

# CWSF 2011 - Toronto, Ontario



## A-J Hutchings

### The Role of Gastrin-Releasing Peptide in Neural Excitation of Rat Paraventricula

**Challenge:** Health

**Category:** Senior

**Region:** Ottawa

**City:** Ottawa, ON

**School:** All Saints H.S.

**Abstract:** Gastrin-releasing peptide (GRP) is a peptide neurotransmitter that plays an important role in feeding and stress behaviours. An important source of the GRP innervation in the hypothalamus is the suprachiasmatic nucleus (SCN), which contains the master pacemaker responsible for circadian rhythms. The axonal projections of these neurons extend into the hypothalamic paraventricular nucleus (PVN) that contains cells that regulate feeding behaviour and hormone release.

#### Biography

Finding myself with nothing to do in the Summer of 2008, I decided to get involved in the rollercoaster experience that is research. What, with its climaxes and sudden drops, research may seem daunting to many, but it was the best decision I have ever made, and an experience that I will never forget. It allowed me to work with some of the most phenomenal people possible, fed my hunger for learning, and granted me access to awards, including winning the Linda Beynan Award and the Martin Willis Summer Scholarship, presented by the Heart and Stroke Foundation. As well as science, one of my passions is the outdoors, and I have been an enthusiastic volunteer with the scouting movement for over five years. Within school I was the Events Co-ordinator for Student Council as well as being a member of the H.O.P.E Team (Helping Other People Everywhere), Robotics Team, Go-Green Committee, and the Music Department, playing the saxophone, guitar, and vocals. Next year I plan on attending University of Ottawa's Biomedical Sciences program, with the future ambition of becoming a Doctor and being actively involved in the Doctor's Without Borders Programme.

#### Awards

#### Value

The Canadian Society for the Weizmann Institute of Science Scholarships Joseph W. and Joel Anthony Leon Kerbel Scholarship Sponsor: The Canadian Society for the Weizmann Institute of Science (Weizmann Canada)	\$9 400
Excellence Award - Senior - Silver Medal Sponsor: Youth Science Canada	\$700
Dalhousie University Faculty of Science Entrance Scholarship Senior Silver Medallist - \$2500 Entrance Scholarship Sponsor: Dalhousie University, Faculty of Science	\$2 500
UBC Science (Vancouver) Entrance Award Senior Silver Medallist - \$2000 Entrance Scholarship Sponsor: The University of British Columbia (Vancouver)	\$2 000
The University of Western Ontario Scholarship Silver Medallist - \$2000 Entrance Scholarship Sponsor: University of Western Ontario	\$2 000
University of Ottawa Entrance Scholarship Senior Silver Medallist - \$2000 Entrance Scholarship Sponsor: University of Ottawa	\$2 000
<b>Total</b>	<b>\$18 600</b>