NCI Announces New Initiative on Energetics and Cancer

The National Cancer Institute (NCI), part of the National Institutes of Health, today announced the funding of a new initiative that will expand its efforts to understand the relationship between obesity and cancer. The Transdisciplinary Research on Energetics and Cancer (TREC) initiative will support a diverse team of scientists from across the United States. This initiative is unique in that it aims to integrate the study of diet, weight, and physical activity and their effects on cancer by funding research centers that focus on energy balance and energetics (the study of the flow and transformation of energy through living systems). The centers also will provide training opportunities for new and established scientists to conduct research on energy balance and cancer.

“TREC will bring together outstanding scientists from many disciplines,” said Robert Croyle, Ph.D., director of NCI’s Division of Cancer Control and Population Sciences. “Together these experts will answer critical questions that will help guide our nation’s public health efforts. NCI is determined to help avoid an increase in cancer deaths in the 21st century due to obesity like the one caused by tobacco in the 20th century.”

Funded through cooperative agreements, the four research centers and one coordinating center will encompass projects ranging from the biology and genetics of energy balance to the behavioral, socio-cultural, and environmental influences on nutrition, physical activity, weight, and energy balance. The coordinating center will facilitate interactions across the research centers and between NCI and the centers.

The TREC initiative will be a five-year, $54 million effort that will fund the following research centers:

- Case Western Reserve University, Cleveland, Ohio
  Principal Investigator Nathan Berger, M.D.
  This project will concentrate on cellular mechanisms, using laboratory models and clinical research that focuses on obesity, metabolic dysfunction, and colorectal cancer risk.

- Fred Hutchinson Cancer Research Center, Seattle, Wash.
  Principal Investigator Anne McTiernan, M.D., Ph.D.
  This project will focus on prevention of breast and colorectal cancers, with particular emphasis on diet and physical activity. The project includes an integrated research program examining energy balance and its consequences in cells, animal models, and human subjects.

- The University of Minnesota, Minneapolis, Minn.
  Principal Investigator Robert Jeffery, Ph.D.
  This project will focus on population studies that examine the causes of, and
effective prevention strategies for, obesity in youth and families.

- University of Southern California, Los Angeles, Calif.
  Principal Investigator Michael Goran, Ph.D.
  This project will explore the physiologic, metabolic, genetic, behavioral, and environmental influences on obesity and cancer risk in minority children.

The Fred Hutchinson Cancer Research Center also will serve as the coordination center for the TREC initiative, led by Principal Investigator Mark Thornquist, Ph.D. This center will support communication, dissemination, data sharing, and collaboration among the TREC centers and with NCI.

“The work done by these centers will enhance our understanding of the mechanisms underlying the association between energy balance and carcinogenesis,” said Linda Nebeling, Ph.D., acting associate director of NCI’s Behavioral Research Program. “These projects are designed to help prevent obesity through innovative and effective approaches, which affect the population at the social, environmental and policy levels. With strong interactions across TREC centers, the coordination center will foster collaborations, facilitate data analyses, and evaluate progress.”

This initiative is one of many programs funded by the National Institutes of Health to understand and reduce the increasing prevalence of overweight and obesity in the United States.

For more information about NCI’s Transdisciplinary Research on Energetics and Cancer (TREC) initiative, please visit http://www.cancercontrol.cancer.gov/TREC.

For more information about cancer, please visit the NCI Web site at http://www.cancer.gov or call NCI’s Cancer Information Service at 1-800-4-CANCER (1-800-422-6237).

The National Institutes of Health (NIH) — The Nation's Medical Research Agency — includes 27 Institutes and Centers and is a component of the U. S. Department of Health and Human Services. It is the primary Federal agency for conducting and supporting basic, clinical, and translational medical research, and it investigates the causes, treatments, and cures for both common and rare diseases. For more information about NIH and its programs, visit http://www.nih.gov.