LAUNCH LAB
THE INNOVATION CENTRE
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Amplify
POWERED BY LAUNCH LAB

Spectra Plasmonics creates life-saving technology to combat opioid crisis

SINCE 2016 13,900 CANADIANS HAVE DIED AS A RESULT OF APPARENT OPIOID-RELATED OVERDOSES. IN THE US, THE WHITE HOUSE COUNCIL OF ECONOMIC ADVISERS ESTIMATES THE OPIOID EPIDEMIC HAS COST THE COUNTRY MORE THAN $2.5 TRILLION FROM 2015 TO 2018. ENTER SPECTRA PLASMONICS.

Hatched in the Queen's Innovation Centre Summer Initiative Program (QICSI) in the Summer of 2017, Spectra Plasmonics has developed a hand-held method of giving Supervised Consumption sites, first responders and law enforcement officers a proven way to instantly detect deadly amounts of fentanyl, carfentanil and other harmful components that have been added to more common street drugs like heroin and cocaine.

Fentanyl is around 50 to 100 times more toxic than morphine. Carfentanil is approximately 10,000 times more toxic than morphine, making it deadly in extremely small amounts. But it now can now easily be detected with Spectra Plasmonics innovation.

With the Spectra Plasmonics solution, on-site results take minutes versus months of wait-time from overrun labs. At a safe injection site, this means a person can pre-test drugs for deadly substances before safely injecting them.

SPECTRAPLASMONICS

FAST FACTS

Why Launch Lab

The Amplify program offers in-depth mentorship from Launch Lab's Entrepreneurs-in-Residence (EIRs). These seasoned executives offer decades of been-there-built-that corporate growth experience. To qualify for Amplify, companies like Spectra Plasmonics have to demonstrate scalable growth potential and a team that divides management responsibilities.

Client testimonial

"LAUNCH LAB NOT ONLY TEACHES US ON HOW TO BUILD OUR COMPANY AND TECHNOLOGY FASTER, BUT THEY ALSO TEACH US TO THINK BIGGER. WHILE WE'RE PILOTING OUR TECHNOLOGY WITH LOCAL PARTNERS IN CANADA OUR STRATEGIC EXPANSION PLAN IS AIMED AT THE US AND EUROPEAN MARKETS."

— MALCOLM EADE, CO-FOUNDER AND CEO, SPECTRA PLASMONICS

Future growth

As well as expanding into new geographies, the Spectra Plasmonics team is looking at expanding into new market verticals like food safety where instant, molecular-level testing could make meat and produce safer while saving lives from the effects of harmful bacteria.

For first responders who arrive at the scene of an apparent overdose, the Spectra Plasmonics technology quickly provides them with an understanding of what they are dealing with. That information, in the form of molecular-level analysis of the proprietary Spectra Plasmonics test consumable integrated with a third-party hand-held spectrometer, can then be easily monitored and managed in the community via analytics software provided by Spectra Plasmonics.

While their life-saving technology came together, the company's Queen's University team of Malcom Eade (B.Sc), CEO, Christian Baldwin (MMIE, B.Eng), COO and Tyler Whitney (B.Com) CFO, needed to create a business to capitalize on it. Given the Queen's Startup Runway Incubation Program has a strong partnership with Launch Lab, the Launch Lab team believed the new company was a great fit for its Amplify Program.

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Spectra Plasmonics' assigned EIR is Mike Amos, a veteran entrepreneur who built a 180-person software company that sold to customers in 52 countries, then sold to a competitor.

"Mike meets with us for bi-weekly check-ins where we review plans and set new goals," said Eade. "Launch Lab coached us through an application for Health Canada's Drug-Checking Technology Challenge, which encourages innovation in drug detection. We received $25,000 to develop our prototype, another $166,000 as a finalist to do field trials, and are now eligible for a $1 million grand prize to further develop our product."

"The Spectra Plasmonics team is a pleasure to work with," said Amos. "They're young and keen so it doesn't take much to convince them to institute recommended business practices to accelerate their plan."

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— MALCOLM EADE, CO-FOUNDER AND CEO, SPECTRA

"Launch Lab not only teaches us on how to build our company and technology faster, but they also teach us to think bigger," adds Eade. "While we're piloting our technology with local partners in Canada our strategic expansion plan is aimed at the US and European markets. I'd recommend them to anyone who's serious about rapidly moving their new venture forward with experienced strategic input."

CONTACT INFORMATION

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