



## FINAL PROGRAM

### National Molecular Microbiology Diagnostic Users Group Annual Fall Meeting (NMG)

Miller Amphitheatre, Room T2203, Juravinski Tower  
St. Joseph's Healthcare, Hamilton ON

**Monday October 19, 2009**

- |                |   |
|----------------|---|
| 8:00-9:00 am   | <b>Breakfast</b> (Sponsored by Abbott Molecular)  |
| 8:00-9:00 am   | <b>Registration</b>   |
| 9:00-9:10 am   | <b>Welcome</b><br>Dr. Astrid Petrich, NMG Chair   |
| 9:10-10:10 am  | <b>Development of Molecular Diagnostic Tests for Women's Health</b><br>Dr. Damon Getman, Principal Scientist, Gen-Probe<br>Workshop sponsored by Gen-Probe<br><br>Objectives: <ol style="list-style-type: none"><li>1. Understand the rationale for testing for infectious organisms in genitourinary medicine.</li><li>2. Understand the basic mechanisms used for purifying, amplifying and detecting nucleic acids from infectious organisms.</li><li>3. To compare and contrast technical strategies used for diagnosis of microorganisms.</li><li>4. Understand future directions of molecular diagnostic testing.</li></ol> |
| 10:10-11:10 am | <b>Applications in Molecular Detection of Respiratory Viruses</b><br>Jamie Yantzi, Product Specialist<br>Workshop sponsored by Inverness Medical Canada   |



11:10-11:30 am

**Coffee Break** (Sponsored by Qiagen)

11:10-11:30 am

**Exhibits**

- Abbott Molecular
- Becton Dickinson
- bioMérieux Canada
- Cedarlane Laboratories
- Daan Diagnostics
- Fisher Scientific/ABgene/GE Healthcare
- Gen-Probe
- Inter Medico
- Inverness Medical Canada
- Primera Dx
- Qiagen
- Somagen Diagnostics
- ZeptoMetrix

11:30-12:30 pm

**Pyrosequencing: An Innovative Technology for Epidemiological Studies, Microbial ID, and Resistance Typing**

Frank Fischinger, Applications Specialist, PyroMark™  
Workshop sponsored by Qiagen

Objectives:

1. To show how the application of Pyrosequencing provides short read sequence confirmation in microbial identification, efficient methodologies for resistance screening and simple cost effective laboratory methods.
2. Overview of the chemistry, design process, workflow and different Pyrosequencing analysis strategies.
3. To demonstrate how Pyrosequencing could be used for the analysis of discriminatory SNPs for epidemiological and bioterrorism applications.
4. To show how Pyrosequencing can be used to detect mutations which confer drug resistance.
5. To examine the use of Pyrosequencing for microbial identification in isolates and mixed populations.



12:30-1:30 pm

**Lunch** (Sponsored by Siemens Healthcare Diagnostics)

12:30-1:30 pm

**Exhibits**

1:30-2:30 pm

**ICEPlex - a novel system for multiplex quantitative PCR**

Dr. George Serbedzija,  
VP Business Development, Primera Dx

**Clinical Utility of a Multiplex Quantitative Viral Load Assay for Transplant Patients**

Dr. Belinda Yen-Lieberman  
Director of Clinical Virology, Serology & Cellular Immunology, Cleveland Clinic, Cleveland OH  
Workshop sponsored by Primera Dx

Objectives:

1. To introduce the new PCR based technology (STAR) for quantitative multiplex testing.
2. To show applications of STAR technology and benefits.
3. To understand viral load testing procedures in the transplant patient.
4. To discuss the advantages of multiplex testing for transplant related viruses.

2:30-3:30 pm

**Viral Monitoring in Transplant Recipients: Challenges and Opportunities.**

Dr. Charles Cartwright, Chief Scientific and Technical Director, ViroMED Laboratories/LabCorp  
Workshop sponsored by Inter Medico

Objectives:

1. Participants will understand the risks and consequence of viral infections in solid organ and hematopoietic transplant recipients.
2. Participants will understand the potential role of viral testing in risk management in these patient populations.
3. Participants will be aware of the challenges that remain to define the optimal use of viral testing in transplant recipients.



- 3:30-4:00 pm **Coffee Break** (Sponsored by Fisher Scientific/ABgene/ GE Healthcare)
- 3:30-4:00 pm **Exhibits**
- 4:00-5:00 pm **Manufacture and Validation of Molecular Controls**  
Part 1: Dr. Kelly A. Cycon, Manager Virus Production  
Part 2: Dr. Karuna Sharma, Manager Molecular Biology  
Workshop sponsored by ZeptoMetrix
- Objectives:
1. Overview: virus growth, optimization and large-scale production and purification, NATtrol™ virus inactivation.
  2. To understand the selection of an optimal dilution matrix.
  3. To show formulation and quantitation of NATtrol™ virus stocks.
  4. Overview: formulation and validation of calibrators, run controls and performance panels.
  5. To discuss final release testing and stability studies.
- 5:00-6:00 pm **Confessions of a PCR Assay Developer**  
Dr. Markus Hess, R & D Scientist, astra Diagnostics, GmbH  
Hamburg, Germany  
Workshop sponsored by astra Diagnostics Canada
- Objectives:
1. Overview: Chemistries, Quenchers, Primers & Probes.
  2. The art of science: Rules, Experience & Intuition.
- Evening **Social Event sponsored by Roche Diagnostics** (space is limited)



**Miller Amphitheatre, Room T2203, Juravinski Tower  
St. Joseph's Healthcare, Hamilton ON**

**Tuesday October 20, 2009**

8:00-9:00 am

**Breakfast**

9:00-9:30 am

**Detection and Characterization of Pandemic H1N1 2009  
Influenza A**

Dr. Astrid Petrich, Molecular Microbiologist, St. Joseph's  
Healthcare, Hamilton ON

Objectives:

1. To describe the set up and testing of an Influenza A pandemic H1N1 proficiency panel.
2. To discuss the results for the Influenza A pandemic H1N1 proficiency panel sent out to laboratories throughout Canada.

9:30-10:30 am

**Molecular Typing and Characterization of Common  
Antibiotic-Resistant Nosocomial Pathogens**

Dr. Mike Mulvey, Chief, Antimicrobial Resistance and  
Nosocomial Infections, National Microbiology Laboratory

Objectives:

1. To present an overview of typing methods used for nosocomial pathogens at the National Microbiology Laboratory with emphasis on Clostridium difficile and methicillin-resistant Staphylococcus aureus.
2. To describe the molecular epidemiology of specific nosocomial pathogens in Canada.
3. To understand the molecular detection of existing and emerging antimicrobial resistance mechanism.

10:30-11:00 am

**Coffee Break**



11:00-11:30am

**Results from a National Norovirus Panel**

Dr. Kirsten Mattison, Research Scientist, Health Canada

Objectives:

1. Overview of norovirus biology.
2. Overview of norovirus detection methods.
3. Presentation of panel results.
4. Identification of differences in the methodology between labs with different results.

11:30-12:30 pm

**Updates by the NMG Working Groups**

Dr. John Kim, Chief, National HIV Reference Services  
Laboratory

Dr. Karam Ramotar, Clinical Microbiologist, Ottawa Hospital

12:30-1:30 pm

**Lunch**

1:30-4:00 pm

**Working Groups (Closed to Industry)**

1. Validation and Quality Control of Quantitative Assays
2. Controls

4:00 pm

**Official Close of Meeting**

4:00-5:00 pm

**NMG Core Group Meeting**