



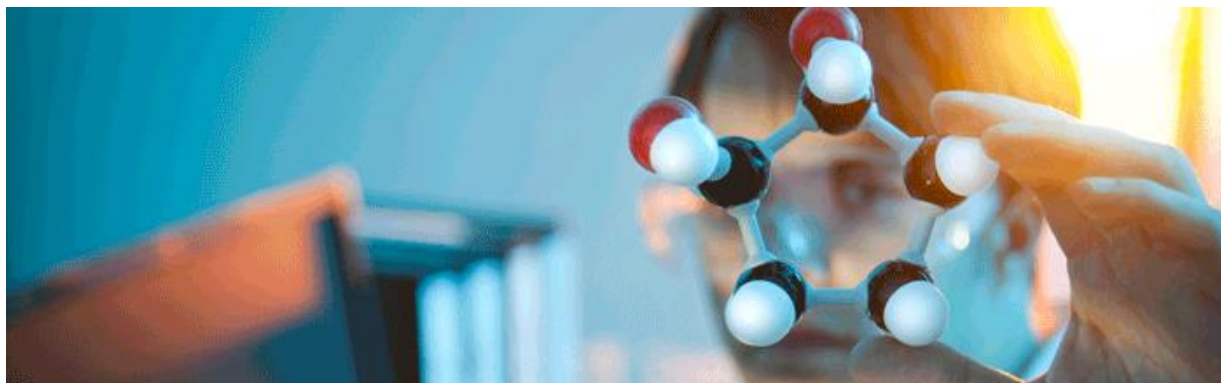
# 11<sup>th</sup> Summer School on Medicines

Drug discovery : from target to market

Montréal, Canada  
June 8 – 15, 2019

*SSM11 offers a unique 50-hour training program on drug discovery, development and market access under a multicultural sponsorship in the wonderful setting of Montreal, Quebec. Make plans now for one full week of lively presentations and direct interactions with the Faculty, including Case Studies and Workshops with Industry, covering the whole value chain of medicines, from “idea to market”. SSM11 Faculty members are leaders in their field and contribute to create one of the most innovative and focused programs in drug discovery & development currently offered.*

## Program



## Opening Note

Dear participants to SSM11,

On behalf of the Université de Montréal, it's a real pleasure for me to welcome you at this [11th edition of the Summer School of medicines](#). We're honoured to organize this summer school in collaboration with three of our privileged international academic partners, the University of Barcelona and Université Paul Sabatier in Toulouse and University of Sao Paulo (Brazil).

For several years now, this summer school has represented an important international outreach for us in our mission to train the next generation of scientists in the biopharmaceutical sector. U de Montreal is the 2<sup>th</sup> largest research U in Canada, with more than 62 thousands students attending, and over 400M Euro in research funding each year. In North America, the region of Montreal is ranked 10<sup>th</sup> among the major hubs of Biopharmaceutical research. Of the six innovative medicines ever developed in Canada and approved by the American FDA, four were developed in the region of Montreal.

Drug discovery is serious business. It has impact on economics, politics, ethics and most importantly on people. Patients who suffer from diseases we don't yet fully understand. As you will appreciate this week, developing new drugs that are safe and effective is one of the most difficult challenges facing mankind. It involves science, lots of it, in so many different fields that nobody can do it alone in his or her lab. We need specialists that can see the big picture and understand the language of other specialists, their challenges and opportunities, from idea to market.

This is why we are here. To give you the larger picture. Because it is an international school, with faculty and students coming from several countries in the European Union and North America, SSM11 is also an opportunity to make contacts and build your network. Do not hesitate to ask questions either after talks or during the general discussions that will follow at the end each day. Several speakers will stay with us after their talk so see this as an opportunity to meet and discuss with them.

We wish you all the best learning experience possible with SSM11.



Denis deBlois  
Chairman, SSM11  
For the Scientific and Organizing Committee



## Program

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SATURDAY, June 8, 2019

**Pavilion Jean-Coutu, room S1-151 & Agora**

**15:00 – 16:00 Registration**

**16:00 – 16:15 OFFICIAL OPENING – 11th Summer School on Medicines (SSM11)**

*Organizing committee*

**16:15 – 17:00 Keynote Opening Lecture 1 (KNL1) : New models of translational research from academia to industry**

*Michel Bouvier, Director of Institute for resesarch in immunology and cancer ([IRIC](#)), Montréal*

**17:00 – 17:45 Keynote Opening Lecture 2 (KNL2): Recent advances in G protein-coupled receptors as therapeutic targets**

*Jean-Philippe Pin, Director of Functional Genomic Institute ([IGF](#)), Montpellier, France*

**17:45 – 20:00 Poster Session and Welcome Reception at Pavilion Jean-Coutu**



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SUNDAY, June 9, 2019

Pavilion Jean-Coutu, room S1-151 & Agora

**SESSION I : DRUG R&D, AN OVERVIEW FROM TARGET TO MARKET**

**Chairperson: Jordi Quintana**

**9:00 – 10:15 (L1) Overview of drug discovery**

*Denis deBlois [UdeM](#)*

**10:15 – 10:45 Health break**

**10:45 – 12:00 (L2) Overview of clinical development**

*Dan Chiche, Chief Medical Officer, [Neomed Institute](#), Montreal*

**12:00 – 13:00 Lunch**

**13:00 – 14:00 (L3) Molecules and money: Overview of business development**

*Steven Klein, VP Business Development, IRIC-Commercialization of Research ([IRICoR](#)), Montreal*

**14:00 – 15:00 (L4) Novel, non obvious, useful? Intellectual property as a discovery engine**

*Steven Lam, Partner and Patent Agent at [ROBIC](#), S.E.N.C.R.L. / LLP*

**15:00 – 15:15 Health break**

**15:15 – 15:45 Plenary discussion with speakers**

**15:45 – 17:30 Participant Mini-Symposium : Oral and poster presentations**

MONDAY, June 10, 2019

Pavilion Jean-Coutu, room S1-151 & Agora

SESSION II : DRUG DISCOVERY

Chairperson (AM): Pierre Cordelier

8:45 – 9:30 (L5) Targeting TNF-alpha to overcome resistance to immunotherapy in melanoma  
*Bruno Ségui, [Centre de recherches en cancérologie de Toulouse](#)*

9:30 – 10:15 (L6) Drug discovery – Small molecule  
*Rodolfo Lavilla, U de Barcelona - Institute of Biomedicine ([IBUB](#))*

10:15 – 10:30 Health break

10:30 – 11:15 (L7) Chemical biology  
*Jordi Quintana, [U Pompeu Fabra](#), Barcelona*

11:15 – 12:00 (L8) Beyond the pill: Systems Pharmacology in Drug Discovery  
*Rafael Najmanovich, [UdeM](#)*

12:00 – 13:00 Lunch

Chairperson (PM): Marçal Pastor-Anglada

13:00 – 13:45 (L9) Biological drugs : development and manufacturing challenges  
*Yves Durocher, [National Research Council of Canada](#)*

13:45 – 14:30 (L10) Oncolytic virus for cancer therapy: from cellular determinants to mathematical modeling of infection  
*P Cordelier, [INSERM](#), Toulouse*

14:30 – 14:45 Health break

14:45 – 15:30 (L11) Beyond the pill: Anti-inflammatory dendrimers call into question pharmaceutical dogmas  
*Remy Poupot, [U Paul Sabatier](#), Toulouse*

15:30 – 16:00 Plenary discussion with speakers

16:00 – 17:00 Visit of IRIC Drug Discovery Platforms (HTS– Medicinal chemistry – Histology– Cytometry)



TUESDAY, JUNE 11, 2019

Pavilion Jean-Coutu, room S1-151

**SESSION III : NONCLINICAL DEVELOPMENT**

**Chairperson: Rémy Poupot**

- 8:45 – 9:30 (L12) Drug-like properties for optimal drug delivery**  
*Grégoire Leclair, [UdeM](#)*
- 9:30 – 10:15 (L13) Membrane proteins in drug-transporter interactions**  
*Marçal Pastor-Anglada, U de Barcelona - Institute of Biomedicine ([IBUB](#))*
- 10:15 – 10:30 Health break**
- 10:30 – 11:15 (L14) Toxicology / Non clinical safety evaluation**  
*Violetta Dimitriadou, VP Scientific Operations, [IRICoR](#), Montreal*
- 11:15 – 12:00 (L15) Beyond the Pill – Modeling and simulation to optimize PK / PD relationship**  
*Fahima Nekka, [UdeM](#)*
- 12:00 – 13:00 Lunch**

**SESSION IV : CASE STUDY – INTELLECTUAL PROPERTY AND TECHNOLOGY WATCH**

- 13:00 – 13:30 Case presentation and outline of challenges**  
*Remy Poupot, [U Paul Sabatier](#), Toulouse*
- 13:30 – 16:00 Group session (students work in small teams) – Health break at convenience**
- 16:00 – 17:00 Each team reports / General discussion**



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Pavilion Jean-Coutu, room S1-111

**SESSION VI: CLINICAL DEVELOPMENT & POST-MARKETING FOLLOW-UP**

**Chairperson: Denis deBlois**

- 8:30 – 9:20 (L16) Learning studies : First-in-Man (Phase I)**  
*Marc Lefebvre, Cofounder of [Algorithme Pharma – An Altasciences Company](#)*
- 9:20 – 10:10 (L17) Learning studies : Proof of concept studies (Phase II)**  
*Marc Riviere, General Partner & CMO, [TVM Life Science Management Inc](#)*
- 10:10 – 10:40 Health break**
- 10:40 – 11:30 (L18) Confirmatory studies (Phase III) : the perspective of the regulatory agency**  
*Ariel E. Arias, Senior Advisor, Centre for Biologics Evaluation, Biologics and Genetic Therapies Directorate, [Health Canada](#)*
- 11:30 – 12:00 Plenary discussion with speakers**
- 12:00 – 13:15 Lunch**
- 13:15 – 14:15 (L19) Safety in the Real-World : Pharmacovigilance and Therapeutic Risk Management**  
*Yola Moride, [UdeM](#)*

**SESSION VII : CASE STUDY II – REGULATORY STRATEGIES**

- 14:15 – 14:45 Case presentation and outline of challenges**  
*Patrick Colin, PCC Inc*
- 14:45 – 15:00 Health break**
- 15:00 – 16:00 Group session (students work in small teams)**
- 16:15 – 17:00 Each team reports / General discussion**



THURSDAY, JUNE 13, 2019

Pavilion Jean-Coutu, room S1-111

8:45 – 9:30 (L20) Working with the FDA and other government agencies on clinical trials  
Mark Kester, Director, [Nanostar Institute](#), Virginia USA

**SESSION VIII : CASE STUDY III – STAKEHOLDERS' PERSPECTIVES (Part 1)**

9:30 – 10:00 Case presentation and outline of challenges  
Denis deBlois [UdeM](#)

10:00 – 11:00 Group session (students work in small teams)

11:00 – 11:15 Health break

**SESSION IX: MARKET ACCESS**

Chairperson: Sylvie Perreault, [UdeM](#)

11:15 – 12:00 (L21) Pharmaco-economics 101  
Alice Dragomir, [McGill U](#)

12:00 – 13:00 Lunch

13:00 – 13:45 L(22) Third payer perspective : Health technology assessment  
Sylvie Bouchard, Director of drug evaluation, [INNESS](#)

13:45 – 14:30 (L23) Market access – Industry perspective  
Frédéric Lavoie, VP Access and Government Relations, [Pfizer Canada](#)

14:30 – 15:00 Plenary discussion with speakers

15:00 – 15:30 Health break

15:30 – 16:15 (L24) Start-up Creation, From the Bench to the Bedside, the journey of a faculty entrepreneur  
Mark Kester, Director, [Nanostar Institute](#), Virginia USA

**CASE STUDY – STAKEHOLDERS' PERSPECTIVES (Part 2)**

16:15 – 17:15 Each team reports / General discussion



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Pavilion Jean-Coutu, room S1-151 & Agora

**INDUSTRIAL SYMPOSIUM - DEEP LEARNING IN CURRENT BIOPHARMACEUTICAL DRUG DEVELOPMENT**

**Chairperson: Jean-Pierre Moreau, Recherche Continuum, Montreal**

- 9:00**            **Opening Remarks – Jean-Pierre Moreau, Recherche Continuum**
- 9:15**            **Metatox: Meta Learning for Assessing Toxicity-Related Drug Safety**  
*Therence Bois, [InVivoAI](#), Montréal*
- Break**
- 10:15**           **Introduction of SSM11 keynote speaker – Denis deBlois, Chairman SSM11**
- 10:20**           **Ceramide Nanoliposomes: A Case Study**  
*Mark Kester, Director, [Nanostar Institute](#), Virginia USA*
- 11:20**           **Prediction of Clinical QTc Changes Based Upon Preclinical Ion Channel Data**  
*William Crumb, [Nova Research Labs](#), New Orleans*
- 11:50-13:30**   **Lunch break (not offered on site)**
- 13:30**           **Proof of Concept Comprehensive Ex-vivo Neurological Assay**  
*Lois Miraucourt, [CiToxLAB](#), Laval*
- 14:05**           **Neomed/CDRD Join Resources for New Pan-canadian Support to Drug Discovery**  
*Youssef Bennani, [adMare BioInnovations](#), Montréal*
- Break**
- 14:40**           **Preclinical & Clinical development of Etripamil for Paroxysmal Systolic Ventricular Tachycardia (PSVT)**  
*Philippe Douville, [Milestone Pharmaceuticals](#), Montréal*
- 15:10**           **Introduction of SSM11 keynote speaker – Denis deBlois, Chairman SSM11**
- 15:15**           **Preclinical and Clinical Development of Palovarotene for Ultra-rare Bone Diseases**  
*Michael Harvey, VP Drug Development, [Clementia Pharma – An Ipsen Company](#), Montreal*
- 16:05**           **Networking cocktail**

SATURDAY, JUNE 15, 2019

Pavilion Jean-Coutu, room S1-111

9:00 – 10:00 (L25) Beyond the Pill – AI meets drug R&D  
Steven Sanche, [Los Alamos National Laboratory](#), USA

**SESSION X : START-UP CREATION, INVESTMENT & BUSINESS DEVELOPMENT**

Chairperson: Steven Klein, VP Business development, IRICoR

10:00 – 10:15 Health break

10:15 – 11:00 (L26) Translational research - Stem cell expansion strategy for cancer treatment  
Anne Marinier, Institute for research in immunology and cancer ([IRIC](#)), Montréal

11:00 – 11:45 (L27) Public-Private Partnerships for Drug Discovery and Development  
Steven Xanthoudakis, Chief Business Development Officer at Consortium Québécois en développement du médicament ([CQDM](#))

11:45 – 12:00 Plenary discussion

12:00 – 13:00 Lunch

**SESSION XI: CARING ABOUT CAREERS: NAVIGATING THE ECOSYSTEM OF BIOPHARMA**

13:00 – 13:45 (L28) Career development in the biopharmaceutical sector  
Michelle Savoie, Université de Montréal, Québec

13:45 – 14:00 Plenary discussion with SSM11 faculty

14:00 – 14:15 SSM11 Wrap-up, Closing comments and Overture towards SSM12



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