

# LABCON2019 – Session Details

Friday, May 24, 0945-1100

## **P01: Gender Dysphoria, lab impact** *(simultaneous interpretation)*

### **Speaker(s):**

John M. Dornan, MD, FRCP, MBA

### **Category**

Chemistry, General Interest

### **Learning Outcomes**

1. Understand gender dysphoria
2. Appreciate laboratory ramifications
3. Develop a respectful interaction with transgender community

### **Session Description**

This presentation is relevant for today's lab med professionals because of a commitment to the maintenance of standards. From DI to lab test results, much of what is reported is compared to gender based ranges of normal. The emergence of gender dysphoria and non-binary populations challenges historic "normal" values.

### **Speaker Bio**

Dr. John Dornan is the Horizon Health Network regional chief of staff. He has been a clinical endocrinologist for over 30 years. Dr. Dornan has worked with the transgender community for approximately 25 years.

# LABCON2019 – Détails de la session

Le vendredi 24 mai de 9 h 45 à 11 h

**P01 : Dysphorie de genre, impact sur le labo** (*traduction simultanée*)

Conférencier(s) :

John M. Dornan, MD, FRCP, MBA

Catégorie

Chimie, intérêt général

Résultats d'apprentissage

1. Comprendre la dysphorie de genre
2. Apprécier les conséquences pour le laboratoire
3. Développer une interaction respectueuse avec la communauté transgenre

Description de la session

Cette présentation est pertinente pour les professionnels de laboratoire médical d'aujourd'hui en raison de l'engagement à maintenir les normes. Depuis l'ID jusqu'aux résultats de tests de laboratoire, une grande partie des données divulguées sont comparées aux zones « normales » fondées sur le genre. L'émergence de la dysphorie de genre et des populations non binaires remet en cause des valeurs « normales » historiques.

Biographie du conférencier

Le Dr John Dornan est le médecin-chef régional du Réseau de santé Horizon. Il est endocrinologue clinique depuis plus de 30 ans. Le Dr Dornan travaille auprès de la communauté transgenre depuis environ 25 ans.

# LABCON2019 – Session Details

Friday, May 24, 1530-1645

## A01: Get the picture? Troubleshooting classic and not so classic CBC result patterns

Speaker(s):

Nadine Roussy, MLT

Category

Hematology

### Learning Outcomes

1. Identify problem samples
2. Associate classic patterns to specific conditions
3. Determine the most probable cause for the result issues or flagging
4. Decide what special handling technique of the sample will correct the spurious result

### Session Description

How to identify and troubleshoot problematic samples using simple manipulations to achieve accurate results. Through observation of classic patterns and flagging, this presentation will explain the mechanism behind each scenario and will include case studies of the most encountered issues and a few "not-so-classic" but interesting cases, how they were discovered and what was done to resolve the issues. We will also look at and compare the final results that were eventually reported.

### Speaker Bio

Nadine Roussy is a medical laboratory technologist and technical supervisor for the CBC analyzers at the Moncton Hospital hematology department. She is also a wife and mother of three beautiful daughters. Originally from Cocagne, New Brunswick, she studied at the CEGEP de Rimouski, Québec, where she completed her MLT course in June of 1996. Her career of over 22 years has taken her from a small rural hospital in Tracadie to a private laboratory in Montreal, and finally, for the past 18 years, in one of Moncton's major trauma centers. Her broad work experience has added to her level of expertise.

# LABCON2019 – Session Details

Friday, May 24, 1130-1245

## A02: Next generation sequencing in the laboratory

### Speaker(s):

Nicolas Crapoulet, PhD

Gilberte Caissie, MLT, BMLSc

### Category

Clinical Genetics

### Learning Outcomes

1. Explain workflow of next-generation sequencing
2. Describe the pros and cons of exome-sequencing
3. Know alternative methods used in molecular genetics

### Session Description

Molecular genetics is a clinical field in constant evolution and innovation. Introduction of methodology like next-generation sequencing was a game changer in the way to diagnose a patient. Exome sequencing, which sequences the protein-coding region of the genome, has been rapidly applied to variant discovery in research settings and recent increases in accuracy have enabled development of clinical exome sequencing for mutation identification in patients with suspected genetic diseases. This presentation will introduce the clinical exome sequencing concept and its usage in the identification of rare mendelian disorders at Dr. Georges-L.-Dumont University Hospital Centre. A case study will be presented in order to demonstrate the clinical benefit of this new technology.

### Speaker Bio

Dr. Nicolas Crapoulet (PhD) implemented the next-generation sequencing technology at the Atlantic Cancer Research Institute (ACRI) in 2012. He has been the principal coordinator for the establishment of a molecular diagnostic platform based on next-generation sequencing. He is now working for Vitalite Health Network as a clinical specialist in molecular genetics at the molecular genetics lab of Dumont hospital.

Gilberte Caissie is the laboratory supervisor responsible for the day-to-day management. She works in conjunction with the PhD for the development and implementation of new tests and technologies. She has been in the molecular field since 1989 and has been responsible for the implementation and growth of a few molecular biology laboratories. She has been an Accreditation Canada surveyor since 2006, which has permitted her to visit many national and international laboratories.

# LABCON2019 – Session Details

Friday, May 24, 1130-1245

## A03: Best practice in blood culture collection for phlebotomists and nurses

Speaker(s):  
Susan Csatari, RN

Category  
Pre-Analytical

### Learning Outcomes

1. Describe the proper technique of blood culture collection to avoid a contaminated specimen
2. Discuss the impact of false positive and false negative results on patients and the health care system
3. Understand the potential impact of various nursing practices when obtaining blood cultures from vascular access devices

### Session Description

Anti-microbial (drug) resistance (AMR) has become an important focus for health care professionals, requiring best practice in blood culture collection technique to prevent contaminated specimens and unnecessary antibiotic treatment. This presentation will review recommended practice in venipuncture collection, including the most recent CLSI guidelines, as well as offering insight into the various practices used by nurses to collect blood cultures from vascular lines, and how these can contribute to false positive and negative results.

### Speaker Bio

Susan is a registered nurse, former ICU nurse and now clinical practice consultant, vascular access blood collection for BD Canada. Collaborating with both MLT and nursing colleagues, she works to bring lab and nursing professionals together to resolve issues with specimen quality and to foster understanding of practice requirements and challenges between both groups.

In this role, Susan also delivers blood collection best practice presentations to national and provincial nursing and lab organizations.

Good specimen quality helps ensure accurate test results and fewer rejected specimens. This leads to improved patient outcomes and decreased re-work for both nursing and lab professionals.

# LABCON2019 – Session Details

Friday, May 24, 1130-1245

## A04: Why the lab is 'fab' in the fight against cancer!

### Speaker(s):

Amber Swan, MD, CCFP

### Category

Histotechnology, Pathology

### Learning Outcomes

1. How mutated and non-mutated genes may help tailor cancer treatments
2. The rationale for some bizarre bloodwork requests from the oncology department
3. The rapidly evolving role of immunotherapies and targeted therapies in cancer treatments

### Session Description

This session will highlight the increasing importance of the information provided by the lab when diagnosing and treating individuals with cancer. As cancer treatments are becoming more individualized and sophisticated, there is increasing reliance on understanding patient factors as well as tumor characteristics on a biochemical and cytogenetic basis. This session hopes to demystify what occurs in the oncology clinic and outline the rationale for specific testing in an easy-to-understand format.

### Speaker Bio

Dr. Swan is a general practitioner in oncology at the Dr. Everett Chalmers Regional Hospital (DECH). She is an associate professor and lecturer through Dalhousie Faculty of Medicine. Dr. Swan is a member of the Horizon Health Oncology Symptom Toxicity and Assessment Group and is the Atlantic Canada representative on the Oncology Subspecialty Committee for the College of Family Physicians of Canada. She is a co-investigator on a National Cancer Institute (NCI) accredited oncology research team and a reviewer for multiple medical journals. In her spare time, Dr. Swan owns and manages a farm with her husband and son.

# LABCON2019 – Session Details

Le vendredi 24 mai de 11 h 30 à 12 h 45

## A05 : L'allo-greffe fécale dans le traitement de la colite à *C. difficile*

### Conférencier(s) :

Gabriel Girouard, MD, FRCPC

### Catégorie

Microbiologie

### Résultats d'apprentissage

1. Connaître la colite à *C. difficile* (bactérie, épidémiologie, tableau clinique et prévention)
2. Connaître les traitements de première et deuxième lignes contre *C. difficile*
3. Connaître les données probantes concernant l'allo-greffe fécale dans la colite pseudomembraneuse (*C. difficile*)
4. Savoir les particularités logistiques entourant l'exécution d'une allo-greffe fécale dans le milieu hospitalier

### Description de la session

TBA

### Biographie du conférencier

TBA

# LABCON2019 – Session Details

Friday, May 24, 1345-1500

## B01: Solvent recycling and reuse in laboratories

### Speaker(s):

Amber Daniels, MEB, EP

### Category

Environmental Sustainability

### Learning Outcomes

1. Understand how solvents can be recycled in a lab
2. See the potential cost savings
3. See the potential waste reductions
4. Understand how this is applicable to your facilities
5. How LifeLabs has been successful in rolling out the solvent recycling program

### Session Description

Solvents used in laboratories create a large amount of chemical waste in a lab. This not only imposes high costs to properly dispose of and purchase enough solvent to meet our needs, but this unnecessary waste is bad for our environment. A solvent recycler distills chemical waste and separates it out from the other waste products in the water. This produces up to 99% pure solvent for reuse in the process. The solvent is then used indefinitely in the lab. LifeLabs has rolled this out to five of our labs and will continue to find new uses for this technology.

### Speaker Bio

Amber Daniels is the manager of national environmental sustainability at LifeLabs. She leads her team to develop and maintain the company's environmental programs and recommends sustainability goals and targets for LifeLabs locations in Ontario, Alberta, Saskatchewan and British Columbia. She builds a culture of sustainability by engaging employees and leadership to support building awareness and participation in environmental initiatives. She has degrees in physical geography and environmental protection technology and a Masters in Environment and Business from the University of Waterloo. As an environmental professional, Amber has worked for the last 12+ years all over Canada in global private companies and municipal government capacities.



# LABCON2019 – Session Details

Friday, May 24, 1345-1500

## B02: A new outlook on quality

### Speaker(s):

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

### Category

Quality, Management

### Learning Outcomes

1. Realize the goal should be to exceed accreditation requirements
2. Learn the importance of setting a clear intention for each quality system element
3. Understand the benefits of active staff involvement in quality systems
4. Pinpoint the missed opportunities where all staff can play a part

### Session Description

It is critical to understand that the running of a quality system is not a lonely job for the quality manager, and that there are places for joy, generosity, creativity and empowerment. This session will take a look at the key quality system elements, suggest the ultimate intention of each and identify the golden opportunities to create processes that are purposeful, inclusive and infuse a new outlook on quality.

### 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 Clinical and Laboratory Standards Institute (CLSI) Expert Panel on Quality Systems.

## LABCON2019 – Session Details

Friday, May 24, 1345-1500

### **B03: Simulation, this is not a test! Lessons learned from implementation**

#### **Speaker(s):**

**Meagan Homer, BSc MLS, MEd HSE, MLT**

**Brady Rose, BSc, MLT**

#### **Category**

**Education, Simulation**

#### **Learning Outcomes**

1. Appreciate the value of simulation from a student perspective
2. Create a road map for simulation implementation
3. Develop and evolve simulations based on past experiences and stakeholder feedback
4. Recognize that there is no such thing as a failed simulation

#### **Session Description**

Presenters will take the audience through personal experiences of simulation implementation, sharing the lessons they have learned over the past few years. Brady and Meagan, instructors in the Northern Alberta Institute of Technology (NAIT) laboratory programs, have been collaborating to develop simulations for use in the didactic clinical chemistry labs. Their passion for educating and developing future laboratory professionals have forced them to think outside the box and explore the vast potential of simulation. The presenters are excited to both share their experiences and learn from the audience. This session will be informative, explorative and encouraging for all professionals looking to incorporate simulation into training.

#### **Speaker Bio**

Meagan Homer is an instructor at NAIT and teaches in the MLT and MLA programs. She completed her BSc in MLS and MEd in Health Sciences Education at the University of Alberta. Combining both her love of teaching and lab, she continues to explore new ways to enhance student experiences and success.

Brady is an instructor at the Northern Alberta Institute of Technology (NAIT) focusing in clinical chemistry, analytical principles and molecular diagnostics. After obtaining her BSc from the University of Alberta, she found her career home in the medical laboratory world at NAIT. She has become passionate about passing on her love of med lab to her students.

# LABCON2019 – Session Details

Friday, May 24, 1345-1500

## B04: Case Studies in Endocrinology

Speaker(s):

Melissa King, MLT

Category

Chemistry

### Learning Outcomes

1. Discuss a condition associated with increased growth hormone levels
2. Describe the resulting syndrome of hypercortisolism
3. Review the implications of biotin interference

### Session Description

In the medical laboratory, some of the uncommonly ordered hormone tests can have a very significant meaning. This specialty testing is performed by an elite group of MLTs who help investigate results. Do we really understand the theory behind the results we so carefully quantify? As an immunochemistry supervisor I have had the opportunity to consult and review some of these cases with specialists. The investigation in to seemingly unfitting results has sometimes produced a very different diagnosis for the patients than originally suspected. These are their stories.

### Speaker Bio

Melissa King is the immunochemistry supervisor at the Moncton Hospital. Passionate about the profession, Melissa is a long standing volunteer on the NBSMLT Board of Directors. She is involved in numerous committees, has planned several educational events, and has authored and reviewed courses for CSMLS. Always interested in research, Melissa has had the opportunity to work closely with the medical biochemist, endocrinologists and interventional radiologist for a few interesting cases to help pin point a diagnosis

## LABCON2019 – Session Details

Le vendredi 24 mai de 13 h 45 à 15 h

### B05 : Séquençage de nouvelle génération dans le laboratoire

#### Conférencier(s) :

Nicolas Crapoulet, PhD

Gilberte Caissie, MLT BMLSc

#### Catégorie

Clinical Genetics

#### Résultats d'apprentissage

1. Expliquer le déroulement du séquençage de nouvelle génération
2. Décrire les avantages et les inconvénients du séquençage de l'exome
3. Connaître les méthodes alternatives utilisées en génétique moléculaire

#### Description de la session

La génétique moléculaire est un domaine clinique en constante évolution et innovation. L'introduction d'une méthodologie telle que le séquençage de nouvelle génération a changé la manière de diagnostiquer un patient. Le séquençage de l'exome, qui permet de séquencer la région du génome codant pour les protéines, a été rapidement appliqué à la découverte de variants dans des contextes de recherche et la précision de cette technique a permis de développer un séquençage exome clinique pour l'identification de mutations chez des patients suspectés de maladie génétique. Cette présentation exposera le concept de séquençage clinique d'exome et son utilisation dans l'identification de troubles mendéliens rares au Centre hospitalier universitaire Dr Georges-L.-Dumont. Une étude de cas sera présentée afin de démontrer les avantages cliniques de cette nouvelle technologie.

#### Biographie du conférenciers

Dr Nicolas Crapoulet (PhD) a mis en oeuvre la technologie de séquençage de prochaine génération à l'Institut atlantique de recherche sur le cancer (ACRI) en 2012. Il a été le principal coordinateur de la mise en place d'une plateforme de diagnostic moléculaire basée sur le séquençage de nouvelle génération. Il travaille maintenant pour le réseau de santé Vitalité en tant que spécialiste clinique en génétique moléculaire au laboratoire de génétique moléculaire de l'hôpital Dumont.

Gilberte Caissie est la superviseuse du laboratoire responsable de la gestion quotidienne. Elle travaille conjointement avec le PhD pour le développement et la mise en oeuvre de nouveaux tests et technologies. Elle travaille dans le domaine moléculaire depuis 1989 et est responsable de la mise en place et du développement de plusieurs laboratoires de biologie moléculaire. Elle est une évaluatrice d'Agrément Canada depuis 2006, ce qui lui a permis de visiter de nombreux laboratoires nationaux et internationaux.

# LABCON2019 – Session Details

Friday, May 24, 1530-1645

## C01: Bloodstream infection: Update on diagnosis and management

### Speaker(s):

Gordon Dow, MD, FRCP(C)

### Category

Microbiology

### Learning Outcomes

1. List the indications for ordering blood cultures and describe how these should be ordered
2. Name the most common causes of bloodstream infection in hospitalized Canadians
3. Describe first-line empiric antimicrobial therapy for common sepsis syndromes where bloodstream infection may be present

### Session Description

Will review the epidemiology and clinical presentation of bloodstream infection in Canada. Indications for ordering blood cultures as well as how they should be obtained and interpreted will be discussed. Will review results of a three-year bloodstream infection study at the Moncton Hospital examining the role of a bloodstream infection surveillance program as a novel antimicrobial stewardship/quality improvement project.

### Speaker Bio

Gordon Dow is an infectious disease consultant in full-time clinical practice at The Moncton Hospital, Moncton, New Brunswick, and is an assistant professor of medicine at Dalhousie University. He obtained his medical degree from Dalhousie University in 1987 and subsequently obtained specialist certification in internal medicine after completing a residency at the University of British Columbia in 1992. He obtained subspecialty certification in infectious diseases in 1993 at the University of Manitoba. He then completed a two-year research fellowship at the University of Manitoba and obtained a Masters in Community Health Sciences in 1999.

He is a consultant in the section of infectious diseases at The Moncton Hospital, director of the Moncton Hospital HIV Treatment Program, chairman for the Horizon Health Network Regional Infection Prevention and Control Committee, medical director, Ambulatory Care Department and director of the Diabetes Foot Clinic at The Moncton Hospital. He has an active research program and has participated in over 30 clinical trials.

# LABCON2019 – Session Details

Friday, May 24, 1530-1645

## C02: What's new in prenatal screening

### Speaker(s):

Kimberly Butt, MD, FRCSC

### Category

Clinical Genetics

### Learning Outcomes

1. Understand the different options for prenatal screening
2. Understand the role of non-invasive prenatal testing (NIPT)
3. Understand the limitations of NIPT
4. Understand the benefits of NIPT

### Session Description

The session is meant to review the current options for prenatal screening, particularly maternal serum screening and NIPT, in Canada. The rationale for NIPT as well as the benefits and limitations of testing will be reviewed.

### Speaker Bio

Dr. Kimberly Butt is a maternal fetal medicine (MFM) specialist in Fredericton, New Brunswick. She is an assistant professor at both Memorial and Dalhousie Universities and is currently a maternal fetal medicine physician at the Dr. Everett Chalmers Hospital. She received her MD and residency training in obstetrics and gynecology at Memorial University in Newfoundland. Since completing her MFM Fellowship training at the University of British Columbia in 2001, she has been practicing in Fredericton. Kim's clinical area of interest is ultrasound and prenatal screening.

## LABCON2019 – Session Details

Friday, May 24, 1530-1645

### **C03: Errors in clinical laboratories: When small mistakes lead to major consequences**

**Speaker(s):**

**Stéphane Beauchamp, TM, MSc.**

**Category**

**Pre-Analytical**

**Learning Outcomes**

1. Learn from real case study examples of laboratory errors
2. Recognize some of the most common errors and other less common errors in a clinical laboratory
3. Identify and prevent potential sources of laboratory errors

**Session Description**

Real case studies of laboratory errors taken from literature and personal experiences will be presented and analyzed with a quality improvement approach. Blood collection and laboratory best practices will also be reviewed to address each of these cases and reinforce the importance of vigilance in the three analytical phases of testing.

**Speaker Bio**

Stéphane has a master's degree in applied microbiology and a Bachelor's in biological sciences and also holds a college degree in medical laboratory technology. He has worked as a MLT for nine years followed by two years as a quality manager in a diagnostic laboratory. He joined BD Canada four years ago as a clinical specialist and clinical educator for the pre-analytical division and he is now leading the Canadian clinical team.

# LABCON2019 – Session Details

Friday, May 24, 1530-1645

## C04: 7 ways to improve your laboratory health and safety program

Speaker(s):

Sara McAleer, MLT

Category

Safety

### Learning Outcomes

1. Understand the importance of laboratory safety including emergency preparedness
2. Define the roles and responsibilities with respect to lab safety for all levels of laboratory personnel
3. Identify and recognize possible laboratory hazards during an emergency
4. Demonstrate ways to mitigate laboratory hazards
5. Apply and implement knowledge and skills gained from this presentation in your workplace and improve your lab's safety program

### Session Description

Do you know your role in lab safety?

Laboratory safety is a shared responsibility. Identifying, recognizing and reporting lab safety hazards before they become a problem is also a shared responsibility. During this presentation, participants will review the importance of a laboratory safety program as well as emergency preparedness. Join us to learn about possible laboratory hazards, what to look for during an emergency and how to improve emergency management skills in the lab environment. This presentation provides the knowledge and skills to mitigate hazards in the workplace and supports the shared responsibility of laboratory safety.

### Speaker Bio

Sara McAleer is the quality and safety coordinator for the laboratory medicine program at the Saint John Regional Hospital in Saint John, New Brunswick. After graduating from New Brunswick Community College (NBCC) in 2012, Sara began her lab career as a full-time medical laboratory technologist in the hematology lab. Sara accepted a new role in 2017 as the safety officer for the 5 sites in her zone. On top of quality management and safety, Sara is also the student coordinator for the MLA and MLT students during their clinical practicum. Outside of work Sara has served as a board member with her association, the New Brunswick Society of Medical Laboratory Technologists for the past 4 years as public relations chair.



## LABCON2019 – Session Details

Friday, May 24, 1530-1645

### C05: Bench to business 3.0

#### Speaker(s):

Christine Nielsen, BHA, MLT, CAE

#### Category

General Interest

#### Session Description

Facilitated by CSMLS CEO, Christine Nielsen, we will explore the personal experiences of experts who left the bench and moved to industry, education, association management and even outside of the field. Do you plan it? Does it just happen? How do you prepare yourself? Is it rewarding? Join us for a fireside chat style Q and A, which may open doors for you.

#### Speaker Bio

Christine Nielsen became chief executive officer of the Canadian Society for Medical Laboratory Science in 2010. She is a medical laboratory technologist, with a degree in Health Administration and a Certified Association Executive, with a Certificate of Mastery in Prior Learning Assessment from the Council for Adult and Experiential Learning at DePaul University in Chicago. Christine is currently completing an MBA from the Edinburgh School of Business, Scotland.