

BLUE CROSS AND BLUE SHIELD OF KANSAS CITY AND BIONEXUS KC PRESENT
TRANSFORMING KC HEALTH RESEARCH GRANT

Issue Date: January 23, 2019



Kansas City



REQUEST FOR PROPOSALS

APPLICATION DEADLINES

1. **Letter of Intent is due by 5:00 p.m. on April 22, 2019.**
2. **Full application must be received by 5:00 p.m. on May 29, 2019.**
Applications received after 5:00 pm will not be accepted.
3. **Funded awards begin October 1, 2019.**

BioNexus KC is pleased to issue on behalf of Blue Cross and Blue Shield of Kansas City (Blue KC) a Request for Proposal (RFP) for Transforming KC Health Research Grant to be submitted for funding consideration. Background, Eligibility, Partnerships, Scope, Review Criteria, Application Procedures, Review Process, and Submission Instructions are provided below.

BACKGROUND

Blue KC is the area's largest locally-based health insurance provider. Our mission is to provide affordable access to healthcare and improve the health of our members. Being mission driven, we've been championing our region's health and wellness for more than 80 years. As a partner in health, Blue KC recognizes that health happens long before illness. Health doesn't happen in the doctor's office or at the hospital bedside – it happens where we live, work, play and pray, and it's in these settings that socioeconomic, behavioral, and environmental factors shape our community's health outcomes.

Numerous studies provide evidence that 90% of health outcomes are attributed to non-medical factors, leaving only 10% attributable to medical care. When the 90% is dissected, research indicates that:

- 40% of health outcomes are based on social factors, e.g. availability of resources to meet daily needs, such as educational and job opportunities, quality schools, living wages, transportation options, social support and social interactions, poverty, or healthy foods;
- 30% are attributable to health behaviors that are largely shaped by family patterns and cultural norms: diet, physical activity, alcohol, tobacco and other drug use, handwashing, or safe sex practices;
- 10% are attributable to the physical environment, e.g. violence, food deserts, play deserts, non-walkable communities, and environmental hazards of living conditions.
- 10% of health outcomes are shaped by genetics, such as inherited conditions and family history of disease

The healthcare community has begun to accept the notion that a person's zip code is a more accurate predictor of health status and life expectancy than their genetic code. In Jackson County, MO and Wyandotte County, KS, the average life expectancy is 77.19 years and 75.35 years respectively, compared to the U.S. national average of 78.80 years.¹ Understanding that health and nutrition are strongly correlated, Blue KC aims to address and improve social determinants of health for the Kansas City region by ameliorating food insecurity. Food Insecurity, defined as a lack of access to food of sufficient quality or quantity due to financial constraints,² affects 14% of the U.S. population.³ In the Kansas City region, 364,090 people are food insecure, including 1 in 6 children.⁴ Food insecurity is associated with multiple unfavorable health outcomes among adults including a host of complex chronic conditions such as heart disease, diabetes, hypertension, hyperlipidemia, poor mental

health and depression and higher medical cost.^{5,6,7}

Further research is needed to determine the causal relationship between food insecurity and adverse health outcomes and evaluate how best to implement programs designed to address health disparities in food insecure populations. Accordingly, Blue KC endeavors to fund such research in and for the Kansas City region.

¹ <https://www.rwjf.org/en/library/interactives/whereyouliveaffectshowlongyoulive.html>

² National Research Council. Food Insecurity and Hunger in the United States: An Assessment of the Measure. Committee on National Statistics, Division of Behavioral and Social Sciences and Education, eds. Washington, DC: The National Academies Press; 2006

³ Coleman-Jensen A, Rabbitt MP, Gregory C, Singh A. Household Food Security in the United States in 2014. Washington, DC: US Department of Agriculture, Economic Research Service; 2015.

⁴ Hunger by the numbers in Harvesters' 26-county region: <https://www.harvesters.org/Harvesters.org/media/assets-uploaded/Ambassador%20documents/hunger-by-the-numbers-FY17.pdf>

⁵ Stuff JE, Casey PH, Connell CL, et al. Household food insecurity and obesity, chronic disease, and chronic disease risk factors. *J Hunger Environ Nutri*, 2006; 1(2):43-62

⁶ Pan L, Sherry B, Njai R, Blanck HM. Food insecurity is associated with obesity among US adults in 12 states. *J Acad Nutr Diet*, 2012;112(9):1403-1409.

⁷ Gundersen C, Ziliak JP. Food insecurity and health outcomes. *Health Affairs (Millwood)*. 2015;34(11):1830-1839

ELIGIBILITY

Research organizations must partner with Community Based Organizations or schools to submit a research proposal aimed to improve health disparities in food insecure populations. Applicant organizations must reside in the Blue KC 32 county service area (30 Counties in NW MO and 2 Counties in KS: Wyandotte and Johnson). Awards will be made only to those organizations designated as a tax exempt 501(c)(3) not-for-profit organization. At the time of submitting the proposal, all investigators or representatives of the 501(c)(3) organization acting as financial partners, must fully disclose any conflict of interest with Blue KC or BioNexus KC.

As a condition of eligibility, an organization, including but not limited to any of its partners, affiliates, subsidiaries, investigators, or representatives (collectively, "Organization"), must agree that if it is selected for a grant award, Blue KC will have the exclusive right of first refusal to purchase any intellectual property created by the organization in the utilization of, or arising from, the Transforming KC Health Research Grant.

PARTNERSHIPS

Social Determinants of Health (SDoH) are optimally addressed through community collaboration and partnerships. Accordingly, a minimum of two organizations must partner in this research to submit a joint proposal. Community organizations must partner with a lead clinical research entity such as hospitals or universities. Blue KC recommends the use of evidence-based approaches to form partnerships that address Food Insecurity and other Social Determinants of Health. A focus on shared measurement, mutually reinforcing activities and continuous communication is critical to success.

SCOPE

Transforming KC Health Research Grant proposals must be applied research projects that evaluate the impact of increased access to healthy foods and its impact on community health status and outcomes and/or programs and interventions designed to address health disparities in food insecure populations. Studies should evaluate changes in health disparities, participant or community health improvement, or short and long-term participant or community outcomes resulting from the intervention(s). While integrating rigorous research methodologies within community-based programs can be challenging, successful proposals will clearly detail the research approach to be utilized while providing a plan for mitigating the impact of the approach on service delivery.

- Blue KC requests research-based proposals from partnering organizations which assess the impact of healthy food access on the health outcomes of food insecure children, adults, or older adults.
- Proposals must include identification of food insecure participants through validated, evidence-based Food Insecurity

screening tools, e.g. the USDA U.S. Household Food Security Survey Modules, Hunger Vital Sign screening, etc.

- Applicants may identify their own combination of outcomes. However, outcome measures must include at least one clinical or one healthcare utilization measure. Clinical outcomes include medical and behavioral factors, to include, but not limited to weight loss, reduced body mass index (BMI), improved blood pressure, Cholesterol (LDL), and Hemoglobin a1C values (in Diabetic individuals), reduced depression and anxiety, etc. Healthcare utilization measures may include the CDC Healthy Days measure, decreased emergency department visits, inpatient hospital admissions or readmissions. Partnerships which involve schools may propose attendance, behavioral and/or academic performance based outcomes as proxy to clinical and healthcare utilization outcomes.
- Applicants are strongly encouraged to leverage other funding sources to use in combination with requested Blue KC grant funds to execute proposed projects.

Proposals consistent with the following thematic areas are encouraged, however not required:

- Food insecurity interventions with communities living in marginalized conditions, to include individuals experiencing socioeconomic challenges in suburban communities;
- The prescribing and provision of healthy food as a medical or behavioral prescription, in lieu of or in conjunction with pharmaceutical prescriptions;
- Home delivery of healthy foods to individuals with complex chronic conditions (e.g. Diabetes, Heart Failure, HIV/AIDS, COPD, Autoimmune Disorders, etc.) and comorbidities.
- Reversal of Metabolic Syndrome, Diabetes Type II, Autoimmune disorders or other chronic conditions due to sustained intake of healthy foods;
- An emphasis on nutritional education in addition to the provision of healthy foods for individuals with chronic conditions. May include education and/or courses on healthy meal preparation/cooking, reading and understanding nutritional food labels and ingredients, education on micro and macro nutrients, or the use of nutritional mobile apps, etc.
- Use of a Social Ecological framework as the design and overall approach;
- Engaging Primary Care Providers (PCPs) and care teams to screen for FI and facilitate referrals to community based organizations to ensure closure of the referral loop and evaluate impact using outcome measures.

REVIEW CRITERIA

- A. Proposals must address important and relevant question(s) related to the SCOPE of this RFP listed herein.
- B. Studies will be expected to produce results that address clinical issues pertinent to Blue KC member subpopulations, potentially impact a larger population beyond the research proposal, and yield actionable interventions that support its mission.
- C. Proposals should describe how the proposed grant support will facilitate the development and submission of a proposal(s) seeking external funding from government and/or private agencies. The long-term expectations regarding the institutions extended research programs and potential for expanded research in related areas of research should also be well articulated.
- D. Merit review criteria are essentially the same as those used by national funding agencies such as NIH and NSF. Criteria include scientific and technical significance, innovation, approach, and likelihood of success of achieving external funding.
- E. Qualifications and research experience of the Principal Investigator, Co-Principal Investigators and collaborating investigators are important considerations.
- F. Proposals must present a realistic assessment of the scope of work proposed for the two-year period of funding with delineated milestones.
- G. Appropriateness of the proposed budget.
- H. Research publication plan, if applicable.
- I. Potential of research to generate new innovations and quality of commercialization plan.

J. Overall scale of the entire research project.

Upon receipt, proposals will undergo an administrative review to insure eligibility and appropriate institutional signatures and assurances are obtained. Proposals will be thoroughly evaluated for scientific and technical merit and assigned NIH-type priority scores. Upon receipt of peer review scores, BioNexus KC will rank the proposals and make a funding recommendation for consideration by Blue KC. Final award decisions will be made by Blue KC based on priority scores, recommendations, and available funds.

APPLICATION PROCEDURES

A. An **original** one-page letter of intent (LOI) should be submitted to the office of Dr. Keith Gary, Vice President, BioNexus KC, by **April 22, 2019 before 5:00 p.m.** Letters of intent must include the following:

1. The principal investigator's name, title, organization, address, phone number, fax number, and email address.
2. A summary of your project (not to exceed 1 page) including the following information:
 - a. Brief review of the literature
 - b. Problem statement and root cause analysis of the problem
 - c. Project description
 - d. Project deliverables and associated implementation plan
 - e. Success measures
 - f. Relevance to Blue KC and potential for impact on a larger population beyond the research proposal
 - g. Funding estimate including indirect expenses
 - h. Project timeline
 - i. Potential for new innovations
3. Tax Identification Number, IRS letter verifying 501(c)(3) status, audited financial statement, and list of Board of Directors.
4. Disclosure statement of any conflict of interest for each investigator or 501(c)(3) institution acting as a financial partner.

LOIs either must bear **original signatures** of all collaborating investigators or be accompanied by appropriate commitment letters bearing **original signatures**. PDF files containing documents bearing original signatures are allowable. **Fax copies will not be accepted.** Full proposal will be invited following the review of LOIs received. LOIs will also be used to identify appropriate scientific reviewers to be assigned to full proposals.

B. Full proposals must be submitted to Dr. Keith Gary, Vice President, BioNexus KC by **May 29, 2019 before 5:00 p.m.** **Applications received after 5:00 p.m. will not be accepted.**

C. Full proposals should use the latest version of PHS 398 forms available electronically at <https://grants.nih.gov/grants/funding/phs398/phs398.html>. Institutional administrative review and approval of applications by all applicable stakeholder institutions must be completed prior to submission. A hard copy with signed approval from the lead institution's signatory official must be submitted to BioNexus KC prior to the stated deadline for full consideration.

D. Strict compliance to the following criteria is necessary in preparing the proposal:

- a. The Face Page should identify only the lead institution and Principal Investigator in addition to other required information about the lead institution.
- b. The Description, Performance Sites, and Key Personnel should clearly detail collaborating investigators and institutions.
- c. The Detailed Budget for Initial Budget Period Page must be used and should reflect the following:
 - i. Requests may be up to \$200,000 per year for two years. Blue KC may consider a second year of funding based on accomplishment of stated milestones.
 - ii. Salary and fringe benefits may be requested and must be in accordance with set institutional guidelines.

- iii. Indirect cost rates may not exceed 10% of total costs and must be included within the \$400,000 total limit.
 - iv. Equipment requests may not exceed 20% of the total funding request. Equipment is defined as any tangible personal property (including information technology systems) having a useful life of more than one year and a per-unit acquisition cost over \$5,000.
 - v. The budget and budget justification should only represent funds requested of Blue KC.
- d. Separate budget justification page must follow the budget page and detail the rationale for all budget requests. Supply items should be summarized within major categories.
 - e. **DO NOT INCLUDE** the Budget for Entire Proposed Period of Support Page.
 - f. The NIH biographical sketch form 398/2590, (also found at <http://grants.nih.gov/grants/forms/biosketch.htm>) must be used for each investigator and **must not exceed three pages** for each investigator. The Principal Investigator's Biographical Sketch Format Pages must be first followed alphabetically (last name) by all other investigators. The bio-sketches must be provided as an appendix.
 - g. The Resources Format Page must detail resources that are to be used at the collaborating institutions toward completion of the project. Use additional pages as necessary.
 - h. **DO NOT INCLUDE** the Checklist Form Page and Personal Data Form Page
 - i. The Research Plan must be no more than 10 pages, single-line spaced, **12 pt. Arial or Times New Roman font with one-inch margins** throughout. Full proposals must be organized as follows:

Problem:

Provide a brief description of the problem addressed in the proposed project, its importance, and the research project that will be undertaken.

Project:

- i. Objectives and Activities – State the project's principal objectives and explain what activities will help accomplish these objectives. Include the research hypothesis.
- ii. Significance – Detail how this project will support Blue KC's mission as described in the SCOPE section above and anticipated positive impact on Blue KC constituents (members, providers and employers). Also describe the extent of impact on any special needs, high risk or minority populations.
- iii. Deliverables and Outcomes – Clearly outline the inclusion and exclusion criteria for research subjects. Describe the project's deliverables and expected outcomes. Define outcomes measures, and any applicable benchmarks or comparative measures. Describe pre- and post-intervention measures, and explain how control groups, subpopulations or cohorts will be used to evaluate the effectiveness of the research interventions.
- iv. Research Method – Describe the project's data sources, data collection methods, and analysis.
- v. Staffing & Resources – Identify the principal project staff, key partners and collaborators necessary to achieve the project's objectives. Also describe other resources such as in-kind services applicable to your project and identify other funding sources and amounts.
- vi. Funding Sources and Budget – Provide an outline of estimated funding and a detailed budget for the project. Describe all funding contributions and/or requests. Provide details for indirect expenses. Note: Funding for indirect expenses is limited to 10% of total costs.
- vii. Communications – Describe the project communication plan. Describe special audiences (e.g., state policy-makers, hospital CEOs, medical organizations, and the public) you will need to reach to achieve your project's objectives; messages you plan to deliver; and how you will deliver these messages.
- viii. Timeline – Provide a project timeline to include major milestones and communication activities.

Appendices must include the following:

- i. A lay executive summary of the proposal. The lay summary should be succinct, not exceeding one page in length at 12 pt. Arial or Times New Roman font with one-inch margins throughout.
 - ii. Signed letters of commitment, with original signatures, from each Co-Principal Investigator, collaborative research investigator, and the President and CEO or Executive Director of collaborating organizations named in the budget must be provided as an appendix. Signatures obtained on the original letter of intent cannot be substituted for this requirement.
 - iii. Proposed publication plan (of study results) in Peer-reviewed journals.
 - iv. Potential for new innovations resulting from the project, intellectual property management/ownership, and pathways for commercialization
 - v. Proposed plan for scaling the project to serve the broader community
- E. IRB approval **is not required unless the proposal is funded**. Funds will not be released until a final IRB approval is received by BioNexus KC.
- F. The budget and budget justification should clearly delineate which costs will be incurred at each institution. One option is to submit a combined budget along with sub-budgets for each institution. Another option is to subcontract with collaborating institutions and provide the supporting budget form. When other funding sources are proposed to be combined with anticipated Blue KC grant funds, the source of funds, funding amount, and role of the funds in the proposed project must be clearly delineated.

REVIEW PROCESS

Proposals will undergo an initial administrative review by BioNexus KC staff to assure compliance with submission requirements detailed in the RFP. Proposals will then be evaluated for scientific and technical merit by peer review and assigned NIH-type priority scores (see <http://grants.nih.gov/grants/peer/peer.htm>).

Applicants may submit up to three names of peers whom they wish not to review their application. This is to avoid selection of someone with whom the applicant(s) does not wish to share the proposal or whom they feel will not provide an objective review. BioNexus KC will not select these persons when contacting potential reviewers to develop an appropriate peer review group.

Upon receipt of peer review scores, BioNexus KC will rank the proposals and make a funding recommendation for consideration by Blue KC. Individuals will be excluded from review and discussion of proposals in which they have a real or apparent conflict of interest.

In addition to the regular progress and financial reports to BioNexus KC, the principal investigators may be invited to present the project and outcomes to Blue KC at the conclusion of the grant.

SUBMISSION INSTRUCTIONS

1. Submit an electronic version in editable PDF format (not imaged) of the full application to:

Keith Gary, PhD
Vice President
BioNexus KC
30W. Pershing Rd., Suite 210
Kansas City, MO 64108
Phone: 816-753-7700
kgary@bionexuskc.org

2. Copy Sharon Newman (snewman@bionexuskc.org) on the electronic submission.