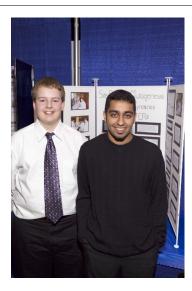




## CWSF 2006 - Saguenay, Québec



## Jeffery McLennan, Arwin Kalra

## Site Directed Mutagenesis of Conserved Tyrosins in ER Alpha and ER Beta

**Division:** Biotechnology

Category: Senior

Region: Manitoba Schools Science Symposium

City: Winnipeg, MB

**School:** Shaftesbury High School

**Abstract:** This project was undertaken to determine the effects of tyrosine

phosphorylation in Estrogen Receptor function. We mutated several tyrosines in ER alpha and ER beta in phenylalanines and using PCR, Luciferase and EMSA assays as well as Invitro-Translation and Western Blotting to determine the effect of these mutations Estrogen Receptor function. We determined that tyrosine phosphorylation did in fact play a role

in ER function.



