13th Annual Canadian Blood Services International Symposium

Blood-Borne Pathogens: Defend, Detect, and Destroy



Saturday September 26th, 2015

Chestnut Conference Centre, University of Toronto Colony Ballroom • 89 Chestnut Street • Toronto, Ontario



Program Goals

- ✓ Enhance knowledge of blood-borne pathogens
- \checkmark Gain an understanding of approaches used to ensure the safety of the blood supply

7:30 – 8:10 Light Continental Breakfast & Registration

Welcome

8:10 – 8:15 Dr. Margaret Fearon, Canadian Blood Services, Toronto

Session 1: Defense Against Pathogens

Chair: Dr. Margaret Fearon, Canadian Blood Services, Toronto

- 8:15 8:50 **Prevalence and risks of blood-borne pathogens in the Canadian blood supply** Dr. Margaret Fearon, Canadian Blood Services and University of Toronto, Toronto Including 6 min Q&A
- 8:50 9:35 Current perspectives on transfusion transmitted infectious diseases: emerging pathogens worldwide Dr. Roger Dodd, Secretary General of the International Society of Blood Transfusion, Washington DC Including 12 min Q&A
- 9:35 9:55 Coffee Break
- 9:55 10:25 **Preventing the spread of pathogens around the globe a clinical and public health perspective** Dr. Allison McGeer, Mt. Sinai Hospital, Toronto Including 6 min Q&A
- 10:25 11:10 An alternative method of maintaining a clean blood supply: ex vivo generated red blood cells Dr. Marc Turner, Scottish National Blood Transfusion Service, Edinburgh Scotland Including 12 min Q&A





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Session 2: Detecting Pathogens

Chair: Dr. William Sheffield, Canadian Blood Services and McMaster University, Hamilton

- 11:10 11:40 The technical aspects of pathogen testing in Canada Nancy Angus, Canadian Blood Services, Toronto Including 6 min Q&A
- 11:40 12:25 Next generation sequencing the future of pathogen testing? Dr. Samia Naccache, University of California, San Francisco CA Including 12 min Q&A

12:25 – 13:25 Networking Lunch (Catered lunch with opportunity to ask questions to speakers)

Session 3: Destroying Pathogens

Chair: Dr. Kathryn Webert, Canadian Blood Services and McMaster University, Hamilton

13:25 – 13:55 **The biological impact of pathogen inactivation on blood product quality** Dr. Peter Schubert, Canadian Blood Services and University of British Columbia, Vancouver

Including 6 min Q&A

13:55 – 14:40 Implementation of pathogen inactivation technology in Switzerland Dr. Niels Lion, Transfusion Interrégionale CRS, Lausanne Switzerland

Including 12 min Q&A

- 14:40 15:00 *Coffee Break*
- 15:00 15:45 Economic and health outcome implications of introducing new pathogen testing and inactivation technologies Dr. Brian Custer, Blood Systems Research Institute and University of California, San Francisco CA

Including 12 min Q&A

Meeting Wrap-up

15:45 – 15:55 Dr. Kathryn Webert, Canadian Blood Services and McMaster University, Hamilton



This event is an <u>Accredited Group Learning Activity 6.0 Section 1 Credits</u> as defined by the Maintenance of Certification program of the Royal College of Physicians and Surgeons of Canada, approved by the University of Toronto.

Program Learning Objectives:

Upon completion of this program participants will be able to:

- Discuss the characteristics, prevalence rates and residual risks for transfusion-transmitted bloodborne pathogens in Canada and worldwide;
- ✓ Describe the factors that impact the emergence of new infectious agents;
- ✓ Summarize surveillance systems in place to monitor risks associated with blood-borne pathogens;
- Explain how the Risk-Based Decision-Making Framework for blood safety can be used to help decision makers optimize the safety of the blood supply from blood-borne pathogens;
- Describe the advantages and disadvantages of the Canadian and Global response to disease outbreaks with global impact;
- ✓ Summarize ways to improve the prevention and management of new outbreaks and emerging diseases;
- ✓ Discuss approaches to generate red blood cells ex vivo and describe their potential applications in transfusion medicine;
- Explain the advantages and disadvantages of ex vivo generated red blood cells in transfusion medicine;
- Describe the laboratory tests currently in use by blood operators, and in particular by Canadian Blood Services, for the detection of blood-borne pathogens;
- ✓ Summarize the differences in sensitivity of the current laboratory tests for blood borne pathogens;
- ✓ Explain the principles and methodology behind next generation sequencing approaches for the detection of pathogens;
- ✓ Explain how next generation sequencing approaches may be used for the detection of blood-borne pathogens by blood operators in the future;
- Compare the currently available pathogen inactivation technologies and their mechanisms of action;
- Discuss the impact of pathogen inactivation technology on product quality, operational logistics, and patient safety;
- ✓ Review costs, consequences, and cost-effectiveness of introducing new pathogen testing and/or pathogen inactivation technologies.

This program was developed in collaboration with:



Continuing Professional Development (CPD), Faculty of Medicine, University of Toronto, is fully accredited by the Committee on Accreditation of Continuing Medical Education (CACME), a subcommittee of the Committee on Accreditation of Canadian Medical Schools (CACMS). This standard allows CPD to assign credits for educational activities based on the criteria established by The College of Family Physicians of Canada, and the Royal College of Physicians and Surgeons of Canada.

As a result of a reciprocal agreement between the Royal College of Physicians and Surgeons of Canada, The American Medical Association, and The European Union for Medical Specialists, CPD is permitted to assign respective credits.

An event organized and sponsored by Canadian Blood Services Medical Services & Innovation



Providing Feedback & Receiving CME Accreditation

Following the event, attendees will receive a link by email to complete an online evaluation questionnaire. We thank you for completing this evaluation as the information will be important to plan for future events.

Attendees will receive a link by email, no later than three weeks after the end of the symposium, for a personalized letter of CME accreditation. Please keep the email should you need to reprint the letter.

Directions & Parking



Chestnut Residence and Conference Centre, University of Toronto is located south of Dundas Street on the east side of Chestnut Street.

The entrance to the parking garage is located on the north-west corner of the building, on the east side of Chestnut Street. For parking rates, visit: <u>http://chestnutconferencecentre.utoronto.ca/parking</u>

