

# Research News

umanitoba.ca/research

## CAN-R website zeros in on superbugs

BY FRANK NOLAN  
Research Promotion

Health professionals across Canada have a new weapon in the war against antibiotic-resistant superbugs. It's not a vaccine or a powerful new drug, it's an innovative website, and it was the brainchild of researchers at the University of Manitoba.

CAN-R.ca is the official website of the Canadian Antimicrobial Resistance Alliance (CARA), a University of Manitoba-based medical microbiology and infectious diseases research group that includes members from across the country. Launched in March, 2007, the new website includes a wide range of information about superbugs, including up-to-date surveillance data, and the latest statistics on antibiotic usage across Canada.

University of Manitoba superbug expert George Zhanel, medical microbiology, is the website's editor in chief.

"This was something we've wanted to do for a very long time, and it's great to have the site up and running," Zhanel said. "Our editorial board is really a



Photo by Frank Nolan

George Zhanel, medical microbiology.

who's who of medical microbiology and infectious diseases across Canada, and we have committed to making the CAN-R website a national resource where people can find comprehensive information about superbugs."

Endorsed by the Association of Medical Microbiology and Infectious Disease Canada (AMMI) and Health Canada, the website is the only one

of its kind in North America. It is designed to be a resource for health professionals dealing with antimicrobial resistant infections, as well as members of the media and the general public. All content is evidence-based, peer reviewed and approved by the CAN-R editorial board before being posted on the site.

CARA has also partnered with an organization called IMS, which stands for Intercontinental Medical Statistics. IMS tracks antibiotic use in both in-patients and out-patients around the world, and will provide the website with the latest information about antimicrobial usage across Canada.

"Doctors and other health care professionals would access this site for a number of reasons," Zhanel said. "For example, you can get the latest Canadian and American practice guidelines for dealing with specific infections. Or if you want to use a certain antimicrobial, you can find the latest research on that particular agent, whether it's dosage, adverse effects, efficacy and so on. It's also very useful for people who want to

know what kind of superbugs are in their particular region, and what the resistance patterns look like."

The new site also has pages aimed at the media and the general public, which present a range of superbug information in a clear and simple way.

"There are a number of animations that show how antibiotics work and how resistance develops," Zhanel said. "This can be used, for example, by university teachers in science and medicine, for teaching in hospitals, or for members of the media who need some background for a story they're working on. It's already a great resource, and we're getting about 500 hits per day. I'm sure that count will rise dramatically as we continue to develop the site."

First-time visitors to the site must register to gain access to all of the information. Registration is free, and once registered, users will also receive a "hot topics" update every few months with the latest superbug information. To register, visit the site at: <http://can-r.ca>

## Programs support agri-food research

BY FRANK NOLAN  
Research Promotion

Agriculture in the 21st century is about a lot more than just farming. Environmental concerns and growing consumer demand for value-added foods and natural health products have revolutionized the agri-food sector, sparking intense research on everything from functional foods and biopharmaceuticals, to environmentally-friendly bioproducts and biofuels.

On May 23, university researchers, government personnel and local companies gathered at the University of Manitoba to learn about government programs that support innovative agri-food research and development. The full-day workshop was organized by Digvir Jayas, associate vice-president (research) at the University of Manitoba, and Canada Research Chair in Stored-Grain Ecosystems. The event was sponsored by the University of Manitoba, the Manitoba Food Processors Association, the Manitoba Business Council, the Manitoba Chamber of Commerce, the Winnipeg Chamber of Commerce, and Agriculture and Agri-Food Canada (AAFC).

"The federal government has introduced several new programs, and we wanted to highlight the opportunities they present to both university researchers and local industries," Jayas said. "It was a tremendous success. We were originally expecting maybe 30 or 40 people, but we ended up with about 125. There is clearly an appetite in the

research and development community to learn more about these government programs."

The event included presentations by a number of federal and provincial government representatives, including Gordon Neish, director general of bioproducts and bioprocesses for AAFC, who began the workshop with an overview of AAFC's science and innovation strategy.

"We live next to a giant, and we deal with giants, whether it's the United States, the European Community, or Japan," Neish said. "We're looking at ways to build a knowledge-based bio-economy, which has profound implications for the agriculture and forestry sectors in Canada. We really need to bring our best minds together in productive partnerships, so that we can develop new ideas and take them to the marketplace."

Neish also opened the afternoon session with a presentation on the new Agriculture Bioproducts Innovation Program (ABIP), which supports the development and operation of new bioproducts research networks that include university researchers and the private sector.

"We're asking people to create networks that have a particular focus, whether it's biofuels, other kinds of bioenergy, biopharmaceuticals, and so on," he said. "We've heard from several applicants who say the program has already done a great service, simply by encouraging people to talk to each other and to come up with these



Photo by Mya Kraft

From left, Gordon Neish, Agriculture and Agri-Food Canada, Digvir Jayas, associate vice-president (research) University of Manitoba, and Daryl Domitruk, Manitoba Agriculture, Food and Rural Initiatives.

collaborations."

The workshop concluded with a presentation by Daryl Domitruk, Manitoba Agriculture and Rural Initiatives, and Lori-Ann Kaminski, project officer for the Agri-Food Research and Development Initiative (ARDI), a program supported by both the federal and provincial governments.

"ARDI funds everything from basic research to product commercialization and market evaluation, and it really

encourages partnerships across sectors," Domitruk said. "Projects are focused on priorities that come directly from the agri-food sector and from rural Manitobans, including things like value-added agriculture, biofuels, functional foods and natural health products and sustainable production systems. It's really about research and development that will lead to better profits for farmers, either on the production side or further up the value chain."

## Bringing Research To Life

Research News is Published  
by the Office of the Vice-President (Research)  
Comments, submissions and event listings to:  
[stefaniu@ms.umanitoba.ca](mailto:stefaniu@ms.umanitoba.ca)  
Phone: (204) 474-9020 Fax (204) 261-3475