



## 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 18, 2010**

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|-----------------|--|
| 8:00-9:00 am    | <b>Breakfast</b> (Sponsored by Siemens)  |
| 8:00-9:00 am    | <b>Registration</b>  |
| 9:00-9:10 am    | <b>Welcome</b><br>Dr. Astrid Petrich, NMG Meeting Chair  |
| 9:10-9:40 am    | <b>Primer/Probe Synthesis: Myths, Realities and Opportunities</b><br>Bob Setter, IDT<br>Workshop sponsored by Integrated DNA Technologies<br><br>Objectives: <ol style="list-style-type: none"><li>1. To highlight oligo synthesis, highlight some basic misconceptions and provide insight into the realities of getting it done right.</li><li>2. To present a case study from 2 diagnostic labs in Canada in 2009 to illustrate issues with primer/probe synthesis.</li><li>3. To discuss opportunities to improve ordering, manufacturing and delivery process, creating a win/win situation for end users and the manufacturer.</li></ol> |
| 9:40am- 10:10am | <b>MultiCode Technology: Development of a Herpes Simplex Virus IVD</b><br>Dr. Rama Subramanian, Manager of Product Development, EraGen Biosciences<br>Workshop sponsored by EraGen Biosciences   |



Objectives:

1. To present an overview of the MultiPLx Technology and its benefits in both a large and small molecular laboratory.
2. To discuss the value of performing a molecular test for HSV versus culture.

10:10-11:10 am

**High Resolution Melt Analysis (HRM): An Innovative Technology for Genetic Analysis and Molecular Diagnostics**

Dr. Christopher Conn, Qiagen, Germantown, MD  
Workshop sponsored by Qiagen

Objectives:

1. Overview of the principles of HRM analysis
2. Critical success factors in HRM experimental design
3. Advances in statistical analysis of HRM data
4. Applications of HRM in molecular diagnostics

11:10-11:30 am

**Coffee Break** (Sponsored by Qiagen)

11:10-11:30 am

**Exhibits**

- Abbott Molecular
- Becton Dickinson
- bioMérieux
- BioNuclear Diagnostics
- Canadian Public Health Laboratory Network
- Cedarlane Laboratories
- Daan Diagnostics
- D-Mark Biosciences
- EraGen Biosciences
- Integrated DNA Technologies
- Inter Medico
- Inverness Medical Canada
- Luminex
- Qiagen
- Roche
- Somagen Diagnostics
- ZeptoMetrix



11:30-12:30 pm

**Advantages of Multiplexing in the Clinical Setting**

Jamie Yantzi, Molecular Sales Specialist, Inverness Medical  
Workshop sponsored by Inverness Medical Canada

Objectives:

1. Increasing sensitivity by multiplexing a single target.
2. Multiplexing controls for enhanced quality control.

12:30-1:30 pm

**Lunch** (Sponsored by ZeptoMetrix)

12:30-1:30 pm

**Exhibits**

1:30-2:30 pm

**Extraction to Detection**

Dr. Markus Hess, R & D Scientist, astra Diagnostics  
Hamburg Germany  
Workshop sponsored by astra Diagnostics

Objectives:

1. Extraction & Detection: Principles and Useful Suggestions
2. astra Diagnostics' Approach to *Clostridium difficile*
3. Advances in Herpes Testing: HSV 1/2 and VZV

2:30-3:30 pm

**Ask Differently-Pathogen Detection without Culture:  
Presentation of the Technology, Features and  
Application of Abbott's Latest Instrument-PLEXID**

Greg Eppink, North American Sales Specialist PLEXID,  
Abbott Molecular  
Workshop sponsored by Abbott Molecular

Objectives:

1. To introduce the technology of the PLEXID and present some of its features.
2. To discuss the application of the PLEXID.



3:30-4:00 pm

**Coffee Break** (Sponsored by InterMedico)

3:30-4:00 pm

**Exhibits**

4:00-5:00 pm

**Advances in Laboratory Testing for Diagnosis of  
*Clostridium difficile* Infections**

Dr. Diane Kawa, Director of Scientific Affairs, BD  
Diagnostics Workshop sponsored by BD

Objectives:

1. Discuss the current challenges of CDI diagnosis and limitations of common laboratory methods for detection of toxigenic *C. difficile*.
2. Identify important targets for molecular detection of toxigenic *C. difficile* and discuss assay performance.
3. Examine the potential impact of rapid molecular testing on laboratory testing, CDI patient management and infection control practices.



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**Tuesday October 19, 2010**

8:00-9:00 am                      **Breakfast** (Sponsored by Roche and Abbott Molecular)

8:00-9:00 am

**Exhibits**

- Abbott Molecular
- Becton Dickinson
- bioMérieux
- BioNuclear Diagnostics
- Canadian Public Health Laboratory Network
- Cedarlane Laboratories
- Daan Diagnostics
- D-Mark Biosciences
- EraGen Biosciences
- Integrated DNA Technologies
- Inter Medico
- Inverness Medical Canada
- Luminex
- Qiagen
- Roche
- Somagen Diagnostics
- ZeptoMetrix

9:00-9:45 am

**Detection of Shiga-toxin Producing E. coli (STEC)**

Dr. Linda Chui, Program Leader Molecular Typing,  
Edmonton, AB

Objectives:

1. Discuss the challenges for detecting STEC.
2. Compare 2 detection methods.
3. A partial picture of STEC in Alberta.



9:45-10:30 am

**Update on Molecular Testing for Hepatitis**

Dr. Anton Andonov, Head, Molecular and Immuno  
Diagnostics Section, National Microbiology Laboratory -  
Public Health Agency of Canada

10:30-11:00 am

**Coffee Break** (Sponsored by Daan Diagnostics)

10:30-11:00 am

**Exhibits**

11:00-11:45 am

**16S rRNA Gene Sequencing: The Good, the Bad, and  
the Ugly**

Kathryn Bernard, Head, Special Bacteriology Section  
National Microbiology Laboratory - Public Health Agency of  
Canada

Objectives:

1. Provide a brief review of the development of 16S rRNA gene sequencing as a routine tool used in microbiology.
2. Provide an overview of general methods used to perform 16S rRNA gene sequencing and data interpretation using on-line Genbank or other tools.
3. Provide criteria to consider in order to perform a quality review of sequence data.
4. Explain the critical relationship between 16S rRNA gene sequence results and bacterial taxonomy.

11:45-12:30 pm

**The Future of Molecular Diagnostics in the Clinical  
Microbiology Laboratory**

Dr. Patrick Tang, BCCDC

Objectives:

1. Understand the need for new approaches to the laboratory diagnosis of infectious diseases.
2. Introduction to metagenomics in clinical microbiology.
3. Application of metagenomics to the 2009 H1N1 pandemic

12:30-1:30 pm

**Lunch**



12:30-1:30 pm

**Exhibits**

1:30-4:00 pm

**NMG Working Groups (Closed to Industry)**

1. Proficiency
2. Towards Standardization of Quantitative Testing

4:00 pm

**Official Close of Meeting**

4:00-5:00 pm

**NMG Core Group Meeting**