



FACT SHEET

Investing in Innovation to Address Antimicrobial Resistance

- Antibiotic resistance is a public health concern around the world. The number of bacteria that are resistant to antibiotics is increasing.
- In response, the Government of Canada has produced *Antimicrobial Resistance and Use in Canada: A Federal Framework for Action*, which maps out a coordinated, collaborative federal approach to responding to the threat of antimicrobial resistance. It also sets out three areas of focus: surveillance, stewardship and innovation.
- The Government of Canada is already a major supporter of research on antimicrobial resistance, investing more than \$143 million in research through the Canadian Institutes of Health Research (CIHR) since 2006. This research is fostering the development of new methods and tools to combat antimicrobial resistance and improve antimicrobial use. This funding is also supporting the participation of Canadian researchers in international research collaborations including the Joint Programming Initiative on Antimicrobial Resistance. Canada is a member of this initiative along with 18 other countries.
- Under this initiative, the Government of Canada has invested \$4 million through CIHR to support the following six new international projects involving researchers at Canadian universities. These researchers will work with international partners to develop new drugs and therapeutics approaches to treating bacterial infections. The projects are co-funded by several European research agencies.

Canadian researchers	Project	CIHR Funding	Participating countries
Dr. Natalie Strynadka University of British Columbia	Developing new approaches to disrupting the construction of bacterial cell walls as a target for drug development.	\$508,857	Canada France United Kingdom Netherlands Switzerland
Dr. Roger Levesque Laval University (Quebec, QC)	Reducing the ability of bacteria to cause disease using biofilms sensitive to antibiotics.	\$379,899	Canada United Kingdom Denmark Sweden
Dr. Nathan Magarvey McMaster University Dr. Raymond Andersen University of British Columbia Dr. Julian Davies University of British Columbia	Developing natural antibiotics for treating drug resistant bacteria.	\$1,500,000	Canada France Israel United Kingdom

Dr. Charles Thompson University of British Columbia	Developing a new strategy for treating drug resistant tuberculosis using a multiple target approach.	\$600,000	Canada Netherlands France Norway Switzerland
Dr. Horacio Bach Dr. Urs Hafeli University of British Columbia	Investigating the mechanism of eradicating multi-drug resistant bacteria using organic and inorganic compounds and protein nanoparticles.	\$461,760	Canada Israel Spain
Dr. Natalie Strynadka University of British Columbia	Protecting the effectiveness of beta-lactam antibiotics by finding and developing molecules to prevent their inactivation.	\$508,857	Canada Netherlands Sweden