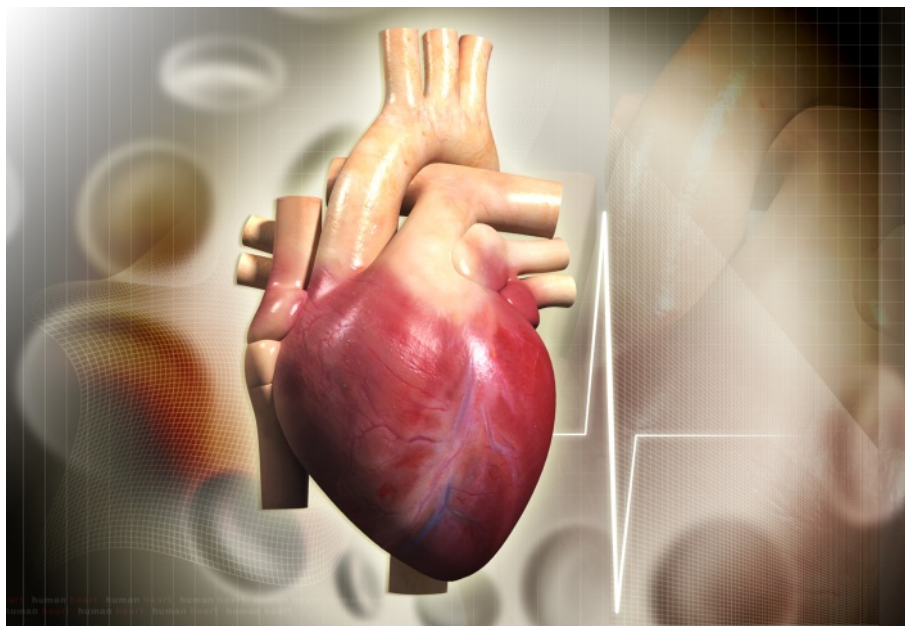


*Canadian Heart Rhythm Society*  
*Société canadienne de rythmologie*  
[www.chrsonline.ca](http://www.chrsonline.ca)

*Collaborate With Your EP Community*



*Thursday, September 17 to Saturday, September 19, 2015*



**Hôtel Le Concorde**  
1225 Cours de Général-de-Montcalm, Québec



September 2015

The Canadian Heart Rhythm Society (CHRS) is proud to welcome you to its third CHRS Annual Meeting at the Hotel Le Concorde in Québec. Our planning committee and faculty have been preparing for this event in hopes of delivering an experience that meets the diverse interests and needs of our community.

We are very excited about this year's Programme, which was created to bring clinicians, researchers, scientists and others together. The theme this year is "Difficulties Encountered in the Practice of Electrophysiology" – with a clinical focus. We are proud to offer a new education track for research associates, while continuing to include pediatric and basic science elements.

We have incorporated more time for interaction as well as for networking opportunities, as we recognize the importance to our participants. This has become an optimum time to network with your colleagues from across the country. This year, we are excited to have the CANet Research Meeting as a partner in Quebec.

Thank you for participating and we hope that you will find this to be a positive educational experience. Please do not hesitate at any time to provide the CHRS Directors or staff members with your feedback. We will rely on your feedback, most importantly; we ask that you complete the event evaluation in order for us to continue to improve future programming and initiatives.

Shubhayan Sanatani, MD, FRCPC, CCDS, FHRS  
Chair, CHRS Annual Meeting



## FACULTY

Sylvia Abadir  
Joseph Atallah  
Peter Backx  
Matthew Bennett  
David Birnie  
Debra Campbell  
Sandra Carroll  
Jean Champagne  
Thomas Claydon  
Robin Clegg  
Pamela Colley  
Jean-Marc Coté  
Eugene Crystal  
Paul Dorian  
Henry Duff  
Derek Exner  
Brenda Gerull

Martin Green  
Andrew Ha  
Robert Hamilton  
Julie Hathaway  
Jeff Healey  
Aliasghar Khadem  
Clarence Khoo  
Andrew Krahn  
Christopher Lane  
Sandra Lauck  
Peter Leong-Sit  
Laurent Macle  
L. Brent Mitchell  
Blandine Mondésert  
Girish Nair  
K. (Nantha) Nanthakumar  
Isabelle Nault

Pablo Nery  
David Newman  
Gavin Oudit  
François Philippon  
Damian Redfearn  
Robert Rose  
Shubhayan Sanatani  
Roopinder Sandhu  
John Sapp  
Jean-Francois Sarrazin  
Elizabeth Sherwin  
Allan Skanes  
Danna Spears  
Elizabeth Stephenson  
Anthony Tang  
Glen Tibbits  
Atul Verma  
George Wells

## PLANNING COMMITTEE

**Shubhayan Sanatani** – Chair

**Jason Andrade** – Education Committee Representative

**Joseph Atallah** – Pediatric Community Representative

**Thomas Claydon** – Basic Science Representative:

**Jacqueline Forman** – Allied Health Professional Representative

## LEARNING OBJECTIVES

**At the end of the sessions, participants will be able to:**

- Provide an introduction to research methodology, opportunities and strategies for the clinical investigator.
- Discuss the management of atrial fibrillation in different populations and using ablative techniques.
- Discuss cardiac rhythm device management including multisite pacing and lead extraction.
- Review the management of inherited arrhythmia conditions such as long QT and substrates such as Wolff-Parkinson-White.

**See the program for a full listing of learning objectives by session**

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*This event is an accredited group learning activity under Section 1 as defined by the Royal College of Physicians & Surgeons of Canada for the Maintenance of Certification program. This program is approved by the Canadian Cardiovascular Society for a maximum of 16.5 credits.*

# AGENDA

PLEASE NOTE COLOUR KEY FOR DIFFERENT SESSION TYPES

General Sessions

CHRS Research Associate Sessions

Committee & Breakout Meetings

Highlight Events

## THURSDAY September 17, 2015

Salon Pilot 11:00	CHRS Executive Meeting (by invitation only)
Salon Leduc 18:00	Canadian Inherited Heart Rhythm Research Meeting
Salon Fortin 19:00	Canadian EP Program Director's Meeting (by invitation only)
Salon Cullen 19:00	CPCHRN Business Meeting (by invitation only)
21:00	WELCOME RECEPTION — 3rd Floor Foyer

## FRIDAY September 18, 2015

07:00 REGISTRATION — 3rd Floor Foyer

BREAKFAST — Salon Borduas/Krieghoff 2

Salon Pilot 7:00 CHRS Executive Meeting (by invitation only)

8:00 WELCOME & INTRODUCTION — *Shubhayan Sanatani*

8:00 ***Rising to the Challenge of Arrhythmia Research***

**Moderators: Paul Dorian, L. Brent Mitchell, David Newman, Atul Verma**

- Research engagement in a challenging local environment

- *Roopinder Sandhu, Andrew Ha*

- Overcoming personal bias to include my patient in clinical research/trial

- *Girish Nair, Damian Redfean*

- In a busy clinical practice, how to remember and enroll patients in research studies

- *Christopher Lane, Peter Leong-Sit*

- How to split my time and focus between my own research program and

- multicenter research projects — *David Birnie, Derek Exner*

AT THE CONCLUSION OF THIS SESSION, PARTICIPANTS WILL:

1. Discuss strategies to facilitate clinical research in Canada.

2. Describe challenges to the conduct of clinical research.

3. Share ideas on how to structure a career in clinical research.

10:00 NUTRITION BREAK — 3rd Floor Foyer

10:30 ***Atrial Fibrillation*** — **Moderator: Andrew Ha**

- What do I do for a redo when the PVs are isolated? — *Atul Verma*

- Strategies for improving the durability for PVI — *Laurent Macle*

- Single shot vs. CF – next generation tools for AF ablation — *Allan Skanes*

- Management of AF in the adult congenital population — *Robin Clegg*

- The AF clinic: evidence and outcomes — *Pamela Colley*

- AF mechanisms and genetic insights — *Peter Backx*

AT THE CONCLUSION OF THIS SESSION, PARTICIPANTS WILL:

1. Identify procedural techniques and technologies to improve lesion creation and outcomes of PVI.

2. Distinguish the role of dedicated AF ablation tools and discuss the evidence of use.

3. Implement the optimal approach, techniques and technologies to improve outcomes for patients with recurrent AF post PVI.

4. Explore the unique challenges associated with AF in the adult congenital heart disease population.

5. Define the role of dedicated AF clinics in the management of patients with AF.

6. Examine the pathophysiology of atrial fibrillation at a mechanistic and cellular level, with an exploration of the role of genetics.

Suzor Côté/  
Salon Krieghoff 1

# AGENDA

PLEASE NOTE COLOUR KEY FOR DIFFERENT SESSION TYPES

General Sessions

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Highlight Events

## FRIDAY September 18, 2015 (continued)

10:30	<b>Introduction to Arrhythmias; Approach to Basic Arrhythmias – Discussion of Types</b> — Martin Green
Salon Leduc/ Fortin	<ul style="list-style-type: none"> <li>• Discussion of arrhythmia investigations</li> <li>• Medical arrhythmia management</li> <li>• Invasive arrhythmia management</li> </ul>
12:20	<b>LUNCH</b> — Salon Borduas/Krieghoff 2
Salon Pilot	
12:30	<b>Education Committee Meeting</b> — Chair: Matthew Bennett Open invitation to all CHRS members
Salon Cullen	
12:30	<b>CCC AF Workshop Planning Meeting</b> (by invitation only)
13:30	<b>Device I — Moderator: Matthew Bennett</b>
Suzor Côté/ Salon Krieghoff 1	<ul style="list-style-type: none"> <li>• New methods of CRT: Multisite CRT, multilead CRT, endocardial CRT — Derek Exner</li> <li>• Pediatric CRT — Elizabeth Sherwin</li> <li>• Congenital heart block: Long term pacing — Jean-Marc Coté</li> <li>• Applying MRI guidelines into practice: A practical approach — Debra Campbell</li> <li>• Mechanisms of pacing-induced dysfunction — Gavin Oudit</li> </ul> <p>AT THE CONCLUSION OF THIS SESSION, PARTICIPANTS WILL:</p> <ol style="list-style-type: none"> <li>1. Recognize emerging CRT methodologies.</li> <li>2. Describe the indications for CRT in pediatrics and the current utilization trends.</li> <li>3. Integrate the use of long-term pacing in congenital heart block.</li> <li>4. Outline the challenges, successes, and future considerations when implementing MRI Guidelines.</li> <li>5. Identify cellular consequences associated with pacing-induced cardiac dysfunction.</li> </ol>
13:30	<b>Introduction to Ventricular Arrhythmia and Sudden Death</b> — Andrew Krahn, Peter Leong-Sit
Salon Leduc/ Fortin	<ul style="list-style-type: none"> <li>• Inherited Arrhythmias – basics and clinical manifestations</li> <li>• Ventricular Tachycardia – basics and clinical manifestations</li> <li>• Ventricular Tachycardia – pharmacology and ablation?</li> </ul>
15:00	<b>Clinical Updates and Conundrums – Moderator: Elizabeth Sherwin</b>
Suzor Côté/ Salon Krieghoff 1	<ul style="list-style-type: none"> <li>• Asymptomatic WPW — Aliasghar Khadem</li> <li>• Restrictive CMO — Robert Hamilton</li> </ul> <p>AT THE CONCLUSION OF THIS SESSION, PARTICIPANTS WILL:</p> <ol style="list-style-type: none"> <li>1. Review risk stratification in Wolff-Parkinson-White.</li> <li>2. Discuss restrictive cardiomyopathy etiologies, outcomes and risk markers.</li> </ol>
15:30	<b>NUTRITION BREAK</b> — 3rd Floor Foyer
16:00	<b>Inherited Arrhythmia</b> — Moderator: Shubbayan Sanatani
Suzor Côté/ Salon Krieghoff 1	<ul style="list-style-type: none"> <li>• Challenging case in LQTS — Danna Spears, Joseph Atallah</li> <li>• Basic science insights into variable phenotype in the same family — Henry Duff</li> <li>• Navigating the variant of unknown significance — Julie Hathaway</li> <li>• Clinical genetic testing via next-generation DNA sequencing: Are we prepared? — Brenda Gerull</li> <li>• Stump the experts case presentations</li> </ul> <p>AT THE CONCLUSION OF THIS SESSION, PARTICIPANTS WILL:</p> <ol style="list-style-type: none"> <li>1. Select management strategies in inherited heart rhythm disorders.</li> <li>2. Explore the basic science and mechanisms of inherited heart rhythm disorders.</li> <li>3. Give examples of current genetic testing platforms and strategies.</li> </ol>

# AGENDA

## PLEASE NOTE COLOUR KEY FOR DIFFERENT SESSION TYPES

*General Sessions*

*CHRS Research Associate Sessions*

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*Highlight Events*

## FRIDAY September 18, 2015 (continued)

**Suzor Côté/  
Salon Krieghoff 1**

18:00

4. Understanding the variations in the spectrum of genotype- phenotype correlation.
5. Developing an approach to challenging gene testing results such as VUS.
6. Looking ahead at upcoming genotyping techniques and their potential clinical implications.

**ADJOURNMENT**

18:00  
**Salon Pilot**

**Device Committee Meeting — Chair: Derek Exner**  
*Open invitation to all CHRS members*

19:00

**Cocktails — 3rd Floor Foyer**

20:00

**CHRS NETWORKING DINNER — Salon Borduas/Krieghoff 2**

## SATURDAY September 19, 2015

07:00

**REGISTRATION — 3rd Floor Foyer**

**BREAKFAST — Salon Borduas/Krieghoff 2**

07:00  
**Salon Pilot**

**Ablation Committee Meeting — Chair: Allan Skanes**  
*Open invitation to all CHRS members*

**Salon Cullen**

07:00

**CIED Guideline Committee Meeting (by invitation only)**

08:00

**Device II — Moderator: Jeff Healey**

**Suzor Côté/  
Salon Krieghoff 1**

- The Sub Q ICD: When and where should it be used in adults and pediatrics?  
— *Blandine Mondésert*
- Outside the box: What to do when you can't go inside the heart or outside the chest — *Elizabeth Stephenson*
- Lead extraction in 2015: In whom should it be done and how?  
— *François Philippon*
- Leadless pacemakers – What is the role? More fiction than fact?  
— *Matthew Bennett*
- Can we implement decision support for patients considering implantable cardioverter defibrillators for primary prevention of sudden cardiac death?  
— *Sandra Carroll*

AT THE CONCLUSION OF THIS SESSION, PARTICIPANTS WILL:

1. Review current indications, benefits and limitations for subcutaneous ICD technology.
2. Explore the options for implantable cardioverter-defibrillators when the traditional systems are not an option.
3. Identify the components of a decision aid.
4. Recognize the value of decision support.

08:00

**Salon Leduc/  
Fortin**

**Cardiac Implantable Devices – How Do They Work and Why Do We Use Them? — Clarence Khoo**

- Pacemakers
- Implantable Defibrillators
- Cardiac Resynchronisation therapy

10:00

**NUTRITION BREAK — 3rd Floor Foyer**

# AGENDA

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General Sessions

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Highlight Events

**SATURDAY September 19, 2015 (continued)**

10:30

Suzor Côté/  
Salon Krieghoff 1

**Ventricular Tachycardia — Moderator: Christopher Lane**

- How do you perform substrate based VT ablation in 2015?  
Targets and technologies required — *Isabelle Nault*
  - Is ablation better than drugs? — *John Sapp*
  - Omni-polar mapping technology and novel mechanistic substrate VT ablation  
— *K. (Nantha) Nanthakumar*
  - How do you do epicardial VT ablation safely: When and how?— *Peter Leong-Sit*
  - Medical management of VT in CHD — *Sylvia Abadir*
- AT THE CONCLUSION OF THIS SESSION, PARTICIPANTS WILL:
1. Identify VT substrate: late potential, LAVA, low voltage and scar border zone.
  2. Review outcome after substrate ablation: is substrate ablation only a surrogate when activation and entrainment mapping cannot be performed or is it an equivalent endpoint?
  3. Define procedure success when performing substrate based VT ablation.
  4. Understand limitation of orientation dependence and ambiguous timing of local activation.
  5. Assess the basis of novel orientation and local timing independent mapping technology.
  6. Outline the basis of beat to beat wavefront direction at catheter tip.
  7. Communicate the basis of DEEP VT substrate mapping.
  8. Compare the efficacy of VT ablation versus medication.
  9. Review and discuss ways to safely perform epicardial VT ablation and indications for use.
  10. Summarize the evidence for ventricular arrhythmias in CHD and their mechanisms.
  11. Assess the different medications available, both old and new, for VT management in general, and more specifically in CHD.
  12. Identify the place of medical management in the armamentarium we have to treat those patients.

10:30

Salon Leduc/  
Fortin

**Atrial Fibrillation – Basic Mechanisms And Management — Pablo Nery**

- AF Review – basics and clinical manifestations
- Management of AF – Stroke prevention
- Management of AF – Pharmacology and ablation

12:30

Salon Pilot

**Allied Health Breakout Session — Chair: Debra Campbell**

*Open invitation to all Allied Health Professionals*

12:30

**LUNCH — Salon Borduas/Krieghoff 2**

13:30

Suzor Côté/  
Salon Krieghoff 1

**Clinical Updates and Conundrums: Left Atrial Appendage — Moderator: Paul Dorian**

- Single shot vs. CF Next generation tools for AF ablation?— *Jean Champagne*
  - The role of LAA in chronic AF: Do we need to isolate the LAA?  
— *Jean-Francois Sarrazin*
  - Basic science perspective on LAA — *Robert Rose*
- AT THE CONCLUSION OF THIS SESSION, PARTICIPANTS WILL:
1. Explore the role of the LAA in arrhythmogenesis and AF perpetuation, as well as in stroke pathogenesis.
  2. Illustrate the preclinical and clinical evidence surrounding electrical LAA exclusion on outcomes.
  3. Analyze the evidence surrounding LAA exclusion/excision/occlusion on stroke and mortality outcomes in patients with AF.



# AGENDA

PLEASE NOTE COLOUR KEY FOR DIFFERENT SESSION TYPES

*General Sessions*

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*Highlight Events*

## SATURDAY September 19, 2015 (continued)

14:15 ***Clinical Updates and Conundrums — Moderator: Atul Verma***

- Robotics and automation in EP — *Eugene Crystal*

14:30 ***CHRS Research: Shaping the Future — Moderator: Anthony Tang***

- Research methodology 101: Common mistakes to avoid — *George Wells*
- Building research networks when you are poor and have no friends — *Paul Dorian*
- Funding the future — *Andrew Krahn*
- What are our goals in basic science — *Glen Tibbits*
- Allied Professionals as partners in research — *Sandra Lauck*

**Suzor Côté/  
Salon Krieghoff 1**

AT THE CONCLUSION OF THIS SESSION, PARTICIPANTS WILL:

1. Evaluate methodological considerations for conducting research.
2. Discuss strategies for constructing research networks.
3. Examine mechanisms for funding the research team.
4. Recognize challenges and opportunities available through basic science integration.
5. Discuss the role of allied professionals in research.

16:00 **NUTRITION BREAK — 3rd Floor Foyer**

16:15 **Research Mentorship Meeting — Open Forum**

**Suzor Côté/  
Salon Krieghoff 1**

— **Moderator: Anthony Tang**

- List the current research networks active in the Canadian EP community
- Discover opportunities for research collaboration

18:00 **CLOSING REMARKS & ADJOURNMENT**

## EVALUATION

**Please take the time to answer the evaluation questions.  
Completing the evaluation will assist the  
Planning Committee with the development of future  
programs.**

*Thank you in advance*





*Thursday, September 17 to Saturday, September 19, 2015*

## *SUPPORTED BY*

### *DIAMOND PARTNER*



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### *GOLD PARTNERS*



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### *SILVER PARTNERS*



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### *BRONZE PARTNER*

