

Annual Report
Division of Cardiology, Department of Medicine
Sir Mortimer B. Davis - Jewish General Hospital
April 1, 2006 - March 31, 2007

I. Highlights

CCU Admissions - 1062
2 Cardiac CTU Admissions - 1540
Pacemaker Clinic visits - 1574
Pacemaker Program - 188
Cardiology Clinic Visits - 538
Physician Consults - 3218
GFT Physician Visits - 8330
Diagnostic Cardiac Catheterizations - 1519
Coronary Angioplasties - 1115
Primary Coronary Stenting - 404
Echocardiograms (including transesophageal and stress echos) - 7391
Electrocardiograms - 16867
Holter monitorings - 743
Ambulatory BP monitorings - 361
Exercise stress tests (including Dobutamine echos) - 1236
Cardiac stress nuclear imaging - 817

II. Evaluation of Past Academic Year

1) Teaching Activities

MARK EISENBERG MD

- Medical Students - Evidence Based Medicine - Small Group Leader (6 hrs/year)
- Introduction to Epidemiology - Small Group Leader (6 hours/year)
- Small Group on Palpitations
- Clinical Teaching - Cardiac catheterization laboratories (160 hours/year) - Cardiology Fellows
- Cardiac Care Unit (140 hours a year) - Cardiology Fellows, Residents, Medical Students
- Consultations (120 hours/year) - Cardiology Fellows, Residents, Medical Students
- Other Research-Related Teaching - Co-Coordinator, Weekly Epidemiology Seminars, Jewish General Hospital, Centre for Clinic Epidemiology and Community Studies (40 hours/year)

Invited Lectures and Seminars

- Celebration: Freedom from Smoking Lecture. Panel Speaker. Jewish General Hospital, Montreal
- Pharmacotherapy for smoking cessation, Pulmonary Rounds, Jewish General Hospital, Montreal
- Anti-thrombin therapy prior to PCI. Jewish General Hospital and Referring Cardiologists Montreal
- Role of drugs in tobacco cessation. International Symposium on Cardiovascular Diseases, Stroke and Diabetes, New Delhi India
- Drug-Eluting stents and Late Thrombosis. Grand Rounds, Lakeshore General Hospital Montreal
and Surgery Rounds, Lakeshore General Hospital Montreal
- The Wolfpack Study. Wolfpack Running Club (YM-YWHA) Montreal QC

- How to Get Your Patient to Quit Smoking Panel Session (Panellist)
American College of Cardiology scientific Session, New Orleans, Louisiana

Supervising Research

-Cardiology Fellows

- 2007 - Kamal Sharma MD
- 2004-2007- Michael Roy MD
- 2004-2007 - Irving Tiong MD
- 2004-2007 - Robert Maranda MD

- Medical Residents

- 2006-2007 - Razi Kahn MD
- 2005-2007 Iliana Lega MD
- 2006 - Jonathan Afilalo MD

- Graduate Students

- 2005 - Kristian Fillion PhD
- 2006 - Sonia Grandi MSc

- Undergraduate Students

- 2007 - Hashana Perera BSc
- 2005- Salvatore Mottillo BSc
- 2004- Michael Coussa-Charley BSc
- 2006 - Robert Sowerby BSc
- 2006 - Lisa Blum BA

- Thesis Co-Supervisor

- 2006 - Jonathan Afilalo MSc

-Thesis Committee

- 2006 - Lucy Boothroyd PhD
- 2004-2006 - Thao Huynh MSc

CECEP Students

- 2006- Susan Wakil
- 2006- Jordan Bergara

Student Bursaries

- a) CIHR Clinician Scientist Phase 1
2007-2009 - Vidal Essebag MD
- b) CCORT Student Training Program
2007 - Salvatore Mottillo BSc
2007 - Susan Wakil

DAVID LANGLEBEN MD

- Bedside teaching of students as ward attending (120-180 hrs/year)
- Bedside teaching of Internal Medicine and Family Medicine residents (180-240 hrs/year)
- Teaching of Cardiology Fellows (wards, consults pulmonary hypertension clinic) 300-400 hrs year
- Introduction to Internal Medicine Students. A Chest pain and palpitations. February 2007
- Invited speaker. L'hypertension pulmonaire: Mise a jour. Association des cardiologues du Québec, 35ieme reunion générale. Quebec June 2006

- Invited speaker. Endothelin in Health and Disease. The rationale for intervention, Satellite Symposium. European League against Rheumatism (EULAR 2006). Amsterdam June 2006
- Invited speaker. Cardiology Rounds. JGH. Pulmonary Hypertension and Update. October 2006
- Invited speaker. Pulmonary/Cardiology Rounds. Maisonneuve Rosemont. Pulmonary Hypertension. November 2006
- Invited speaker. Notre Dame Hospital. March 2007

CAROLINE MICHEL MD

- Continuous training of Cardiology Fellows
- Training of Internal Medicine Residents in the Heart Function Clinic
 - Cindy Jacques
 - Jonathan Afilalo
 - Jennifer Nguyen
- Post doctoral Echocardiography Fellows trained
 - Dr Fiorella Carreda
 - Dr Justin Wong
 - Dr Hoa Do
- Supervision and teaching at the Communication/Ethics OSCE for Internal Medicine Residents at the McGill Simulation Centre (February and April 2007)
- Clinical lecture for Cardiology Fellows: Management of Chronic and Acute Heart Failure (Feb.07)
- Clinical Lecture at the McGill Family Refresher Course: Office Management of Congestive Heart Failure November 2006
- Clinical Lecture for Family Medicine Residents (JGH): Management of Congestive Heart Failure in 2007 September 2006
- Total clinical teaching: CCU 4 weeks and Consults 4 weeks

IGAL SEBAG MD

- Echocardiography Rounds. JGH. Mitral valve prolapse and atrial septal defect: New perspectives by three dimensional imaging. April 2006
- Clinical applications of real-time, three-dimensional echocardiography. Centre Hospitalier de l'Université de Montreal. Pavillon Saint Luc, Cardiology Rounds. May 2006
- McGill Cardiology Academic Rounds. McGill Cardiology Training Program. Lower extremity peripheral arterial disease: The Cardiovascular specialist's approach. June 2006
- Introduction to Clinical Medicine (ICM-A), McGill Medical School. January 2007
- Three dimensional echocardiography. From bench to bedside. Regional Winter Workshop, Association des Cardiologues du Quebec. Mont Tremblant. February 2007
- Cardiology Rounds. Three dimensional echocardiography. Maisonneuve Rosemont. May 2007

RICHARD SHEPPARD MD

- CCU/Consult Service Teaching
- Invited speaker, Cardiology Rounds, Lakeshore General Hospital, May 2006
- Invited speaker, Annual meeting of the Association des Cardiologues de Quebec: Pharmacogenetics in CHF, May 2007
- Monthly CHF talk to students and residents rotating through the CCU.

JUDITH THERRIEN MD

Medical Students

- Electrocardiography teaching, part II (2 hours)
- McGill University, Osler Fellows Program

Cardiology Residents - Ventricular Septal Defect lecture, McGill Cardiology Resident Teaching Sessions

- Ventricular Septal Defect, McGill Cardiology Echocardiography Rounds
- Marfan lecture, McGill Cardiology Resident Teaching Sessions
- Chest Radiography lecture, McGill Cardiology Resident Teaching Sessions
- CCU Ward Rounds (1 hour/day for 6 weeks)
- Chest Radiography lecture, McGill Cardiology Resident Teaching Sessions
- Tetralogy of Fallot lecture, McGill Cardiology Resident Teaching Sessions
- Invasive Catheterization in adult with congenital heart disease, McGill Cardiology Resident

Teaching Sessions

- Bicuspid Aortic Valve lecture, McGill Cardiology Resident Teaching Sessions,
- General Practitioners - McGill University, General practitioner CME lecture (1 hour)

International Teaching

- Management of the Adult with Ebstein Anomaly: When to Refer? Too Early? Too Late?. Invited speaker at the Second National Symposium on Congenital Heart Disease in the Adult, Birmingham UK June 2006
- Arrhythmia in Congenital Heart Disease. Invited speaker at the Second National Symposium on Congenital Heart Disease in the Adult, Birmingham UK June 2006
- Is it Right Ventricular Failure or Tricuspid Failure that Leads to Late Decline? Invited speaker at the Second Annual Toronto International Symposium on Contemporary Questions in Congenital Heart Disease. Toronto June 2006.
- Does Availability of the Bonhoeffer Valve Change the Indications for Pulmonary Valve Replacement in TOF Patients? Invited speaker at the Second Annual Toronto International Symposium on Contemporary Questions in Congenital Heart Disease. Toronto June 2006
- Diagnostic methods: What do I need, How do I get it, Invited speaker at the International Symposium on Congenital Heart Disease in the Adult, American College of Cardiology, Oregon June 2006.
- What do we know about recovery of the right ventricular function:. Invited speaker at the International Symposium on Congenital Heart Disease in the Adult, American College of Cardiology Oregon June 2006.
- Issues of Women with Congenital Heart Disease. International Symposium on Congenital Heart Disease in the Adult, American College of Cardiology, Oregon June 2006.
- Pulmonary regurgitation: imaging assessment and indications for surgery. Invited Speaker, XIX Brazilian Congress of Pediatric Cardiology and Cardiovascular Surgery, Sao Paulo, Brazil 2006.
- Adult with Congenital Heart Disease: Organizing a multidisciplinary tertiary care facility, XIX Brazil Congress of Pediatric Cardiology and Cardiovascular Surgery, Sao Paulo, Brazil 2006.

- A Moderate TR in the setting of ccTGA is an indication for Tricuspid Valve replacement, Invited Speaker, New Orleans, ACC March 2007.

- Adults with Congenital Heart Disease: a Growing Population: Invited keynote speaker at the 14 Journee Romande d'echocardiographie in Lausanne, Switzerland, May 2007.

- Echocardiographic evaluation of right ventricular function: where are we at? Invited Keynote speaker at the 14 Journee Romande d'echocardiographie in Lausanne, Switzerland, May 2007.

ANN WALLING MD

- Elaboration of the CME Program for the Quebec Cardiology Association meeting February and May 2007

- Organized the STACER exam for R6 Cardiology Fellows in June 2006 and May 2007.

- POM Examiner August and November 2006. 6 hours

- ECG course 2nd year medical students April 2006 - 3 hours

- McGill Osler Fellow - 10 hours. Mentor for First year medical students until graduation

- Post doctoral fellows trained: 1 year:

Dr R Sabbah

Dr J Wong

Dr F Calderra

Dr H Do

- Total clinical teaching hours:

CTU - 144 hrs

Consults - 60 hours

Echo lab - continuous training of fellows (year 1-3) all year round

Echo lab teaching of Cardiology fellows (equivalent of 15 full weeks/yr)

- CME courses: 75 hours

Wrote and corrected three 2 hour exams with SAW for Cardiology residents.

-Organized the STACER exam - 10 hours

-Coached residents for ACE academic contest a provincial competition for cardiology residents competing for their universities - 6 hours

- Invited speaker. Internal Medicine Rounds. Non Invasive stress testing. June 2006

- McGill Mini Med School. Cummings Center. September 2006

- Hertzl Family Medicine Rounds. January 2007

- Hertzl Family Medicine Rounds. March 2007

- McGill Family Medicine National Drug Therapeutics Course. May 2007

2) Research Activities

MARK EISENBERG MD

- Zyban as an Effective Smoking Cessation Aid (ZESCA) trial (principal investigator). Funded by the Canadian Institutes of Health Research. Multi Center trial.

- Post-angiographic Rates of Abstinence with Multiple Smoking Cessations Aids (PROMISE) pilot study (principal investigator). Funded by the Canadian Tobacco Control Research Initiative.

- The Safety of Transdermal nicotine immediately following an acute coronary syndrome (STADIA) pilot study (principal investigator). Funded by the Canadian Tobacco Control Research Initiative. Multi-center pilot study.

- Early versus late coronary artery bypass grafting after myocardial infarction. (Co-investigator, principal investigator: Lawrence Rudski). Funded by the Heart and Stroke Foundation.

- A population-based analysis of the effectiveness and determinants of use of cardiac drugs for

congestive heart failure (co-investigator: Louise Pilote). Funded by the Canadian Institutes of Health Research.

- Modern statistical methods to analyse administrative databases (co-investigator, principal investigator: Louise Pilote). Funded by the Canadian Institutes of Health Research.

- Gender and sex determinants of cardiovascular disease: from bench to beyond (co-investigator, principal investigator: Louise Pilote). Funded by the Canadian Institutes of Health Research.

- A hierarchical-Bayesian meta-analysis of randomized clinical trials of behavioral interventions for smoking cessation (principal investigator). Funded by the Canadian Institutes of Health Research.

- Cardiac outcomes in patients with metabolic syndrome: A systematic review and hierarchical Bayesian meta-analysis (principal investigator). Funded by the Canadian Institutes of Health Research.

- Acute cardiovascular effects of gambling in patients with stable angina: pilot study (co-investigator, principal investigator: Jon Afilalo). Funded by the Ontario Problem Gambling Research Center.

- Pharmacogenetic and pharmacokinetic variation in CYP2B6 and the efficacy of Zyban as a smoking cessation aid: A ZESCA trial sub-study (principal investigator). Funded by the Canadian Tobacco Control Research Initiative. Multi-Center trial.

- Meta-analyses: understanding the subjective interpretation of an Objective analysis (co-investigator, principal investigator: Ian Shrier). Funded by the Canadian Institutes of Health Research

DAVID LANGLEBEN MD

The Centre for Pulmonary Vascular Disease is collaborating with colleagues from Athens Greece, the Medical College of Georgia, and the Montreal Heart Institute on studies examining lung metabolism in Pulmonary Hypertension.

CAROLINE MICHEL MD

- Atrial Fibrillation-Congestive Heart Failure Trial (AF-CHF)-ongoing CIHR sponsored trial: Principal Investigator

- Warfarin versus Aspirin in Reduced Cardiac Ejection Fraction (WARCEF) Trial-ongoing NIH sponsored trial: Co-investigator

- A Multi-Center, Randomized, Double-Blind, Parallel Group, Placebo-Controlled study to assess the effects of Immune Modulation Therapy (IMT) on Mortality and Morbidity in Patients with Chronic Heart Failure (ACCLAIM) Study - ongoing trial sponsored by Vasogen: Principal Investigator

- Access et prise en charge par les cliniques specialisees en insuffisance cardiaque (ACCES-CLIMIC Trial- ongoing CIHR sponsored trial

- Etude du suivi des patients vus en urgence hospitaliere pour insuffisance cardiaque: (ACCESS-UG) Trial - ongoing CIHR sponsored trial: Collaborator

- Protocol FDHFO1- ongoing trial sponsored by Encysive Pharmaceuticals: Site Principal Investigator

IGAL SEBAG MD

Projects within McGill:

I. Clinical Research.

1. Matrix-array, real-time three-dimensional echocardiography provides a rapid, simple and accurate assessment of right ventricular volume and function: Comparison with magnetic

resonance imaging (Dr Sebag). Patients enrolled:22)

2. Right atrial size relates to invasive markers of chronic diastolic dysfunction in an adult population with congenital heart disease. Dr Do, Dr Sebag.

3. Matrix-array technology for real-time, three-dimensional echocardiography provides a simplified, reproducible assessment of left ventricular ejection fraction. Dr. Stafford & Dr. Sebag. Patients enrolled: 35

4. Review on stress-echocardiography. Dr Sabbagh, Dr Sebag

II. Basic Research

5. Echocardiographic analyses reveal estrogen and androgen control of left ventricular structure and function in adult mice. Dr Chalifour, Dr Sebag.

6. Age-related Changes in Lamin A/C Expression in Cardiomyocytes. Dr Afilalo, Dr Duque. Dr Chalifour and Dr Sebag collaborating.

Projects outside of McGill:

7. Collaboration between the Jewish General Hospital and Massachusetts General Hospital. Early detection and prediction of chemotherapy induced cardiac toxicity in breast cancer patients. Dr Passeri, Dr Scherrer-Crosbie. Dr Sebag collaborating. Patients enrolled: 3.

RICHARD SHEPPARD MD

- IMAC-II study investigating myocarditis and genetics of ventricular recovery with University of Pittsburgh)

- CANDIID-2 study investigating the influence of genetics on biomarkers in heart failure patients receiving Candesartan therapy (with Montreal Heart Institute)

- ACCESS-URG/CLINIC (studying the demographics of patients in Heart failure Clinics (with Dr Louis Louise Pilote at MUHC

3) Clinical Activities

In addition to the individual clinics each doctor holds, the Division also holds a Pacemaker Clinic on Friday mornings, Cardiology Clinic on Friday mornings, Adult Congenital Clinic on Wednesday mornings, and a Pulmonary Vascular Disease Clinic on Mondays. Our extremely active Congestive Heart Failure Clinic under the leadership of Dr Caroline Michel and Dr Richard Sheppard, provides Monday to Friday service for CHF patients, reducing Emergency Room visits and hospitalizations.

4) Academic Staff

We were delighted to be able to recruit Dr Dominique Joyal to the Institution. Dr Joyal trained in Cardiology at McGill and then pursued advanced studies in interventional Cardiology at the University of Illinois. He has returned to the Jewish and is active both as an interventional Cardiologist and clinician as well as a researcher and teacher. Notably, he has already pushed forward our Rotablator program for coronary arteries that are not amenable to traditional angioplasty.

5) Consulting Activities: None

6) Honours, Awards and Prizes.

GEORGE HONOS MD

- Chair, Adult Cardiology Exams for the Royal College of Physicians and Surgeons of Canada

RICHARD SHEPPARD MD

- Appointed and now active Associate Chair for Research Ethics Committee

III. Objectives and Priorities

The Division's number one priority is to maintain and expand its status as a tertiary and quaternary Cardiology referral centre. To that end, the cardiac catheterization laboratory has been completely renovated and, with the support of McGill RUIS, the Administration is active in confirming our status as a C3 referral centre. Our second priority is to increase the level of research being performed. Dr Regina Husa will be performing teaching outcomes research on the Cardiology CTU. Dr Dominique Joyal and Mark Eisenberg will be increasing the research activity generated by the cardiac catheterization laboratory, and our Echocardiography group will be increasing the level of their research. Another high level priority will be to obtain software that will allow direct interlinking between our echocardiography machines and the computer and a computerized echocardiography reporting data base, as well as obtaining software that will allow integration with the hospital PACS system and the electronic charting system of the Hospital.

Respectfully submitted,

David Langleben, MD, FRCPC
Chief, Division of Cardiology