

Duke Global Cancer
Request for Applications: Pilot Projects
Submission Deadline: 17 October 2016

Background

The Duke Global Health Institute (DGHI) was created in 2006 to be responsible for all global health research, education, and policy development at Duke. Based on Duke's rich tradition of interdisciplinary work and drawing on the intellectual assets of the entire University to address global issues, the Institute seeks to reduce disparities in health in our local community and worldwide through programs and activities in global health education, research, service and policy.

One of DGHI's key strategies is to promote interdisciplinary work in global health, including the use of enabling technologies for educational and research purposes. The Duke Cancer Institute (DCI) has partnered recently with the DGHI to create Duke Global Cancer (DGC). The DCI is one of only 41 centers in the country designated by the National Cancer Institute as a "comprehensive cancer center," combining cutting-edge research with compassionate clinical care. The overall aim of the DCI is to grow its involvement in cancer research and education in Low and Middle Income Countries (LMIC), particularly in Africa. As part of this aim, DGC will actively engage researchers in global cancer from across the University and Medical Center on such issues as disease pathogenesis, mHealth, palliative care, and prevention and health promotion.

According to the World Health Organization, cancer accounted for 8.2 million deaths in 2012. Based on current projections, annual cancer cases will go from 14 million in 2012 to 22 million by 2032. About 70% of all cancer deaths occur in LMIC. At Duke, there is growing interest in global cancer across diverse disciplines. In partnership with the DCI, DGHI is working to strengthen and expand research activities in global cancer.

Description of the DGHI/DCI Cancer Pilot Project Program

Duke Global Health Institute and Cancer Institute will provide up to \$25,000 direct costs for one year of support for each pilot research project that address issues relating to cancer prevention, diagnosis, or treatment in resource constrained environments. Two pilot projects will be funded. Specific emphasis will be given for interdisciplinary research between DGHI and DCI faculty with the larger goal of enabling investigators to leverage preliminary findings and data to obtain external funding and develop collaborations in LMIC. New investigators and/or new collaborations and projects in global health research are encouraged to apply and will be given special consideration.

Eligibility

Applicants must have a Ph.D., M.D., or equivalent degree and otherwise meet standard NIH requirements for a R01 application and hold a Duke faculty appointment. Postdoctoral fellows may apply under the direction of a senior faculty mentor.

Areas of Research Focus

The pilot project program will not be used to support clinical trials. If you have any questions on the nature or scope of the proposed project, please contact Dr. Nelson Chao (see "Application Submission" section below).

The research proposals may pertain to cancer prevention, detection, diagnosis, and treatment as follows (but not limited to):

1. Basic, translational, or clinical research projects (objectives must be achieved during the proposed time frame of the study). This can include formative research and protocol development for community-based and clinic-based intervention studies; development of standard operating procedures to ensure quality assurance and quality control (Q/A and Q/C) measures in these studies, data analysis, statistical analysis plan development, or statistical modeling (e.g., able to be completed in one-year).
2. Informatics development, data managing, and data sharing to improve research capabilities in LMICs or training in informatics technology that enhances cancer research capabilities and collaborations;
3. Establishment or enhancement of biorepositories or biospecimen resources, adapting best practices to

facilities in LMICs, or building informatics to support biorepositories;

4. Retrospective study based on a well-defined scientific rationale or, demonstrating an opportunity to test assays in a unique patient population, if done in a year.

Applications must propose work in or applicable to LMICs. A listing of eligible countries can be found at the World Bank website: <http://data.worldbank.org/about/country-classifications/country-and-lending-groups>

Special emphasis and consideration will be given to the three areas where Duke Global Cancer is establishing a strong connection. These three sites are Tata Medical Center in Kolkata, India, Bugando Medical Center in Mwanza, Tanzania and Barretos Cancer Center, Barretos, Brazil.

Applicants are encouraged to identify collaborating in-country investigators, and should describe plans for how the results generated will be applied to obtain future external funding.

Budget limits

There is a maximum of \$25,000 direct costs available for each pilot project.

The following budget categories will not be supported: Indirect costs, capital equipment (\$5,000 or greater in cost); faculty salary support, staff salary support for non-Duke employees and patient care costs. For questions regarding allowable staff salary support, please contact Lisa Wright at 919-668-3747 or lisa.wright@duke.edu.

Project Period

Approved applications will be funded for the period 1/1/2017 – 12/31/17 with the possibility of a second year renewal subject to availability of funds.

Application Format

Please observe the following guidelines and page limits. Applications should follow standard NIH formatting rules (Arial 11pt font, single spaced, half inch margins).

Cover Page. (one page):

- Proposal title
- Name, title, departmental affiliation, address, e-mail address, and telephone number of all proposed investigators
- Designation of a Principal Investigator or Co-Principal Investigators

Specific Aims (one page)

Research Strategy (3 page maximum)

- Statement of scientific objectives and their significance
- Work already completed related to the proposed work
- Description of the research team and research setting
- A statistical analysis plan must be included (see “Statistical Considerations” below).
- Applicability of project goals to low and middle-income countries and plans to develop a collaboration with researchers in that country
- Potential for future grant support and specific plans to achieve external funding goals
- Additional, highly relevant information may be placed in an Appendix.

NIH biosketch (for all key personnel, include current grant support)

Budget (1 page)

Budget justification (no page limit, but be succinct)

Appendix materials (1 page maximum each) including:

- Research schedule and milestones
- Collaborative nature of the project
- Relevance to mission of the DGHI/DCI
- Letter of support from a collaborating researcher in a low or middle income country, if applicable

Clinical Specimen Studies (not subject to page limits): Institutional assurances must be in place prior to final funding if your project is selected. If the use of human samples is proposed, please be sure to include a completed NIH section “Human Subjects Research” in your application.

Statistical Considerations

Each aim must have its own statistical section (e.g., Statistical Consideration for Aim x). Within each statistical section the primary statistical hypothesis/objective for that aim must be stated. The secondary, exploratory or hypothesis generating objectives for the aim should be stated clearly and separately within the statistical section.

If the primary objective is a hypothesis, the statistical decision rule must be clearly outlined. If not (e.g., building a classifier) pertinent details (e.g., validation) must be given. The sample size available for each primary objective must be provided. If the primary objective is a hypothesis, power calculations (or Bayesian counterparts) must be provided. A discussion about the clinical relevance and realism of the effect sizes must be provided. If no power calculations are provided, then the investigator must clearly state that what is proposed is a pilot study. A brief plan for the analyses of the secondary, exploratory or hypothesis generating objectives must be provided.

Scoring

The applications will be ranked using the following criteria:

- Significance
- Investigator(s)
- Innovation
- Approach
- Environment

Project Monitoring

Funded investigators will be expected to attend teleconferences and meetings when requested and present updates on progress at the DGHI annual meeting.

A progress report detailing the funds expended and the progress toward completion of the specific aims will be submitted following six months of funding. A final report is due within 30 days of the end of the project period.

Application Submission

For questions about the nature or scope of scientific projects, please contact Nelson Chao, MD, MBA (nelson.chao@duke.edu).

Projects must be within the program research focus areas and must have clearly defined deliverables to be competitive.

Applications should be submitted by the application due date 5:00 PM (Eastern) October 17, 2016 electronically. Electronic submissions are required. PDF format is preferred. Late or incomplete applications or applications not conforming to the page limits will not be reviewed.

Submit an electronic copy of the application to Joel Ross at joel.ross@duke.edu