









RHS Science 12 Presents:



Philanthropic Engineering:

One Million Lights

&

Automated Greenhouse



@RHSScience12



ian.fogarty@nbed.nb.ca



400 Whitepine Road, Riverview, NB E1B 4H8



Automated Greenhouse

An automated greenhouse system that combines hydroponics and aquaculture, our aquaponics project is in its prototype stage waiting to grow bigger. The greenhouse will be used to help feed homeless in our community. Dreaming of becoming an entire green wall in the schools new atrium we explore the science behind a soilless system. Plants are fed with only water filled with fish waste. Water is filtered by seedlings and sent back to the fish tank where the cycle continues.





One Million Lights

The One Million Lights project began when we discovered Hailey and Maria from the Dominican Republic. Hailey and Maria are two young females who aspire to be doctors. This is their goal because their small town survives without any health workers. Where they live, electricity is not accessible and the sun sets around 6 at night. Consequently, studying is nearly impossible.

We set out to fix their problem, in order to help them achieve their dreams, to better their town's health and to improve our own learning. Through using 3D printing technology, learning how to solder and constructing our own full circuits, our project has come to life with 4 flashlight designs being materialized. The goal is to globally build 1,000,000 lights to help people worldwide.

Itinerary

- Doors Open
- Welcome
- Skype to Colorado
- Moonshot Thinking Video
- Automated Greenhouse
- Students for the Community
- Aquaponics
- Intermission (Greenhouse Tour)
- UNESCO Year of Light Video
- Clean Light
- Hailey & Maria
- RHS Flashlight Video
- Global Collaboration
- Ideal Plans
- Closing

(Refreshments provided by IEEE)