

## **NOTICE OF INTENT TO AWARD**

DATE: May 20, 2009  
REFERENCE: Research Contracts  
IN RESPONSE TO: RFP # 852R0006  
CONTRACTOR: See attached list

It is the intent of the Virginia Tobacco Settlement Foundation to award contracts to 7 vendors listed below in response to the above-referenced Request for Proposals on July 1, 2009. Records for this procurement are now available for inspection by any offeror on this RFP.

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Wilma Jordan  
Business Manager

**Research Recommendations: Contracts Not To Exceed Amounts Listed Upon Final Negotiation**

**VCU/Balster: Virginia Youth Tobacco Project Research Coalition Core**  
**\$572,711/3 years**

The proposed VYTP Core will continue its activities to coordinate VYTP Research Coalition meetings, a small grants program, a report summarizing and integrating VTSP-sponsored research, a triennial Research to Practice Conference, preparation of reports documenting the progress of VYTP, the dissemination of information on funding opportunities and facilitating the networking of VYTP researchers.

**GMU/Smith: Adolescent Nicotine: From the First Experience to Neural Remodeling**  
**\$600,000/3 years**

Abstract: Work in this laboratory and others has enabled us to now understand that neurobiological reactions to adolescent nicotine differ from those resulting from adult dosing. Following dosing in an early adolescent window of vulnerability, there are substantial long-term changes in neural structure, neurochemistry, and emotional and addictive behaviors which quantitatively [in some cases, qualitatively] differ from reactions to comparable adult doses. Acute dosing during this window also induces different effects than dosing at older ages. However, much remains to be understood regarding both immediate and persisting neurobiological effects of adolescent nicotine. Among the remaining questions are the variables affecting the first nicotine experience, and the nature and extent of long-term consequences.

We propose to address these issues in some detail. First, we propose to study the conditions potentially affecting the first nicotine experience. Preliminary data suggests that a dopamine D3 receptor antagonist blocks the effect of adolescent injection in inducing long-term effects. We propose to follow up on this result, and also to investigate the effects of environmental manipulations at the time of dosing [novel vs familiar environment, stress] on lasting effects of adolescent nicotine. We see some potential for this knowledge to develop into adolescent-specific interventions for nicotine addiction, and propose a preliminary test of that.

We also propose to continue our investigation into the multiple and persisting effects of adolescent nicotine. We have already demonstrated effects of adolescent nicotine on several neural structures, and propose to investigate potential nicotine-induced changes in the bed nucleus of the stria terminalis, an element of the extended amygdala. We have chosen to examine this structure as it is proposed to play a key role in regulating emotional behaviors, some of which we have shown to be affected by adolescent nicotine exposure.

Finally, we continue to be intrigued by associations between systems related to addiction, and those related to emotion and stress. A theme of the proposed work will be to investigate interrelationships of addiction, emotion, and stress regulation, as they interact with and are influenced by adolescent nicotine dosing.

The proposed work will continue and extend a productive line of work which has already defined previously unknown consequences of adolescent nicotine. The work will be crucial for

understanding neurobiological consequences of adolescent nicotine and the neurobiological underpinnings of continued adolescent nicotine use, and should contribute both to education and prevention efforts regarding adolescent smoking, and to initial development of interventions which are adolescent-specific.

**VCU. Bruznell: Exercise as a Prevention and Intervention Strategy for Nicotine Use in Adolescents**

**\$600,000/3 years**

*The primary objective of this project is to determine using animal models whether exercise might block the initiation of nicotine use. As pharmacotherapies are controversial in teens, another goal of these studies is to determine whether exercise will promote nicotine cessation. The potential utility of exercise as an intervention will be examined during two different developmental time-points during adolescence in rats using nicotine self administration, a paradigm that has good face validity for initiation, motivation, and cessation of tobacco use in humans. Recent trends indicate that girls are more likely than boys to initiate smoking, in part due to efforts to control weight gain. Our preliminary data show that female rodents also have a greater propensity for nicotine self-administration during adolescence, suggesting that a biological basis exists for this sexual dichotomy. A secondary goal of this project is to determine if adolescent males and females respond differently to exercise interventions for nicotine initiation and cessation. Although recent work in adults suggests that exercise may be a promising intervention for nicotine dependence, the mechanism for its efficacy is not known. Targeting neurotransmitters, neurotrophins, inflammatory cytokines, and second messengers known to be modulated in humans and rodents by nicotine and exercise, a third goal of this project is to identify molecules associated with positive exercise outcome on nicotine use.*

**UVA/O'Loughlen and Hollen - A Decision Aid to Reduce Substance Use Behaviors in Medically at-risk Adolexcents: Targeting Persistent Asthma**

**\$599,960/3 years**

This program of research is aimed at enhancing care for “medically at-risk” adolescents. The major objective of the study is to further test a decision aid for adolescents with asthma that is aimed at difficult decisions related to engaging in risk behaviors. Study aims: 1) To test the hypothesis that adolescents with persistent asthma who receive a cognitive-behavioral skills program in the clinic setting to enhance decision making skills (framed within the context of engaging in risk behaviors and their interaction with the disease process and medical treatment) will report increased quality decision making 6- and 12-months post-intervention compared with the usual care/control group; and 2) to explore the hypothesis that adolescents with persistent asthma who receive a cognitive-behavioral skills program in the clinic setting to enhance decision-making skills (framed within the context of engaging in risk behaviors and their interaction with the disease process and related medical treatment) will report (a) maintained or lowered inherent risk motivation and (b) maintained or lowered risk behavior status 6- and 12-months post-intervention compared with the usual care/control group.

**VCU/Dowdy: Tobacco Use Prevention and Health Promotion in Virginia Schools:  
Translating Research into an Evidence-Based Model Curriculum**

**\$600,000/3 years**

The specific aims of this Model Curriculum Project are as follows:

- Form a Health Promotion Curriculum Collaborative (HPCC) among selected university faculty and staff and public school administrators and teachers, to produce a model tobacco-use-prevention and healthy-eating program for use in public schools in Virginia – a education program that is grounded in learning and health-behavior theory, testable with respect to efficacy and effectiveness, flexible in application, and responsive to Virginia SOL guidelines for subject matter.
- Employ the HPCC in framing program objectives and in the design of teaching materials – both for students and for teachers at an appropriate grade level.
- Employ the HPCC in the design of assessment and evaluation tools for school-based testing of program efficacy.
- Arrange for pilot testing of the program in two school districts.
- Employ the HPCC in using the results of the pilot test(s) to prepare a revised program that is ready for efficacy trial.
- Conduct an efficacy pilot trial in four school districts, pitting the Model Curriculum against the Life Skills Center’s LIFT+ program in a 2X2 design.
- Employ the HPCC in analyzing and interpreting the results of the efficacy pilot trial, with an eye to continuing improvement in program effectiveness and to furthering program dissemination in school districts around the Commonwealth.

**UVA/Kulbok: Partnering with Rural Youth and Parents to Design and Test a Tobacco, Alcohol and Drug Use Prevention Program Model**

**\$593,428/3 years**

Rural youths in tobacco-growing counties, such as Charlotte County, Virginia (VA), have the highest rates of cigarette and smokeless tobacco (ST) use in the United States (U.S.);<sup>1</sup> and adolescent tobacco use is highly correlated with use of alcohol and other drugs.<sup>2</sup> *Healthy People (HP) 2010*<sup>3</sup> pointed to the long-term health threat of adolescent substance use and the need to increase the proportion of adolescents who remain *substance free*. Many rural counties, however, have little knowledge of effective intervention strategies to prevent adolescent substance use. *HP 2010*<sup>3</sup> suggested the use of community-based participatory research (CBPR) to create innovative prevention programs and to increase their acceptability, relevance, effectiveness, and sustainability.

Therefore, the specific aims of this study are to:

1. Establish a community participatory research team (CPRT) in rural Charlotte County, VA made up of youth, parents, trusted community leaders, and interdisciplinary researchers from the University of Virginia (UVA), Virginia Tech (VT) and Carilion Health System (CHS);
2. Conduct a community assessment with the CPRT to identify ecological, cultural, and contextual factors influencing substance-free and substance-using adolescent lifestyles.

3. Evaluate the effectiveness of prevention programs with the CPRT in light of the community's ecological, cultural, and contextual dimensions, health attitudes and behaviors, and *on that basis* develop a tobacco, alcohol, and drug use preventive intervention for this rural tobacco producing community.
4. Pilot-test the intervention to determine feasibility, acceptability, obtain preliminary effectiveness data, and refine the intervention for formal testing in other rural communities.
5. Prepare a proposal for external funding to conduct a randomized clinical trial of the refined preventive intervention model in other rural communities.

### **VCU/Koch: Tobacco Use Among Youth Receiving Public Behavioral Healthcare Services**

#### **\$226,253/3years**

Adolescents with behavioral healthcare problems (substance abuse and/or mental health) are particularly vulnerable to tobacco initiation and dependence. However, the extent to which tobacco-related issues are being addressed within behavioral healthcare settings is unknown. Thus, better understanding the issues surrounding the assessment and treatment of tobacco use/dependence among adolescents in behavioral healthcare settings, from both a patient and organizational perspective, is critical. Gaining a better understanding of tobacco-related issues in this population could lead to a reduction in barriers to treatment.

The specific aims of this project are:

1. To examine the extent to which behavioral healthcare providers address adolescent (ages 13 through 17 years) tobacco use/nicotine dependence, including the method used for tobacco use screening/assessment (e.g., standardized assessment instrument, clinical interview, biomarkers), the extent to which tobacco use/dependence is addressed in the treatment plan, and the extent to which tobacco cessation services are offered and provided.
2. To explore the relationship between the screening, assessment and treatment of adolescent tobacco use and individual adolescent characteristics (demographic, diagnostic and treatment variables).
3. To pilot the feasibility of assessing and biochemically verifying tobacco use and nicotine dependence at intake, for adolescents receiving behavioral healthcare services, as well as determine the relationship between nicotine dependence, biochemical measures, and other variables (demographic variables, other diagnoses, medications, etc.).
4. To determine the organizational policies and practices for the screening and treatment of adolescent tobacco use/nicotine dependence, including barriers to screening and treatment, among the network of public, community-based behavioral healthcare services in Virginia (i.e., community services boards).
5. To develop a set of policy and practice recommendations for the assessment and treatment of youth tobacco use/nicotine dependence in behavioral healthcare settings based on the study results and input from behavioral healthcare staff serving on a project advisory committee.