

# Congrès annuel AMBQ/CAMB Annual Congress

12 au 14 juin 2024/June 12-14, 2024



## Hilton Québec

1100, boul. René-Lévesque E. Blvd  
Québec (Québec) G1R 4P3

### Objectifs généraux d'apprentissage

À la fin du congrès, le participant devrait être en mesure d' :

- Expliquer certaines percées en médecine translationnelle issues de la génétique, génomique ou de la transcriptomique.
- Intégrer des modalités thérapeutiques propres aux conditions présentées.
- Employer ou recommander des approches génératrices de valeur au laboratoire, notamment au niveau des interprétations ou par l'automatisation et la standardisation des rapports.

### General learning objectives

At the end of the congress, the participant should be able to:

- Explain certain breakthroughs in translational medicine from genetics, genomics or transcriptomics.
- Integrate therapeutic modalities specific to the conditions presented.
- Employ or recommend approaches that generate value in the laboratory, particularly in terms of interpretations or through the automation and standardization of reports.

9 h

**Assemblée générale de l'AMBQ**  
**General meeting of AMBQ**  
Salle/room: Sainte-Foy/Portneuf

Dîner libre/Lunch (not provided)

**Symposium 1**  
**Genetics, genomics and transcriptomics: applied and fundamental aspects**  
**Modérateur/Chair:**  
**Salle/room: Sainte-Foy/Portneuf**

Chacune des conférences inclut 25 % du temps alloué aux questions.  
Each conference includes 25% of the time allocated to questions

13 h 30

**Dr. Yves Giguère**

**Newborn screening: From Robert Guthrie to Genomics**

- Review the benefits of neonatal screening since its inception in the 1960's
- Discuss the opportunities of genomic newborn screening
- Summarize the challenges and concerns related to the introduction of universal genomic NBS

14 h 30

**Dr. Jonatan Blais**

**Identifying potential cancer cell vulnerabilities by applying the Pareto optimality theory to public omics databases**

**Objectifs/Objectives**

- Summarize the general underlying principle of the Pareto task inference approach and its application to a diffuse large B-cell lymphoma transcriptomic database
- Discuss the significance of specialized phenotypes identified by this type of analysis for our understanding of cancer biology
- Recognize the types of data and bioinformatic tools publicly available and their potential for advancing biomedical research

15 h 30

**Pause/break**

Salle/Room: Sainte-Roy/Portneuf

16 h 00

**Dr. Nicolas Bergeron**

**Introduction aux thérapies par acide nucléique**

**Objectifs/Objectives**

- Décrire les mécanismes d'action des principales thérapies par acide nucléique
- Discuter de certaines thérapies par acide nucléique déjà disponibles sur le marché
- Reconnaître le potentiel thérapeutique des thérapies par acide nucléique, particulièrement pour les maladies rénales

17 h 00

**Fin des activités scientifiques du jour**  
**End of scientific activities of the day**

**Comité scientifique et organisateur**  
**Scientific and Organising Committee**

Dr. Jonatan Blais, président  
Dr. Yves Giguère  
Dr. Pierre Douville  
Dr. Sébastien Thériault

Dr. Jean-Claude Forest  
Dr. Karim Mourabit Amari  
Dr. Jean Bergeron

**Responsable de l'unité de DPC AMBQ**  
**AMBQ CPD Unit representative**

Dr. Martin Viau

**Mission**

La mission particulière de l'unité de développement professionnel continu (DPC) de l'AMBQ est de contribuer à l'amélioration constante de la qualité des soins de santé des québécois en organisant des activités de DPC pour les membres de l'AMBQ

## Symposium 2

### Trends in emerging biomarkers

Modérateur/Chair:

Salle/room: Sainte-Foy/Portneuf

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8 h 30

**Dr. Sébastien Thériault**

**Polygenic scores for risk stratification of cardiovascular disease: are they ready for clinical use?**

**Objectifs/Objectives**

- Explain the rationale underlying the utilization of polygenic scores for risk stratification of cardiovascular disease
- Summarize the evidence regarding the predictive performance of polygenic scores for cardiovascular disease and their potential clinical utility
- Identify the limitations of polygenic scores for risk stratification of cardiovascular disease

9 h 30

**Dr. François Émond**

**Sclérose en plaques - survol des progrès et nouveaux biomarqueurs (Multiple Sclerosis - an overview of recent advances and novel biomarkers)**

**Objectifs/Objectives**

- Comprendre comment les changements apportés à la désignation du parcours clinique et aux critères diagnostiques de la sclérose en plaques s'appuient sur les progrès dans la compréhension de la physiopathologie de la maladie/Understand how the changes made to the definition of the clinical course and to the diagnostic criteria of multiple sclerosis are based on advances in our understanding of the physiopathology of the disease
- Survoler l'arsenal thérapeutique ayant un impact sur l'évolution de la maladie à court et à long terme, et en reconnaître l'accroissement considérable depuis 20 ans/Appreciate the therapeutic armamentarium that can have a short- and long-term impact on the evolution of the disease, and acknowledge its considerable enlargement in the past 20 years
- Discuter de l'utilisation émergente de biomarqueurs biologiques susceptibles d'améliorer le diagnostic et le suivi des patients avec sclérose en plaques dans les prochaines années/Discuss the emerging use of biological biomarkers used to improve the diagnostic and therapeutic follow-up of patients with multiple sclerosis in the next few years)

10 h 30

**Pause/break**

Salle/Room: Sainte-Foy/Portneuf

11 h 00

**Dr. Patrice Desmeules**

**Challenges and opportunities in liquid biopsy implementation for solid tumors**

**Objectifs/Objectives**

- Summarize the current and emerging applications of cell-free DNA tests in solid tumors, focusing on non-small cell lung cancer
- Discuss analytical and clinical validation strategies for cell-free DNA tumor assays
- Analyze strategies to evaluate different genomic alterations using liquid biopsy

12 h 00

**Lunch**

Salle/room: Plaines

**Symposium 3**  
**What's new in cardiometabolic medicine**  
**Modérateur/Chair: Dr. Jean Bergeron**  
**Salle/room: Sainte-Foy/Portneuf**

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**13 h** | **Dr. Paul Poirier**  
**Indications and health benefits of bariatric surgery in 2024**

**Objectifs/Objectives**

- Review clinical indications for bariatric surgery in adults
- Recognize adverse effects but also health benefits in the management of co-morbidities
- Discuss the place of bariatric surgery with arrival of new weight loss pharmacological agents

**14 h 00** | **Dr. John Weisnagel**  
**Pharmacological treatment of obesity - an update**

**Objectifs/Objectives**

- Recognize current pharmacology for weight management in obesity
- Review new data on pharmacological agents under study for the treatment of obesity
- Familiarize yourself with agents under development for the treatment of obesity

**15 h 00** | **Pause/break**  
**Salle/Room: Sainte-Foy/Portneuf**

**15 h 30** | **Dr. Daniel Gaudet**  
**New and Emerging Therapies in Clinical Lipidology**

**Objectifs/Objectives**

- Recognize unmet needs in clinical lipidology
- Review and differentiate targets and mechanisms of action of emerging therapies
- Debate access issues

**16 h 30** | **Fin des activités scientifiques du jour**  
**End of scientific activities of the day**

**16 h 45** | **Assemblée générale de la CAMB/General Meeting of the CAMB**  
**Salle/Room: Sainte-Foy/Portneuf**

**18 h 00** | **Cocktail**  
**Restaurant CABU**

**19 h 00** | **Souper/Dinner**  
**Restaurant CABU**

## Symposium 4

### Short presentations/Courtes présentations

Modérateur/Chair:  
Salle/room: Sainte-Foy/Portneuf

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9 h 00

**Dr. Li Wang**

The Canadian Medical Biochemistry Residency Training Program: History and Current Challenges

**Objectifs/Objectives**

- Review the history of medical biochemistry residency training
- Evaluate the current challenges of medical biochemistry residency training
- Identify next steps

9 h 30

**Dr. Pierre Douville**

Proteins in urine, beyond bence jones!

**Objectifs/Objectives**

- Describe the physiology of protein handling by the kidney
- Identify the principal bands observed in normal or pathological urines
- Recognize different electrophoretic profiles related to the source of proteins in the urine

10 h 15

**Pause/break**

Salle/Room: Sainte-Foy/Portneuf

10 h 30

**Dr. Gang He**

ANA automation and transfer to ICAP reporting

**Objectifs/Objectives**

À venir

11 h 15

**Dr. Hans Frykman**

Novel disease-modifying drugs in immunology drive demand for more precise diagnostics

**Objectifs/Objectives**

- Explain the mechanism behind FcRn inhibition and complement activation inhibition
- Discuss the different methods to measure autoantibodies in Myasthenia Gravis and other antibody driven disorders

12 h 00

**Évaluation du congrès**

**Congress evaluation**

**Fin des activités scientifiques**

**End of congress**

*L'AMBQ et la CAMB, via la cotisation de leurs membres, ont contribué financièrement à la tenue de cette activité.*

*The AMBQ and CAMB, through annual dues of their members, contributed financially to this event.*

*Cette dernière a aussi été rendue possible grâce à une subvention à visée éducative sans restriction des compagnies suivantes :*

*It has also been made possible through an educational grant without limitation of the following companies:*

### **Catégorie Platinum**

Roche Diagnostics

### **Catégorie Or/Gold**

QuidelOrtho

Sanofi

The Binding Site Inc.

Ultragenyx Canada Inc.

### **Catégorie Argent/Silver**

Bio-Rad Laboratories (Canada)

### **Catégorie Bronze**

Euroimmun

Nova Biomedical Canada Ltd.

Recordati Rare Diseases Canada Inc.

Sebia

Somagen Diagnostics