

INTERNAL REQUEST FOR PROPOSALS: *PILOT AND FULL PROJECT* FOR INCLUSION IN THE U54 COMPETING RENEWAL APPLICATION

Background

New Mexico State University (NMSU) and the Fred Hutchinson Cancer Research Center (Fred Hutch) have been funded for the past 20 years by the [National Cancer Institute's Partnerships to Advance Cancer Health Equality \(PACHE\)](#) program. The goal of this U54 [Partnership for the Advancement of Cancer Research](#) (PACR) is to build upon the increasing cancer-research capacity at NMSU and increase knowledge and attention to cancer-related health disparities research at Fred Hutch.

The overall goals of the U54 Partnership are the following:

1. Continuing to develop a diverse portfolio of robust cancer research projects that span clinical, basic, and population health sciences.
2. Collaborating with regional community organizations that work with underrepresented populations to reduce cancer health disparities.
3. Maintaining, strengthening, and evaluating our effective research education programs for current and future underrepresented scientists.
4. Continuing to implement evidence-based relevant cancer-related public health interventions within underrepresented communities.
5. Expanding the scientific collaboration among U54 Partnership members and other faculty within the two institutions.

U54 Pilot and Full Project Objectives

The purpose of this initiative is to provide support for the formation of NMSU-Fred Hutch scientific collaborations in a research areas relevant to the U54 Partnership for the Advancement of Cancer Research (cancer.nmsu.edu; fredhutch.org/pacr). Funds are available for two different levels of collaborative research: pilot and full projects. The **Pilot Project** is intended to provide funding (up to \$120,000 per year direct costs shared between both institutions) and have the potential to develop into a U54 Full Project or small NIH grant. The **Full Project** is intended to provide funding (up to \$275,000 per year in direct costs shared between both institutions) and show the potential to develop into an NIH R21 or R01 grant. All projects must be co-led by an NMSU investigator and a Fred Hutch investigator.

The partnership seeks proposals that will be included in the next U54 competing renewal, anticipating a submission in November 2022, with the award period starting in September 1, 2023. Research projects, in general, may be in any area of basic, clinical, translational, prevention, control, behavioral, and/or population research. **New partnerships are encouraged to apply for Pilot Project funding.**

Applicant Eligibility

Applicants must be current active members of the NMSU and Fred Hutch faculty in a position that is required to conduct independent research.

Grant Period

September 1, 2023 through August 31, 2026

Application Forms and Deadlines

All proposals must have a minimum of **two** co-PIs; one from NMSU and one from the Fred Hutch. Applications will include the following (please also see page 5 of this document):

1. **Letter of Intent (LOI):** due by 5pm PT / 6pm MT on March 1, 2022 via REDCap survey. LOI must include the following:
 - Proposal type (i.e. **Pilot** or **Full** Project)
 - Title of Research Project
 - The names of NMSU and Fred Hutch Collaborators, including indication of ESI status
 - Specific Aims (download template [here](#))

2. **Proposal Documents:** due by 5pm PT / 6pm MT on April 29, 2022 via REDCap survey. Research Plan must include the following:
 - **Abstract** (download template [here](#))
 - **Research plan:**
 - *Specific Aims* (1 page maximum for both **Pilot** and **Full** Projects): please only upload this document if Specific Aims have changed since submitting the LOI. Download template [here](#):
 - **Research Plan (6 pages maximum for Pilot Projects; 12 pages maximum for Full Projects)** (download template [here](#))
The subsections of the research plan should include: Significance, Innovation, Approach, Expected Results, Potential Pitfalls, Alternative Plans.
 - **U54-Specific Elements** (download template [here](#)):
 - Address *distribution of work, sustainability, compatibility of proposed project with the U54 goals, environment, and relevance to cancer health disparities* (1 page maximum for both **Pilot** and **Full** Projects)
 - **Budget form** (NIH PHS 398 form Page 4) and **Budget Justification form** (NIH PHS 398 form Page 5) per institution:
 - The total direct cost across both institutions **should not exceed \$120,000/year for a Pilot Project Proposal**
 - The total direct cost across both institutions **should not exceed \$275,000/year for a Full Project Proposal**
 - Do not include indirect cost (F&A) in the budget total unless the project anticipates having a subcontract
 - This is an internal RFA, therefore institutional sign-off is NOT required for this application
 - Download NMSU budget and justification template [here](#).
 - Download Fred Hutch budget and justification template [here](#).
 - **NIH Biographical Sketch** for each PI and any other key personnel (download template [here](#)). Download a Sample Biosketch [here](#).
 - **Additional Materials** (to be uploaded as separate attachments)
 - Bibliography and References cited
 - Study Timeline
 - Facilities and Resources
 - Targeted/Planned Enrollment Table (if applicable)

- Protection of Human Subjects, Inclusion of Women and Minorities, Inclusion of Children, Vertebrate Animals, and/or Select Agent Research (if applicable)
- Letters of support (if applicable)
- Consortium/Contractual arrangements (if project anticipates subcontracts)
- *Note: If a proposal is recommended for funding, a Just-in-Time (JIT) protocol will be followed for projects that include human subjects, animals or biohazards. Any necessary IACUC, IBC or IRB certifications will need to be in place before research can start.*

Submission Instructions

All application materials will be submitted electronically via REDCap. Please upload all documents in PDF format.

The LOI should be submitted first via REDCap using the following link:

<https://nmsu.link/cancer>

After submitting the LOI, REDCap will redirect to a confirmation page. At the bottom of this page is a “Survey Queue” where you can access the link to a second survey, “2022 Pilot and Full RFA-Complete Packet.” **You will use this survey link to submit the final proposal documents.**

Please click the, “Get link to my survey queue” button. We recommend you have this link emailed to you AND record the link (preferably as a bookmark). ***Note: Neither PACR nor REDCap maintain a record of the “2022 Pilot and Full RFA-Complete Packet” survey link. It is imperative that you maintain the link in your records, so you are able to submit your proposal.***

To ensure data integrity, please have **only one person** submit all application materials within both the LOI and Complete Packet surveys. Information in both surveys may be uploaded, replaced, or removed multiple times prior to the deadline before “Submitting” the survey. If multiple people access the surveys, data may be overridden.

Program Directors:

Graciela Unguez, Regents Professor, Department of Biology, NMSU
gunguez@nmsu.edu; 575-646-7963

Julian Simon, Associate Professor, Clinical Research, Fred Hutch
jsimon@fredhutch.org; 206-667-6241

Program Managers (please contact for more information or questions):

Helena (Lené) Loest, NMSU PACR Program manager
hloest@nmsu.edu; 575-646-5104

Marilyn Drennan, Fred Hutch PACR Program manager
mdrennan@fredhutch.org; 206-667-4226

Deadlines

- Letter of Intent (Required) Due: **Tuesday, March 1, 2022 by 5 pm PST / 6 pm MT**
- Proposal Submission Due: **Friday, April 29, 2022 by 5 pm PST / 6 pm MT**

Funding Timeline

- June 2022: Study Section Review
- June 2022: Internal Advisory Committee reviews Study Section comments and recommends projects for funding

- July 15, 2022: Projects notified of funding decision and invited to present project to the PACR Program Steering Committee
- September 2022: Projects present to the PACR Program Steering Committee
- October 2022: Projects invited to modify proposals in response to Program Steering Committee and Study Section Feedback
- October 31, 2022: Final proposal documents due to PACR Program Managers
- November 2022: Projects submitted to NCI/CRCHD with U54 Competing Renewal Application
- May 2023: Notice of Award
- September 1, 2023: Project Start Date

For More Information:

Travel support for potential collaborators is available upon request. The program has limited funds to support travel of prospective applicants to visit potential collaborators in Seattle or Las Cruces. Please contact Lené or Marilyn (contact information listed above) for travel assistance and information.

Proposals for current and formerly funded projects are available upon request. Please contact Michele Shuster (NMSU) mshuster@nmsu.edu or Karen Peterson (Fred Hutch) kpeterso@fhcrc.org to request a sample proposal.

For referrals to prospective collaborators per institution, contact our program directors listed above.

Websites:

Listing of recently funded U54 projects:

- <https://www.fredhutch.org/en/research/divisions/public-health-sciences-division/research/cancer-prevention/pacr/projects.html>

Fred Hutch main website:

- <http://www.fredhutch.org>

NMSU main website:

- <http://www.nmsu.edu>

Partnership for the Advancement of Cancer Research (PACR):

- PACR Fred Hutch: <http://www.fredhutch.org/pacr>
- PACR NMSU: <http://cancer.nmsu.edu>

National Cancer Institute's Partnerships to Advance Cancer Health Equality (PACHE):

- <https://www.cancer.gov/about-nci/organization/crchd/diversity-training/pache>

U54 PILOT AND FULL PROJECT APPLICATION CHECKLIST

Final Proposal Documents due by 5pm PT / 6pm MT on
 April 29, 2022 via REDCap survey
 Documents sent after 5 PM PT **WILL NOT BE ACCEPTED**

Listed below are the components of a complete application package. Use this checklist to ensure that your application is complete and in compliance with the application requirements. This checklist is provided for your reference only.

CHECK OFF	REQUIRED DOCUMENTS
<input type="checkbox"/>	1. Abstract
<input type="checkbox"/>	2. Specific Aims (limited to 1 page): please only upload this document if Specific Aims have changed since submitting the LOI
<input type="checkbox"/>	3. Research Plan (6 pages maximum for <i>Pilot</i> Projects; 12 pages maximum for <i>Full</i> Projects) The subsections of the research plan should include: Significance, Innovation, Approach, Expected Results, Potential Pitfalls, Alternative Plans.
<input type="checkbox"/>	4. U54-Specific Elements: distribution of work, sustainability, compatibility of proposed project with the U54 goals, environment, and relevance to cancer health disparities (1 page maximum for both <i>Pilot</i> and <i>Full</i> Projects)
<input type="checkbox"/>	5. NMSU budget and budget justification
<input type="checkbox"/>	6. Fred Hutch budget and budget justification
<input type="checkbox"/>	7. NIH Biographical Sketch for each PI and any other key personnel
<input type="checkbox"/>	8. Additional materials (to be uploaded as separate attachments): <ul style="list-style-type: none"> • Bibliography and References cited • Study Timeline • Facilities and Resources • Targeted/Planned Enrollment Table (if applicable) • Protection of Human Subjects, Inclusion of Women and Minorities, Inclusion of Children, Vertebrate Animals, and/or Select Agent Research (if applicable) • Letters of support (if applicable) • Consortium/Contractual arrangements (if project anticipates subcontracts)

U54 **PILOT AND FULL PROJECT GRANT APPLICATION EVALUATION CRITERIA**

Review Process:

A study section comprised of faculty from NMSU, Fred Hutch, and ad-hoc external reviewers, when applicable, will review proposals coinciding with their scientific expertise and provide a written evaluation. All submitted pilot and full proposals will be reviewed. The U54 Internal Advisory Committee (IAC) will review the Study Sections' written evaluations and advise the co-Program Directors on the final proposal decisions. Selected projects will be invited to present their project to the U54 Program Steering Committee (PSC) in September 2022. Projects will then have the opportunity to revise their projects based on feedback from the Study Section, IAC, and PSC before submitting final documents to the Program Managers on or before October 31, 2022.

Because faculty across multiple disciplines will review proposals, please write in a clear and concise style with detail that can be understood by an "*intelligent non-expert*." Use basic English, avoiding jargon or excessive language.

When writing a proposal, please keep in mind the overall goals of this collaboration between NMSU and the Fred Hutch, namely, to expand the current cancer research infrastructure at NMSU and increase knowledge and attention to cancer-related health disparities at both Fred Hutch and NMSU. The partnership is guided by five specific aims to achieve this overall goal (see Background section of RFA, page 1).

Pilot and Full Project Proposal Evaluation Criteria

The U54 Pilot and Full Project evaluation template can be downloaded [here](#).

- **Significance:** Does this proposal address an important problem consistent with the objectives of the CPACHE program? If the aims of the application are achieved, how will scientific knowledge be advanced? What will be the effect of these studies on the concepts or methods that drive this field of cancer research and/or research on cancer disparities?
- **Investigator:** Are the investigators appropriately trained and well suited to carry out this work? Is the research proposed appropriate to the experience level of the principal investigators and other researchers (if any)? Is the CDP and mentorship plan adequate?
- **Innovation:** Does the project employ novel concepts, approaches or methods? Are the aims original and innovative? Does the project challenge existing paradigms or develop new methodologies or technologies?
- **Approach:** Are the conceptual framework, design, methods, and analyses adequately developed, well-integrated, and appropriate to the aims of the project? Does the applicant acknowledge potential problem areas and consider alternative tactics?
- **Environment:** Does the scientific environment in which the work will be done contribute to the probability of success? Do the proposed experiments take advantage of unique features of the scientific environment or employ useful collaborative arrangements? Is there evidence of institutional support?
- **Compatibility** with the U54 goals: To what extent does the project address the development of collaborative programs of research? To what extent does the project build new bridges across programs or areas that could benefit from seed funding? To what extent does project offer training opportunities for students?
- **Pilot projects** need to demonstrate potential to develop into a full project or small NIH grant.
- **Full projects** need to demonstrate potential to develop into an independently funded research project (R01 or similar).

Evaluation Scale

The NIH 1 – 9 rating scale for each of the following areas (1 – 2 = outstanding; 3 = excellent; 4 – 6 = average; 7 – 9 = poor) will be used. Reviewers should not only consider the relative number of strengths and weaknesses noted, but also the importance of these strengths and weaknesses to the criteria or to the overall impact when determining a score. For example, a major strength may outweigh many minor and correctable weaknesses. The table below provides additional guidance to assist reviewers in determining their ratings.

IMPACT	SCORE	DESCRIPTOR	ADDITIONAL GUIDANCE ON STRENGTHS AND WEAKNESSES
High Impact	1	Exceptional	Exceptionally strong with essentially no weaknesses
	2	Outstanding	Extremely strong with negligible weaknesses
	3	Excellent	Very strong with only some minor weaknesses
Moderate Impact	4	Very Good	Strong but with numerous minor weakness
	5	Good	Strong but with at least one moderate weakness
	6	Satisfactory	Some strengths but also some moderate weaknesses
Low Impact	7	Fair	Some strengths but with at least one major weakness
	8	Marginal	A few strengths and a few major weaknesses
	9	Poor	Very few strengths and numerous major weaknesses

Minor Weakness: An easily addressable weakness that does not substantially lessen impact.

Moderate Weakness: A weakness that lessens impact.

Major Weakness: A weakness that severely limits impact.