

Division of Cancer Control and Population Sciences

Opportunities at NIH in Diet and Energy Balance

**Presented at: First NCI Epidemiology Leadership
Workshop: Tobacco, Diet, and Genes –
Chicago, IL**

Presented by: Virginia W. Hartmuller, PhD, RD

September 20, 2004

Small Grants Program for Cancer Epidemiology – PAR 03-010

- ▶ **CONDUCT** a pilot study to plan a future R01 epidemiologic investigation
- ▶ **ANALYZE** previously collected data for epidemiologic purposes
- ▶ **DEVELOP** or **VALIDATE** a laboratory, statistical or methodological procedure with the potential to improve quality of cancer epidemiologic research
- ▶ **STUDY** a question relevant to cancer epidemiology in special situations, such as the availability of special personnel for limited time periods

Small Grants Program for Cancer Epidemiology – PAR 03-010

- ▶ R03 - \$100,000 direct costs
(not to exceed \$50,000/ year)
- ▶ Two year award
- ▶ DCCPS Contact: Mukesh Verma
- ▶ All investigators eligible
 - ▶ **New investigators encouraged**
- ▶ Review by NCI-constituted study section
- ▶ Due – 12/20/04; 4/20/05; 8/23/05

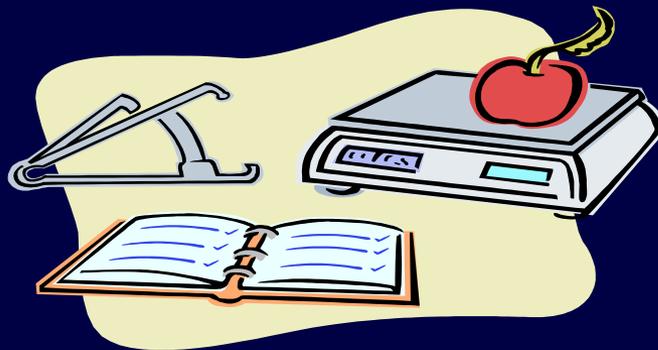
<http://grants2.nih.gov/grants/guide/pa-files/PAR-03-010.html>

Improving Assessment

- ▶ **Physical Activity Assessment**



- ▶ **Diet Assessment**



Improving Diet and Physical Activity Assessment – PAR 03-009

- ▶ Applications to improve diet and physical activity measurement through improved instruments, technologies, or statistical/analytic techniques
- ▶ 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

(assessment of behavior, not determinants of behavior)

Improving Diet and Physical Activity Assessment – PAR 03-009

- ▶ **R01 or R21**
(Five years - R01; Two years – R21)
- ▶ **DCCPS Contact: Amy Subar or Rick Troiano**
- ▶ **Special Emphasis Panel – CSR Review**
- ▶ **Due – 2/1/05; 10/1/05**
(Revised applications – 3/1/05; 11/1/05)

<http://grants1.nih.gov/grants/guide/pa-files/PAR-03-009.html>

Exfoliated Cells - Diet Variation of Bioactive Food Components to Prevent Cancer

- ▶ **Potential tool to monitor human exposure and response to bioactive food components**
- ▶ **Preferable to measuring serum concentrations**
- ▶ **Non-invasive collection of biological samples from target tissue**



Exfoliated Cells, Bioactive Food Components, and Cancer – PA 04-114

- ▶ **Encourage interdisciplinary collaborations between scientists doing research on exfoliated cells and scientists conducting nutrition and cancer prevention studies**
- ▶ **Promote innovative preclinical and clinical research to evaluate the utility of using exfoliated cells to monitor variation in dietary intakes of bioactive food components possibly involved in cancer prevention**

Exfoliated Cells, Bioactive Food Components, and Cancer – PA 04-114

- ▶ **R01; R21; or R03**
(Five years - R01; Two years – R21 or R03)
- ▶ **DCCPS Contact: Virginia Hartmuller**
- ▶ **CSR Review**
- ▶ **Standard receipt dates**

<http://grants1.nih.gov/grants/guide/pa-files/PA-04-114.html>

Energy Balance Factors

**Integrated effects on growth and
body weight over life course:**



- ▶ **Diet**
- ▶ **Physical Activity**
- ▶ **Genetics**

Transdisciplinary Research on Energetics and Cancer (TREC) – RFA CA-05-010

- ▶ Enhancing understanding of the mechanisms underlying the association between energy balance and carcinogenesis across the cancer continuum from causation and prevention through survival
- ▶ Developing effective approaches with broad population impact at the social-environmental and policy level for the prevention and control of obesity
 - ▶ Focusing on children and adults during critical periods for excessive weight gain (e.g., cancer treatment)

<http://grants1.nih.gov/grants/guide/rfa-files/RFA-CA-05-010.html>

Transdisciplinary Research on Energetics and Cancer (TREC) – RFA CA-05-010

- ▶ **RFA - U54 mechanism**
- ▶ **Anticipated award date – 9/1/05 (Letter of intent 10/15/04 – application receipt 11/16/04)**
- ▶ **DCCPS Contact: Linda Nebeling**
- ▶ **To fund 4-5 Centers, each will include 3-5 individual research projects and provide evidence of a transdisciplinary focus**
- ▶ **Each center may request maximum annual direct cost of \$1.5 million/year (up to 5 years)**

<http://grants1.nih.gov/grants/guide/rfa-files/RFA-CA-05-010.html>

TREC Coordination Center – RFA CA-05-011

- ▶ Foster transdisciplinary teams of scientists; facilitate data analyses; examine common research questions across sites; coordinate and facilitate semi-annual meetings of TREC Centers; develop training modules, and evaluate progress
- ▶ Accelerate progress toward reducing cancer incidence, morbidity, and mortality associated with obesity, low levels of physical activity, and poor diet
 - ▶ Foster collaboration & communication
 - ▶ Coordinate training opportunities
 - ▶ Play a role in overall evaluation process

<http://grants1.nih.gov/grants/guide/rfa-files/RFA-CA-05-011.html>

TREC Coordination Center – RFA CA-05-011

- ▶ **RFA – U01 mechanism**
- ▶ **Anticipated award date – 9/1/05 (Letter of intent 10/15/04 – application receipt 11/16/04)**
- ▶ **DCCPS Contact: Linda Nebeling**
- ▶ **Request project period up to 5 years; maximum annual direct costs of \$600,000 that includes \$100,000/year as set-aside for Core Funds**

<http://grants1.nih.gov/grants/guide/rfa-files/RFA-CA-05-011.html>

Studies of Energy Balance and Cancer in Humans – PA 04-124

▶ Purpose:

- ▶ Expand efforts to define factors that affect energy balance and define mechanisms influencing cancer risk, prognosis, and quality of life

▶ Types of support suggested for existing studies:

- ▶ Test new hypotheses related to energy balance and cancer with existing data;
- ▶ Perform additional assays on existing biological specimens to examine new hypotheses;
- ▶ Collect and analyze additional self-report or objective measures of diet, anthropometry, physical activity, and/or biological specimens

Studies of Energy Balance and Cancer in Humans – PA 04-124

- ▶ **R01; R21 or Competitive Supplements**
- ▶ **Eligibility**
 - ▶ **Previously collected measures from human subjects on at least two of the following:**
 - dietary data
 - physical activity data (exercise)
 - body composition data (anthropometrics)
 - related biomarkers (blood, urine, exfoliated cells, and/or tissue samples)
- ▶ **DCCPS Contact: Virginia Hartmuller**
- ▶ **CSR Review**

<http://grants1.nih.gov/grants/guide/pa-files/PA-04-124.html>

Obesity and the Built Environment

– RFA ES-04-003

- ▶ **Studies in two areas related to the built environment and obesity**
 - ▶ Understanding the role of the built environment in causing/exacerbating obesity and related co-morbidities
 - ▶ Developing, implementing, and evaluating prevention/intervention strategies that influence parameters of the built environment to reduce the prevalence of overweight, obesity & co-morbidities
- (encourages combining qualitative & quantitative methodologies)**

Obesity and the Built Environment

– RFA ES-04-003

- ▶ RFA – R01 or R21
- ▶ Anticipated award date – June 2005 (Letter of intent 11/17/04 – application receipt 12/17/04)
- ▶ NCI (DCCPS) Contact: Louise Masse
- ▶ To fund 10-12 new grants (ICs to commit approximately \$5 million total)
- ▶ R01- up to 5 years with \$400,000/year direct costs;
R21 – up to 2 years with \$275,000 for the 2 year period
- ▶ Teams to consist of a scientist with expertise in health research; a clinical specialist; and an expert in planning, design, or transportation

<http://grants1.nih.gov/grants/guide/rfa-files/RFA-ES-04-003.html>

Diet Composition and Energy Balance – PA 04-033

▶ Purpose

- ▶ Invite applications investigating the role of diet composition in energy balance
- ▶ a) Basic Studies
 - Investigate the impact of micro- or macronutrient composition on appetite, metabolism, and energy expenditure
- ▶ b) Clinical Studies
 - Evaluate efficacy of diets differing in micro- or macronutrient composition, absorption, dietary variety, or energy density for weight loss or weight maintenance

Diet Composition and Energy Balance – PA 04-033

- ▶ R01; R21 (Five years - R01; Two years – R21 or R03)
- ▶ NCI (DCP) contact: John Milner
- ▶ CSR Review
- ▶ Standard receipt dates

<http://grants2.nih.gov/grants/guide/pa-files/PA-04-033.html>

NIH Obesity Resources

- ▶ **NCI Public Energy Balance URL**

<http://www.cancer.gov/cancertopics/energybalance>

- ▶ **NIH Obesity Research URL**

<http://obesityresearch.nih.gov>

- ▶ **NCI Obesity Research Funding Opportunities**

<http://obesityresearch.nih.gov/funding/funding.htm>

Other Resources

- ▶ **Small Grants for Behavioral Research in Cancer Control – PAR 04-020**

<http://grants2.nih.gov/grants/guide/pa-files/PAR-04-020.html>

- ▶ **Cohort Studies in Cancer Epidemiology – PAR 04-011**

<http://grants2.nih.gov/grants/guide/pa-files/PAR-04-011.html>