

**Annual Report**  
**Division of Nephrology**  
**Department of Medicine - Jewish General Hospital**  
**Jan 1, 2016 - Dec 31, 2016**

**SUMMARY**

**1. Research & publications**

The Division has continued to expand its research activities with three ongoing local investigator-conceived and implemented studies. This is in addition to the division participating in several multi-center clinical trials as well as the fundamental research taking place in Dr. Lipman's laboratory. Details are presented below in Section II.

**2. Teaching and learning**

The Division of Nephrology at the JGH continues to serve as a training site for the McGill Renal Fellowship program. Fellows rotate through our peritoneal dialysis program, hemodialysis unit, and the consulting service. The feedback from the fellows on the JGH experience has been uniformly positive. In addition, McGill internal medicine residents and medical students do rotations on the nephrology consult service. Typically we have 2-4 individuals at any given time on the service.

Three of our nephrologists also act as attending staff on the medical CTUs. In an average year we provide 8 weeks of CTU service.

We also give many lectures throughout the year including Grand Medical Rounds, Core teaching for internal medicine, and core lectures for nephrology fellows. We also participate in teaching at the undergraduate level both through lecture series and through small group teaching at the medical school.

**Teaching activities (outside of CTU & nephrology service)**

**Core Medicine lecture series:**

Dr. D. Bercovitch  
Dr. M. Davidman  
Dr. M. Lipman  
Dr. G. Frisch  
Dr. S. Nessim

**University teaching:**

Dr. G. Frisch & Dr. S. Nessim:  
Medicine I Physiology: Small group tutorials - Renal section: 18 hours/year each  
Back to Basics Acid-Base - 6 hours/year each

Dr. M. Lipman, Dr. Frisch, & Dr. Nessim:  
McGill Renal fellow seminar series, 1-2 hours/year each

Dr. M. Davidman:  
McGill Anesthesia resident seminar series - Fluids and electrolytes, acid-base and renal disease - 2 hours/year

**Undergraduate medical student lectures:**

Dr. D. Bercovitch, Hypertension, 2 hours

Dr. M. Davidman, Renal failure, 6 hours

Dr. M. Lipman, Electrolytes, 2 hours

Dr. G. Frisch, Electrolytes, 6 hours

Dr. S. Nessim, Hypertension, 6 hours

**3. Involvement in the community**

Drs. Lipman, Frisch, and Nessim give several CME rounds throughout the course of the year included at the McGill Refresher Course as well as JGH family medicine rounds amongst others.

**4. Partnerships**

Dr. Lipman is actively engaged in research partnerships with Drs. Ernesto Schiffrin and Andrew Karaplis at the Lady Davis Institute for Research, and with Drs. Marcelo Cantarovich and Steve Paraskevas at the MUHC. Dr. Nessim has research collaborations with Dr. Joanne Bargman, among others, at the University of Toronto.

**5. Milestones:**

After over six years of planning and fundraising, the new, modern and enlarged Hemodialysis Unit in the Sandra and Steven Mintz Nephrology Centre opened in September 2016. This new facility merges the two former hemodialysis treatment units in one location. The centre contains 37 hemodialysis stations each of which includes a Hemodialysis machine, a multi-function electric chairs, a personal TV, and internet access for a computer or tablet. The centre finally allows patients to receive their treatments in a spacious milieu and with a level of comfort that they so greatly deserve.

**6. New hires, promotions, and retirements:** None to report.

**7. Honours, awards, and prizes:**

Dr. Nessim received the teaching award from the nephrology fellows at McGill. This marks the first time that a member of the nephrology division at the JGH has been the awardee.

Dr. Lipman received the award for Physician Management from the administration of the JGH. This award recognized Dr. Lipman's leadership contribution to hospital as Associate Physician-in-Chief in the Department of Medicine and Chief of the Division of Nephrology. In addition, it served to recognize the pivotal role that he played in the creating the Diagnostic Treatment Clinic. This clinic receives ambulatory patients who require expedited management and who would otherwise typically be referred to the emergency room.

## **8. Fundraising**

The Division of Nephrology was the beneficiary of the 24<sup>th</sup> Annual Golf Tournament of the JGH held at Elm Ridge in June 2016.

Dr. Frisch organizes a separate annual golf tournament whose proceeds are directed every second year to the Nephrology Division at the JGH.

Drs. Lipman and Frisch both made appearances at various fundraising activities for the Division of Nephrology throughout the year.

## **SECTION I- DIVISION STATUS UPDATE**

### **1. Mission and objectives of the Division**

The Division of Nephrology continues to provide excellence in patient care and teaching. In addition, although the division is modest in terms of the number of members, there is significant activity in fundamental, translational, and clinical research domains.

Our consult service is extremely active and follow between 20 and 30 admitted patients daily.

The new hemodialysis unit is operating since September 2016 and includes 37 stations serving over 230 patients.

Our peritoneal dialysis program has continues to be among the busiest in Montreal. We currently have close to 50 patients in this program. Of our total dialysis population 18% are on peritoneal dialysis as their mode of therapy. This figure is substantially higher than the provincial average of 12%.

The Kidney Treatment Centre (pre-dialysis clinic) which is located adjacent to the satellite dialysis unit in Pavilion H is in its fifth year of operation. The clinic provides the necessary educational, dietary, and psychological support to patients with progressive kidney failure and to their families. These programs have been shown to slow the decline of renal function in participants. In addition, the team in the pre-dialysis clinic helps patients make the often difficult transition to dialysis therapy. This clinic now handles over 250 patients with Stage III and Stage IV CKD.

We continue to aggressively promote renal transplantation to our patients as the preferred option for the treatment of end-stage renal disease. We emphasize the value of pre-emptive transplantation in order that the patient may avoid dialysis and we encourage donations from both living-related and living-unrelated donors.

## 2. List of academic staff

### Full-time JGH based:

Dr. David Bercovitch	Associate Professor of Medicine	GFT-H
Dr. Michael Davidman	Associate Professor of Medicine	GFT-H
Dr. Gershon Frisch	Assistant Professor of Medicine	GFT-H
Dr. Mark Lipman	Associate Professor of Medicine	GFT-H
Dr. Sharon Nessim	Assistant Professor of Medicine	GFT-H

### Associate staff:

Dr. Johanna Eid  
Dr. Paul Bourgoin  
Dr. Natalie Ng Cheung

## SECTION II- GRANTS, PUBLICATIONS, AND SERVICE OUTSIDE MCGILL

### 1. Grants

*Peer reviewed:* none

*Industry sponsored:*

Dr. Lipman in collaboration with Dr. Ernesto Schiffrin

Gene expression profile in small resistance arteries of patients with hypertension with or without nephroangiosclerosis and its relations to small and large artery function and remodeling

Sponsor: Servier Institute

*Investigator initiated:*

Dr. Lipman

Effect of vitamin D3 supplementation on arterial and bone remodelling in chronic kidney disease patients

The pharmacodynamic and pharmacokinetic profiles of apixiban in hemodialysis patients

### 2. Research Trainees:

Dr. Thomas Mavrakanas, Nephrology Fellow, McGill University

Dr. Tofol Al-Nashmi, Vascular Fellow, McGill University

### 3. Publications:

Perl J, **Nessim SJ**, Moist LM, Wald R, Na Y, Tennankore KK, Chan CT. Vascular access type and patient and technique survival in home hemodialysis patients: the Canadian Organ Replacement Register. Am J Kidney Dis 2016; 67(2):251-259

Perl J, Parpia S, **Nessim SJ**. Does the risk of peritoneal dialysis-associated peritonitis vary by time on treatment? Clin Nephrol 2016;85(4):209-214

Nguyen M-T, Fryml E, Sahakian SK, Liu S, Cantarovich M, **Lipman M**, Tchervenkov JI, Paraskevas S. Pre-transplant recipient circulating CD4+CD127-TNFR2+ Treg: a surrogate of Treg suppressive function and predictor of delayed and slow graft function after kidney transplantation. Transplantation 2016; 100(2):314-324

### 4. Service outside McGill:

We are participating in the Dialysis Outcomes and Practice Patterns Study Program (DOPPS) with Dr. Nessim and our point person. This is a multi-national effort to monitor and record dialysis practices around the world. We provide all relevant statistics from our program which are incorporated into the overall study. Here too, we can compare how our dialysis program performs with respect to those in other regions of the world.

We participate in the Canadian Organ Replacement Register (CORR). This effort is sponsored by the Canadian Institute for Health Information and is designed to monitor trends and practices in end-stage renal disease populations. It includes both hemodialysis and transplantation practices. We provide our annual statistics which are then included with other centres across the country. This allows us to compare ourselves to other programs with respect to many clinically relevant aspects of patient management.

## SECTION III-CONFIDENTIAL INFORMATION

### 1. Consulting activities: None

Respectfully submitted,



Mark L. Lipman, M.D.  
Chief, Division of Nephrology, JGH