Agenda

Heart + Lung Scientific Symposium

Institute for HEART+LUNG Health
Strong beats. Clear breaths. Full lives.

Thursday, March 8th

7:30 – 7:50 Breakfast & Registration

Welcome to FEST 2012

7:50 – 8:20 Welcomes from:

- Mark FitzGerald
  Professor & Head, Division of Respiratory Medicine, University of British Columbia
  Co-Director, Institute for Heart + Lung Health
- Gavin Stuart
  Dean, Faculty of Medicine, University of British Columbia
- David Ostrow
  President & CEO, Vancouver Coastal Health
- Dianne Doyle
  President & CEO, Providence Health Care

Alan Bernstein Distinguished Lecture

Chair: Gordon Francis

8:20 – 9:00 *The Power of Knowledge to Influence Policy: Lessons from the Institute of Medicine*

Harvey Fineberg MD, PhD

Learning Objectives - at the end of this presentation, participants will have the ability to:

- Describe the mission of the United States Institute of Medicine and explain how it differs from other advisory bodies
- Identify at least three determinants of a successful advisory study that has an impact on policy

9:00 – 9:10 Discussion

Session Theme - Epigenetics in Heart + Lung Health

Chairs: David Granville, Darryl Knight

9:10 – 9:25 *Epigenetics as a Factor in Nutritional Health*

Angela Devlin PhD

9:25 – 9:40 *Epigenetics in Cancer*

Wan Lam MSc, PhD, MRC

Learning Objectives - at the end of this presentation, participants will have the ability to:

- Discuss the role of epigenetics in lung cancer
- Describe current research activities in Vancouver on epigenetics and lung cancer

9:40 – 9:55 Discussion

9:55 – 10:10 Coffee Break

Session Theme – Imaging of the Heart, Lungs and Vasculature

Chairs: John Mayo, Marla Keiss

10:10 – 10:25 *Optical Tomography in Airway Evaluation*

Annette McWilliams MD

Learning Objectives- at the end of this presentation, participants will have the ability to:

- Describe the current state of research utilizing OCT in respiratory disease in Vancouver
- Discuss possible clinical application for OCT in respiratory disease

Heart + Lung Scientific Symposium Agenda (cont'd)

10: 25 – 10:40 *Horizons on CT Imagery of Heart and Lung*

Jonathon Leipsic MD, FRCPC

Learning Objectives- at the end of this presentation, participants will have the ability to:

- Describe the integration of computational fluid dynamics in cardiac CT to enable CT derived fractional flow research (FFR)
- Reflect on the clinical importance of FFR in stable coronary artery disease

10:40 – 10:55 *Quantitative Assessment of Vascular Disease as a Tool to Stratify Risk and Treatment Targets*

John Mancini MD, FRCPC, FAC

Learning Objectives- at the end of this presentation, participants will have the ability to:

- Describe the current role of imaging in risk assessment
- Describe and reflect on the strengths/limitations of carotid ultrasound, coronary artery calcium and computer coronary tomographic angiography for risk assessment in asymptomatic patients

10:55 – 11:10 Discussion

11:10 – 12:50 Poster Session & Lunch

Session Theme – Air Pollution: Individual and Community Interventions

Chairs: Stephan van Eeden, Mieke Koehoorn

Highlighted Lecture

12:50 – 1:15 *The Science of Stopping Smoking*

Iris Torchalla PhD

Learning Objectives- at the end of this presentation, participants will have the ability to:

- Realize the importance of identifying and documenting tobacco use status for every patient
- Propose intervention and, for those patients willing to make an attempt, provide a plan to quit, including information about effective medication and additional smoking cessation counseling
- Employ motivational techniques for patients unwilling to make an attempt to quit

1:15 – 1:25 Discussion

David Bates Lecture

Chair: Mark Fitzgerald

1:25 – 1:50 *Air pollution: how can it be that bad for us?*

Sverre Vedal MSci, MD

Learning Objectives- at the end of this presentation, participants will have the ability to:

- Be familiar with the estimated impact of outdoor air pollution on health globally
- Understand the evidence for novel mechanisms of the cardiovascular effects of particulate matter pollution

1:50 – 2:00 Discussion

2:00 – 2:15 *Air Filtration to Reduce Cardiovascular Risks from Particulate Air Pollution*

Ryan Allen PhD

Learning Objectives- at the end of this presentation, participants will have the ability to:

- Identify factors contributing to particle exposures inside residences
- Describe the potential cardiovascular health benefits of indoor air filters.

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2:15 – 2:30 *Genetics as a Window into Populations "Particle-ularly" Vulnerable to Air Pollution*

Christopher Carlsten MD, MPH

Learning Objectives- at the end of this presentation, participants will have the ability to:

- Discuss how genetic variants can influence a population's risk for respiratory disorders related to inhaled pollutants
- Reflect on how knowledge of such 'gene-environment' interactions can potentially inform efforts to improve public health

2:30 – 2:45 *Air Pollution Exposure Avoidance*

Michael Brauer PhD

Learning Objectives- at the end of this presentation, participants will have the ability to:

- Describe linkages between the build environment and air pollution exposures and related health impacts
- Suggest opportunities by which healthy urban design that promotes active transportation and reduced air pollution can be achieved

2:45 – 3:00 Discussion

3:00 – 3:15 Break

Debates

Chair: John Boyd

3:15 – 3:20 Introduction and Rules

3:20 – 3:45 *Animal versus Human models of disease*

Debate runs in five minute segments

- Pro-Animal: Dr. Darryl Knight PhD
- Pro-Human: Dr. Peter Paré MD
- Rebuttal Knight
- Rebuttal Paré

Learning Objectives- at the end of this presentation, participants will have the ability to:

- Reflect on whether animal models of lung disease translate well into human disease
- Evaluate the relative importance of human and animal models of disease

3:40 – 3:45 Audience Participation

3:45 – 4:05 *Cardiovascular Disease in Women: The lack of research is a problem!*

Debate runs in five minute segments

- For: Karin Humphries
- Against: Christopher Thompson
- Rebuttal Humphries
- Rebuttal Thompson

Learning Objectives- at the end of this presentation, participants will have the ability to:

- Reflect on whether gender differences exist and require different approaches to the diagnosis and treatment of heart disease

4:05 – 4:10 Audience Participation

4:10 Reception Begins

Location: Ambleside 1 Room

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Friday, March 9th

7:30 – 8:00 Breakfast

Graeme Copland Memorial Lecture

Chair: Pearce Wilcox

8:00 – 8:50 *Phenotype Specific Management of Severe Asthma*
Ian Pavord DM, FRCP

8:50 – 9:00 Discussion

Session Theme – Endothelium and Epithelium and Heart + Lung Health

Chairs: Aly Karsan, Samuel Wadsworth

9:00 – 9:15 *When Coagulants and Endothelium Meet: A Virus Gateway*
Ed Pryzdial PhD

Learning Objectives- at the end of this presentation, participants will have the ability to:
- Describe protease activated receptors in vascular biology
- Discuss how viruses exploit hemostasis proteases

9:15 – 9:30 *Epithelium Plasticity in Lung Disease*
Tillie-Louise Hackett PhD

Learning Objectives- at the end of this presentation, participants will have the ability to:
- Describe the mechanisms by which E-cadherin controls aspects of epithelial plasticity
- State the rationale for considering epithelial plasticity as a driver of airway remodeling in asthma

9:30 – 9:45 *Evidence of Physical Repair in the Vascular Endothelium*
Pascal Bernatchez PhD

Learning Objectives- at the end of this presentation, participants will have the ability to:
- Describe endothelial function and vascular atherosclerosis
- Discuss evidence of vascular repair in vascular disease

9:45 – 10:00 Discussion

10:00 – 10:15 Coffee Break

Session Theme – Clinical Innovation in Heart + Lung Health

Chairs: Carlo Marra, Graham Wong

10:15 – 10:30 *Experience and New Directions in Heart Valve Replacement*
David Wood MD, FRCPC

Learning Objectives- at the end of this presentation, participants will have the ability to:
- Describe why transcatheter aortic valve replacement (TAVR) is now the standard of care for extremely high risk "inoperable" patients and is a valid alternative to surgery for high risk but "operable" patients
- Discuss how safe, next day discharge is now feasible in high risk operable patients using contemporary TAVR in Vancouver
- Describe how PARTNER IIA will enroll and randomize moderate risk patients with severe symptomatic aortic stenosis

10:30 – 10:45 *Why Lungs Are Risky for the Heart*
Don Sin MD, PRCP, MPH

Learning Objectives- at the end of this presentation, participants will have the ability to:
- Describe the role of lung inflammation in the pathogenesis of acute coronary syndromes

- Reflect on the epidemiologic evidence linking lung inflammation with acute coronary syndromes

10:45 – 11:00 Discussion

11:00 – 12:00 Poster Winners: 'Lightning' oral presentations
Chairs: Dawn Cooper, Jasmine Grewal
Winners 1- 6: 5 minute presentation, 5 minute discussion

12:00 - 12:20 Lunch

British Columbia Lecture

Chair: John Cairns

12:20 - 12:50 *Treasuring the Exceptional Patients – Clues to New Treatment Modalities*

Michael R. Hayden MB, ChB, PhD, FRCPC, FRSC

Learning Objectives- at the end of this presentation, participants will have the ability to:

- Describe the importance of unusual phenotypes in novel target identification
- Reflect on unusual phenotypes that are leading to drug development

12:50 – 1:00 Discussion

Session Theme – Novel Risk Markers in Heart + Lung Health

Chairs: Gordon Francis, Rhonda Wideman

Highlighted Lecture

1:00 – 1:20 *The Ethics of Patient Data and Sample Collection*

Laurel Evans LL.B

Learning Objectives- at the end of this presentation, participants will have the ability to:

- Describe the ethical issues involved in collection of patient data and human biological materials, including privacy concerns, informed consent limitations and communication of downstream findings
- Explain why these issues are important, delineate ways that the issues can be resolved and how to achieve an acceptable balance between the need to conduct useful research and the need to respect the rights of research participants

1:20 – 1:30 Discussion

1:30 – 1:45 *The Obesogenic Built Environment and Risk for Cardiovascular Disease*

Scott Lear PhD

Learning Objectives- at the end of this presentation, participants will have the ability to:

- Describe what the built environment is
- Discuss how the built environment is related to risk factors for heart disease

1:45 – 2:00 *Sleep Apnea and Cardiovascular Disease*

Najib Ayas MD, MPH

Learning Objectives- at the end of this presentation, participants will have the ability to:

- Describe the epidemiologic links between sleep apnea and cardiovascular disease
- Discuss how biomarkers may be potentially useful in elucidating mechanisms and for prognosis

2:00 – 2:15 *Blood Biomarkers for Better Heart and Lung Health*

Scott Tebbutt PhD

Learning Objectives- at the end of this presentation, participants will have the ability to:

- Describe the importance of standardized approaches in the collection of blood samples for high-performance molecular analyses
- Discuss how multiple "omics"-based molecular data-sets can be combined to enhance biological discovery and interpretation

2:15 – 2:30 Discussion

2:30 – 2:45 Break

Session Theme – Early Life Origins of Disease

Chairs: Kelly McNagny, Stephanie Warner

2:45 – 3:00 *What Everyone Needs to Know About DOHAD*

John Challis PhD, DSc, FRCOG, FCASH, PRSC

Learning Objectives- at the end of this presentation, participants will have the ability to:

- Describe the concept of the developmental origins of health and disease hypothesis (the Barker hypothesis)
- Describe and reflect on the underlying mechanisms of DOHaD

3:00 – 3:15 *Early Life Origins of Asthma*

Stuart Turvey MBBS, DPhil, FRCPC

Learning Objectives- at the end of this presentation, participants will have the ability to:

- Describe how features of early human life influence development of disease of adulthood
- Recognize some early life factors that impact on asthma development

3:15 – 3:30 *Enigmas and Emerging Insights about the Islet Case and Childhood Disease*

Bruce Verchere PhD

Learning Objectives- at the end of this presentation, participants will have the ability to:

- Describe the global problem and impact of diabetes
- Discuss how the early life environment impacts susceptibility to diabetes in adulthood

3:30 – 3:45 Discussion

3:45 – 4:00 Award Presentations and Thank-You

4:00 Symposium Closes