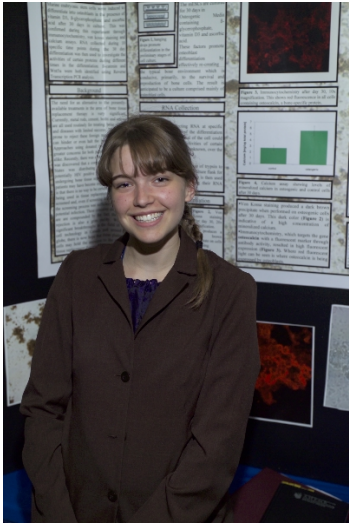


## CWSF 2006 - Saguenay, Québec



### Emily Cooley

#### Generating Osteoblasts From Murine Embryonic Stem Cells

**Division:** Biotechnology

**Category:** Senior

**Region:** Calgary Youth

**City:** Calgary, AB

**School:** Queen Elizabeth Junior Senior High School

**Abstract:** Murine embryonic stem cells were induced to differentiate into osteoblasts in the presence of osteogenic medium containing vitamin D3,  $\beta$ -glycerophosphate and ascorbic acid. RNA collected during 10 specific time points during the 30 day differentiation was used to investigate the activities of the signaling molecule Wnt5a and the transcription factor  $\beta$ -catenin.

Awards	Value
Quality of Life Student Research Award	\$3 750
Sponsor: Institute of Musculoskeletal Health and Arthritis of the CIHR	
Total	\$3 750