

## ESPC 2011 - Toronto (Ontario)



### Adam Noble, Shayla Larson

#### The Hazards of Nanosilver Uncovered

**Défi:** Environnement

**Catégorie:** Sénior

**Région:** Peterborough

**Ville:** Lakefield, ON, Lakefield, ON

**École:** Lakefield District Secondary & Intermediate

**Sommaire:** This investigation examined the effect of nanosilver, an increasingly common commercial and industrial antimicrobial agent, on *Euglena*. This photosynthetic protozoan may represent an indicator of the potential impact of nanosilver on living organisms in fresh water ecosystems. Results of this study indicated that absorbed nanosilver is toxic to *Euglena* cells resulting in structural and functional changes and cell death.

#### Biographies

Adam - I am 17 years old and in grade 11 at Lakefield District Secondary School. My favourite subjects are science and math. I have been on the Honour roll every year. I am on the cross country running, Nordic skiing, rugby, badminton and track and field teams at school. Outside of school, I run with the Quinte Track Club, play rugby with the Peterborough Pagans, and Nordic ski provincially with the Kawartha Nordic team. I am active on the Student Council where I chair the dance committee. During high school, I have earned two medals at OFSSA for Nordic skiing, several COSSA medals for Nordic skiing and rugby and a Silver medal for cross country run...

Shayla - I am a 16 year old, grade eleven student at Lakefield District Secondary School. I have been on the Honour Roll every year and have earned the highest mark honour in many of my high school courses: four courses in grade nine and five courses in grade ten. I am also a member of my school's Student Advisory Council and volunteer at the Peterborough Regional Health Centre. I played boys' hockey until I was thirteen, with four of those years on the AAA Peterborough Petes team. In soccer, I played for Peterborough City Representative A girls' teams for five years. In 2008, I suffered a serious leg injury which prevented further participation...

#### Prix

#### Valeur

Prix du concours junior canadien au sujet de l'eau, à Stockholm Commanditaire: Les associations membres canadiennes de la WEF, l'Association canadienne des eaux potables et Jacobs	2 000,00 \$
Le Prix Manning en innovation Commanditaire: Ernest C. Manning Awards Foundation	500,00 \$
Le Prix Manning en innovation et le prix Manning aux jeunes Canadiens et Canadiennes de 4 000 \$ Commanditaire: Ernest C. Manning Awards Foundation	4 000,00 \$
Prix du défi - Environnement - Sénior Commanditaire: Encana Corporation	1 000,00 \$
Prix d'excellence - Senior - Médaille d'or Commanditaire: Sciences jeunesse Canada	1 500,00 \$
Bourses d'admission de la Faculté des sciences de l'Université Dalhousie Médaille d'or, sénior - Bourse d'admission de 5 000 \$ Commanditaire: Université Dalhousie, Faculté des sciences	5 000,00 \$
Prix d'admission en sciences de UBC (Vancouver) Médaille d'or, sénior - Bourse d'admission de 4 000 \$ Commanditaire: The University of British Columbia (Vancouver)	4 000,00 \$
Bourse d'admission de l'Université du Manitoba Médaille d'or, sénior - Bourse d'admission de 5 000 \$ Commanditaire: Université du Manitoba	5 000,00 \$
Bourse d'études de l'Université Western Ontario Médaille d'or - Bourse de début d'études de 4 000 \$ Commanditaire: Université Western Ontario	4 000,00 \$
Bourse d'admission de l'Université d'Ottawa Médaille d'or, sénior - Bourse d'admission de 4 000 \$ Commanditaire: Université d'Ottawa	4 000,00 \$
<b>Total</b>	<b>31 000,00 \$</b>

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