### For Immediate Release



# AUB receives major US federal grant to study electronic cigarettes and help inform US tobacco regulatory policy

Beirut, Lebanon- 17/10/2013 -The American University of Beirut (AUB) has been awarded a five-year \$2.1 million U.S. federal grant to study novel tobacco products, such as <u>electronic cigarettes</u> -- promoted as a safer alternative to smoking -- in order to properly evaluate how the design features of e-cigs combined with consumer behavior might ultimately affect health.

Known in scientific jargon as modified risk tobacco products (MRTPs), electronic cigarettes, have been rising in popularity and are being promoted as a means to reduce cigarette consumption and/or to puff in smoke-free zones. "Faced by an avalanche of new MRTPs entering the marketplace, many flavored in a manner that may appeal to children, health officials worldwide have been caught off guard and are scrambling to develop regulations to deal with this product category," said Alan Shihadeh, AUB Professor of Mechanical Engineering, who will be leading the AUB study. Efforts to regulate electronic cigarettes and other MRTPs are hampered by a lack of objective evidence that addresses their safety or effectiveness as nicotine delivery devices.

"While new products are appearing on the market at a dizzying pace, no one is in a position today to answer basic questions, like whether these products will help people quit smoking and improve public health, or whether they will indirectly lead to increased cigarette consumption and greater disease."

Enter this major US-funded research study, which an AUB team of researchers will conduct to identify the amount of nicotine and other toxicants that are emitted as a result of e-cigarette design and use, which will subsequently affect consumer health. This, in turn, will help the Food and Drug Administration to develop evaluation tools that will inform tobacco regulatory policy.

Funded by the FDA and the National Institutes of Health (NIH), the AUB study is part of an \$18.1 million grant to establish the Center for the Study of Tobacco Products (CSTP) by a consortium of researchers from Virginia Commonwealth University (VCU), Penn State, and AUB.

The CSTP is among 14 centers selected to participate in a regulatory science research program that will provide vital scientific evidence to the FDA and NIH. Administratively housed at VCU, the center includes four scientific projects as well as a Training and Education Core that supports four pre-doctoral and four post-doctoral appointees. Project 1 will be housed at AUB and will involve an inter-disciplinary team from the Faculties of Engineering and Architecture, Arts and Sciences and Health Sciences.

"It speaks volumes to AUB's rising stature and credibility that the US FDA/NIH was willing to fund at AUB a program that will ultimately advise the US Food and Drug Administration on how to protect human health through regulatory science," said AUB Provost Ahmad Dallal. "I think we should all be proud of this achievement, particularly considering the extremely competitive field of applicants."

CSTP researchers will develop and test a multidisciplinary approach that uses engineering analysis, clinical behavioral research and randomized control trials to study the effects of novel tobacco products. The information learned from this research will help implement the 2009 Family Smoking Prevention and Tobacco Control Act, which gave the US Food and Drug Administration the authority to regulate the manufacture, distribution and marketing of tobacco products to protect public health.

The multi-year grant will involve four projects — examination of factors that influence MRTP nicotine and toxicant yields (directed by Professor Alan Shihadeh, AUB); comparison of short-term effects of MRTP to other products (co-directed by Professors Alison Breland and Michael Weaver of VCU); a randomized control trial (co-directed by VCU's Professor Thomas Eissenberg and Penn State Hershey's Professor Jonathan Foulds); and MRTP use and misuse on user's attitudes, beliefs and perceived effects (directed by Professor Aashir Nasim, VCU).

For the first five-year period, the focus will be on electronic cigarettes.

At AUB the work will involve researchers from the Faculty of Engineering and Architecture (Alan Shihadeh, Professor of Mechanical Engineering), the Faculty of Arts and Sciences (Dr. Najat Saliba, Professor of Chemistry), and the Faculty of Health Sciences (Dr. Rima Nakkash, Assistant Professor of Health Promotion and Community Health).

The AUB project will develop an empirically-validated mathematical model that will allow researchers to calculate nicotine yields based on electronic cigarette design features and consumer characteristics," explained Shihadeh. "This will enable regulators, for example, to rapidly identify products that, if used in a realistic manner, are likely to produce excessively high nicotine doses."

Drawing on methods developed at AUB to study waterpipe tobacco smoking, another aim of the project is to study non-nicotine toxicant emissions when electronic cigarettes are used as intended, as well as when they are misused.

The CSTP is part of a network of Tobacco Centers of Regulatory Science that includes Yale, Ohio State, the University of North Carolina and the University of Southern California, Los Angeles. The program will be coordinated by the National Institutes of Health Tobacco Regulatory Science Program.

**ENDS** 

### For more information please contact:

Maha Al-Azar, Associate Director for Media Relations, <u>ma110@aub.edu.lb</u>, 01-75 96 85

**Note to Editors** 

### **About AUB**

Founded in 1866, the American University of Beirut bases its educational philosophy, standards, and practices on the American liberal arts model of higher education. A teaching-centered research university, AUB has more than 700 full-time faculty members and a student body of about 8,000 students. AUB currently offers more than 100 programs leading to the bachelor's, master's, MD, and PhD degrees. It provides medical education and training to students from throughout the region at its Medical Center that includes a full service 420-bed hospital.

## Stay up to date on AUB news and events. Follow us on:

Website: <a href="www.aub.edu.lb">www.aub.edu.lb</a>

Facebook: <a href="http://www.facebook.com/aub.edu.lb">http://www.facebook.com/aub.edu.lb</a>
Twitter: <a href="http://twitter.com/AUB\_Lebanon">http://twitter.com/AUB\_Lebanon</a>