



**Julielynn Wong, MD, MPH**  
Founder, Chairman, & C.E.O.  
3D4MD

Dr. Julielynn Wong works in a space most would view as ideal - using one of the most modern innovations in health care today to deliver care cost-effectively to those most in need.

As the founder, chairman and CEO of the Toronto-based 3D4MD, Dr. Wong is using 3D printing technology and drones to provide sustainable

solutions to reduce poverty and deliver health care globally to those most in need.

Dr. Wong was the first to 3D print medical supplies onboard the International Space Station and the Mars Desert Research Station. She has also designed a solar-powered mobile 3D printing system to produce medical supplies in remote, off-grid communities. Last year, Dr. Wong received one of the five inaugural grants awarded by the Canadian Medical Association subsidiary Joule for her work to deliver low cost, on-demand 3D printable medical solutions.

So how did this Queen's and Harvard-educated public health physician come to be [identified](#) one of the most influential 35 women currently working in 3D printing?

That Dr. Wong entered the medical profession is not a surprise. Her father, two uncles, two cousins and brother-in-law are all doctors.

In an e-Health Conference interview, she explained that as part of her public health training she became involved with a social enterprise incubator known as Singularity University, where she was initially exposed to 3D printing and learning about how technology can benefit humanity.

"As a public health physician I saw that 3D printing was a great technology to save lives, time and money."

Earlier this year, Dr. Wong made a presentation to the Senate Standing Committee on Social Affairs, Science and Technology, where she was able to elaborate on her views about the potential of 3D printing.

She told the committee: "Our work has identified the following useful health care applications of 3-D printing: unforeseen objects needed to prevent or treat a medical condition in a remote setting; custom-made expensive or difficult-to-obtain specialized medical items; medical models for education; and pre-surgical planning for uncommon, complex high-stakes operations."

Dr. Wong stressed the ability of the technology to make low-cost assistance devices that can be printed in a location such as an out-patient clinic, library or even a person's home. "3D printing is very accessible and affordable," she says.

Last year, Dr. Wong started Medical Makers to create a global network of patients, healthcare providers and innovators with the goal of creating low-cost solutions to help those in need. Now, Dr. Wong is launching Medical Make-A-Thons worldwide, to add 150 new 3-D printable designs to their digital catalogue to celebrate Canada's 150th birthday.

Dr. Wong has advice for those who want to become innovators.

"Success in healthcare IT innovation (and life) requires integrity, kindness and strength," she said. "Your word is your reputation." She added that healthcare innovation can be a challenging and lonely journey "so be kind to your fellow innovators. Lend a supportive hand when you can."

"Empathy is essential to the innovation process," she adds. "At 3D4MD, we don't start designing products until we've met a patient and identified their challenges and needs."

On June 6, Dr. Wong will be speaking on "From Fax Machines to 3D Printing - Digital Health at Warp Speed".

*Dr. Julielynn Wong at the 2017 e-Health Conference:*

**Presentation:**

*From Fax Machines to 3D Printing - Digital Health at Warp Speed*

**Time & Location:** June 6, 2017 | 8:30 AM - 9:30 AM  
Exhibit Hall A, North Building, Metro Toronto Convention Centre