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 $100,000 in direct costs per year for two years)
                  Full Project (up to $175,000 in direct costs per year for two years)

The UMB – DF/HCC Partnership aims to develop strong cancer research programs to understand the reasons behind the significant cancer disparities and related impact of cancer on underserved communities and socio-economically disadvantaged population groups.

The goal of the Partnership is to:
- improve cancer-related research, training, and outreach opportunities for under-represented minority (URM) students, fellows, and early stage investigators; and
- develop evidence-based information and resources toward closing the cancer disparities gap.

For more information about the Partnership, visit http://www.umb-dfhcc.org/

IMPORTANT DATES & DEADLINES

- Letter of Intent: April 10, 2024 by 11:59 PM EST
- Application: June 5, 2024 by 11:59 PM EST
- Anticipated Award Date: September 1, 2024
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 https://umb-dfhcc.org/research/research-projects/current-projects/.

Specific requirements for applications focused on cancer research vs. cancer disparities research: The project can focus on any area of cancer research OR cancer disparities research with an equal partnership between UMass Boston and the DF/HCC.

Specific requirements for applications focused on basic science, population sciences, outcomes and social science: Areas of interest: translational research, emerging technologies (emerging technologies include information and communication technology, nanotechnology, proteomics, genomics and imaging) as well as research focusing on pediatric, adolescent and young adult cancers.

Specific requirements for applications focused on community outreach, cancer education, and dissemination of evidenced-based programs: The proposed research project must focus on cancer disparities. Applications focusing on cancer outreach must include hypothesis-driven research that may lead to increased use of and access to beneficial medical procedures, such as primary preventative measures, for example, smoking cessation and cancer vaccines; or early detection procedures, such as mammography, PAP smear, colorectal cancer screening etc.; or cancer prevention behaviors such as increased screening or smoking prevention etc.

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 minority (URM) 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 u54partnership@umb.edu.

LETTER OF INTENT (LOI)
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) 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
4) 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 on May 6, 2024 from 10:00am – 12:00pm or May 13, 2024 from 12:00 – 2:00pm.

APPLICATION
A. Title Page (limited to 1 page) including: title of the project, names of investigators from both institutions, type of project (pilot or full), brief abstract stating the specific aims.

B. Research Strategy (limited to 6 pages) including:
   • significance, innovation, preliminary studies (encouraged for pilot grant applications and required for the full project applications) or scientific rationale based on literature, and approach;
   • description of how this project relates to the overall priorities of the Partnership;
   • description of experimental methods/study design;
   • clear delineation of components of project to be conducted at each institution;
   • how the proposed project will lead to peer-reviewed funding (i.e. full project funding from the UMass Boston – DF/HCC Partnership or independent NIH R01/R15/R21-level or NSF funding);
   • plans for inclusion of under-represented minority (URM) students/trainees;
   • strategies for maintaining an active collaboration between investigators, cross-institutional integration of research labs/programs beyond the project period;
   • plans for career development and mentorship for less experienced/early stage investigators/co-leaders; and
   • scope and timeline of project (e.g. how the proposed research will be accomplishable within the 2 year funding period).

C. Other Sections of PHS 398 Research Plan (Sections 4-16) must also be completed. Attach documentation (described in PHS 398 instructions) as required.
   • Section 5. Protection of Human Subjects;
   • Section 7. Inclusion of Women and Minorities;
   • Section 8. PHS Inclusion Enrollment Table;
   • Section 9. Protection of Children; and
   • Section 10. Vertebrate Animals.

D. Research components involving clinical trials must include a data and safety-monitoring plan as described in the PHS instructions. For any cancer treatment protocol supported directly or indirectly by the Partnership, early stopping rules and procedures to detect and monitor adverse drug reactions (ADR) must be provided in the application, or in the case of protocols subsequent to funding, to the NCI Program Director.

E. Biosketches: A current NIH biosketch using the PHS 398 Biographical Sketch Format Page.
F. **Budget:** The proposed budget should be outlined in direct costs only. 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. Budgets should be submitted on the [NIH 398 Detailed Budget for Initial Budget Period Format Page (fp4)](#) and the [PHS 398 Budget for Entire Proposed Project Period Format Page (fp5)](#) with budget justifications included. *Cost extensions are not guaranteed if funds are not spent.*

If funded, projects in need of IRB or IACUC approval must apply in order for funds to be released. Inclusion enrollment reports must also be submitted if required.

**PROPOSAL REVIEW CRITERIA**

Applications will be reviewed by designated review committees. Reviewers will assign a score on the overall application based on the following criteria:

**Significance:** 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.

**Innovation:** The project utilizes novel theoretical concepts, approaches or methodologies, instrumentation, or interventions.

**Investigators:** 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.

**Approach:** 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.

**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 [Research Education Core](#) aims to increase the number of trainees, particularly those from under-represented 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 Research Design and Analysis Core 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 (Carol_Lowenstein@dfci.harvard.edu).

Genomics Core
The Genomics Core is partially funded to assist investigators who wish to incorporate high-throughput NextGen sequencing studies in their study design. Funds are available to help develop incubator projects responding to this RFA for consideration for pilot or full project funding. To request an appointment, contact Jill Macoska (jill.macoska@umb.edu).

Outreach Core
The Outreach Core aims to maximize the dissemination and implementation of evidence-based strategies to promote cancer prevention behaviors in faith-based and other community settings, provide training opportunities for students in outreach research, and offer resources and support to new and ongoing research projects. The Outreach Core participates in the NCI National Outreach Network (NON) activities, including cross-cutting activities in biobanking. To request an appointment, contact Shoba Ramanadhan (Sramanadhan@hsph.harvard.edu) or Tiffany Donaldson (tiffany.donaldson@umb.edu).

ELIGIBILITY & REQUIREMENTS
• PIs must be appointed as faculty at their respective institutions; post-doctoral fellows are not permitted to serve as PIs on proposals. Research scientists and instructors at DF/HCC institutions and research professors at UMB are eligible to serve as PIs.
• Investigators may not a) submit a pilot application if they have received Partnership pilot project funding within the last two years, 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 pilot or full project.
• This is a joint application. All materials must be submitted to u54partnership@umb.edu as a single PDF.

QUESTIONS?
For programmatic or grants-related questions, contact Abby Shain at abigail_cook@dfci.harvard.edu.

For scientific questions, contact one of the four Principal Investigators:
• Gregory “Goyo” Abel at gregory_abel@dfci.harvard.edu
• Vish Viswanath at vish_viswanath@dfci.harvard.edu
• Adán Colón-Carmona at adan.colon-carmona@umb.edu
• Jill Macoska at jill.macoska@umb.edu