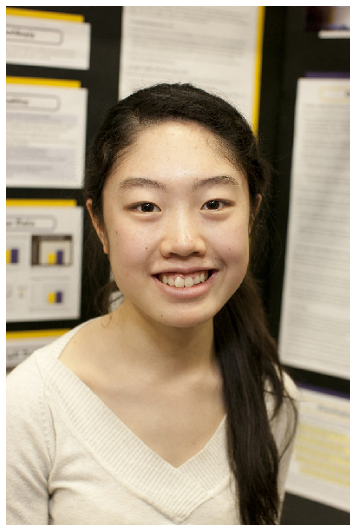


# CWSF 2011 - Toronto, Ontario



## Jenny Xue

### Does Light At Night Boost Appetite? A Study on Mice

**Challenge:** Health

**Category:** Senior

**Region:** Quinte

**City:** Belleville, ON

**School:** Moira S.S.

**Abstract:** The recent, concurrent increase of artificial lighting and obesity rates suggest night-time light exposure as a novel risk factor for this detrimental condition. After entrainment to a 16:8 light-dark cycle (?long day'), mice displayed significantly greater food consumption via abnormal shifts of activity and eating towards daytime. On a molecular level, light at night may have altered metabolic proteins and hormones by disturbing circadian rhythms.

#### Biography

I have a true passion for learning and making discoveries! I am an all-around academic student, earning the top mark in all nine of my courses last year. My love of being challenged has led me to enroll in the International Baccalaureate Diploma Programme. I also participate in several extracurricular activities, such as serving as Head of Outreach at student council and studying many disciplines of dance at the Quinte Ballet School of Canada. My greatest aspirations lie in the fields of science and mathematics. After university, I hope to establish a career in medicine or finance. Beginning in Grade 7, I've entered in as many as four national math contests per year, and I consistently rank in the top 2-10%. I have been selected for this year's Lloyd Auckland Invitational Mathematics Workshop for my high performance on the Fermat contest. I also have a long history of participating in science fairs and my experiments often focus on bettering human health. For my project on the antimicrobial properties of herbs two years ago, I was awarded best in grade. This year, I won best in fair and I'm very excited to be attending CWSF for the first time!

#### Awards

#### Value

Excellence Award - Senior - Bronze Medal Sponsor: Youth Science Canada	\$300
The University of Western Ontario Scholarship Bronze Medallist - \$1000 Entrance Scholarship Sponsor: University of Western Ontario	\$1 000
University of Ottawa Entrance Scholarship Senior Bronze Medallist - \$1000 Entrance Scholarship Sponsor: University of Ottawa	\$1 000
<b>Total</b>	<b>\$2 300</b>