



## **Addressing Childhood Obesity through Translational Research**

### **Funded Projects**

The Harvard Catalyst Community Health Innovation and Research Program (HC-CHIRP) sponsored this pilot grant opportunity in collaboration with Harvard Catalyst's Child Health Committee and Health Disparities Research Program. This pilot grant opportunity seeks to engage a broad range of policy, public health, clinical, and other investigators from across the Harvard community, and will provide seed money for interdisciplinary translational research to prevent and treat childhood obesity.

This 2013 request for applications (RFA) sought proposals that addressed one or more of eight specific research priority areas:

- Research and evaluation on socio-cultural aspects of the food and physical activity environment
- Research on childhood obesity development, transitions, and life-course
- Research and evaluation on reducing the consumption of sugar-sweetened beverages
- Technology, research, or tool/resource development that can contribute to a reduction in childhood obesity
- Research in pediatric clinical interventions
- Research and evaluation of policies and other interventions in families, early childhood settings, and schools
- Strengthening capacity of state and city systems to implement and evaluate evidence-based policy and its integration within community-based public health

This funding opportunity was open to investigators who held Harvard University appointments at the assistant professor, associate professor, or professor level; or had the approval of their department chair. At least one co-investigator was required on each application and proposals

were required to be collaborative and interdisciplinary. Three pilot grants were awarded in amounts of up to \$50,000 for each one-year project.

Funding decisions for the Addressing Childhood Obesity through Translational Research pilot grants were announced in May of 2013.

## **What about Dads? First Steps to Engaging Fathers in Childhood Obesity Prevention**

Principal Investigator: Kirsten Davison, PhD, Harvard School of Public Health

Co-Investigators: Milton Kotelchuck, PhD, Massachusetts General Hospital  
Timothy Nelson, PhD, Johns Hopkins University

Fathers are under-represented in childhood obesity and child feeding research. This study targets fundamental barriers to their inclusion in research and lays the groundwork for the PI's future research on fathers, families and obesity prevention. Specific aims include: (1) identify strategies to recruit fathers for childhood obesity research and test the effectiveness of each strategy; (2) explore fathers' perceived roles in feeding children, their child feeding practices, and inter-parental dynamics in the feeding context; and (3) develop and pilot test the Child Feeding Scale for Fathers. Participants for all study aims will include white and African American (AA) fathers of preschool-aged children with diverse educational backgrounds. For aim 1, strategies to recruit fathers will be identified by (i) reviewing the literature within and beyond public health, (ii) interviewing investigators conducting research with men, and (iii) conducting intercept interviews with 80 fathers. The identified recruitment methods will be summarized and used to recruit fathers for aims 2 and 3: All recruitment activities and the resulting recruitment yield from each will be documented. For aim 2, semi-structured interviews will be conducted with 60 fathers (white/AA, low/high educ.) to explore their perceived roles in feeding children and their feeding practices. For aim 3, fathers will provide feedback on the applicability of two mother-validated child feeding questionnaires for use with fathers; feedback will be integrated with results from the semi-structured interviews to inform the development of the Child Feeding Scale for Fathers, which will be piloted tested with a sample of 100-150 fathers.

## **Cultural Influences on Parents' Food Decisions**

Principal Investigator: Michele Lamont, PhD, Harvard Faculty of Arts and Sciences

Co-Investigators: Kathryn Edin, PhD, Harvard Kennedy School of Government  
Caitlin Daniel, Harvard Faculty of Arts and Sciences  
Mark Pachucki, PhD, Massachusetts General Hospital

This project, titled Cultural Influences on Parents' Food Decisions, examines how the meaning that parents attribute to food guides what they feed their children. Parents are instrumental in combating childhood obesity because they create the environments in which children develop eating habits and food preferences. Despite this fact, few studies examine how parents make food decisions for their children. Current research focuses extensively on the economic and spatial correlates of children's diets, but it is through parents' decisions that income, the food 'environment, and other factors ultimately affect what children eat. Explaining parents' food decisions requires a cultural perspective that uncovers how parents think about the meaning and value of food. Using an innovative combination of in-depth interviews and observations of grocery shopping, we will examine how the meanings that parents attribute to food, to care giving, and to children's needs influence parents' food decisions. We will also examine how these cultural understandings of food vary across socioeconomic and racial groups in ways that may contribute to disparities in childhood obesity. Finally, we will examine how parents' cultural understandings of food influence their food decisions in interaction with constraints and opportunities such as money and time. We ultimately aim to specify more finely how culture

influences caretakers' food decisions in order to inform nutritional interventions that parents will endorse and adopt.

### **Randomized Trial of Financial Incentives to Reduce Sugar-sweetened Beverage Purchases with SNAP**

Principal Investigator: Anne Thorndike, MD, MPH, Massachusetts General Hospital

Co-Investigators:     Melissa Dimond, Massachusetts General Hospital  
                              Douglas Levy, PhD, Massachusetts General Hospital  
                              Eric Rimm, PhD, Harvard School of Public Health

Approximately 15% of the US population is enrolled in the Supplemental Nutrition Assistance Program (SNAP), and 50% are children. Although the goal is to improve nutritional health, preliminary data suggest that enrollment in SNAP is associated with obesity and metabolic risks and that SNAP reimburses \$4 billion annually for sugarsweetened beverages (SSBs). This pilot project tests an innovative strategy to reduce purchase of non-nutritive, SSBs by families with children on SNAP by combining targeted point-of-purchase education with a randomized trial of financial incentives to discourage purchase of unhealthy beverages. The study will take place at a mid-size grocery store in Chelsea, MA, a low-income, Latino community. Targeted beverage education will be provided to all study subjects with a traffic-light system to identify healthy and unhealthy beverages at the point-of-purchase. Individual beverage purchases will be tracked by electronically stored cash register sales and linked to SNAP debit card reimbursement data. Supplementary validation of beverage consumption will be assessed by 24 hour dietary recall. Aim 1 is to conduct a randomized controlled trial to compare purchase and consumption of SSBs by families assigned to a financial incentive to reduce purchase of SSBs with families assigned to control (no incentives). Aim 2 is to compare the purchase of SSBs by families in both arms during the study period when they are exposed to the trafficlight system to a baseline period prior to traffic-light education. Results of this project will provide pilot data for larger scale interventions to promote healthy choices among SNAP beneficiaries.