

ALBERTA BIO FUTURE PROGRAM HIGHLIGHTS

LIGHT ACTIVATED CLEANER

Antibiotic-resistant infections are on the rise in hospitals and food packing plants must frequently recall tainted products. A group of researchers at the University of Calgary is developing a new way to curb the spread of bacteria causing these problems with a product derived from wood called cellulose nanocrystals (CNC).

One of CNC's many unique characteristics is its reaction to light. Drs. Belinda Heyne and Todd Sutherland have developed a novel formulation with CNC that kills bacteria by turning on a room's light. "We have reinvented how to clean," said Heyne. "It's clean. It's green. It's safe."



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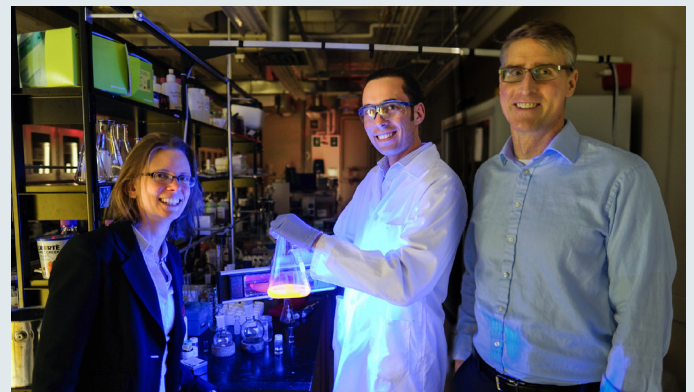
Dr. Belinda Heyne
University of Calgary



This project is a good example of how an idea moves through the innovation continuum with support from Alberta Innovates. Heyne and Sutherland received a seed grant from the Alberta Innovates CNC Challenge to prove the concept. In 2015, they received a much larger grant from the ABF Research and Innovation subprogram in Project BFR-16-017 to develop a prototype.

In 2018, they received a grant from the ABF Biomaterials Pursuit subprogram in Project BFM-18-001 to develop a market-ready product by 2020. Industry is very interested.

"We couldn't have gotten this far without Alberta Innovates' support," said Heyne. "It's not just the money. It's also their care that you succeed. I've never experienced that level of interest and help from any other funder."



Dr. Belinda Heyne with her team, Dr. David Press and Dr. Todd Sutherland, are developing a light-activated cleaner.
Source: Belinda Heyne

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