



2017 Special RFA on “NUTRITION, OBESITY and CANCER”

NORC PILOT/FEASIBILITY GRANT APPLICATION INSTRUCTIONS for special RFA

Purpose:

Approximately \$60,000 is available to fund one or two P&F grants around the theme of **nutrition, obesity and cancer**. The major objective of this program is to provide research support to develop preliminary data and/or potential novel approaches (methods) from pairs of investigators with one investigator from LSU-HSC in New Orleans (cancer expertise) and the other from Pennington Biomedical (obesity expertise).

The hope for a Pilot and Feasibility Award is that it will generate enough preliminary data for the investigator(s) to obtain research funding by conventional mechanisms (e.g., R01).

This program needs to have at least one of the 2 investigators (either from LSU-HSC or from PBRC) to be a **young investigator** while the other can be more a mentor in the execution of the scientific proposal.

Background:

Nutrition has always been considered a pillar of optimal health in general. In cancer, adequate nutrition is considered to be essential in the prevention of cancer and the recovery from the challenging therapies prescribed for this disease. More recently new findings have shown that obesity is linked with an increased risk for the development of at least 14 different cancers, further strengthening the link nutrition and cancer. The biological mechanisms linking obesity and cancer, its implications in prognosis and outcome of treatment, and the social and economic determinants of obesity in cancer patients have become areas of great interest for the National Cancer Institute. Possible links between obesity and cancer include among others:

1. Obesity as a driver of chronic inflammation, including the chronic inflammatory cells that support the growth of cancer stem cells.
2. Obesity as direct support of the growth of cancer stem cells.
3. Impact of obesity on the outcome of treatment in cancer patients.
4. The mechanisms of cachexia in cancer
5. Neighborhood environments as determinants of obesity and its relation to cancer incidence and mortality

The convergence of obesity, nutrition and cancer create a unique opportunity to conduct multidisciplinary research among investigators with different but complementary backgrounds. Furthermore, the National Cancer Institute and the Cancer Moonshot Program have emphasized new initiatives on cancer prevention and novel forms of treatment (targeted therapies, and immunotherapy), by expanding the existing funding in these areas. Therefore it is essential that investigators from LSU-New Orleans Cancer Center and from Pennington Biomedical join forces to conduct research that demonstrates the link between obesity and cancer, and provides novel preventive and/or therapeutic approaches for patients with cancer.

This program is designed to:

- Encourage young investigators to develop the needed preliminary data to support new grant applications,
- Encourage more senior investigators to mentor younger investigators in developing novel approaches and techniques in support of application for new funding, and
- Encourage the formation of multidisciplinary research teams between obesity and cancer investigators.

Who is Eligible?

Full-time Associate or Assistant Professors.

- Junior investigators who do not have current or previous NIH (or equivalent) independent research support (excluding fellowship or career development awards)
- Teams of junior and senior faculty (senior as mentor only) working together to tackle a question of high priority regarding nutrition, obesity and cancer.
- Collaborative teams between basic, clinical, and population researchers working together to develop translational studies that pursue scientific questions on the impact of obesity on cancer.

There is no citizenship requirement for P/F recipients, BUT visiting scientists with whom the CENTER or other Louisiana Institution will not have a long-term collaborative relationship will not be considered for support. Applicants must hold a Ph.D., M.D., or equivalent degree, and have completion of at least one year of postgraduate work relevant to the desired research experience.

Initial Email Announcement

August 2017

Letter of Intent

Due: September 5, 2017

<http://norcfunding.pbrc.edu>

Full Application

Due: October 16, 2017

<http://norcfunding.pbrc.edu>

Please submit ONE DOCUMENT Electronically (PDF format in color) on the NORC website

A letter of intent is required initially to ensure eligibility and appropriateness of the research topic.

Only investigators who receive approval following their letter of intent will be eligible to submit a full application.

Letter of Intent Guidelines:

- One page maximum
- Project title, Principal Investigator(s).
- General description of intended work including a statement of PBRC or LSU-HSC scientific core usage.
- If applicable, name collaborative mentor.
- A letter of commitment to retention from the institutions.
- NIH Biosketch from PI(s) and mentor

Format of Application:

The application packet must include the following (Applicants are required to use the NIH 398 forms):

- NIH Face Page
- NIH Budget page + 1 page budget justification
NOTE: clinical protocols MUST be budgeted through the standard procedures. Contact your Sponsored Projects Office for details.
- NIH Biographical Sketch including "Other support" if currently independently funded.
- NIH Biographical Sketch from the mentor if applicable
- Research plan (**5-page maximum including references, Arial 11, single-spaced, .5 inch margins**).
 - A) Specific Aims
 - B) Background and Significance
 - C) Preliminary Data
 - D) Research Design and Methods
 - E) Relevance of the Proposed Project to the theme of nutrition/obesity and metabolic health
 - F) If relevant, the role of the mentor in the design and execution of the proposed research

G) Description of how the results of this study will lead to future investigations/grant applications.

H) References.

Any additional materials including the anticipated use of the cores and letters of support should be submitted as an appendix.

- If project involves a sponsor, a consultant or a mentor, this individual must write a letter of support for the application and clarify any potential overlap between their support and the subject of the proposal.

Additional Instructions:

1. Please list the Principal Investigator(s) name(s) on the top right-hand corner of every page of the application.
2. When completing the budget page, please refer to the list of expenditures allowed and not allowed included with these instructions.
3. Although facilities and administrative costs are allowed under the terms of the prime award, **it is our belief that these funds should be used in the spirit intended i.e. direct costs in support of this project. It is hoped that for an award of this type, your institution will be willing to forego the facilities and administrative costs and consider these costs as matching funds to your project.**
4. The following headings should be used for the research plan (sections A-H should be 5 pages maximum).
 - A. Specific Aims:** State concisely the hypothesis to be tested and the specific aim(s) to be achieved during the grant period. The aims must be reasonable to achieve during the one-year period of the grant. While it is possible to receive grants for 2 year proposals, the PI must define a quantitative, intermediate milestone that can be evaluated at the end of the 1st year of research.
 - B. Background and Significance:** State the relevance of the proposed project to the theme of nutrition, obesity and cancer. Discuss the use of Core Facilities (NORC and LSU-HSC).
 - C. Preliminary Studies/Progress Report:** Discuss the pertinent research findings that will help to establish the experience and competence of your project.
 - D. Research Design and Methods:** Concisely present your experimental design and the methods to accomplish your specific aims relating it to chronic disease and to longer term funding objectives. Also indicate how the results will be interpreted and how they will lead to future investigations. Well-known methods and standard procedures may be described very briefly or referenced, but novel experimental approaches should be outlined in more detail. This section should represent the bulk of the application.
 - E. Relevance of the Proposed Project to Nutrition, Obesity and Cancer research.**
 - F. Role of Mentor when applicable**
 - G. Description of how the results of this study will lead to future investigations/grant applications.**
 - H. References**

Appendix:

- Anticipated use of the cores
- Letters of support

Allocation and Expenditure of Funds:

Testing available at the NORC Cores are provided; however, supplies (when applicable) for the testing have to be budgeted.

Expenditures Allowed:

- Technical staff salary support
- Research supplies and animal maintenance
- Equipment costing less than \$5,000.
- Special fees (pathology, photography, etc.)
- Supplies
- We want to encourage the use of next generation sequencing (Dr. Michael Salbaum for details)

Expenditures NOT Allowed:

- Principal Investigator, or Co-Investigator, or Mentor salary support
- Secretarial/administrative personnel salary support
- Office equipment and supplies
- Computers
- Tuition
- Domestic or Foreign Travel
- Publication costs, including reprints
- Dues and membership fees in scientific societies
- Purchasing and binding of periodicals and books
- Honoraria and travel expenses for visiting lecturers
- Rental of office or laboratory space
- Construction or building maintenance
- Recruiting and relocation expense
- Indirect Costs

Scoring metric

Applications are scored using the NIH criterion for Significance including scientific premise, Innovation, Approach including scientific rigor, reproducibility and biological variables. Other score driving factors include likelihood of successful execution within the funding constraints (cost and time), potential for future funding, available mentoring and other Faculty/Institutional support.

Additional Information:

If the project involves human or animal subjects, submission to IRB or IACUC must be within two months (better one month) after receipt of notice of grant award. IRB/IACUC approval will be requested as per the NIH practice of just-in-time mechanism before funding is released.

Please check our NORC website <http://NORC.pbrc.edu> or contact Augusto Ochoa, Eric Ravussin or Jacqueline Fox (NORC Executive Secretary) at jacqueline.fox@pbrc.edu or 225-763-2686 if you have questions about the P&F application process. Please contact the Directors of the NORC Cores if information is needed regarding a specific Core (Human Phenotyping - Corby Martin, Molecular Mechanisms - Michael Salbaum, and Animal Models - Randy Mynatt).

Note that facilities and administrative costs for such NORC Pilot & Feasibility grants are STRONGLY DISCOURAGED.