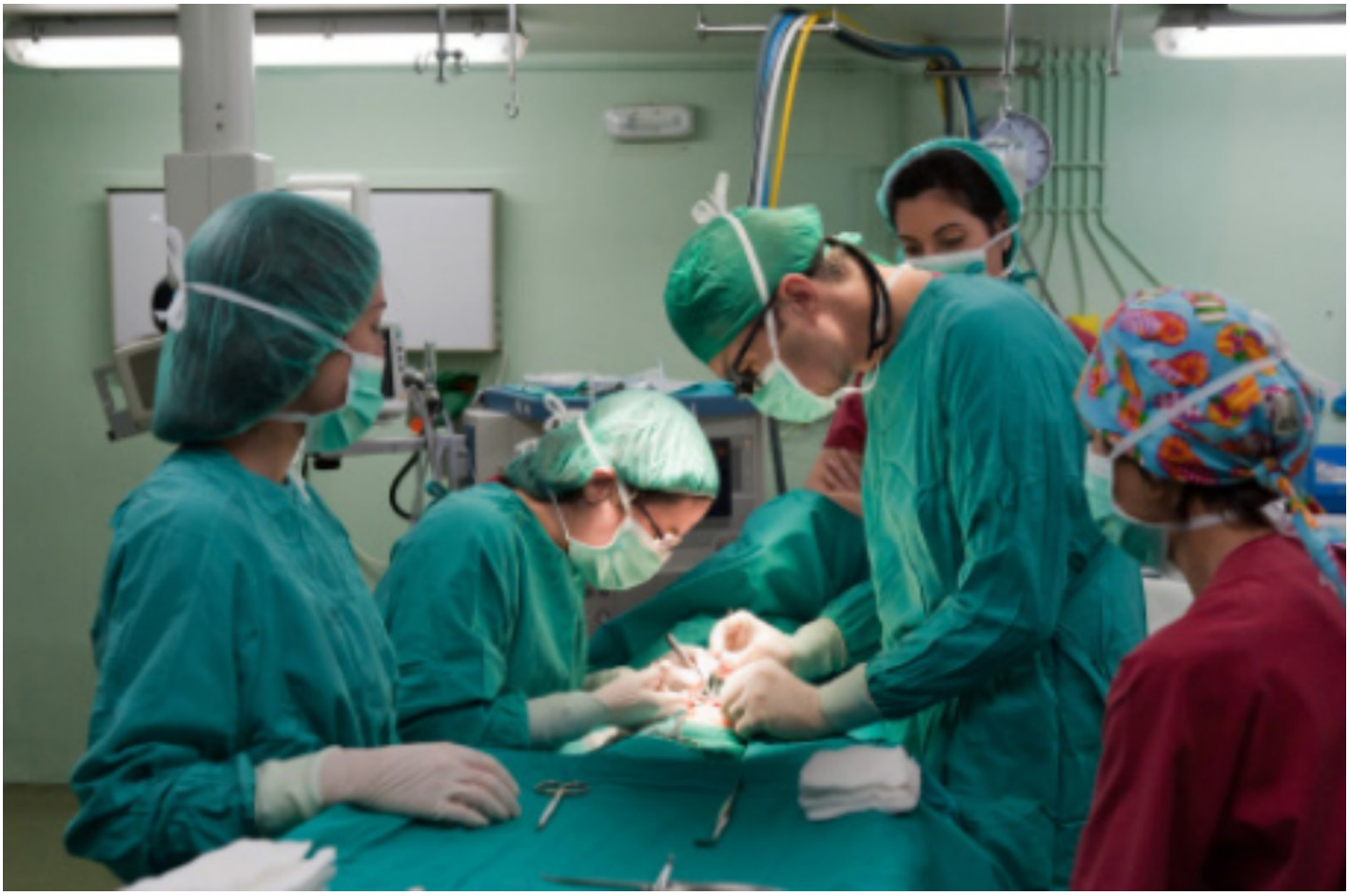
# From Hardware Store To Operating Room

University of British Columbia



Healthcare facilities in the developing world lack many resources, including access to expensive surgical equipment. As a result, some 5 billion people lack access to safe surgery because surgeons do not have access to the right medical equipment.

Case in point: orthopedic drills needed to perform surgery on serious bone and muscle injuries cost upwards of $30,000. That leaves orthopedic surgeons in low-resource areas with two options — they can use non- sterile hardware drills which increase the risk of infection, or use sterile, hand-cranked drills that are labor- intensive and lack precision.

Working with surgeons from Canada and Uganda, graduate students in biomedical engineering at the University of British Columbia (UBC) created a third and more appealing option — a reusable drill cover that transforms a drill purchased at a hardware store into a sterile surgical instrument.

> *Transforming off-the-shelf hardware into surgical equipment has helped reduce the rate of infection, improve patient outcomes and reduce operating times for low-resource environments*

*in 20 countries.*

UBC assigned the patented drill cover to Arbutus Medical. The company's flagship product, the Arbutus Drill Cover, has been used in more than 12,000 surgeries in 20 countries. Use of the sterilizable and reusable drill cover has helped reduce the rate of infection, improve patient outcomes and reduce operating times.

Arbutus Medical named the company after the Arbutus tree, an evergreen tree native to the southwest coast of British Columbia that thrives in harsh environments. Like its namesake, the company is working with surgeons around the world to develop safe, affordable and appropriate medical equipment for low-resource environments.

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