

- **TITLE: Early-life Factors and Cancer Development Later in Life (R03), (R21), (R01)**
[\(PA-15-124\)](#) [\(PA-15-125\)](#) [\(PA-15-126\)](#)

SPONSOR: National Cancer Institute, Eunice Kennedy Shriver National Institute of Child Health and Human Development, National Institute of Environmental Health Sciences

Synopsis: The purpose of this announcement is to stimulate research focused on the role of early-life factors in cancer development later in life. Given that current emerging evidence from limited research indicates a potentially important role for early-life events and exposures in cancer development, it is necessary to better understand 1) the early-life (maternal-paternal, in utero, birth and infancy, puberty and adolescence, and teenage and young adult years) factors that are associated with later cancer development; 2) how early-life factors mediate biological processes relevant to carcinogenesis; and 3) whether predictive markers for cancer risk based on what happens biologically at early-life can be measured and developed for use in cancer prevention strategies. Markers that predict malignancy or pre-malignant conditions would allow assessment of early-life exposures with relevant outcomes without having to wait 50 years for cancer development. Ultimately, a better mechanistic understanding of how early-life events and exposures contribute to the etiology of cancer later in life will allow for the development of effective interventions during pregnancy or early life that may have a profound impact on cancer prevention.
Application Receipt/Submission Date(s): Multiple dates; see announcement for details.

- **TITLE: Advancing Translational and Clinical Probiotic/Prebiotic and Human Microbiome Research (R01)**
[\(PA-15-127\)](#)

SPONSOR: National Cancer Institute, Eunice Kennedy Shriver National Institute of Child Health and Human Development, National Institute on Drug Abuse, National Center for Complementary and Integrative Health, Office of Dietary Supplements

Synopsis: The purpose of this funding opportunity is twofold: 1. to accelerate translational and clinical Phase I and II a/b safety and efficacy studies for substantiating measurable functional benefits of probiotic/prebiotic components and/or their combinations; and; 2. to understand the underlying mechanisms of their action(s), and variability in responses to these interventions. This FOA calls for interdisciplinary collaborations across scientific disciplines engaged in microbiome and pro/prebiotic research including, but not limited to: nutritional science, microbiology, virology, microecology and microbiome, genomics, immunology, computational biology, chemistry, bioengineering, as well as integration of omics and computational approaches in DNA technologies. This FOA will not support phase III clinical trials.
Application Receipt/Submission Date(s): Multiple dates; see announcement for details.

- **TITLE: FY15 Breast Cancer Research Program (BCRP) Breakthrough Award**
<http://cdmrp.army.mil/funding/bcrp.shtml>

SPONSOR: Congressionally Directed Medical Research Programs (CDMRP), Department of Defense

Synopsis: The intent of the Breakthrough Award is to support promising research that has high potential to lead to or make breakthroughs in breast cancer. Research supported by the Breakthrough Award will have the potential for a major impact and accelerate progress toward ending breast cancer. The impact may be near-term or long-term, but must be significant and move beyond an incremental advancement. Applications must articulate the pathway to making a clinical impact for individuals with, or at risk for, breast cancer, even if clinical impact is not an immediate outcome. Research proposed under this award mechanism may be small- to large-scale projects, at different stages of idea and research development. Two different funding levels, Levels 1 and 2, based on the scope of the research, are available under the Program Announcement W81XWH-15-BCRP-BREAKTHROUGH_FL12. Two additional funding levels, Funding Levels 3 and 4, are available under a different Program Announcement (W81XWH-15-BCRP-BREAKTHROUGH_FL34).