

## FOR IMMEDIATE RELEASE

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## THE CANARY SYSTEM INVENTORS RECEIVE THE "INVENTORS OF THE YEAR" AWARD FROM the UNIVERSITY OF TORONTO

Quantum Dental Technologies is pleased to announce that the inventors behind the energy conversation technology powering The Canary System<sup>™</sup> were recognized by the University of Toronto as "Inventors of the Year".

On May 15, 2013, Drs. Stephen Abrams and Andreas Mandelis (Professor in the Departments of Mechanical and Industrial Engineering; Electrical and Computer Engineering; and the Institute of Biomaterials and Biomedical Engineering) were recognized for their invention, The Canary System, which is changing the way dentists detect, monitor and treat tooth decay. Inventions were assessed based on their uniqueness, potential for global impact and commercial appeal.

"The Inventor of the Year Award is meant to recognize inventions that have the potential to improve our quality of life," said Professor Paul Young, vice-president (research and innovation). "The winning inventions represent the very best of innovation at U of T, and on behalf of the University, I extend my congratulations."

The Canary System is the brainchild of dentist Dr. Stephen Abrams and one of his patients, Dr. Andreas Mandelis. Twelve years ago, while Mandelis was in the dental chair, Abrams complained about the difficulty of diagnosing tooth decay on the biting surfaces of back teeth. Mandelis said he had a novel technology to image crystal structure, and they then started on their journey to create The Canary System. The technology behind The Canary System was developed in Dr. Mandelis' lab at the University of Toronto, with the help of his co-inventors and guidance and technical input from co-founder and dentist Dr. Stephen Abrams. This unique system allows clinicians to detect and monitor caries on all tooth surfaces including interproximal regions, around the intact margins of restorations, beneath opaque dental sealants and around orthodontic brackets. Under the leadership of Dr. Abrams and Dr. Mandelis the research team has been constantly innovating and pushing the frontiers of dentistry by substantiating the clinical applications of The Canary System in early detection and treatment of tooth decay.

Dr. Abrams said, "I'm proud to be working with such a great team of scientists, researchers, and engineers. Research is at the core of QDT. Now dentists have a reliable diagnostic tool for minimally invasive treatment of tooth decay."



PTR-LUM, the core technology in The Canary System, exhibits higher sensitivity and specificity in detecting caries compared to traditional methods using visual inspection, dental explorer tools, x-rays (radiographs), or fluorescence-based devices. The Canary System is the product of over 12 years of research and development which includes 60+ peer-reviewed journal articles, 7 patent families, and supported with two clinical trials performed under FDA CFR 21 guidelines. Quantum Dental Technologies continues to develop and publish more research applications for this unique platform.

## **About Quantum Dental Technologies**

Quantum Dental Technologies (QDT) is a Canadian diagnostic device company. The company was founded in 2006 by Dr. Stephen Abrams and Dr. Andreas Mandelis who designed and developed The Canary System, a patented technology to aid in the diagnosis, prevention and management of dental caries. For more information, please visit www.thecanarysystem.com.

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