



**MTS Professional Development Day
The Science Teachers' Association of Manitoba
(STAM) presents:**

STAM Speaker Series 2017

Friday, October 20th, 2017

8:00 a.m. - 3:30 p.m.

Westwood Collegiate

360 Rouge Road, Winnipeg



Dr. Jennifer Gardy

Senior Scientist at BC Centre for Disease Control
& Guest Host of *The Nature of Things*

Jennifer Gardy's enthusiasm for science is refreshing. Called "the new Suzuki" by *The Globe and Mail*, she is a senior scientist at the BC Centre for Disease Control and was guest host for one of the

highest-rated *Nature of Things* specials. She communicates, with immense charm and energy, the impact of science on our everyday lives. Gardy is a scientist at the British Columbia Centre for Disease Control, where she hunts for the newest deadly diseases before they spread. In her talks, and in her work as a guest host on *The Nature of Things*, Gardy challenges our most commonly held beliefs to uncover the truth behind our folklore. Does drinking alcohol on a cold day really warm you up? Does eating grilled meat really increase your risk of cancer? And, do we really lose most of our body heat through our head? Gardy tackles these questions—and more—in her fascinating and engaging talks. She is also the author of children's book *It's Catching: The Infectious World of Germs and Microbes*, a "roll call of germs [that] makes for fascinating reading" (*Kirkus Reviews*). Being a scientist isn't just about reading boring books and looking through a microscope. Dr. Jennifer Gardy puts herself in the middle of her own experiments—all for the sake of science, of course—as guest host of the "Myth or Science" episodes on CBC's popular show *The Nature of Things*. Do mosquitoes bite women or men more? Is raw food better than cooked food? Do we really lose most of our body heat through our heads? Gardy knows first-hand. In this seriously funny and educational talk, she introduces young audiences to the way science impacts nearly every aspect of our lives. And, she shows that scientists don't have to be lab-coat-wearing stereotypes—they can be just as cool (and fun and fearless) as Gardy herself.

Program

8:00 Registration and Refreshments
9:00 Welcome
9:10 Randy Herrmann
10:10 Coffee
10:45 Candace Parks
11:45 *Lunch & Awards
1:00 Dr. Jennifer Gardy
2:00 Dr. Michael Drebot
3:00 Reception & AGM

*Registration includes lunch.

**STAM thanks
Engineers Geoscientists Manitoba
for helping to sponsor the
nutrition break.**



8:00-9:00

MAPT AGM

(Manitoba Association
of Physics Teachers)

Annual General Meeting

All physics teachers are welcome! A great opportunity to see what MAPT is up to, make suggestions, and become a member.



Randy Herrmann, P.Eng.

Director, Engineering Access Program (ENGAP)
Faculty of Engineering, University of Manitoba

For almost 20 years, Randy Herrmann, P.Eng. has been Director of the Engineering Access Program for Indigenous Canadians (ENGAP) at the University of Manitoba. In this role, he leads the team that provides a holistic academic, social, cultural, and financial support program to Indigenous engineering students. Prior to this role, Randy worked in geotechnical engineering consulting services in rural and remote Ontario communities for 10 years. He is passionate about outreach and educational development for Indigenous children, youth, and young adults and assisting them to reach their potential.

Bringing Engineering into the Classroom

Randy will describe why students should consider engineering as a career area, the various areas engineering covers, and how to bring engineering into the classroom. The presenter will also speak about how to incorporate Indigenous knowledge into the science curriculums.



Candace Parks

Aquatic Invasive Species Specialist, Department of Sustainable Development, Manitoba Government

Candace is the Aquatic Invasive Species (AIS) Specialist for the Province of Manitoba's Department of Sustainable Development. She is a program lead for the province's Aquatic Invasive Species program. Candace focuses on communicating to user groups their legal responsibilities, and how collectively, everyone must take personal responsibility to stop the spread of aquatic invasive species. Notably, she works with all levels of government, industry and user-groups

to address how to manage, and adapt to, Zebra Mussels in Manitoba. When she is not battling AIS, Candace spends time with her husband and their three young boys aged 9, 6, and 4 years old.

Candace's presentation will describe aquatic invasive species (AIS) in Manitoba: status, lessons learned and why prevention is key. She will present on what AIS is on the horizon, what is here such as Zebra Mussels, how to slow the spread, how we need to adapt to a new reality for AIS-invaded waters, and how it takes collective action and a shared responsibility to protect Manitoba's rivers, lakes and wetlands from the threat of aquatic invasive species.



Dr. Michael Drebot

Director, Zoonotic Diseases and Special Pathogens
National Microbiology Laboratory

Dr. Michael Drebot received his PhD in Microbiology in 1988 from Dalhousie University and was then awarded a postdoctoral fellowship in genetics from the Hospital for Sick Children (Toronto, 1988-1991). In 1991 he joined the National Centre for Enteroviruses in Halifax

where he conducted research on the molecular diagnostics-epidemiology and genetics of polioviruses and various enteric pathogens and was cross-appointed as an adjunct professor within the Department of Microbiology and Immunology at Dalhousie University. In 1996, Dr. Drebot joined the Zoonotic Diseases program of Health Canada, Ottawa, as a research scientist. In 1999 he became the Chief of Viral Zoonoses within the Zoonotic Diseases and Special Pathogens (ZDSP) section of the National Microbiology Laboratory (NML) (Public Health Agency of Canada, Winnipeg) and in 2007 also took on the responsibilities of Director of the Science Technology and Core Services division. In 2013 he became the Director of the Zoonotic Diseases and Special Pathogens section at the NML.

As well, Dr. Drebot is an Associate professor within the Medical Microbiology (MM) Department, University of Manitoba. He has been actively involved in teaching and supervising students, dealing with student affairs, served on various MM Executive and Graduate Student committees and promoting/orchestrating staffing interchanges between the University and the NML to further foster relationships between academia and government.

The focus of his research and / or directorship has been to work with and support colleagues at ZDSP on the establishment of applied and basic research programs for various zoonotic / vector-borne disease agents including: arboviruses (such as Zika virus, West Nile virus-WNV, emerging mosquito borne bunyaviruses and alphaviruses such as California serogroup viruses and Chikungunya), rodent-borne pathogens such as hantaviruses, rabies, and rickettsia agents, prion diseases and high containment pathogens such as Ebola viruses and high consequence respiratory viruses. The ZDSP program carries out reference diagnostic services, surveillance activities and a wide variety of research projects on a number of zoonotic disease agents and ultimately the information gained from these three core activities are used to better define the risk factors, geographic distribution and intervention strategies available to minimize human exposure to these pathogens.

HOT LUNCH BUFFET

Catered by Urban Prairie Cuisine

Join us for a delicious
buffet luncheon, including:

Variety of salads

Assorted dinner rolls

Carved beef sirloin steaks with wild
mushroom au jus and chutneys

Tequila lime grilled chicken breast

Baby boiled herb potato with butter

Chef selection of fresh garden veggies

Assorted fresh baked dainties,
squares and cookies

Coffee and juice

**Lunch is included with
conference registration.**

Engineers Geoscientists Manitoba Spaghetti Bridge Competition

The competition is open to all school children (grades K - 12). The goal is to see whose truss will support the heaviest load. The competition is a fun event giving the opportunity for students, teachers, and parents to get involved in "hands-on engineering". In addition to the \$2000.00 in prize money up for grabs by the students, Engineers Geoscientists Manitoba have expanded the event to be a meaningful charity event for the whole community. The Association will make a donation to Winnipeg Harvest equal to the cumulative weight supported by all entries.



Contact Gemma Keatch at gkeatch@EngGeoMB.ca for more information.

REGISTRATION INFORMATION

Registration available online at www.stam.mb.ca.

REGISTRATION/MEMBERSHIP INFORMATION

PLEASE READ CAREFULLY

There is limited space available for this event, so early registration is encouraged. Although we are expecting to be sold out, any available spaces will be offered to STAM members at the registration desk on Friday, October 20th, 2017. Changes to the program as well as other conference announcements may be viewed on the STAM website: www.stam.mb.ca

STAM Membership 2017-2018*

General	\$20.00
Full-time student	\$20.00

**Please note membership fees may be paid in conjunction with the conference fee.*

Membership includes:

- Reduced SAGE conference fees
- Reduced science workshop/in-service fees

Early Bird Full Day Conference Fees (includes hot lunch) Before October 1st, 2017

STAM Member	\$55.00
Non-Member	\$74.00
Full-time student (STAM member)	\$20.00
Full-time student (non-member)	\$39.00

NOTE: For **regular STAM members**, your total cost for the conference, including a STAM membership and hot lunch, is **\$75.00**. For **full-time student STAM members**, your total cost for the conference, including a STAM membership and hot lunch, is **\$40.00**.

Please show card at registration desk.

Full Day Conference Fees (includes hot lunch) October 1st-20th, 2017

STAM Member	\$65.00
Non-Member	\$84.00
Full-time student (STAM member)	\$30.00
Full-time student (non-member)	\$49.00

- On-site registration is available for STAM members only, providing space is available. Memberships may be purchased on-site.

- ◆ Please go to the STAM website at www.stam.mb.ca and follow the link for online registration.
- ◆ Conference fees and STAM memberships are non-refundable.
- ◆ *Registration is on a first-come basis and this conference may fill up quickly.*

IMPORTANT: For session updates and changes, visit the STAM website at: www.stam.mb.ca