Completed Projects

proposed training capitalizes on strengths of the School of Dental Medicine's restructured curriculum, including evidence-based principles, critical thinking, and innovative early clinical experiences. The program is partnering w the school of Medicine to include an established Master's degree program in clinical research that has been hig successful in training health professionals and K12 scholars, and will include collaborations among participating faculty in CWRU's NIH-funded Clinical and Translational Science Center (CTSC).

The trainees will engage in five years of training, with a year off between third and fourth DMD years for graduate research training. The specific aims of the training are to accomplish: (1) a biological, behavioral, and environme approach to investigating oral health problems in diverse populations; (2) an inter-and multi-disciplinary teams that promote the dental scholar as an integral part of the health care team; (3) provision of leadership skills to communicate and disseminate research findings at both the local and national levels. Trainees will be awarded a structured and rigorous Master's in Clinical Research that consists of core didactic curriculum, research rotation and thesis, and oral health seminar series. Additional training activities include research retreats, seminars, and participation in local and national meetings. This training grant will provide one year of support to 15 dual degree trainees over the five year grant period, admitting three trainees each year for five years. This training is critical developing the next generation of dentist scholars who are capable of conducting independent innovative clinical research to solve complex oral health problems that can result in early translation of findings to relevant populations, and to address the national shortage in dentists pursuing academic research careers.

Xylitol
This randomized controlled clinical trial addresses the prevention of dental caries (tooth decay) in inner-city school children using xylitol-containing snacks. Dental caries disproportionately affect poor and minority children with a significant proportion of treatment costs borne by Medicaid. The current best practices of oral health education, tooth brushing, topical fluorides and dental sealants have a more limited impact in children with the highest tooth decay rates than in children with lower rates; the newest research shows that an antimicrobial agent is required. Thus, addressing disparities, improving child health (MCH strategic research issue #II and #IV), and reducing ca rates (Healthy People 2010) are key public health objectives. Xylitol is safe, FDA approved effective preventive agent, but poorly utilized in the U.S.

The goal of this study is to establish the use of an antimicrobial agent, delivered via xylitol gummy bear snacks a school, to reduce the caries rates in the permanent teeth of children from kindergarten to second grade. This age

Dental Association's program, Operation T.A.C.T.I.C., which stands for Teens Against Chewing Tobacco in the Community. The curriculum focuses on the negative consequences of ST use, understanding nicotine addiction, reading the advertising messages that make tobacco use look attractive, and practicing how to say no to offers. In addition, the curriculum describes how to perform a self-exam to look for mouth sores and provides take-home information on resources for quitting ST use. The school-curriculum is augmented with a parent-targeted brochure about ST use and a follow-up evaluation survey to be completed by parents.

The health risks associated with the use of smokeless tobacco (ST) products such as dip, oral snuff and chewing tobacco are oral lesions (non-cancerous mouth sores), oral cancer, dental caries, periodontal disease and nicotine addiction. The use of ST by young people in Ohio is of increasing concern. The initial use of these products is reported to be in the pre-adolescent years, ages 10-12, so that education and prevention messages need to be communicated early to assist young people in making healthy decisions about the use of these substances. The purpose of this research study is to develop school-based education modules that address issues of knowledge, attitude, and social norms regarding the use of smokeless tobacco. Analyses of the research study results are underway.

Detection of Oral Lesions in Dental Practices
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