

MEng. Project: Processing of Algae as a Nutritional Supplement in the Developing World

We are seeking a self-starting, highly independent Masters of Engineering student to work on a project to grow Spirulina for human nutrition. This project will contribute to a larger project entitled 'Locally-produced Spirulina for protein, iron, and vitamin supplementation in children,' which has been funded through the Grand Challenges Canada Stars in Reproductive, Maternal, Newborn and Child Health program. Specifically, the successful candidate will work with lead researchers to develop methods for drying algae biomass, and methods for affordably growing the biomass in a developing world setting. Daily activities would include sampling and testing biomass growth systems (total suspended solids/biomass, dissolved nutrient concentrations, etc.) maintenance of biomass growth systems, and literature review/research on sourcing required materials for these growth systems. Preferred experience includes designing, building and operating reactors, an understanding of biomass de-watering methods, work in laboratory settings, and literature review/research.

Interested MEng students should send their CV and copy of their transcripts (unofficial is fine) to Professor D. Grant Allen, dgrant.allen@utoronto.ca and Dr. Peter Schnurr: peter.schnurr@mail.utoronto.ca