# Division of Cancer Control and Population Sciences

http://cancercontrol.cancer.gov

## 2008 Physical Activity Guidelines for Americans Funding Opportunities

The Federal Government has issued its firstever Physical Activity Guidelines for Americans (see <a href="http://www.health.gov/PAGuidelines">http://www.health.gov/PAGuidelines</a>). They describe the types and amounts of physical activity that offer substantial health benefits to Americans.

Although a substantial amount of research on physical activity and health has been published since 1995, major gaps still exist in knowledge needed to establish cause and effect for various health outcomes and to better define dose response, especially at the low and high ends of the activity spectrum. These gaps are highlighted in Part H: Research Recommendations of the Advisory Committee Report that accompanied the guidelines (see <a href="http://www.health.gov/PAGuidelines/committeereport.aspx">http://www.health.gov/PAGuidelines/committeereport.aspx</a>). Following is overview information describing NCI and NIH funding opportunities for researchers who wish to explore these remaining gaps in the scientific evidence.

For the full text of the Funding Opportunity Announcements (FOAs) described below, including contact information for applicable personnel, visit

http://grants.nih.gov/grants/guide/.

#### **Dose Response**

Some recently published data indicate that physical activity of a lower intensity and/or smaller amount than is currently recommended may provide significant health benefits for chronically inactive or unfit adults and older adults. Experimental and observational studies are needed to answer a variety of questions about dose response.

Translating Basic Behavioral and Social Science Discoveries into Interventions to Reduce Obesity: Centers for Behavioral Intervention Development (RFA-HL-08-013)

This FOA solicits cooperative agreement (U01) applications that propose to translate findings from basic research on human behavior into more effective clinical, community, and population interventions to reduce obesity and improve obesity-related behaviors. This FOA will support Centers for Behavioral

Intervention Development (CBIDs) in which interdisciplinary teams of basic and applied behavioral and social science researchers develop and refine novel interventions based on basic research findings to reduce obesity and alter obesity-related health behaviors.

#### Cancer

Studies are needed to increase knowledge about the role of physical activity in reducing the risk of common cancers and in improving survivorship outcomes. Studies are also needed to clarify biological mechanisms linking physical activity to specific cancers, define the shape of the dose-response curve of the physical activity-cancer relation, identify the dose, type, and frequency of physical activity on risk of various cancer sites and subtypes, and identify the effect of physical activity on risk of specific cancers within population subgroups.

### Studies of Energy Balance and Cancer in Humans

**R01**: PA-07-176 **R21**: PA-06-405

This FOA invites exploratory/developmental research grant applications that focus on defining factors affecting energy balance and defining mechanisms influencing cancer risk, prognosis, and quality of life. It is anticipated that the knowledge gained will provide additional information to better understand the relationships among energy balance, cancer risk, and cancer prognosis.

#### Youth

Several evidence gaps pertaining to physical activity and children and adolescents are identified in the Advisory Committee Report. For example, studies are needed to determine whether physical activity affects classroom behavior and academic achievement, whether physical activity affects depression, anxiety, and cognitive function, and to identify the types and amounts of physical activity needed to prevent health problems and maintain health in particular domains (e.g., excessive

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adiposity, cardiorespiratory and metabolic health, bone health).

### Reducing Risk Behaviors by Promoting Positive Youth Development

**R01**: PA-08-241 **R03**: PA-08-242

This FOA encourages research grant applications that propose to enhance our understanding of effective positive youth development programs and the mechanisms responsible for positive health and developmental outcomes.

### Participant Diversity and Racial/Ethnic Diversity

Research needs pertaining to physical activity and racial/ethnic diversity include the need for greater representation of ethnic/racial minority populations in studies. Also, cultural proficiency in recruitment and retention should be improved. Specific research questions such as the precise role of certain racial anthropomorphic variations in weight maintenance deserve particular emphasis.

#### Research on the Economics of Diet, Activity, and Energy Balance

**R01**: PA-08-078 **R21**: PA-08-077

This FOA solicits projects that enhance the state-of-the-science on the causes of obesity and inform Federal decision making on effective public health interventions for reducing the rate of obesity in the United States. The PA is intended to make funding opportunities in the area of energy balance known to researchers with expertise and experience in health economics and health services research. It also aims to foster collaborative activities between researchers from these disciplines and more traditional researchers of chronic diseases.

### Health Promotion Among Racial and Ethnic Minority Males

**R01**: PA-07-422 **R21**: PA-07-421

This FOA solicits research grant applications that propose to stimulate and expand research in the health of minority men. Specifically, this initiative is intended to: 1) enhance our understanding of the numerous

factors (e.g., sociodemographic, community, societal, personal) influencing the health promoting behaviors of racial and ethnic minority males and their subpopulations across the life cycle; and 2) solicit applications focusing on the development and testing of culturally and linguistically appropriate health-promoting interventions designed to reduce health disparities among racially and ethnically diverse males and their subpopulations age 21 and older.

### Reducing Risk Behaviors By Promoting Positive Youth Development

Please see overview information in column 1.

#### **Measurement Methodology**

Gaps in physical activity measurement methodology include needs for uniformity in data collection, greater access to specific understudied populations by institutions in multicenter studies, and development and evaluation of assessment technologies that have emerged in the past decade.

### Improving Diet and Physical Activity Assessment

**R01**: PAR-07-259 **R21**: PAR-06-103

This FOA promotes research to: 1) improve existing instruments that seek to measure dietary intake and physical activity within diverse populations over time; 2) develop or refine new technologies for the measurement of dietary intake or physical activity; and 3) improve the statistical and analytical techniques to correct for measurement error in diet and physical activity assessment instruments. Proposals should aim to explore the optimal combination of objective and self-report measures of physical activity or dietary intake that can capture these behaviors in both general and diverse populations.

#### **Research Resources**

pertaining to the guidelines.

The following webpage (http://appliedresearch.cancer.gov/funding/pa\_g\_uidelines.html) offers research resources for exploring the physical activity research questions described above. It also contains a listing of the funding opportunities in this fact sheet and additional information on the Advisory Committee's research recommendations