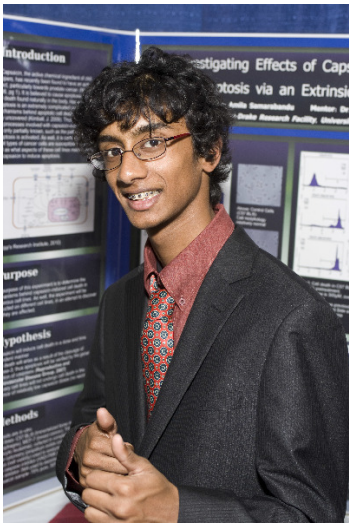


CWSF 2010 - Peterborough, Ontario



Amila Samarabandu

Investigating effects of Capsaicin Induced Apoptosis via an Extrinsic Pathways

Division: International

Category: Senior

Region: London District

City: London, ON

School: A.B. Lucas S.S.

Abstract: This project consists of using capsaicin, the active ingredient in chili peppers, to trigger apoptosis (cell suicide) in different cancer cell lines. The mechanics behind apoptosis are analysed, including the activation of caspases. Cancer cells, which would normally undergo apoptosis, somehow have disabled these mechanisms. Cell death exhibited is caspase-independent, implying that the apoptotic pathway being activated is extrinsic.

Biography

As a grade 12 student entering into the sciences, I have a fairly diverse background. I am heavily involved with music, as I play both the alto saxophone and the piano. I am going into life sciences, and my ultimate goal is medical school. I have done some cool work, including volunteering in hospitals in Sri Lanka, as well as teaching piano to children who can not normally afford lessons. I have won a couple awards and scholarships in music, both individually and with my school bands. The two things I enjoy most are meeting new people and a good meal.