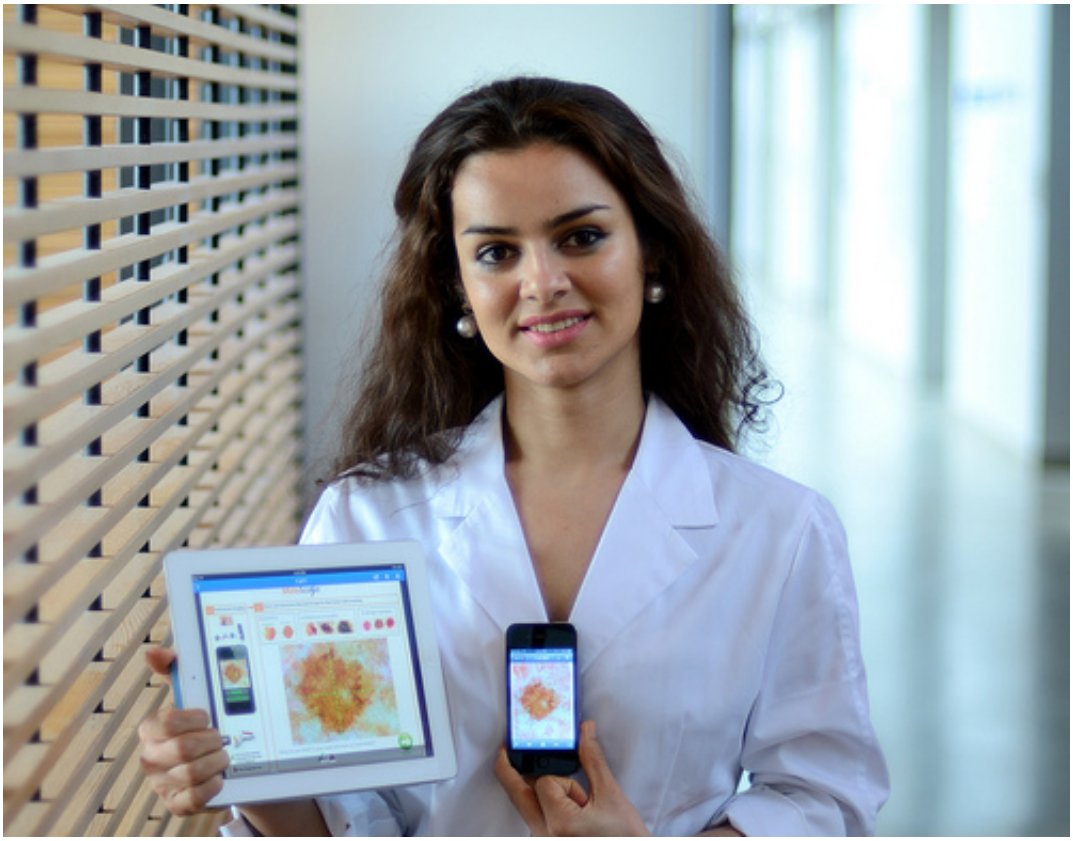
Medical Xpress

# Molescope to be unveiled at World Dermatology Conference in Vancouver

June 9 2015



Burnaby's Maryam Sadeghi, who is graduating from Simon Fraser University next week, has developed a number of smartphone apps that help diagnose or prevent skin cancer.

Simon Fraser University PhD graduate Maryam Sadeghi will unveil MoleScope, an innovative hand-held tool that uses a smartphone to

monitor skin for signs of cancer, at the World Congress of Dermatology conference in Vancouver June 9-13.

Sadeghi has spent three years transitioning from academic research to her start-up venture, MetaOptima Technology Inc. MoleScope, the company's inaugural product, which enables people to monitor their moles and skin health, share images with family and healthcare providers and eventually, connect skin specialists with people online.

"I love working with people to help them manage their health," says Sadeghi. "This is exactly what I imagined doing as a student and now my vision is being realized through the launch of MoleScope, and my company, MetaOptima Technology."

MoleScope comprises a mini-microscope that attaches to a smartphone, an app (iOS, Android, or web compatible) and a cloud-based analytical platform called DermEngine. Once people take high-quality, high-resolution images of suspicious moles or skin abnormalities, they can archive images and communicate concerns with others.

MoleScope is expected to provide healthcare benefits in communities without access to medical specialists and in those with long waitlists as people can self-monitor their moles and track changes over time.

Visual changes in skin often signal the possibility of skin cancer. It's estimated that 70 per cent of skin cancer is caught by individuals and family members.

The company has developed two versions of the product: a consumer version expected to retail at $149; and a more expensive professional version being presented at the World Congress of Dermatology meeting.

MoleScope has received approval from Health Canada, is FDA

registered as a Class 1 medical device in the U.S. and has just received the CE Mark in the EU. TGA approval in Australia is expected shortly. The company is initiating an early adopter program with qualified dermatologists and receiving strong interest from potential distributors and channel partners throughout the world.

Sadeghi is CEO of MetaOptima Technology and the company has grown to nine full-time employees. MetaOptima grew out of the SFU Innovation Office's Venture Connection program and Sadeghi's former mentor in the program, Hugh MacNaught, is now chair of the company's board of directors.

"It was obvious from the outset that Maryam had identified an unmet medical need and that she had strong insights in the application of technology to address that need," says MacNaught. "It has been a pleasure to watch her rally people around her vision and to work tirelessly to make it a reality."

Sadeghi won recognition during the research and development phase of MoleScope, winning WaveFront's Wireless Prize package ($40,000) in the BCIC-New Ventures Competition in 2013, plus a prize in the Plug & Play Silicon Valley competition in Vancouver in July 2014.

While a graduate student at SFU (she earned a PhD in computing science in 2012 under supervisor and professor emeritus Stella Atkins) Sadeghi and her team also developed the UV Canada app for skin cancer awareness and prevention. It was released in June 2011 and donated to the BC Cancer Agency at Vancouver General Hospital.

Sadeghi's PhD research on skin cancer prevention and analyzing dermoscopic images for early skin cancer diagnosis using intelligent computer technologies was recognized with a 2012 Innovation Challenge Award from the Natural Sciences and Engineering Research Council of

Canada.

Provided by Simon Fraser University