



**CDU Accelerating Excellence in Translational Science (AXIS) Center
Pilot Project Program 2021
Request for Applications (RFA)**

Key Dates:

Release Date:	04/15/2021
Letter of Intent Due Date:	04/30/2021
Full Application Due Date:	06/01/2021
Anticipated Award Date:	08/01/2021

Purpose

In order to augment the quality and quantity of research conducted at Charles R. Drew University of Medicine and Science (CDU), the AXIS Center is inviting investigators to apply for pilot funding to facilitate innovative approaches in translational research in basic mechanisms, prevention, diagnosis, and treatment of diseases that disproportionately affect minority and underserved communities. In addition, we strongly encourage applications that employ Community Based Participatory Research (CBPR) methods.

Cross-disciplinary projects that address new approaches to health disparities in the areas of Cancer, Cardiometabolic diseases, HIV Aids, Mental Health and Behavior Sciences will be given high priority. **In this cycle, we encourage applications that focus on addressing health disparities and inequities associated with SARS-CoV-2 (COVID-19) infection, testing, treatment and vaccination.**

Partnerships with CDU's Community faculty and local community organizations engaged in addressing health disparities are also encouraged to participate.

There must be a clear plan to use the pilot project support to secure subsequent independent funding, such as ROI, R21, R03 and K awards from other non-institutional sources, e.g., NIH, DOD, CDC and others. An applicant may submit only one application as principal investigator but can be a co-investigator on another proposal.

If the principal applicant is a junior-level investigator at the Postdoctoral Fellow or Assistant Professor Rank, s/he must designate a mid-level or senior-level mentor/collaborator, with a brief but clearly described mentoring plan. Additionally, each application must show utilization of AXIS resources whenever applicable. With the pilot funding, we hope to better position CDU investigators for conducting basic, clinical and translational research, especially research that focuses on reducing and/or eliminating health disparities.

Maximum Budget and Project Award Period

AXIS Pilot Project Program aims to fund **three to five** pilot projects at a **minimum direct costs of \$50,000 to a maximum \$70,000** per pilot project. Each award will be for a total of two years. Budget period will cover Year 1 (08/01/21 to 2/28/22) and Year 2 (3/1/22 to 2/28/23).

Application Timeline:

1. By 12pm noon Monday, April 30th, 2021 applicants must submit an letter of intent with required supporting documents (See page 3 for required documents)
2. By Wednesday, May 15th, 2021, candidates will be notified if they have been selected to submit a full proposal and supporting documents.
3. By Monday, June 01, 2021, selected candidates must submit the full proposals with supporting documents.
4. Applicants whose proposals are selected for funding will be notified as soon as possible (July 2021). The full proposals and supporting documents will be forwarded to the NIH/NIMHD for final approval.

AXIS Center Overview

One of the **Accelerating eXcellence In translational Science (AXIS)** Center's overarching goals is to provide the infrastructure to translate scientific discoveries into advances that improve health disparities among underserved and under-resourced communities in Los Angeles and the nation.

AXIS is CDU's integrated hub for translational research. It continues to provide experienced leadership, and a myriad of clinical, translational, and community partnered activities. AXIS continues to play a critical role in addressing CDU's strategic plan for the growth and sustainability of our research excellence. While, we have made significant advances in the areas of Cancer, Cardiometabolic, and HIV related health disparities, our recently renewed center will expand our capabilities in Mental Health, and Health Policy Research. In addition, we will continue to build upon our newly funded Precision Medicine program. We will utilize our outstanding resources in: Community Outreach and Engagement; Advanced Technologies such as Next Generation Sequencing for identifying Genomic Data; Drug Discovery; Integrated Clinical Tissues, Biorepository and Bio banking Facility; Clinical Studies/Trials Resources; Medical Bioinformatics; and Methods for Statistical and Epidemiological Studies. The goals of our recently renewed AXIS center grant are:

Goal 1: To enhance the infrastructure capacity in translational research using Precision Medicine model in the areas of Cancer, Cardiometabolic, and HIV/AIDS. Provide support for the emerging research pillars in Mental Health and Health Services

Goal 2: To continue the integration of basic, clinical, behavioral and community-partnered research by fostering collaboration among disciplines, departments and schools at CDU, and sustainable collaboration with community leaders and investigators across other research institutions.

Goal 3: To facilitate and elevate professional development and best practices in mentored clinical and translational research training on minority health and health disparities.

Available AXIS Center Core/Unit resources include:

- Investigator Development Core
- Administrative Core
- Community Outreach and Engagement Core
- Research Infrastructure Core with Precision Medicine focus:
 - Research Design & Biostatistics Unit
 - Technology Laboratory Unit
 - Drug Discovery Unit
 - Clinical Research Resources Unit
 - Biomedical Informatics Unit

For detailed information and a description of the AXIS Cores/Units and Resources please contact the AXIS Administration Office (323-563-5926).



A. Eligibility Criteria

1. The project must be translational and/or cross-disciplinary in nature (including 2 of the 4 disciplines – basic, clinical, community outreach, social/behavior).
2. Viability of the pilot study and commitment of the team to develop an independent research proposal based upon the pilot project within one year after receiving the award.
3. Research questions of relevance to the reduction of health disparities in basic mechanisms, clinical, health services, epidemiological, policy or behavioral topics.
4. Feasibility of conducting the study in the time period proposed with funds allocated.
5. The scientific strength of the design, methods and analytic plan.
6. Provide substantial evidence that this support may lead to a successful R21 and eventually ROI application.
7. Senior investigators and investigators with current independent funding will not be eligible. In addition, those individuals who have received prior Pilot funds from AXIS will have a low priority.

B. Priority

1. **Junior level Investigators who have not previously received AXIS Center Pilot funding.**
2. Utilization of the AXIS Center Core's/Units and other CDU resources, including the Vivarium, to build upon the application of Precision Medicine to understand and eliminate health disparities.
3. Proposal submissions in translational research in basic mechanisms, prevention, diagnosis, and treatment of disease that disproportionately affect minority and underserved communities.
4. Proposals with special emphasis in areas of Cancer, HIV/AIDS, and Cardiometabolic.

C. Instructions for Submission

a. Step One:

- Submit a Letter of Intent (Must be no more than 1 page – Arial 11 Font)
 1. Proposal title
 2. Specific Aims
 3. Relevance to reduction of minority health disparities.
 4. Identify if study design will include animal based research (IACUC) or Human Subject Research (IRB)
 5. AXIS Core's/Research Units planned to utilize.
 6. Names of Co-investigators/Mentor's (Current NIH Biosketches are needed for the PI, Co-Investigators and mentor)

b. Step Two for Full Application (Invited Investigators Only):

All applications should follow an abbreviated NIH application, using PHS398 form in a **Microsoft word document**.

All documents should be single single-spaced, 11-pt Arial. Applications should include the following:

- a. Cover page (one page maximum) describing: a) collaborative and translational aspects of the project, b) how the project will lead to proposal submission for future funding, c) a description of collaborations with other center grants at CDU: CDU/UCLA Cancer Center, Urban Health Institute, RTRN, CTSI, and CRECD; and d) how AXIS resources will be used.
- b. Specific Aims (1 page)
- c. Research Strategy (6 pages) – Must include: Significance, Innovation, Preliminary Studies, Approach, Impact, and References Cited. The maximum limit is 6 pages; this does not include references or mentoring plans. The font should be Arial Black, Size 11.
- d. NIH Format Biographical sketch (PHS 398):
- e. NIH Format Other Support Page (PHS 398)
- f. NIH Format Budget and Budget Justification (PHS 398)
- g. Resources (Environment) Form (PHS 398)



- h. Planned Enrollment Report (PHS 398) – *If applicable.*
- i. All Personnel Form (PHS 398)
- j. Mentoring Plan for each Junior Investigator or Trainee
 - i. Not to exceed 12 pages; this is separate to research strategy
 - ii. Candidate Background, Career Goals and Objectives – Scientific Biography, Career Development/Training Activities during the Award Period, Training in the Responsible Conduct of Research.
 - iii. Must include at least one senior level mentor (Associate to Full Professor)
- k. If applicable, full description of Protection of Human Subjects and Research Risk; Inclusion of Women, Minorities and Children in Research, Care and Use of Vertebrate Animals in Research; and Biohazards and Select Agencies.
 - For applications involving the use of human subjects, a Targeted/Planned Enrollment Table and CDU Institutional Review Board (IRB) approval **must be included.**
 - For applications involving animals, Lindquist Institute's Institutional Animal Care and Use Committee (IACUC) approval **must be included.**

All PHS templates available at: <http://grants.nih.gov/grants/funding/phs398/phs398.html>.

Biosketches Format Pages, Instructions: <https://grants.nih.gov/grants/forms/biosketch.htm>

Applications will only be accepted using MS Word document forms. Applications need to be compiled into one document. Please do not submit as PDF

D. Review Process and Selection Criteria

Pilot Project applications will be reviewed and prioritized by internal and external reviewers in the field. We will use the NIH recommended review process with 9-point scoring system. Briefly, the initial merit review of applications for support through the AXIS will be based on the six following criteria: collaborations and partnerships, significance, approach, innovation, investigators, and environment.

- **Collaborations and Partnerships:** Has the applicant included collaborations with additional investigators, other center grants at CDU, Community Faculty and local community groups and organizations. Is there a commitment and action plan that clearly demonstrates the development, adoption, and implementation of best practices through the collaborating centers and other national consortia and networks, where appropriate?
- **Significance:** Does the study address an important health question? If the aims of the application are achieved, how will scientific knowledge or clinical practice be advanced? What will be the effect of the study on the concepts, methods, technologies, treatments, services, or preventive interventionist that drive the field? Will this study lead to new funding? An objective of the program is to stimulate new science. Hence, applications that are likely to lead to new R21/RO1 applications (or similar national grants funding sources) are of higher priority.
- **Approach:** Are the conceptual or clinical framework, design, methods and analysis adequately developed, well integrated, well-reasoned and appropriate to the aims of the project? Does the applicant acknowledge potential problems and consider alternative strategies?
- **Innovation:** Is the project original and innovative? For example: Does the project challenge existing paradigms or clinical practice or address an innovative hypothesis or critical barrier to progress in the field? Does the project develop or employ novel concepts, approaches, methodologies, tools or technologies? How will this application provide results that are novel and likely to open new avenues of investigation at CDU and beyond?
- **Investigators:** We anticipate that some of our Early Stage Investigators may not have a strong research experience. The AXIS program is committed to train such individuals to become independent investigators. We however, do anticipate that these investigators will have strong experienced mentors on their team with clearly defined study hypothesis, aims and objectives. Applicants must include a well thought out mentoring plan. Investigators must demonstrate a time commitment to complete the proposed study within two years.



- **Environment:** Does the scientific environment in which the study will be performed contribute to the probability of success? Does the proposed study benefit from unique features of the scientific environment, or subject populations, or employ useful collaborative arrangements? Is there evidence of institutional support?

E. Submitting LOI/Full Application

Please email your LOI/Application to:

- Dr. Jay Vadgama (jayvadgama@cdrewu.edu)
- Dr. Yanyuan Wu (yanyuanwu@cdrewu.edu)
- Dr. Mohsen Bazargan (mohsenbazargan@cdrewu.edu).
- Mr. Jacob De La Torre (jacobdelatorre@cdrewu.edu)

F. Contact Information

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