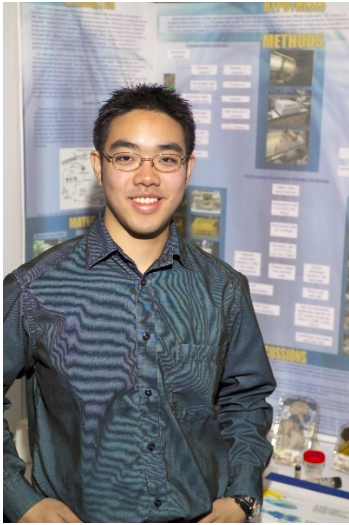


CWSF 2005 - Vancouver, British Columbia



Raymond Ko

Polysaccharides in Exotic Mushrooms and their Health Benefits

Division: Health Sciences

Category: Senior

Region: Saskatoon

City: Saskatoon, SK

School: Walter Murray Collegiate

Abstract: Three polysaccharides, lentinan, LC-1, and E, were isolated from water-soluble extracts of six exotic mushrooms: Monkey Head, Oyster, Reishi, Shiitake, Turkey Tail, and Wood Ear. The extraction included fractional precipitation with ethanol, cetyltrimethylammonium hydroxide, and acetic acid. Immunomodulatory effects of the extracts were tested on murine-bone-marrow-derived dendritic cells (DCs). In this study, fraction LC-1 from Oyster mushrooms significantly increased CD86 and CD40 expression in DCs.

Awards	Value
Agriculture and Agri-Food Canada Award - Senior	\$1 000
Sponsor: Agriculture and Agri-Food Canada	
Total	\$1 000