CFAR Administrator will provide guidance to awardees during this process.

Projects with an International Component: Please refer to this [Guidance for NIH Approval Process for CFAR-Supported International Studies](#).

Projects Involving Clinical Trials: CFARs are unable to fund clinical trials, however, projects involving clinical research (e.g., observational studies or sub-studies using existing data from an ongoing clinical trial) may be funded by the CFARs. The [NIH definition of a clinical trial](#) is very broad. Some investigators conducting human subjects research may not be aware that NIH considers their study to be a clinical trial. For guidance, [click here](#) and refer to the [revised Guidance on CFAR Clinical Research Studies](#) for CFAR-funded clinical research.



Start dates for funded awards involving clinical research entailing above minimal risk to the subjects will be based on the date that the NIH issues clearance for the project. The CFAR Finance Administrator will provide guidance to awardees on this process.

DMC Mission

The Duke Microbiome Center (DMC) was established to address the rapidly expanding interest among the public and scientific community in the pervasive roles of microbial communities in human health, the environment, and biotechnology. The mission of the DMC is to cultivate and support microbiome science at Duke University. We do so by providing an intellectual and educational environment that fosters collaboration and discovery, and by creating and supporting necessary resources at Duke University for research in the microbiome sciences.

Duke CFAR Mission

The principal mission of the Duke Center for AIDS Research (CFAR) is to provide, establish, and enrich infrastructure support for research and to promote collaboration and coordination among the community of HIV/AIDS investigators at Duke and its principal international research partners.

The CFAR program is scientifically managed by the NIH Office of AIDS Research (OAR) and the Fogarty International Center (FIC). NIAID Division of AIDS created the CFAR program in 1988 and most recently renewed in 2017. CFARs are co-funded by eleven NIH Institutes:

1. National Institute of Allergy and Infectious Diseases (NIAID)
2. National Cancer Institute (NCI)
3. *Eunice Kennedy Shriver* National Institute of Child Health and Human Development (NICHD)
4. National Heart, Lung, and Blood Institute (NHLBI)
5. National Institute on Drug Abuse, (NIDA)
6. National Institute of Mental Health (NIMH)
7. National Institute on Aging (NIA)
8. National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK)
9. National Institute on Minority Health and Health Disparities (NIMHD)
10. National Institute of Dental and Craniofacial Research (NIDCR)
11. National Institute of Nursing Research (NINR)