# 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:**

<table>
<thead>
<tr>
<th>A) Pilot Projects</th>
<th>B) Seed Projects</th>
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<td>(up to $100,000 in direct costs for one year)</td>
<td>(up to $30,000 in direct costs for 6-12 months)</td>
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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 underrepresented 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 [www.umb.edu/u54](http://www.umb.edu/u54).

**What’s new in this RFA?**

- Seed projects! Highly innovative, early stage science with no preliminary data needed. *See pages 5-6 for instructions.*
  - If applying for a seed project, LOIs are *not* required.
- Pilot projects are eligible for up to one year of funding. *See pages 2-4 for instructions.*

## PILOT AND SEED PROJECTS – IMPORTANT DATES

<table>
<thead>
<tr>
<th>Letter of Intent*</th>
<th>December 20, 2019 by 11:59 PM EST</th>
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<tbody>
<tr>
<td>Application</td>
<td>January 31, 2020 by 11:59 PM EST</td>
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<tr>
<td>Anticipated Award Date</td>
<td>September 1, 2020</td>
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*Not applicable for seed projects*
A) PILOT PROJECT INFORMATION

OVERVIEW
The purpose of this RFA is to call for proposals for research to address cancer disparities and cancer science. Unlike typical RFAs, 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).

We are calling for proposals that focus on developing an understanding of cancer-related disparities through an elucidation of biological, social or behavioral mechanisms, or at their intersection. We are also interested in studies that can mitigate these disparities through interventions. Projects must specifically address areas of cancer or cancer disparities among the underserved, racial/ethnic minorities and/or socio-economically disadvantaged populations. Examples of previously funded research projects can be found at www.umb.edu/u54/projects/projects_2016-2021.

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 foundation support; and
• provide training opportunities for under-represented minority (URM) students and/or fellows.

LETTER OF INTENT (LOI) INFORMATION
Submission of an LOI is required. LOIs are limited to two pages and must include the following:
1) description of the proposed research;
2) specific aims;
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;
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 and/or NIH (e.g. R01/R15/R21-level funding) mechanism; and
5) contact information.

APPLICATION INFORMATION
A. Title Page (limited to 1 page) including: title of the project, names of investigators from both institutions, a brief abstract stating the specific aims, and type of project application (i.e. “Pilot Project Application”).

B. Research Strategy (limited to 6 pages) including:
• significance, innovation, preliminary studies (encouraged) 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 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; and
plans for career development and mentorship for less experienced/early stage investigators/co-leaders.

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 budget justifications should be submitted on the PHS 398 Budget for Entire Proposed Project Period Format Page (fp5). No cost extensions will not be granted 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.
PILOT 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.
B) SEED GRANT INFORMATION

OVERVIEW
The purpose of the seed grant program is to award projects that provide support for pioneering research at early stages of development that focuses on cancer disparities or cancer sciences. This innovative mechanism is designed for studies that fund research that can provide preliminary support for preparation of larger applications at R-21 or R01 level later. Potential fundable projects under this mechanism include, but are not limited to:

• small observational studies to generate hypotheses;
• purchase and analysis of datasets for preliminary analyses;
• conducting metanalyses for design of future studies; and
• studies that include key experiments that could provide feasibility for larger studies.

All applications must:

• illustrate collaboration between UMass Boston and DF/HCC researchers;
• focus on an aspect of cancer or cancer disparities; and
• result in preliminary data to prepare for larger grant proposals.

APPLICATION INFORMATION
A. Title Page (limited to 1 page) including: title of the project, names of investigators from both institutions, brief abstract stating why this project is high risk and (potentially) high gain, the 1-2 specific aims, a proposed timeline for the project, and the type of application (i.e. “Seed Project Application”)

B. Research Strategy (limited to 3 pages) including:

• potential impact (high risk/potential high gain)
• 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;
• description of how the proposed project could lead external funding (i.e. pilot/full project funding from the Partnership or external funding);

C. Biosketches: A current NIH biosketch using the PHS 398 Biographical Sketch Format Page.

D. 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. Budgets should be submitted on the NIH 398 Detailed Budget for Initial Budget Period Format Page (fp4), and budget justifications should be submitted on the PHS 398 Budget for Entire Proposed Project Period Format Page (fp5). No cost extensions will not be made available 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.
SEED 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:

**Impact:** Project is high risk and (potentially) high impact.

**Investigators:** The PIs, collaborators, and other key personnel have the necessary experience and expertise to accomplish the goals of the proposed research project.

**Approach:** The overall strategy, methodology, and analyses are well-reasoned and appropriate to accomplish the specific aims of the project within the proposed timeline.

Projects that include opportunity for participation by URM students and fellows are strongly encouraged.
AVAILABLE RESOURCES
Utilization of the Partnership cores is strongly recommended.

**Research Education Core**
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, this core can help investigators identify UMass Boston students to work as part of their research teams. To request an appointment, please contact U54REC@umb.edu.

**Shared Resources:** **Research Design and Analysis Core**, **Genomics Core**
The **Research Design and Analysis Core (RDAC)** 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, please contact Carol Lowenstein (Carol.Lowenstein@dfci.harvard.edu).

The **Genomics Core (GC)** 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, please contact Susan Patalano (susan.patalano@umb.edu) or 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 U54 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, please contact Shoba Ramanadhan (Sramanadhan@hsph.harvard.edu), Tiffany Donaldson (tiffany.donaldson@umb.edu), or Eduardo Siqueira (Carlos.Siqueira@umb.edu).
ELIGIBILITY & REQUIREMENTS

- All investigators must be DF/HCC members. To apply for membership, please visit www.dfhcc.harvard.edu/membership.
- PIs must be appointed as faculty at their respective institutions; post-doctoral fellows are not permitted to serve as PIs on proposals.
- Investigators may not a) submit an application if they have received Partnership project funding within the last two years, or b) submit more than one application.

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

This is a joint application. All materials must be a single PDF file and submitted to Abby Shain at u54partnership@umb.edu.