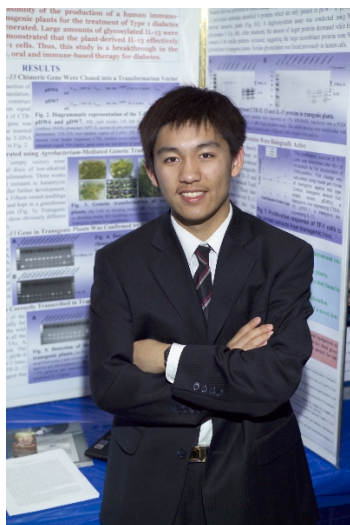


# CWSF 2006 - Saguenay, Québec



## David Wang

### Engineering A Cure for Diabetes

**Division:** Biotechnology

**Category:** Senior

**Region:** London District

**City:** London, ON

**School:** A.B. Lucas S.S.

**Abstract:** This project investigated the feasibility of the cost-effective production of a human regulatory cytokine, IL-13 in transgenic plants for the treatment of Type 1 diabetes (T1D). Transgenic plants producing large amounts of IL-13 were generated. In vitro bioassays demonstrated that the plant-derived IL-13 effectively induced the proliferation of T1D-associated T-lymphocytes. Thus, this study represents a novel, low-cost, oral, immune-based therapy for diabetes.

Awards	Value
Honourable Mention - Biotechnology & Pharmaceutical Sciences Senior Sponsor: Rx&D Health Research Foundation	\$100
Total	\$100