

F01: 1000-1115

Personalized Medicine, Artificial Intelligence Systems and the Medical Laboratory Sciences

Peter J. Bridge, PhD, FCCMG, FACMG

# **Session Description:**

There has been a genetics revolution in the last decade. This revolution is now infiltrating other medical laboratory sciences in a much more dominant manner. Individual genomic profiles and personalized medicine will soon be the norm. Artificial Intelligence systems will play an increasing role in the generation and periodic reanalysis of these profiles. For a time, the ability to identify risks will not be matched by equal opportunities to fully put into place effective risk reduction strategies because, for our current cohort of older individuals, many of these opportunities have already been lost. Hence the great urgency of our preparations!

At the end of this session, you will be able to:

- 1. Understand the extent to which genomic data will impact laboratory science
- 2. Appreciate both the benefits and threats posed by artificial intelligence systems
- 3. Appreciate the need for laboratory science to be an active participant in, rather than a victim of, the bioinformatics revolution
- 4. Sense the urgency in starting to practice risk reduction strategies based upon personalized medicine which may take decades to achieve optimal results

#### Speaker Bio:

Dr. Peter Bridge was the Director of Clinical Molecular Genetics laboratories and a Professor of Medical Genetics in 3 different provinces between 1987 and 2010 (from before the Human Genome Project until after its completion). He became a Fellow of the Canadian College of Medical Geneticists in 1989 (Molecular Genetics) and was a Founding Fellow of the American College of Medical Genetics in 1992. For the last 7 years he has been the Academic Chair of Medical Laboratory Sciences (which includes Medical Laboratory Science, Genetics Technology, and Diagnostic Cytology) at the Michener Institute of Education at UHN in Toronto.

# LABCON2018: May 25-27

# Ottawa, ON



Sunday, May 27

F02: 1000-1115

Finding My Way Out of the Abyss

Rachelle Kingsler, MLT

#### **Session Description:**

Rachelle has suffered from depression for over 20 years. She finally feels like she is climbing out of the abyss and would like to share her Mental Health Journey from a Med lab student, to a laboratory supervisor in a remote Northern town, to becoming a parent, and coming back home.

At the end of this session, you will be able to:

- 1. Recognize when to seek help
- 2. See what depression can look like

#### Speaker Bio:

Rachelle graduated from New Brunswick Community College as a Medical Laboratory Technologist. After working as a bench technologist for a few short years, she became a laboratory supervisor in a small town in the Northwest Territories. After 10 years in the north, she returned to Sackville, NB where she is currently working as a bench technologist in a small hospital. Throughout her career, she has volunteered at the provincial and national level, serving one term as a Director for the CSMLS board of directors.



F03: 1000-1115

Winning the Quality Improvement Race through the Ontario Transfusion Quality Improvement Plan and Choosing Wisely Canada

Denise Evanovitch, MLT, Dipl. Adult Ed.

# **Session Description:**

This session will consist of several short lectures to provide background and several sessions of small group work. The OTQIP story will provide the background and foundation for a provincial quality improvement plan in action. Small group work will be brought back to the large group for further discussion and consensus. At the end of the session, there will many generic and multi-disciplinary CWC statements for laboratory staff to employ in order to set the stage for their quality improvement initiatives.

At the end of this session, you will be able to:

- 1. Explain the need for a provincial quality improvement plan
- 2. Describe Ontario Transfusion Quality Improvement Plan Toolkit and Process
- 3. Explain the purpose of the Choosing Wisely Canada campaign
- 4. Describe the format of the Choosing Wisely Canada (CWC) statements
- 5. Develop 5 CWC statements for use by technologists (also technicians and assistants) to improve patient safety

## Speaker Bio:

Denise is a seasoned MLT with 40 years of medical technology experience, primarily in Transfusion Medicine. Denise has worked in both the hospital and blood centre environment. She has been with for the Ontario Regional Blood Coordinating Network (ORBCoN) for 7 years and is currently the regional manager at the southwest office. Her volunteer activities include membership in CBS's Regional and National Liaison Committees, assessor/surveyor with IQMH and Accreditation Canada, president and vice-president with the College of Medical Laboratory Technologists of Ontario, serving on the committee that developed Practice Guidelines for Transfusion Science, as well as bring a CSMLS and CSTM volunteer in various aspects. She is an experienced speaker and educator and has had abstracts accepted at local, national and international scientific events. She has also published several articles.



F04: 1000-1115

**Current Clinical Utilization of High Sensitivity Troponin** 

Joe Bottos

#### **Session Description:**

Participants will gain a better understanding of the following:

- · The pathology of heart disease
- Current clinical guidelines for the management of ACS and the use of high sensitivity troponin
- The use of Rapid Diagnostic Protocols (ADP) pertaining to "rule in" and "rule out" of ACS
- New and novel utilization of high sensitivity troponin

#### Speaker Bio:

For over 30 years Joe Bottos has been involved in the field of medical laboratory technology and biochemistry. He has worked various technical positions in the veterinary biologics manufacturing sector and also as a medical technologist in large teaching centers and smaller community based hospitals. He has assisted with autopsies and free-lanced as a scientific/medical illustrator with drawings published in Grants Atlas of Human Anatomy. Currently he is the National Product Manager for Beckman Coulter assisting laboratories with disease management through the optimal use of biomarkers specializing in cardiac, fertility, endocrine and cancer care.



G01: 1130-1245

Learning to Love Quality Systems Through Active Involvement For All Staff

Julie Coffey, MLT, ART, CQA, CMQ/OE

#### **Session Description:**

As more laboratories adopt ISO-style quality systems across Canada, it is critical to understand that the running of a quality system is not a lonely job for the quality manager. This session will highlight the key quality system elements that are often overlooked as golden opportunities to empower and engage staff.

At the end of this session, you will be able to:

- 1. Understand the reasons for reluctance to participate in quality systems
- 2. Understand the benefits of active involvement
- 3. Pinpoint the missed opportunities where all staff can play a part

#### Speaker Bio:

Julie Coffey is the Director of Education for the Institute for Quality Management in Healthcare. She is on a quest to elevate the confidence of laboratory personnel in their own abilities by providing empowering, relevant and interactive education. She is an active member of ISO TC 212 and serves on the CLSI Expert Panel on Quality Systems.



G02: 1130-1245

Research and RESPECT (Research Educates, Serves Patients, Engages and Creates careers for Technologists)

Patricia Johnson, BSc, MLT, ART

# **Session Description:**

Research in a clinical laboratory has long been a part of the laboratory professionals scope of practice. As laboratory professionals, we often do not appreciate how research contributes to our careers. There is a whole history around the research process, and the studies being conducted in our laboratories today are ground breaking and potentially life changing. This lecture will provide the background history of research and describe one current Canadian study making an impact in people's lives. There will be examples of laboratory support that is being carried out, and potential benefits for laboratory professionals participating in research.

At the end of this session, you will be able to:

- 1. Understand the role of research in a clinical setting
- 2. Have knowledge of some ethical considerations
- 3. Appreciate the contributions of research to medical professionals
- 4. Be informed of some of the exciting research happening in Canada

# Speaker Bio:

Patricia Johnson has been a laboratory technologist for over 35 years, working in seven different laboratory disciplines during that time. She has been a part of method development and research as a bench technologist, presented posters and given lectures as a senior technologist, and currently holds a position as a research coordinator with Calgary Laboratory Services. She has attended five LABCONs in her career and welcomes the opportunity to "raise her voice" in support of the research community. Her main extra curricular activity is singing- most recently at a Canada 150 celebration on July 1 in Ottawa.



G03: 1130-1245

The Journey of Managing Amniotic Fluid pH Testing in Obstetrics: Creation of a quality framework to satisfy accreditation standards

Robert Kerekes, MLT, ART

# **Session Description:**

This presentation will review the journey of implementing a Quality Framework around the Obstetrical testing of amniotic fluid pH, following accreditation requirements. Topics covered include recognition of testing, conversations with end-users, creation of policies and procedures, training, QC/QA and pre- and post-analytical processes.

At the end of this session, you will be able to:

- 1. Identify if the institution performs amniotic fluid pH testing
- 2. Review of IQMH/ISO requirements surrounding POCT
- 3. Developing dialogue to have the POCT conversation with end-users
- 4. Creating a quality framework to manage amniotic fluid pH testing

#### Speaker Bio:

Rob Kerekes is currently employed at Alexandra Marine and General Hospital as the Manager of Laboratory and Cardiorespiratory Services. He has an ART in Clinical Chemistry, is an Assessor for IQMH (Institute for Quality Management in Healthcare) and formal member of the Chemistry Committee.



G04: 1130-1245

Wastewater Management in the Lab: Case Study on Sodium Azide

Louise Nagy, MCert, BSc, COHS

#### **Session Description:**

Almost every process in diagnostic testing relies on water to ensure high quality test results. Returning clean, safe and usable water is an important part of LifeLabs' commitment to our communities and our environment. Sodium azide is a preservative used in many reagents. It is highly hazardous and, if not managed appropriately, can pose significant risks to employees, facilities and the environment. We have developed an innovative system to treat wastewater containing sodium azide. The unique system breaks down the sodium azide and removes contaminants from the water before it is returned to the public system. We are the first diagnostic testing lab in Canada to implement this system.

At the end of this session, you will be able to:

- 1. Understand role of environment and purchasing teams in selection of products & equipment to support becoming a sustainable organization
- 2. Leverage LifeLabs lessons learned to change how your organization assesses new products and equipment
- 3. Bring back learnings to improve sustainable approaches to your organization

## Speaker Bio:

Louise is the National Director of Community Engagement & Environmental Sustainability at LifeLabs. In this role, she has been executing on LifeLabs commitment to be a socially and environmentally responsible organization.

Louise holds a Master Certificate in Healthcare Management from the Schulich School of Business at York University, a Bachelor in Science, Kinesiology, from SFU, and a Certificate in Occupational Health & Safety from BCIT. She is passionate about giving back and is active in her community as a board member for Special Olympics BC – Coquitlam and Bringing Women Together – Vancouver.



P04: How to Communicate New Ideas For My Lab

**Sponsored by Roche Diagnostics** 

Chris Graham

**Session Description:** 

You have great ideas and are excited to share them—with colleagues, lab managers, procurement, and hospital management.

You have a vision you know that they are better ways to do things you wish to improve processes you want innovative solutions in your lab to bring medical value, compliance, optimize resources and reduce risk? You work hard, prepare, and do your best to share.

Still, people don't understand, disagree, or have trouble following along.

There is a better way.

Chris Graham, founder and principal of TellPeople, shows you simple, powerful tools for communicating in ways that stand out, win trust, and gain credibility.

Specifically, Chris shows you how to:

- Make sense of your audience
- Get that audience to listen
- · Help that audience understand

Weaving together stories that are funny, poignant, and relatable, Chris's workshop takes participants on an entertaining, interactive and customized journey through research in communications, neuroscience and behavioral economics.

You will start communicating better right away.