CSPT 2019 Annual Conference

From Base to Summit: Pharmacology at its Peak

Calgary, Alberta
June 12 - 14, 2019

#CSPT2019 / #PharmacologyCanada
pharmacologycanada.org
From Base to Summit: Pharmacology at its Peak

2019 Conference Program
An electronic copy of this document can be found on the CSPT website at
https://pharmacologycanada.org/resources/Documents/CSPT%202019%20Annual%20Conference%20Program%20FINAL,%20June%202019.pdf

Biographies and Abstracts
Speaker biographies and abstracts can be viewed on the CSPT website at

Wednesday, June 12
https://pharmacologycanada.org/06/12/2019-speaker-biographies-and-abstracts

Thursday, June 13
https://pharmacologycanada.org/06/13/2019-speaker-biographies-and-abstracts

Friday, June 14
https://pharmacologycanada.org/06/14/2019-speaker-biographies-and-abstracts

Wi-fi Access
Academic attendees will be able to log on to the “Eduroam” network with using their home login. Others should select the AirUC-guest network and follow the instructions to get a password.

Posters
Poster presenters are encouraged to be at their posters during the breaks to answer questions and to visit others’ posters. Judging will take place as indicated on the schedule.

Welcome Reception
The Welcome Reception on Wednesday evening takes place at the Hotel Alma, University of Calgary Main Campus. The event takes place on the 7th Floor in the Senate Room. Those who have registered are encouraged to attend from 6:00 to 7:30 pm, before heading out to dinner on your own. A list of dining options is included at the back of this program.

Questions
Should you have any questions or concerns during your time at the conference, please visit the Registration Desk and someone will be happy to assist you.

Follow Us
Please follow us during and after the conference! #CSPT2019 #PharmacologyCanada
As President of the Canadian Society of Pharmacology and Therapeutics (CSPT) it is my pleasure and honour to welcome you to our 2019 Annual Meeting in Calgary. The theme, *From Base to Summit: Pharmacology at its Peak*, aptly captures the scope of our society — from basic and discovery science to clinical pharmacology and translational and systems pharmacology — and the role of CSPT as the voice of pharmacology in Canada.

Organizing an outstanding meeting such as this takes a lot of effort. While many people deserve credit, I would like to specifically thank our many generous sponsors, the members of our Scientific Program Committee, and the members of the Local Organizing Committee. Particular recognition goes to Dr. Don Miller, Chair of the Scientific Program Committee, and Dr. Alastair Cribb, Chair of the Local Organizing Committee for their leadership and hard work, as well as Randee Holmes, our amazing Executive Director, without whom none of this would have happened.

We encourage you all to enjoy the conference and the great city of Calgary, meet old friends and make new ones, and continue your great work in moving Canadian pharmacology forward.

It has been a privilege to serve as your society President for the past two years and I greatly anticipate working with our incoming President, Dr. Kerry Goralski, and the rest of the Executive Committee in advancing the cause of pharmacology in Canada and beyond.

Michael Rieder
President, Canadian Society of Pharmacology and Therapeutics
A Message from the Scientific Program Committee Chair

Welcome to Calgary and the annual Canadian Society of Pharmacology and Therapeutics meeting. Whether your interests reside in more basic pharmacology, translational medicine or clinical therapeutics, I think you will find the scientific sessions have much to offer. In addition to the various podium sessions, I encourage you to check out the posters – they will remain on display for the entire meeting with opportunities for discussion with poster presenters on both Wednesday and Thursday. On behalf of the entire Scientific Program Committee, I invite you to experience Pharmacology at its Peak.

Donald Miller
Chair, Scientific Program Committee

A Message from the Local Organizing Committee Chair

On behalf of the local organizing committee and everyone here at the University of Calgary, welcome to CSPT 2019. We hope you will enjoy your stay and have a chance to visit the city and the mountains while you are here. Equally, we hope you will enjoy the conference and the chance to get together with colleagues and trainees from across Canada.

If you need any help or information during your time here, do not hesitate to ask and we will do our best to help you. Thank you to all of the sponsors that have made this meeting possible. Without their generous support, we would not be able to offer the same quality of program. I encourage attendees to thank the sponsors for their support and to stop by the display tables. Thank you. also, to all the speakers who have agreed to share their knowledge and research with us.

Alastair Cribb
Chair, Local Organizing Committee Chair
### Wednesday, June 12, 2019

<table>
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<tr>
<th>Time</th>
<th>Event</th>
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<tr>
<td>07:00 to 15:30</td>
<td>Registration Desk Open</td>
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<tr>
<td>07:30 to 08:15</td>
<td>Breakfast (HRIC Atrium)</td>
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<tr>
<td>08:30 to 17:30</td>
<td>Posters and Exhibits Open</td>
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<tr>
<td>08:20 to 08:30</td>
<td><strong>Conference Welcome Address</strong> (Theatre 4)</td>
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| 08:30 to 10:00| **The Ontogeny of Drug Metabolism and Pharmacokinetics: Basic Mechanisms and Clinical Implications** (Theatre 4)  
Moderator: Abby Collier (University of British Columbia)  
- Saskia de Wildt (Radboud University) – Safe and effective drug use in children  
- Lauren Aleksunes (Rutgers University) – Transporters as regulators of *in utero* xenobiotic exposure and placental health |
| 10:00 to 10:30| Break, Poster Viewing, Exhibits (HRIC Atrium)                                              |
| 10:30 to 12:00| **The Ontogeny of Drug Metabolism and Pharmacokinetics: Basic Mechanisms and Clinical Implications**  
**Basic Track** (Theatre 4)  
Moderator: Abby Collier (University of British Columbia)  
- Ryan Takahashi (Genentech) – *In vitro* approaches to pediatric DM assessment and prediction  
- Micheline Piquette-Miller (University of Toronto) – The role of placental transporters and their regulation  
- Abby Collier (University of British Columbia) – The ontogeny of conjugation enzymes: Differential physiology and pharmacology in human and non-human models |
| 12:00 to 13:30| Lunch, Poster Viewing, Exhibits (HRIC Atrium)                                              |
| 12:30 to 13:30| Poster Judging (Odd numbered posters)                                                     |
| 13:30 to 14:00| **Senior Investigator Award Lecture**                                                       
- Peter Chidiac (Western University) – What does concentration dependence depend on? |
| 14:00 to 15:30| **Pain and Inflammation: Basic Mechanisms and Clinical Management** (Theatre 4)           
Moderator: Tuan Trang (University of Calgary)  
- Isaac Chiu (Harvard University) – Pain and neuro-immune interactions in bacterial host defense  
- Luda Diatchenko (McGill University) – Understanding chronic pain through genomics and transcriptomics: Focus on inflammation |
| 15:30 to 16:00| Break, Poster Viewing, Exhibits (HRIC Atrium)                                              |
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<tr>
<td>16:00 to 17:30</td>
<td><strong>Pain and Inflammation</strong></td>
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<td><strong>Basic Track</strong> (Theatre 4)</td>
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<td>Moderator: Tuan Trang (<em>University of Calgary</em>)</td>
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<td>- Gerald Zamponi (<em>University of Calgary</em>) – A brain circuit for neuropathic pain</td>
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<td>- Anna Taylor (<em>University of Alberta</em>) – Gut dysbiosis contributes to neuroimmune mechanisms driving pain and negative affect in opioid withdrawal</td>
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<td>- Mike Hildebrand (<em>Carleton University</em>) – Determinants of spinal cord hyperexcitability: From rodent to human models of chronic pain</td>
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<td>18:00 to 19:30</td>
<td><strong>CSPT President’s Welcome Reception</strong> (Senate Room, 7th Floor, Hotel Alma, Main Campus)</td>
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<td>19:30 to 21:30</td>
<td><strong>CSPT Executive Committee Meeting</strong> (Offsite)</td>
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Thursday, June 13, 2019

07:00 to 15:30 Registration Desk Open

07:30 to 08:15 Breakfast (HRIC Atrium)

08:20 to 08:30 Opening Remarks

08:30 to 17:30 Posters and Exhibits Open

08:30 to 10:00 Clinical Toxicology (Theatre 4)
Moderator: Cindy Woodland (University of Toronto)

- Scott Lucyk (*University of Calgary*) – Emerging recreational drugs of abuse: Pearls and pitfalls
  Discussion of clinical management of recreational drug toxicities
- Mark Yarema (*University of Calgary*) – Acetaminophen poisoning: Old dog, new tricks
  Discussion of clinical management of acetaminophen overdose

Ion Channel Pharmacology (Theatre 3)
Moderator: Donald Miller (University of Manitoba)

- Michael Jackson (*University of Manitoba*) – TRPM2 channels expressed in microglia links elevated glutamate signalling in Alzheimer’s to inflammation
- Harley Kurata (*University of Alberta*) – Varied mechanisms and sites of action of anti-epileptic potassium channel activator compounds
- Christophe Altier (*University of Calgary*) – Transient receptor potential channels in peripheral sensitization

10:00 to 10:30 Break, Poster Viewing, Exhibits (HRIC Atrium)

10:30 to 12:00 Practical Pharmacology (Theatre 4)
Moderator: George Dresser (Western University)

- Ryan Chuang (*University of Calgary*) – Beware the OTC: Looking beyond Rx medications
- Kathryn Watson (*University of Calgary*) – Chasing amiodarone pharmacokinetics
- George Dresser (*Western University*) – The ups and downs of off label anticoagulant dosing
- Michael Rieder (*Western University*) – Toxicity of high dose methotrexate
- Reo Tanoshima (*University of British Columbia*) – Defining cancer drug nonadherence: The unwillingness or inability of a patient to meet the doctor’s objective

12:00 to 13:30 Lunch, Poster Viewing, Exhibits (HRIC Atrium)

12:30 to 13:30 Poster Judging (Even numbered posters)

13:30 to 14:00 Postdoctoral Award Lecture (Theatre 4)

- Britt Drögemöller (*University of British Columbia*) – Uncovering the genetics of severe adverse drug reactions to chemotherapy

14:00 to 16:00 Trainee 10-minute Oral Platform Presentations (Theatre 4)

17:00 to 22:30 CSPT Annual Dinner in Kananaskis at Boundary Ranch
Bus leaves from Hotel Alma at 17:00 pm; Dinner at 19:00 pm; Bus returns at 21:00 pm
### From Base to Summit: Pharmacology at its Peak

**Friday, June 14, 2019**

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<th>Time</th>
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| 8:00 to 9:00 | **Breakfast (HRIC Atrium)**  
**CSPT Annual General Meeting and Presentation of Trainee Podium and Poster Awards** |
| 9:00 to 9:30 | **Junior Investigator Award Lecture** (Theatre 4)  
- *Peter B. Stathopulos (Western University)* – Regulation of stromal interaction molecule function by post-translational modifications |
| 9:30 to 10:15 | **Diabetes and Vascular Disease: Targeting the Endothelium** (Theatre 4)  
**Moderators:** Christopher Triggle (Weill Cornell Medicine, Qatar) / Morley Hollenberg (University of Calgary)  
- *Christopher Triggle (Weill Cornell Medicine, Qatar)* – Why the endothelium?  
- *Todd Anderson (University of Calgary)* – The clinical implications of endothelial function in humans |
| 10:15 to 10:30 | **Break** |
| 10:30 to 12:00 | **Diabetes and Vascular Disease: Targeting the Endothelium** (Theatre 4)  
**Moderators:** Christopher Triggle / Morley Hollenberg  
- *Frances Plane (University of Alberta)* – Calcium activated potassium channels (KCa) channels as targets to improve endothelial function  
- *Rithwik Ramachandran (Western University)* – Proteinases, signal transduction and vascular disease: Exploring signaling bias in PAR4 to develop novel anti-platelet drugs  
- *Vivek Krishna Pulakazhi Venu (University of Calgary)* – Hyperglycaemic impairment of Par2-mediated vasodilatation: Prevention by inhibition of SGLT2 and minimizing mitochondrial dysfunction |
| 12:00 to 12:15 | **Closing Remarks** |
From Base to Summit: Pharmacology at its Peak

Directions to the Foothills Health Sciences Centre

CSPT 2019 is taking place in the University of Calgary Foothills Health Sciences Centre (not the Foothills Hospital) — home to Cumming School of Medicine and the Faculty of Veterinary Medicine.

The registration desk, posters, and break/lunch area is in the HRIC Atrium on the ground floor.

The pharmacogenomics pre-conference course takes place in TRW2E23.

The main meeting presentation rooms are Theatre 3 and Theatre 4.

From Hotel Alma (walking)

- Cross 24th Avenue and then proceed until you reach a T-junction.
- Cross the road and turn right – you will quickly come to a pathway (you will see signs for a bike route) that crosses an alley and takes you out to the next street. Take this pathway. (You will see cranes on the skyline – this is where you are going).
- You will come out on Uxbridge Drive (another T-junction). Stay on the same side of the road and turn left. Follow it around, past the roundabout to a set of lights by the gas station.
- Staying on the same side of the street, cross over 16th Avenue at the lights and proceed straight ahead (south) until the next set of lights (another T-junction). Go the south side of the intersection and cross over (there will be a parkade on your left and construction on your right across the road).
- Walk straight ahead until you come to a large building – you will see an overhead ‘Plus 15’ from a parking garage on the right crossing over to the Health Sciences Centre. Walk ahead and enter the Foothills Health Science through the door under the Plus 15. You are in the Health Sciences Centre. Follow the signs to the registration desk (or refer to the directions on the next page).
From Base to Summit: Pharmacology at its Peak

Directions to Registration Desk

The registration desk is located on the north side of the HRIC Atrium. You can follow the signs or these directions:

- On entering the Health Sciences Centre from the north under the Plus 15 walkway, go up the steps and walk straight ahead until you reach an atrium to your right.
- Turn right and go right down the atrium until you reach a set of glass doors.
- Go through the doors and up the small ramp on the right hand side.
- You are now in the HRIC Atrium. The registration desk should be just to your left, with the poster boards and tables set up behind the registration desk.

Directions to Presentation Rooms

Pharmacogenomics Pre-conference Course

- Walk to the south end of the HRIC Atrium (end away from the Registration Desk). You will see a set of stairs and a hallway to your right.
- You can follow the hallway through two sets of doors (past the first elevators) until you are in the TRW Building. There will be a set of elevators in the lobby. Take it up to the second floor.
  - When you exit, you will see the main office of the Faculty of Veterinary Medicine. Walk to the office and turn right, go through a door, and then the first door on your right leads to TRW2E23 (there are lockers in front of the room).
- Alternatively, go up the stairs in the HRIC atrium two flights until you reach the next level.
  - Turn right and walk through the next building (HRIC), across a walkway, and up a small set of stairs on the right hand side, then through two sets of doors until you see the main office of the Faculty of Veterinary Medicine. Walk to the office and turn right, go through a door, and then the first door on your right leads to TRW2E23 (there are lockers in front of the room).

Main Theatres for CSPT 2019

- Walk to the south end of the HRIC Atrium (end away from the Registration Desk).
- You will see a set of stairs and a hallway to your right. You can either walk up the stairs until you reach the next level, or you can go a few feet down the hallway and take the first set of elevators up to the first floor.
- Once on the next floor, take the walkway that goes across the HRIC atrium (follow the signs), down a few steps and through a door.
- The first door on your left is Theatre 3.
- For Theatre 4, proceed through the next set of doors and walk down the hallway, about 50 feet or so, to the first classroom on your left. This is Theatre 4.
Where Can I Eat During the Conference?

Breakfast and lunch will be served at the meeting venue as indicated on the meeting schedule.

**On Campus**

There is a small restaurant in the Hotel Alma lobby.

If you go to the MacEwan Centre on campus, you can find a number of fast food outlets.

There is a small food outlet in the Health Sciences Centre as well.

**Walking Distance from Hotel Alma**

- **The Keg** in the Stadium Shopping Centre – 1923 Uxbridge Drive NW. Standard Keg fare. Reasonable quality and price.


- **Saigon Y2K** – 2110 Crowchild Trail NW. Good Vietnamese food. In the same stripmall as Big T’s. Doesn’t look like much, but food is generally good (online reviews have slipped recently).

- **Hotel Village** – Many of the hotels have restaurants (e.g., Best Western).

- **Moxie’s Grill and Bar, Boston Pizza, Milestones** – 3625 Shaganappi Trail NW. In the Market Mall shopping centre. Standard chain food. There is also a food court.

**Taxi Ride Away**

- **NOtaBLE** – 4611 Bowness Road. This is probably one of the best restaurants in the NW of Calgary. Less than 10 minutes by taxi/Uber. Uses local food. Good selection.

- **Kensington Restaurants** – 10 minute taxi/Uber ride. Pulcinella (Italian), Modern Steak, Hayden Block Smoke and Whisky. All are generally good. Some other restaurants there as well.

- **Downtown Restaurants** – 15 minutes by taxi/Uber; 30-40 minutes by C-train including walking time. Good choices: **Alloy, Anju (Korean), Blink Restaurant and Bar, River Café, Shokunin** (for a different experience), **Pigeonhole** (vegan, gluten free), **Teatro Ristorante, Charcut, SALTLIK**.

This year’s CSPT Annual Conference has been made possible by the generous sponsorship of the following organizations:

**Diamond ($3,000 or more)**

- ASPET
- Waters
- University of Calgary
- Faculty of Veterinary Medicine

**Opal ($1,000 to $2,999)**

- University of Calgary
- Cumming School of Medicine
- Dynacare
- Canadian Pharmacogenomics Network for Drug Safety
- ACP
- University of Calgary
- Cumming School of Medicine
  Department of Physiology and Pharmacology