University of Massachusetts Boston & Dana-Farber/Harvard Cancer Center Partnership to Advance Cancer Health Equity

# **REQUEST FOR GRANT APPLICATIONS**

SPONSOR:	University of Massachusetts, Boston (UMass Boston) – Dana- Farber/Harvard Cancer Center (DF/HCC) Comprehensive Partnership to Advance Cancer Health Equity (CPACHE) (U54) Grant
FUNDING SOURCE:	Federal
AWARD LEVEL:	Pilot Project (up to \$75,000 in direct costs per year for two years) Full Project (up to \$150,000 in direct costs per year for three years)

The UMB – DF/HCC Partnership, in existence for more than two decades, aims to develop strong cancer research and training programs to understand the reasons behind the significant cancer disparities and related burden of cancer on underserved communities and socio-economically disadvantaged population groups. **The Partnership is submitting a competing application for renewal in October 2025.** Projects selected will be included in the application and evaluated by NCI. Funding is contingent upon NCI's successful award of the U54 PACHE grant. Our proposed theme for the renewal application is:

## "Harnessing Data Science to Eliminate the Cancer Burden for All"

For more information about the Partnership, visit <a href="http://www.umb-dfhcc.org/">http://www.umb-dfhcc.org/</a>

Letter of Intent:	February 26, 2025 by 11:59 PM EST
Application:	April 11, 2025 by 11:59 PM EST
Anticipated Award Date:	August 1, 2026

## **IMPORTANT DATES & DEADLINES**

#### **OVERVIEW**

The purpose of this RFA is to call for proposals for research to address cancer disparities and cancer science. This RFA is explicitly aimed at fostering and supporting collaborations between investigators at UMass Boston (an institution that serves underrepresented populations) and DF/HCC (an NCI-



designated Comprehensive Cancer Center). Examples of supported research projects can be found on our website at <u>https://umb-dfhcc.org/research/research-projects/current-projects/</u>.

Specific requirements for applications:

- Projects can focus on any area of cancer disparities research with an equal partnership between UMass Boston and the DF/HCC.
- Projects may span basic science, population sciences, outcomes, and social science related to cancer. Projects that incorporate data science approaches (e.g., machine learning, AI, computational biology, bioinformatics, LLM) are preferred.
- Areas of research may include, but are not limited to, cancer prevention (such as cancer screening, vaccines, smoking prevention and cessation), cancer imaging, cancer initiation and progression, diagnostic and prognostic biomarkers, and cancer care delivery.

All applications must:

- illustrate collaboration between UMass Boston and DF/HCC researchers;
- have high potential for leading to external funding through the NIH K-series, R03, R21, R01 mechanisms or through NSF or foundation support; and
- provide training opportunities for under-represented or disadvantaged students and/or fellows.

Interested faculty who do not have a UMass Boston or a DF/HCC collaborator may request assistance from the Partnership at <u>u54partnership@umb.edu</u>.

## **APPLICATION INFORMATION**

#### LETTER OF INTENT (LOI) due February 26, 2025

Submission of an LOI is required. LOIs are limited to one page and must include the following:

- 1) UMass Boston and DF/HCC PIs and contact information;
- 2) A brief description of the proposed research;
- 3) A brief paragraph on the scientific significance and how it relates to the goals of the NCI CPACHE and UMass Boston DF/HCC Partnership; and
- 2-3 bullet points on how the outcomes of the proposed work will position the project well for funding as a future U54 full project (if pilot application) and/or NIH (e.g. R01/R15/R21-level funding) or NSF mechanism.

#### **PROPOSAL PRESENTATIONS**

Applicants are encouraged to share an informal overview of their proposed project with the Partnership PIs and Internal Advisory Committee members for feedback in March. Date options will be shared upon receipt of the LOI.

### APPLICATION due April 11, 2025

- Complete the Application Guide and Template <u>here</u>.
- Complete NIH R&R budget forms (Form Page 4 and Form Page 5) <u>here</u>.
- Submit a current NIH biosketch for all personnel using the PHS 398 Biographical Sketch Format Page.



• Compile all of the above documents into one PDF and submit to <u>u54partnership@umb.edu</u>.

## **PROPOSAL REVIEW CRITERIA**

Applications will be reviewed drawing on 2025 NIH <u>review criteria</u> by designated review committees as well as on U54 Partnership priorities as outlined below. Reviewers will assign a score on the overall application based on the following criteria:

**Importance of the Research** (significance and innovation): The project addresses important problems or critical barriers to progress in cancer or cancer disparities research. The aims of the project must advance scientific knowledge, technical capability, and have near-term impact. The project utilizes novel theoretical concepts, approaches or methodologies, instrumentation, or interventions.

**Rigor and Feasibility** (approach, rigor, and feasibility): The overall strategy, methodology, and analyses are well-reasoned and appropriate to accomplish the specific aims of the project, and cross-institutional integration of research labs/programs is clearly defined.

**Expertise and Resources** (investigators and environment): The PIs, collaborators, and other key personnel have the necessary experience and expertise to accomplish the goals of the proposed research project. The investigators have complementary and integrated expertise and institutional resources are appropriate to ensure the successful execution of the proposed work.

**Career Development:** There is a well thought-out and reasonable plan for career development of early stage investigator(s). Mentor(s) have been identified and the appropriate mechanisms are in place to achieve career development goals outlined.

Student Training: There will be significant opportunity for the training of URM students and fellows.

**Potential for External Funding:** There is a high likelihood that the proposed research project will lead to NIH K-series, R03, R21, R01 etc. mechanisms, or other types of foundation funding.

## **UMB-DF/HCC PARTNERSHIP CORES**

Utilization of the Partnership cores is strongly recommended.

#### **Research Education Core (REC)**

The <u>Research Education Core</u> aims to increase the number of trainees, particularly those from underrepresented minority (URM) backgrounds, who are interested in cancer/cancer disparities research. This core is available to investigators to assist with strategizing and developing a URM training program plan that suits the nature of their proposal. Additionally, the REC can help investigators identify UMass Boston students to work as part of their research teams. To request an appointment, contact U54REC@umb.edu.

**Research Design and Analysis Core (RDAC)** 



The <u>Research Design and Analysis Core</u> offers consultation to investigators who would like guidance regarding the design of their proposal. The RDAC can assist with research design, survey and measure development, qualitative research, and feedback on quantitative and qualitative project feasibility. Population science and basic science research projects involving statistical analysis must consult with the RDAC to develop a strategy for study design and data analysis. To request an appointment, contact Carol Lowenstein (<u>Carol Lowenstein@dfci.harvard.edu</u>).

#### **Genomics** Core

The <u>Genomics Core</u> is partially funded to assist investigators who wish to incorporate advanced genomics-based technologies (NextGen or single-cell sequencing, spatial transcriptomics) in their study design. Proposed projects interested in development funds for core services (\$2-3K max) as they prepare their pilot or full applications can contact Jill Macoska (<u>Jill.Macoska@umb.edu</u>). Study design questions can be directed to Jill Macoska as well.

#### **Outreach Core**

The <u>Outreach Core</u> aims to maximize the dissemination and implementation of evidence-based strategies to promote cancer prevention behaviors in faith-based and other community settings. The Outreach Core can assist research projects with dissemination and building relationships with community organizations. To request an appointment, contact Sara Minsky (<u>Sara Minsky@dfci.harvard.edu</u>).

#### **Data Science**

If you have a data science related question, please email our Partnership email (<u>u54partnership@umb.edu</u>).

## **ELIGIBILITY & REQUIREMENTS**

- Pls must be appointed as tenure track or non-tenure track faculty at their respective institutions; post-doctoral fellows and staff scientists (UMB) are not permitted to serve as Pls on proposals. Research scientists and instructors at DF/HCC institutions and research professors at UMB are eligible to serve as Pls.
- Investigators may not: A) submit a pilot application if they have received Partnership pilot project funding within the last two years (other than seed projects), or B) submit more than one application. Former pilot project recipients are encouraged to apply for a full project. Former seed project recipients are encouraged to apply for a full project.
- DF/HCC and UMass Boston collaborators must complete separate budgets which, when combined, do not exceed the award amount in direct costs. These budgets should be roughly equivalent and should not exceed a 60/40 split.
- This is a joint application. All materials must be submitted to <u>u54partnership@umb.edu</u> as a single PDF.

Projects selected for funding must complete the following sections, if applicable, upon notice of selection:



- Human subjects and clinical trials. A fillable template for this section can be found <u>here</u> (PHS Human Subjects and Clinical Trials Information) and assistance will be provided if the project is selected.
- Vertebrate Animals Section. Guidance on what to include in this section can be found <u>here</u>.

Projects in need of IRB or IACUC approval must apply in order for funds to be released.

## **QUESTIONS?**

For programmatic or grants-related questions, contact Abby Shain at <u>Abigail\_Shain@dfci.harvard.edu</u>.

For scientific questions, contact one of the four Principal Investigators:

- Gregory "Goyo" Abel at Gregory\_Abel@dfci.harvard.edu
- Vish Viswanath at <u>KViswana@hsph.harvard.edu</u>
- Adán Colón-Carmona at Adan.Colon-Carmona@umb.edu
- Jill Macoska at Jill.Macoska@umb.edu

