

Beth is saving ringed seals in the Arctic.

What's an urban teenager doing boiling the claws of Arctic ringed seals? Using biotechnology to help solve the serious problem of mercury pollution in the North.

Seals are an important food source for polar bears and other predators, and for many northern people. When mercury collects in the seals' organs and the seals are eaten, the poison ends up traveling through the food chain—spreading its harmful effects.

Sixteen year-old Beth knew people could 'read' the rings on the seals' claws to tell the animals' age. That got her wondering if the claws might contain other information, too. She entered the Sanofi-Aventis BioTalent Challenge to find out. Matched with a professor at the University of Manitoba's Faculty of Medicine as her mentor, she devised a method of analyzing the claws to learn about ringed seals' mercury exposure—taking science one step closer to understanding how the seals might be protected in future.



How other teens are using biotechnology to make a difference



Fending off food shortages

Jonathan, Josh and Norman—a trio of high-school students—had big ambitions when they decided to study the genetics of a small flowering plant: they wanted to help prevent future world food shortages. How? By figuring out ways of producing salt-resistant crops that could be grown on land not currently usable for farming.



Fighting disease—naturally

Stephanie, a grade-nine student, grew up hearing her grandfather's stories of how larch tea saved his life during a childhood bout of tuberculosis. Through her Sanofi-Aventis BioTalent Challenge project, she proved him right—showing that larch tea is a powerful natural medicine that fights bacterial infections.



What's the difference you want to make?



Everybody wins

The **Sanofi-Aventis BioTalent Challenge** (SABC) is a national science competition open to all high-school and CEGEP students in Canada. It focuses on biotechnology: the science of researching and developing biological solutions that can be applied to agriculture, the environment, medicine and many more areas that have a direct impact on people's daily lives.

That's what makes the SABC a win-win proposition: every project in every competition changes the world a little through its discoveries. And the top entries earn substantial cash prizes: since its beginning the SABC has given out nearly half a million dollars in scholarships and awards.

Students are free to propose their own research, to explore topics they're passionate about. They collaborate with professional mentors—real scientists in real labs—to do work that has practical, meaningful applications and sometimes even makes headlines.

How to get started

Students submit their research proposals to the Sanofi-Aventis BioTalent Challenge to enter. Selected projects are matched with scientist mentors and given access to appropriate laboratory facilities. Regional competitions are held in March and April to determine finalists; the national competition is held at the headquarters of the National Research Council Canada in Ottawa. And it doesn't stop there: the top two national project teams earn the chance to compete in the sanofi-aventis International BioGENEius Challenge at the Biotechnology Industry Organization's (BIO) Annual International Convention.

Registering is simple

To enter, go to sanofibiotalentchallenge.ca and complete the online application. You'll also find more information there about the competition, how it works and who's involved.



What's in it for you

The opportunity to get **valuable experience** working with **real scientists in real labs**.

The possibility of **answering questions or solving problems** that you care about or have touched your life.

The chance to win **cash prizes, scholarships and more**.

Beyond the contest — biotechnology careers

Many students say taking part in the SABC gets them thinking about the prospect of a career in the bio-economy. The opportunities are almost limitless. Check out the growing list of biotechnology career profiles online in the career planning section at BioTalent Canada's website www.biotalent.ca.

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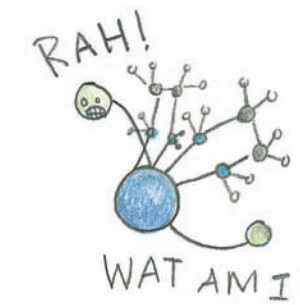
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The Sanofi-Aventis BioTalent Challenge

This project is funded in part by the Government of Canada's Sector Council Program.