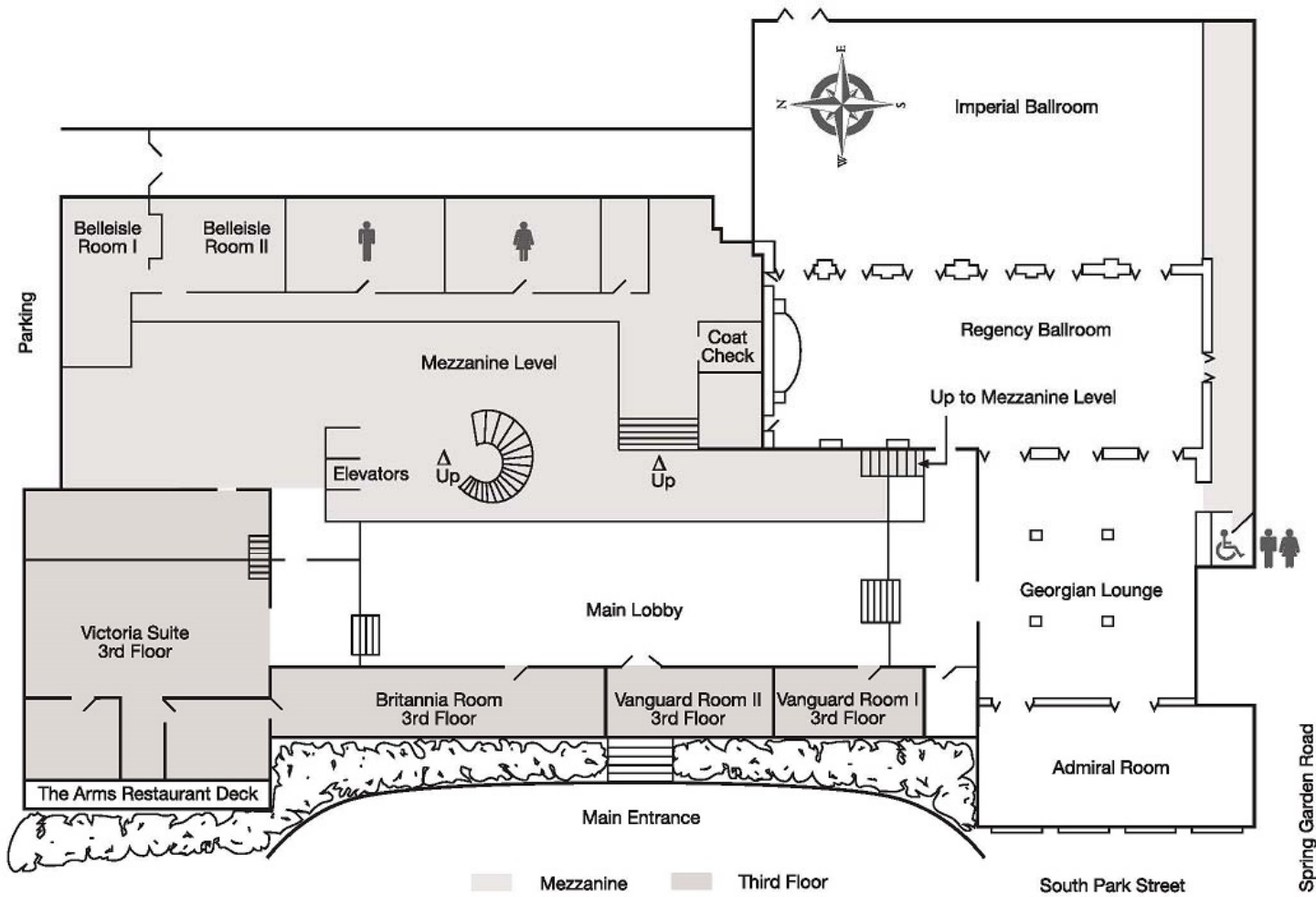


**37th Annual Conference of the North
American Section of the International
Society for Heart Research
“Cardiovascular Disease in Vulnerable Populations”**



**May 29 - June 1, 2018
Halifax, Nova Scotia
Lord Nelson Hotel & Suites
Program Chair: Susan E. Howlett**



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International Society for Heart Research

ISHR XXXVII North American Section

Halifax, Nova Scotia



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37th Annual Conference of the North American Section of the ISHR

Local Organizing Committee

Program Chair: Susan Howlett

Program Co-Chairs: Alex Quinn, Kishore Pasumarthi, Tom Pulinilkunnil, Petra Kienesberger, J.F. Legaré, John Sapp, Scott Grandy & Keith Brunt

ECI Program Executive: Sam Das (Chair), Ron Vagnozzi (Vice-Chair) Erik Blackwood (Secretary)

ECI Program Committee: Randi Parks, Cat Makarewich, Stephan Lange, Natasha Fillmore, Manuel Rosa Garrido & Kim Ho.

Local ECI Contacts: Hiran Feridooni, Brittney Allen

Social Chair: Jeff Molquentin

ISHR Officers and Council Members

President:	Gary D. Lopaschuk
President Elect:	Peipei Ping
Past President:	Elizabeth Murphy
Secretary:	Susan Howlett
Treasurer:	Litsa Kranias
Recording Secretary:	Thomas M. Vondriska
Executive Secretary:	Leslie Anderson Lobaugh
Council Members:	

2012-2018: Chris Baines, Asa Gustafsson, Joan Heller Brown, Timothy Kamp, Pieter de Tombe, Jun Sadoshima, Walter Koch and Rick Vander Heide

2015-2021: Dale Abel, Burns Blaxall, John Elrod, Joseph Hill, Tim O'Connell, Brian O'Rourke and Monte Willis



Welcome letter from the president

SPONSORS

Tuesday May 29, 2018
Overview

8:00 AM	5:00 PM	Registration	Registration Desk
8:30 AM	10:30 AM	Early Career Investigator (ECI) Symposium	Imperial Ballroom
10:30 AM	10:45 AM	Coffee Break	Admiral Room
10:45 AM	11:45 am	Career Development Panel – Discussion	Imperial Ballroom
12:00 PM	1:30 PM	ECI Lunch with senior investigators (Ticket Required)	Admiral Room
2:00 PM	3:30 PM	Young Investigator Competition - Junior Sci.	Imperial Ballroom
3:30 PM	4:00 PM	Coffee Break	Admiral Room
4:00 PM	5:30 PM	Young Investigator competition - Senior Sci.	Imperial Ballroom
5:30 PM	8:00 PM	Welcome Reception & Posters – Session 1	Georgian Lounge & Admiral Room

8:00 AM – 5:00 PM **Registration**

Registration Desk

8:30 AM – 10:30 AM **ECI Symposium**

Imperial Ballroom

10:30 AM – 10:45 AM **Coffee Break**

Admiral Room

10:45 AM – 11:15 AM **Career Development Panel – Discussion**

Imperial Ballroom

12:00 PM – 1:30 PM **ECI Lunch with Senior Investigators
(Ticket Required)**

Admiral Room

2:00 PM – 3:30 PM **Young Investigator competition – Junior Sci.
(Sponsored by Cincinnati Children's Hospital & Dr. Jeff Robbins)**

Imperial Ballroom

3:30 PM – 4:00 PM **Coffee Break**

Admiral Room

4:00 PM – 5:30 PM **Young Investigator competition – Senior Sci.
(Sponsored by Cincinnati Children's Hospital & Dr. Jeff Robbins)**

Imperial Ballroom

5:30 PM – 8:00 PM **Welcome Reception & Posters**

Georgian Lounge and Admiral Ballroom

Wednesday May 30, 2018
Overview

7:00 AM	8:00 AM	Breakfast	Admiral Room
8:00 AM	5:00 PM	Registration	Registration Desk
8:00 AM	8:45 AM	Sarrazin Award Lecture	Imperial Ballroom
9:00 AM	10:30 AM	Symposium 1 Cell death, cancer treatment & cardiovascular disease	Imperial Ballroom
9:00 AM	10:30 AM	Symposium 2 Proteomics & proteotoxicity in the heart and impact of co-morbid illness	Regency Ballroom
10:30 AM	11:00 AM	Coffee Break	Admiral Room
11:00 AM	12:30 AM	Symposium 3 Autophagy: fundamentals to cardiovascular disease	Imperial Ballroom
11:00 AM	12:30 AM	Symposium 4 Rare diseases, cardiomyopathy and heart failure	Regency Ballroom
12:30 PM	1:30 PM	ISHR – NAS Council Meeting	Britannia Room
12:30 PM	2:00 PM	Lunch & Posters Session II	Admiral Room & Georgian Lounge
2:00 PM	3:30 PM	Symposium 5 Cardiovascular diseases in females	Imperial Ballroom
2:00 PM	3:30 PM	Symposium 6 Evolving trends in cardiac metabolism	Regency Ballroom
3:30 PM	4:00 PM	Coffee Break	Admiral Room
4:00 PM	5:30 PM	Symposium 7: Cardiac hypertrophy and heart failure	Imperial Ballroom
4:00 PM	5:30 PM	Symposium 8: New advances in stem cell and gene therapy	Regency Ballroom
5:30 PM	7:00 PM	Posters & Reception – Session II	Georgian Lounge & Admiral Room
7:00 PM	10:00 PM	ECI Social (Ticket Required)	TBA

7:00 AM – 8:00 AM **Breakfast**

Admiral Room

8:00 AM – 5:00 PM **Registration**

Registration Desk

8:00 AM – 9:00 AM **Plenary Lecture “The Sarrazin Award Lecture”**

Imperial Ballroom

Sandra Davidge (University of Alberta)

“Impact of pregnancy complications on maternal and offspring cardiovascular health” (Sponsored by the Canadian Physiological Society)

9:00 AM – 10:30 AM

Symposium 1: Cell death, cancer treatment & cardiovascular disease Imperial Ballroom

CHAIRS: Ian Dixon (University of Manitoba), Sayantan Jana (University of Alberta)

1. Novel small molecule inhibitors protect against doxorubicin-induced cardiomyopathy (Rick Kitsis, Einstein)

2. Cell death signaling pathways in the heart: doxorubicin (Lorrie Kirshenbaum, University of Manitoba and St Boniface)
3. E2F6 serves to protect myocardium in drug induced injury (Balwant Tuana, University of Ottawa)
4. Vitamin C mitigation of oxidative/nitrosative stress in doxorubicin-induced cardiomyopathy (Pawan Singal, University of Manitoba and St Boniface Hospital)
5. Oral abstract to be decided from poster submissions

9:00 AM – 10:30 AM

Symposium 2: Proteomics and proteotoxicity in the heart and impact of co-morbid illness

Regency Ballroom

CHAIRS: Monte Willis (Duke University), Erik Blackwood (San Diego State University)

1. Protein aggregates and proteotoxicity in the heart (Jeff Robbins, Cincinnati Children's Hospital Medical Center)
2. The cardiac mitochondrial proteome (Peipei Ping, UCLA)
3. Cardiac amyloidosis: heart disease links in Alzheimer's Disease (Federica del Monte, South Carolina)
4. Role of proteomics in studies of heart disease (J Van Eyk, Cedars-Sinai)
5. Oral abstract to be decided from poster submissions

10:30 AM – 11:00 AM **Coffee Break**

Admiral Room

11:00 AM – 12:30 PM

Symposium 3: Autophagy: fundamentals to cardiovascular disease

Imperial Ballroom

CHAIRS: Aldrin Gomes (UC Davis), Charles Steenbergen (Johns Hopkins)

1. Cell death pathways in the heart: roads to cell dysfunction and death (Dale Abel, Iowa)
2. Mitochondrial Autophagy (Asa Gustafsson, University of California, San Diego)
3. Taking Heart: what we can learn from intra-operative biopsies of human heart (Roberta Gottlieb, Barbra Streisand Women's Heart Center and Cedars-Sinai Heart Institute)
4. Autophagy and Cardiomyopathy (Thomas Pulinilkunnil, Dalhousie University)
5. Oral abstract to be decided from poster submissions

11:00 AM – 12:30 PM

**Symposium 4: Rare diseases, cardiomyopathy and heart failure
(Sponsored by Data Sciences of Cardiovascular Medicine at UCLA)**

Regency Ballroom

CHAIRS: Richard Vander Heide (Louisiana State), Hailey Jansen (University of Calgary)

1. Use of iPSCs to delineate the cardiac developmental defects associated with RAF1 mutations in Noonan Syndrome (Maria Kontaridis; Beth Israel Deaconess Medical Center, Boston, Massachusetts)
2. Cardiac defects in muscular dystrophy (Ghassan Bkaily, Université de Sherbrooke)

3. Mechanisms of Iron Overload and Cardiomyopathy in Thalassemia (Gary Sweeney, York University)
4. Sudden Cardiac Arrest in Infants as a potential cause of SIDS (Glen Tibbits, Simon Fraser University)
5. Oral abstract to be decided from poster submissions

12:30 PM – 1:30 PM **ISHR – NAS Council Meeting**

Britannia Room

12:30 PM – 2:00 PM **Lunch and Posters**

Admiral Room & Georgian Lounge

2:00 pm – 3:30 pm **Symposium 5: Cardiovascular diseases in females**

Imperial Ballroom

CHAIRS: Pieter de Tombe (Loyola University), Randi Parks (NIH)

1. Sex differences in mechanisms of cardioprotection (Elizabeth Murphy, NIH)
2. Male-female differences in functional responses to physiological challenges (Lea Delbridge, University of Melbourne)
3. The Basis for Sex Differences in the Response to the Heart to Disease and Exercise (Leslie Leinwand, University of Colorado)
4. Sex, Redox Signaling and Myocardial Ischemia-reperfusion Injury (Mark Kohr, Johns Hopkins)
5. Oral abstract to be decided from poster submissions

2:00 PM – 3:30 PM

Symposium 6: Evolving trends in cardiac metabolism

Regency Ballroom

CHAIRS: Suresh Selvaraj Palaniyandi (Wayne State University), Kim Ho, University of Alberta

1. Nutrient sensing and substrate metabolism in heart failure (Christine DeRosiers, Université de Montréal)
2. Transcriptional Circuits Controlling Mitochondrial Phenotype in the Developing and Diseased Heart (Dan Kelly, University of Pennsylvania)
3. Metabolic therapies and heart failure (Jason Dyck, University of Alberta)
4. Ketone metabolism in the failing heart (Rong Tian, University of Washington)
5. Oral abstract to be decided from poster submissions

3:30 PM – 4:00 PM **Coffee Break**

Admiral Room

4:00 PM – 5:30 PM

**Symposium 7: Cardiac hypertrophy and heart failure
(Sponsored by JMCC)**

Regency Ballroom

CHAIRS: Ronglih Liao (Harvard), Anastacia Garcia (University of Colorado)

1. Renal innervation and heart failure (David Lefer, Louisiana State University)
2. Novel pathways for physiologic cardiac hypertrophy (Lynn Megeney, University of Ottawa)

3. CAM Kinase II and heart failure (Mark Anderson, Johns Hopkins)
4. Epigenetic regulation of heart failure (Joe Hill, UT Southwestern Medical Centre)
5. Oral abstract to be decided from poster submissions

4:00 PM – 5:30 PM

Symposium 8: New advances in stem cell and gene therapy

Regency Ballroom

CHAIRS: Keith Brunt (Dalhousie University), Christie Aguiar (Dalhousie University)

1. Rejuvenation of diseased myocardium using stem cell based therapies (Ren-Ke Li, University of Toronto)
2. Stem Cell Therapy for Aging Frailty (Joshua M. Hare, University of Miami)
3. Cardiac progenitor cells and heart regeneration (Mark Sussman, San Diego State University)
4. Models of Atrial Fibrillation using Human Embryonic Stem Cell-Derived Atrial Tissue (Peter Backx, York University)
5. Oral abstract to be decided from poster submissions

5:30 PM – 7:00 PM **Posters & Reception – Poster Session II**

Georgian Lounge & Admiral Room

7:00 PM – 10:00 PM **ECI Social (Ticket Required) – Sponsored by Temple University & Dr. W Koch**

Thursday May 31, 2018
Overview

7:00 AM	8:00 AM	Breakfast	Admiral Room
8:00 AM	5:00 PM	Registration	Registration Desk
8:00 AM	8:45 AM	President's Lecture	Imperial Ballroom
9:00 AM	10:30 AM	Symposium 9 Contribution of the extracellular matrix to heart disease: beyond the structural support	Imperial Ballroom
9:00 AM	10:30 AM	Symposium 10: Lipid metabolism and signaling in cardiovascular disease	Regency Ballroom
10:30 AM	10:45 AM	Coffee Break	Admiral Room
10:45 AM	12:15 PM	Symposium 11: Mechano-electric coupling: altered mechanics & cardiac arrhythmias	Imperial Ballroom
10:45 AM	12:15 PM	Symposium 12 Novel strategies for repair of the vulnerable heart	Regency Ballroom
12:15 PM	2:00 PM	Lunch	Admiral Room
2:00 PM	3:30 PM	Symposium 13 Frailty and cardiovascular diseases in males and females	Imperial Ballroom
2:00 PM	3:30 PM	Symposium 14 Myocardial contractile and regulatory proteins in heart disease	Regency Ballroom
3:30 PM	3:45 PM	Coffee Break	Admiral Room
3:45 PM	5:15 PM	Symposium 15 Cardiovascular diseases in neonates and children	Imperial Ballroom
3:45 PM	5:15 PM	Symposium 16 Ischemia and cardioprotection in hearts at risk	Regency Ballroom
5:45 PM		Board Buses	Front of Lord Nelson Hotel & Suites
7:00 PM	9:30 PM	Lobster Banquet & Awards Ceremony	Pier 21
10:30 PM	11:30 PM	Board Buses	Pier 21 return to Lord Nelson Hotel

7:00 AM – 8:00 AM **Breakfast**

Admiral Room

7:00 AM – 8:00 AM **Women in Science Breakfast**

TBA

(Sponsored by the Heart and Stroke Foundation of Nova Scotia)

8:00 AM – 5:00 PM **Registration**

Registration Desk

8:00 AM – 8:05 AM **2018 ISHR Distinguished Leader Award Presentation**

Imperial Ballroom

Recipient: Rick Moss (University of Wisconsin)

8:05 AM – 8:50 AM **President's Lecture**

Imperial Ballroom

Jeff Molquentin (Cincinnati Children's Hospital Medical Center)

Title "TBA"

(Sponsored by the International Society for Heart Research: International Section)

9:00 AM – 10:30 AM

Symposium 9: Contribution of the extracellular matrix to heart disease: beyond the structural support

Imperial Ballroom

CHAIRS: Michael Czubryt (University of Manitoba), Manuel Rosa (UCLA)

1. Multi-functional role of the extracellular matrix in heart disease (Zam Kassiri, University of Alberta)
2. Defining the cardiac fibroblast (Michelle Tallquist, University of Hawaii)
3. Cardiac fibroblasts in heart failure (Burns Blaxall, Cincinnati Children's Hospital Medical Center)
4. Role of epigenetics in regulating cardiac hypertrophy and fibrosis in heart failure (Timothy McKinsey, University of Colorado)
5. Oral abstract to be decided from poster submissions

9:00 AM – 10:30 AM

Symposium 10: Lipid metabolism and signaling in cardiovascular disease

Regency Ballroom

CHAIRS: Brian Rodrigues (University of British Columbia), Natasha Fillmore (NIH)

1. Lysophospholipid signaling and cardiovascular disease (Petra Kienesberger, Dalhousie University)
2. Dietary Modulation of Plasma Oxylipins in Conditions of Cardiovascular Disease (Grant Pierce, University of Manitoba)
3. Lipid droplet: Signaling hub for cardiac function (Guenter Haemmerle, University of Graz, Austria)
4. Temporal Control of Cardiac Metabolism: From Physiologic Significance to Pathologic Consequence (Martin Young, University of Alabama)
5. Oral abstract to be decided from poster submissions

10:30 AM – 10:45 AM **Coffee Break**

Admiral Room

10:45 AM – 12:15 PM

Symposium 11: Mechano-electric coupling: altered mechanics & cardiac arrhythmias

Imperial Ballroom

CHAIRS: Litsa Kranias (University of Cincinnati), Eilidh MacDonald (Dalhousie University)

1. Mechano-electric coupling-induced arrhythmias in disease and with age (Alex Quinn Dalhousie University)
2. Human atrial fibroblasts beyond fibrosis - voltage-dependent and mechanosensitive ion channels (Ursula Ravens, Freiburg)
3. Mechano-transduction in heart failure (Jen Davis, University of Washington)
4. Studying pathophysiological mechano-electrical interactions in human (Igor Efimov, University of Washington)
5. Oral abstract to be decided from poster submissions

10:45 AM – 12:15 PM

Symposium 12: Novel strategies for repair of the vulnerable heart

Regency Ballroom

CHAIRS: Tim Kamp (University of Wisconsin), Ron Vagnozzi (Cincinnati Children's Hospital)

1. Cardiac Repair & Injury (Steve Houser, Temple University)
2. Repeated cell therapy: A new paradigm (Roberto Bolli, University of Louisville)
3. Biomaterials and Optimizing the Host Substrate Environment for Cardiac Repair (Erik Suuronen, University of Ottawa Heart Institute)
4. Building better scars (Peter Kohl, Freiburg)
5. Oral abstract to be decided from poster submissions

12:15 PM – 2:00 PM **Lunch**

Admiral Room

2:00 PM – 3:30 PM

Symposium 13: Frailty and cardiovascular diseases in males and females

Imperial Ballroom

CHAIRS: John Sapp (Dalhousie University), Alice Kane (Harvard University)

1. How frailty and sex affect heart disease risk and expression in ageing humans and in mice (Ken Rockwood, Dalhousie University)
2. Frailty and ventricular function: sex differences in the results of intervention studies (Susan Howlett; Dalhousie University)
3. Frailty modifies sinoatrial node and atrial structure and function in aging (Robert Rose, University of Calgary)
4. The influence of age on cardiovascular function in a large animal model (Katherine Dibb, University of Manchester)
5. Oral abstract to be decided from poster submissions

2:00 PM – 3:30 PM

Symposium 14: Myocardial contractile & regulatory proteins in heart disease **Regency Ballroom**
(Sponsored by JMCC)

CHAIRS: Beata Wolska (University of Illinois at Chicago), Stephan Lange (University of California San Diego)

1. A Novel Therapeutic Strategy Targeting Cardiac Myosin to Treat Failing Hearts: Energizing with deoxy-ATP (Mike Regnier, University of Washington).
2. Put a Cap On It: The role of cardiac CapZ in the response to stress (WG Pyle, University of Guelph)
3. Walking a Thin Line: The role of thin filament proteins in cardiomyopathies and their therapeutic potential (JC Tardiff, University of Arizona)
4. Beta-arrestin in the sarcomere/cytoskeletal network (David Ryba, University of Illinois at Chicago)
5. Oral abstract to be decided from poster submissions

3:30 PM – 3:45 PM **Coffee Break**

Admiral Room

3:45 PM – 5:15 PM

Symposium 15: Cardiovascular diseases in neonates and children

Imperial Ballroom

CHAIRS: Scott Grandy (Dalhousie University), Kathleen Woulfe (University of Colorado)

1. Metabolic changes in the neonatal heart (Gary Lopaschuk, University of Alberta)
2. The pathogenesis of heart failure in children and adults: key differences and treatment implications (Kika Sucharov, University of Colorado)
3. Cardiovascular risk in the pediatric population: why maternal metabolic status matters (Jennifer Thompson, University of Calgary)
4. Defining the role of an epicardial specific miRNA in the growth and adaptation of the postnatal heart (Patrick Burgon, University of Ottawa Heart Institute)
5. Oral abstract to be decided from poster submissions

3:45 PM – 5:15 PM

Symposium 16: Ischemia & cardioprotection in hearts at risk

Regency Ballroom

CHAIRS: JF Legaré (Dalhousie University), Qutuba G. Karwi (University of Alberta)

1. Role of RIP3 and CaMKII in ischemia- and oxidative stress-induced myocardial damage (Rui-Ping Xiao, Institute of Molecular Medicine, Peking University)
2. A novel role for GRK2 in the ischemic Heart (Walter Koch, Temple University)
3. Role of iron in cardiovascular disease (Hossein Ardehali, Northwestern University)
4. Sulfhydrylation and the Diabetic Heart (John Calvert, Emory University)
5. Oral abstract to be decided from poster submissions

5:45-6:15 PM **Board Buses to Banquet**

Lord Nelson Hotel & Suites

7:00 PM – 9:30 PM **Lobster Banquet and Awards Ceremony**

Pier 21 Museum

10:30 PM **Board Buses for return to Lord Nelson Hotel & Suites**

Pier 21 Museum

Friday June 1, 2018
Overview

8:00 AM	9:00 AM	Breakfast	Admiral Room
9:00 AM	12:00 PM	Registration	Registration Desk
9:00 AM	10:30 AM	Symposium 17: Cardiac excitation-contraction coupling & heart disease across the life course	Imperial Ballroom
9:00 AM	10:30 AM	Symposium 18: Epigenetics and lineage commitment	Regency Ballroom
10:30 AM	11:00 AM	Coffee Break	Admiral Ballroom
11:00 AM	12:30 AM	Symposium 19: Mitochondria in hearts at risk	Imperial Ballroom
11:00 AM	12:30 AM	Symposium 20 Heart diseases in pregnancy	Regency Ballroom
12:30 PM		Lunch and Closing	Admiral Room

8:00 AM – 9:00 AM **Breakfast**

Admiral Room

9:00 AM – 12:00 PM **Registration**

Registration Desk

9:00 AM – 10:30 AM

Symposium 17: Cardiac excitation-contraction coupling & heart disease across the life course

Regency Ballroom

CHAIRS: Crystal M. Ripplinger (University of California Davis), Hiran Feridooni (Dalhousie University)

1. Impact of CAM-Kinase dependent phosphorylation of the RyR on cardiac contraction (Don Bers, UC Davis)
2. Myocardial calcium handling in diastolic dysfunction (William Louch, University of Oslo)
3. New roles for junctophilin in the failing heart (Xander Wehrens, Baylor)
4. Molecular mechanisms of RyR activation and regulation (SR Wayne Chen, University of Calgary)
5. Oral abstract to be decided from poster submissions

9:00 AM – 10:30 AM

Symposium 18: Epigenetics and lineage commitment

Imperial Ballroom

CHAIRS: Sanjiv Dhingra (University of Manitoba), Brittney Allen (Dalhousie University)

1. Molecular mechanisms regulating cardiac progenitor cell proliferation and differentiation (Kishore Pasumarthi, Dalhousie University)
2. Origin of cardiac lineages: insights for regeneration (Reza Ardehali, UCLA)
3. Chromatin structure in the normal and failing heart (Thomas Vondriska, UCLA)
4. Proteomic analyses of chromatin in heart failure (Sarah Franklin, University of Utah)
5. Oral abstract to be decided from poster submissions

10:30 AM – 11:00 AM **Coffee Break**

Admiral Room

11:00 AM – 12:30 PM

Symposium 19: Mitochondria in hearts at risk

Regency Ballroom

CHAIRS: Chris Baines (University of Missouri-Columbia), TBA

1. Mitochondrial dysfunction in heart disease (Brian O'Rourke, Johns Hopkins)
2. New insights into the molecular regulation of mitochondrial calcium exchange (John Elrod, Temple University School of Medicine)
3. Mitochondrial imaging (Eva Rog-Zielinska, Freiburg)
4. MicroRNAs and mitochondrial function (Sam Das, Johns Hopkins)
5. Oral abstract to be decided from poster submissions

Symposium 20: Heart diseases in pregnancy

Imperial Ballroom

CHAIRS: Sarah Wells (Dalhousie University), Rushita Bagchi (University of Colorado)

1. Regulation of cardiac automaticity during pregnancy (Céline Fiset, Université de Montréal)
2. The impact of in utero particulate matter exposure on heart disease in adulthood (Loren Wold, Ohio State)
3. Cardiac pyruvate oxidation in pregnancy (Zolt Arany, University of Pennsylvania)
4. Cardiac remodeling in pregnancy: role of sex hormones (Mansoureh Eghbali, UCLA)
5. Oral abstract to be decided from poster submissions

11:00 AM – 12:30 PM

12:30 PM **LUNCH and CLOSING**

Admiral Room

PROGRAM SYMPOSIA - OVERVIEW

Date	Time	Imperial Ballroom	Regency Ballroom
May 30, 2018	9:00 am-10:30 am	Symposium 1 Cell death, cancer treatment & cardiovascular disease	Symposium 2 Proteomics and proteotoxicity in the heart and impact of co-morbid illness
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	2:00 pm-3:30 pm	Symposium 5 Cardiovascular diseases in females	Symposium 6 Evolving trends in cardiac metabolism
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	11:00 am-12:30 pm	Symposium 11 Mechano-electric coupling (MEC): altered mechanics & cardiac arrhythmias	Symposium 12 Novel strategies for repair of the vulnerable heart
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	3:45 pm-5:15 pm	Symposium 15 Cardiovascular diseases in neonates and children	Symposium 16 Ischemia, cardioprotection and mitochondria in hearts at risk
June 1, 2018	9:00 am-10:30 am	Symposium 17 Cardiac excitation-contraction coupling and heart disease across the life course	Symposium 18 Epigenetics and lineage commitment
	11:00 am-12:30 pm	Symposium 19 Mitochondria in hearts at risk	Symposium 20 Heart diseases in pregnancy