SUMMARY

Introduction

The Internal Medicine Division continues to provide most of the hospital's functions caring for more than 150 in-patients on a daily basis outside the Clinical Teaching Units. In spite of the many obligations, our Division is one of the most accomplished in research with four of our members devoting more than 50% of their time in highly productive research activities and teaching with three members having substantial roles in medical education. Dr. Beth Cummings was appointed Associate Dean of Undergraduate Medical Education, Faculty of Medicine and Vicky Tagalakis was nominated Director, Division of General Internal Medicine, McGill University. Dr. Ruxandra Bunea is Director of the Postgraduate Medical Education at the Jewish General Hospital.

Clinical Activities:

Ambulatory Internal Medicine Clinics:
4 clinics/week: 4 hours/week each (Drs. Becker, Hoffer); 12 hours/week (Dr. Trudeau); 10 hours/week (Dr. Schifferrin15 hours/weeks (Residents)

Emergency Room/Medical Short Stay Unit:
7 day/week 52 weeks/year (Drs. R. Becker, M. Koolian, M. Elizov, B. Cummings, J. Raffoul, L. Trudeau, V. Tagalakis, B. Schwartz); 6 Residents and 4 students/week

Emergency Room/Medical Short Stay Unit/Consults:
8 weeks/yr each (Drs. R. Becker, M. Elizov, M. Koolian, J. Raffoul, V. Tagalakis, L. Trudeau, B. Schwartz); 2 weeks/yr each (Drs. B. Cummings, S. Kahn)

Nutritional Support Team Consultation:
16-20 weeks/year: Dr. J. Hoffer

Cardiovascular Prevention Center:
2 clinics/week: Drs. E. Schifferrin, L. Trudeau

Resident’s Hypertension Clinic:
2 clinics/week: Drs. R. Becker, R. Bunea, M. Elizov, J. Raffoul, V. Tagalakis, J. Hoffer, L. Trudeau, B. Cummings, B. Schwartz, J. Lipes

Thrombosis Clinic:
2 day clinic per week, Drs. S. Kahn, V. Tagalakis

Pre-Operative Clinic:
1 ½ days per week: Drs. B. Cummings

1. Research and Publications:

The amount of secured grants for the Internal Medicine Division for the period 2015-2016 is $2,055,505. Total research grants and awards are: Dr. John Hoffer, $95,000 for his research in Vitamin C & D treatment, Dr. Susan Kahn, $776,304 for her research in Thrombosis, Dr. Vicky Tagalakis, $31,029 for her research in Epidemiology & Venous Thrombosis and Dr. Schifferrin, $1,153,171 for grants and Canada Research Chair in Vascular and Hypertension.
In addition to our divisional members presenting world-wide they have also been given recognition for their articles published in many well-known medical journals. Below are listed some of the more notable publications of our Division:


2. **Teaching and learning (undergraduate and graduate)**

Internists participate in teaching medical students, residents and fellows on Clinical Teaching Units, Internal Medicine, Thrombosis and Perioperative clinics as well on consult services including in the Emergency Room. They participate in journal clubs and the McGill Simulation Center.

**Teaching Activities:**

Clinical Teaching Unit: 4 weeks/year each Drs. R. Becker, M. Elizov, J. Raffoul, L. Trudeau, V. Tagalakis, B. Schwartz, J. Lipes and M. Koolian (32 weeks/year); 2 weeks/year each Drs. B. Cummings and S. Kahn (4 weeks/year) for a total of 36 weeks/year 3 weeks/year each 52 Residents (156 weeks/year); 2 weeks/year each 26 students (52 weeks/year)

Ambulatory Internal Medicine 15 hours/week Residents Clinic
Consult Service: 7 day/week: 52 weeks (Raffoul 14 weeks; Trudeau 12 weeks; Tagalakis 10 weeks; Koolian 8 weeks; Elizov 6 weeks and Schwartz 2 weeks) 52 weeks each Residents and Fellows

Emergency Room: 7 day/week 52 weeks (Drs. R. Becker, R. Bunea, M. Elizov, B. Cummings, J. Raffoul, L. Trudeau, V. Tagalakis, B. Schwartz) 52 weeks (Residents & Fellows)

Core Lectures: 10 hours/year: Drs. R. Becker, M. Elizov, B. Cummings, S. Kahn, J. Raffoul, L. Trudeau, V. Tagalakis, J. Hoffer, B. Schwartz, J. Lipes; Residents: 20-30

Professional Skills Tutorial Group: 48 hours/year, 30-36 Students: Drs. Trudeau, Tagalakis, Bunea, Echocardiography Courses: 8 hours/year, Critical Care Fellowship (Dr. J. Lipes)

Simulation center: 24 hours/year (Drs V. Tagalakis, R. Bunea, M. Elizov, B. Schwartz)

Intensive Care Teaching Unit: 10 weeks/year (Dr. J. Lipes, B. Schwartz)

Intensive care Consults: 10 weeks/year (Dr. J. Lipes, B. Schwartz)

Hoffer, L John

- Diagnosis and Treatment of Malnutrition in Hospitalized Patients. Lecture 2/3 to 1/3 of McGill Med 3 class, February 2, 2016 (4 hours)
- Nine hours of lectures in Block D of First Year Medicine (Fundamentals of Medicine and Dentistry) on human body composition and bioenergetics, protein metabolism in health and disease, obesity, causes, implications and treatment, appetite and eating behavior, anorexia and cachexia, vitamin and mineral nutrition, starvation, weight loss and frailty, evidence-based nutrition and comprehensive nutritional assessment: Feb 1,3,4,8,9,10,11,12 and March 3, 2016 (90 hours)
- Diagnosis and Treatment of Malnutrition in Hospitalized Patients. Lecture to 3/3 to 1/3 of McGill Med 3 class, May 24, 2016 (4 hours)
- Diagnosis and Treatment of Malnutrition in Hospitalized Patients. Lecture to 1/3 to 1/3 of McGill Med 3 class of UGME 2018, September 20, 2016 (4 hours)
- Diagnosis and Treatment of Malnutrition in Hospitalized Patients. Lecture to 2/3 to one-third of McGill Med 3 MDCM UGME grad year 2018, February 14, 2017 (4 hours)
- Diagnosis and Treatment of Malnutrition in Hospitalized Patients. Lecture to 3/3 to one-third of McGill Med 3 UGME grad year 2018, May 30, 2017 (4 hours)
- Diabetes mellitus. Departments of Neurology, Neurosurgery and Experimental Medicine Course 531-550B: Free Radical Biomedicine. April 4, 2016 (6 hours)
- Surgical Nutrition. McGill Faculty of Medicine PGY1 Surgery seminar, MUHC-Montreal General Hospital, July 18, 2016 (4 hours)
- Starvation and malnutrition. Faculties of Science and Agricultural and Environmental Sciences Course 307, Human Nutrition, November 24, 2016 (4 hours)

Schiffrin, Ernesto L

- 2 half days per weeks: Teaching of Internal Medicine residents and Clinical Pharmacology fellows at Cardiovascular Prevention (McGill Fellows: Yusuf Bahbahani and Tofal Alnashmi)
- Chair of weekly Medical Grand Rounds.
- Supervision of M.Sc. & PhD student, Division of Experimental Medicine, McGill University: (MSc [1]: Sofiane Ouerd, Thesis on Endothelin and inflammation in cardiovascular disease; PhD [3]: Oneeb Mian, Thesis on Dysregulated activation of immune-inflammatory responses contributes to vascular damage in atherosclerosis and hypertension and Suellen Coelho, Thesis on Inducible
transgenic mouse overexpressing human endothelin-1; Kugeng Huo, Thesis on MicroRNA in vasculature in hypertension and metabolic syndrome)

Tagalakis, Vicky

Mentorship, research training, and teaching:
- Supervision of Graduate Students (3): Maral Koolian, MSc Adi Klil-Drori, Postdoctorate fellow, Dinela Rushani, PhD student, McGill University
- McGill University Courses/small groups - Undergraduate:
  Group Leader, Unit 8, Clinical Epidemiology, Faculty of Medicine, McGill University
  Group leader, Evidence based medicine, Faculty of Medicine, McGill University CME

3. Involvement in the community:

Elizov, Michelle

- General Internal Medicine Global Health Initiative: Haiti Project. Dr. Michelle Elizov, Director of Medical Education for the Division, launched the Haiti Project and organized the third formal rotation in 2016

Hoffer, L John

McGill
- Diagnosis and Management of In-Hospital Malnutrition, JGH Internal medicine divisional rounds, March 24, 2016.
- Surgical Nutrition. McGill Faculty of Medicine PGY1 Surgery seminar, MUHC-Montreal General Hospital, July 18, 2016
- Diagnosis and Treatment of Malnutrition in Hospitalized Patients. Lecture to 1/3 of McGill Med 3 class, Feb 2, May 24 and September 20, 2016
- Starvation and malnutrition. Faculties of Science and Agricultural and Environmental Sciences Course 307, Human Nutrition, November 24, 2016

National
- Online audiovisual webinar presentation: Protein requirements in protein-catabolic critical illness based on ASPEN conference presentation. March 7, 2016 (http://www.screencast.com/t/xNdAm92il)
-Charleston, SC: Will we ever agree on protein requirements in the ICU? Nestle International Protein Summit, September 24, 2016
-Kansas City, MO: Does clinical research with vitamin C and cancer have a future? Intravenous Vitamin C and Integrative Therapies, KU Integrative Therapies, the University of Kansas Medical Center, October 1, 2016

Kahn, Susan R

National
- Guidelines on Treatment of VTE. A practical course in emergency medicine. Department of Emergency Medicine and the Continuing Education Office, McGill University Health Centre and Continuing Professional Development, Faculty of Medicine, McGill University. Montreal, Canada, December 12, 2016.
- CSIM Dr. David Sackett Senior Investigator Award Keynote Address: “What I learned in business school: Entrepreneurship as a model for a research career in general internal medicine”. Canadian Society of Internal Medicine 2016 Annual Meeting. Montreal, Canada, October 28, 2016.

International
- Faculty Speaker, American Society of Hematology 2016 Junior Researcher Symposium, American Society of Hematology 58th Annual Conference, San Diego, CA, December 2, 2016, 2-5PM.
- Chair, ASH Education Session, Managing Severe Thrombosis and Sequelae, American Society of Hematology 58th Annual Conference, San Diego, CA, December 5, 2016.
- Invited Speaker, ASH Education Session, Post Thrombotic Syndrome, American Society of Hematology 58th Annual Conference, San Diego, CA, December 5, 2016.

Schiffrin, Ernesto L

Outside McGill University
- Debate: Animal models are or not a appropriate for study of human hypertension. Invited speaker, Quebec Hypertension Society, Montreal, QC, January
- Discussion on implications of SPRINT trial. Invited speaker, Quebec Hypertension Society, Quebec City, January 14, 2016.
- The Immune System & Cardiovascular Disease, invited State-of-the-Art Lecture, Canadian Hypertension Congress, Montreal, October 20, 2016.

National
- High blood pressure, blood vessels and inflammation: the good, the bad and the ugly. Public lecture for the Margolese National Heart Disorders Prize, Vancouver, BC, November 24, 2016.

International


-“Do we need a new definition for hypertension?”. Invited lecture, International Society of Hypertension Scientific Meeting, Seoul, Korea, September 27, 2016.


Tagalakis, Vicky

McGill University

-Tagalakis V. Malignancy & Thrombosis: Going Beyond Trousseau. Oral presentation at: Medical Grand Rounds, Jewish General Hospital, McGill University, Montreal, Canada, 2016.

National

-Tagalakis V. Distal deep vein thrombosis: what to do? Oral presentation at: Société des sciences vasculaires du Québec (SSVQ); 2016 December 9; Montreal, Canada.

-Gerson H, Tagalakis V, MacNamara E, Eintracht S. ED Use of D-dimers for the Diagnosis of VTE. Poster presentation at: Canadian Medical Biochemistry meeting; 2016 November; Montreal Canada.

-Tagalakis V. Perioperative Management of Patients on Anticoagulants and of Patients with Prothrombotic States. Oral presentation at: CSIM Annual Meeting; 2016 October 26; Montreal, Canada.

-Tagalakis V. Thromboses inhabituelles : Du complément au cancer. Oral presentation at: Société des sciences vasculaires du Québec (SSVQ); 2016 September 16; Montreal, Canada.

-Tagalakis V. The STEP-CAT Cohort Management Study: Step-down to prophylactic doses of enoxaparin after a minimum of 3-6 months of anticoagulation for the treatment of cancer-associated thrombosis. Oral presentation at: 1st Annual CanVECTOR Conference; 2016 June 8; Toronto, Canada.

-Tagalakis V. CanVECTOR Network Quality of care and effectiveness research platform. Oral presentation at: 1st Annual CanVECTOR Conference; 2016 June 8; Toronto, Canada.

- Tagalakis V. Thromboembolic Disease in Patients Undergoing Robotics for Endometrial Cancer. Oral presentation at: GOC's 37th Annual General Meeting; 2016 June 16-18; Vancouver, Canada.
- Tagalakis V. Cases of anticoagulation: small group session. Oral presentation at: Canadian Digestive Diseases Week (CDDW); 2016 February 26-29; Montreal, Canada.

International

4. Partnerships: None to report

5. Honours, awards, and prizes:

Dr. Beth-Ann Cummings, Associate Professor in the Division of General Internal Medicine at the JGH and Associate Dean, Undergraduate Medical Education, has been named to the Faculty Honour List for Education Excellence for 2016-2017.

Dr. Michelle Elizov was honoured as the Osler Fellow to the class of 2017

Dr. Jed Lipes was voted as Teacher of the Year by the residents.

Dr Susan Kahn received the CSIM 2016 David Sacket Award

Dr. Susan Kahn, Winner of the 2016 Canadian Society of Internal Medicine (CSIM) Dr. David Sackett Senior Investigator Award. This award recognizes excellence in research by a senior Canadian general internist, and is intended to increase awareness of high-quality research by general internists in Canada and to foster such research

Dr. Susan Kahn, Elected to Fellowship in the Canadian Academy of Health Sciences (CAHS) on the basis of demonstrated leadership, creativity, distinctive competencies and commitment to advance academic health sciences. Membership in the CAHS is considered one of the highest honours for members of the Canadian health sciences community

Dr. Ernesto L. Schiffrin became the Editor-in-Chief of the American Journal of Hypertension in January 2016.

Dr Ernesto Schiffrin was awarded The Margolese National Heart Disorders Prize 2016 for advancing the understanding of high blood pressure’s effects on vasculature and for his outstanding contributions to the treatment, amelioration, or cure of heart disorders. He was one of 3 of Canada’s leading researchers in brain health, heart health and cancer to have been singled out by the
University of British Columbia Faculty of Medicine for their accomplishments, and for their potential to make further contributions in their fields.

Dr Vicky Tagalakis was appointed the McGill Division Director as of September 15, 2016.

7. **Milestones:**

Dr. Maral Koolian was recruited as full-time staff.

8. **Fundraising:** None to report.

SECTION 1 - DIVISION STATUS

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

The Division of Internal Medicine will continue to enhance McGill University in their role as one of Quebec’s leading teaching institutions. Our Division fulfills its role in achieving high standards in all aspects of academic medicine. All physicians in the division have a clear academic role. Recruitment is the most important priority as the burden of clinical service has become increasingly higher over the years.

2. **A nominative list of academic staff, their academic rank**

Dr. Rubin Becker, Associate Professor of Medicine, McGill University; Chief, Division of Internal Medicine, Jewish General Hospital

Dr. Ruxandra Bunea, Assistant Professor of Medicine, McGill University; Director Postgraduate Education, Jewish General Hospital

Dr. Beth Cummings: Associate Professor of Medicine, McGill University; Associate Dean, Undergraduate Medical Education, McGill University

Dr. Michelle Elizov: Associate Professor of Medicine, McGill University; Director of Medical and University Education, CIUSSS Centre Ouest de l’Ile de Montreal

Dr. L John Hoffer: Professor of Medicine, McGill University; Member and Associate Chair, JGH Research Ethics Committee

Dr. Susan R Kahn: Professor of Medicine, McGill University; Program Director, Thrombosis Fellowship, McGill University; Director, Thrombosis Clinic, Jewish General Hospital

Dr. Maral Koolian: Assistant Professor of Medicine, McGill University,

Dr. Jed Lipes: Assistant Professor of Medicine, McGill University, Director of Critical Care Ultrasound and Echocardiography, Critical Care Fellowship Program, McGill University, Director of bedside ultrasound training for core internal medicine, McGill University

Dr. Joseph Raffoul: Assistant Professor of Medicine, McGill University; CTU Director and Medical Gatekeeper, Jewish General Hospital; Medical Director, Mount Sinai

Dr. Ernesto L Schiffrin: Professor and Vice-Chair (Research), Department of Medicine, McGill University; Physician-in-Chief and Director of the Cardiovascular Prevention Centre, Jewish
General Hospital; Canada Research Chair in Hypertension and Vascular Research, Lady Davis Institute for Medical Research

Dr. Blair C Schwartz: Assistant Professor, McGill University

Dr. Vicky Tagalakis: Associate Professor, McGill University

Dr. Luc Trudeau: Assistant Professor, McGill University; Director of Professional Services; Jewish Rehabilitation Hospital

SECTION II - PUBLICATIONS, AND SERVICES OUTSIDE MCGILL

1. Grants and awards received

Cummings, Beth

2015-2016: Medical Council of Canada W. Dale Dauphinee Fellowship: The W. Dale Dauphinee Fellowship is intended to advance the vision of the Medical Council of Canada (MCC) by supporting medical educators to enhance their knowledge and skills in physician assessment.


Kahn, Susan R

2015-2020: Co-director and Nominated Principal Investigator, CanVECTOR Network (CIHR- and partner-funded national research and training network in venous thromboembolism)

2015-2022: Canadian Institutes of Health Research-Foundation Scheme: 2014 1st Live Pilot: Improving long term outcomes after venous thromboembolism (VTE); Kahn SR (Principal Applicant); $2,050,822

2015-2020: Canadian Institutes of Health Research- ICRH Community Development Program Grants - Sleep and Circadian Rhythms and Venous Thromboembolic Diseases Clinical Trials CanVECTOR (Canadian Venous Thromboembolism Clinical Trials and Outcomes Research) Network; Kahn SR (Principal Applicant); $1,500,000 (CIHR component) + $3,800,000 (Partner support)

2015-2018: Heart and Stroke Foundation of Ontario: Age-adjusted D-dimer cutoff levels to rule out deep vein thrombosis (The ADJUST-DVT Study); Le Gal G (PI) / Kahn SR (co-applicant); $255,538

2015-2016: Canadian Institutes of Health Research-Knowledge Synthesis Grant: Effectiveness of interventions for implementation of thromboprophylaxis in hospitalized patients at risk for venous thromboembolism: An updated systematic review and meta-analysis; Kahn SR (principal applicant); $100,000

2014-2021: Canada Research Chairs (CRC)- Tier 1 Chairs: Improving long term outcomes after venous thromboembolism (VTE); $1,400,000
2014-2016: National Institutes of Health/NHLBI-Clinical Trials Planning Studies for Rare Thrombotic and Hemostatic Disorders (U34): Chronic Venous Thrombosis: Relief with Adjunctive Catheter-Based Therapy (C-TRACT) Study. Vedantham S (PI)/ Kahn SR (co-applicant)/ Kearon C; $663,942

2013-2017: Canadian Institutes of Health Research: D-dimer testing, tailored to clinical pretest probability, to reduce use of CT pulmonary angiography in suspected pulmonary embolism: A management study. (PE Graduated D-dimer [PEGeD] Study). Kearon C (PI)/ Kahn SR (co-applicant); $981,032

2013-2016: Canadian Institutes of Health Research: D-dimer testing, tailored to clinical pretest probability, to minimize initial and follow-up ultrasound testing in suspected deep vein thrombosis: A management study. Kearon C (PI)/ Kahn SR (co-applicant); $742,083

2013-2016: Canadian Institutes of Health Research: Development and validation of clinical prediction rules for bleeding for patients on anticoagulant therapy for venous thromboembolism. Wells PS (PI)/ Anderson D/ Kahn SR (co-applicant); $501,083

2013-2016: Heart and Stroke Foundation of Canada: Rivaroxaban for the secondary prevention of thromboembolism in patients with antiphospholipid antibody syndrome. Crowther M (PI)/ Blostein M/ Carrier M/ Kahn SR (co-applicant)/ Schulman S; $166,336

2012-2016: Canadian Institutes of Health Research: Extended Venous Thromboembolism Prophylaxis Comparing Rivaroxaban to Aspirin Following Total Hip and Knee Arthroplasty (EPCAT II). Anderson D (PI)/ Kahn SR (co-applicant); $3,044,877

Schiffrin, Ernesto L

2013-2019: Canada Research Chair in Vascular and Hypertension Research; $1,400,000

2010-2015: CIHR MOP102606 "T-regulatory cells and vascular injury in hypertension"; $757,495

2015-2022: CIHR MOP123465 “MicroRNAs and gene regulation on vascular remodeling in hypertension from mice to humans” (2012-2017, replaced July 1, 2015 by Foundation; Grant; $583,717

2015-2022: CIHR First Pilot Foundation Grant “Vascular remodeling in hypertension and cardiometabolic disease: from mice to humans”; $3,160,000

Tagalakis, Vicky

2016-2019: Canadian Institutes of Health Research “StAtins for Venous Event Reduction in patients with venous thromboembolism (The SAVER Pilot Randomized Trial)” Rodger (PI)/ Tagalakis (Co-Investigator); $424,298.00
2015-2022: Canadian Institutes of Health Research: “Statistical Methods in Pharmacoepidemiology and Perinatal Epidemiology” Platt (PI)/ Tagalakis (Co-Investigator); $1,071,721

2015-2020: Canadian Institutes of Health Research: “ICRH Community Development Program Grants - Sleep and Circadian Rhythms and Venous Thromboembolic Diseases Clinical Trials Grant”, Kahn (PI)/ Rodger (Co-PI)/ Tagalakis (Co-Investigator); $1,500,000

2015-2016: Canadian Institutes of Health Research; “Effectiveness of interventions for implementation of thromboprophylaxis in hospitalized patients at risk for venous thromboembolism: An updated systematic review and metaanalysis”; Kahn (PI)/ Tagalakis (Co-Investigator); $100,000

2012-2016: Canadian Institute of Health and Research: “New Oral Anticoagulants for the Prevention of Venous Thromboembolism in High-Risk Ambulatory Cancer Patients: A Randomized Placebo-Controlled Double-Blind Clinical Trial”; Wells (PI)/ Kahn/ Tagalakis (Co-Investigator); $836,841

2014-2017: Jewish General Hospital GFT (H), Department of Medicine; $24,000

2. Scholarly works published in the 2016 calendar year:

**Cummings, Beth-Ann**


--Ellaway R, Graves L, **Cummings B** (2016). Dimensions of integration, continuity, and longitudinality in clinical clerkships. Medical Education. 50(9):912-921

**Hoffer, L John**


**Hoffer LJ.** Human protein and amino acid nutrition: a tutorial. JPEN J Parenter Enteral Nutr 40:460-474, 2016 (April 26, 2016)

**Kahn, Susan**


Schiffrin, Ernesto L


--Schiffrin EL, Calhoun D, Flack JM. SPRINT proves that lower is better for non diabetic high risk patients, but at a price. Amer J Hypert. 2016;29;2-4. doi:10.1093/ajh/hpv190. --PMID: 26597221


Schwartz, Blair

Tagalakis, Vicky


SECTION III - CONFIDENTIAL INFORMATION

1. Consulting activities:

<table>
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<tr>
<th>Name of Faculty Member</th>
<th>Private Consults</th>
<th>Public Sector Consulting # of days</th>
<th>Other # of Days</th>
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<td>Dr. Jed Lipes</td>
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<td>ICU Jean Talon Hospital</td>
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<tr>
<td>Dr. Blair Schwartz</td>
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<td>ICU Jean Talon Hospital</td>
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<tr>
<td>Dr. Joe Raffoul</td>
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<td>Internal Medicine Consults Lakeshore General Hospital, 2 evenings/month Mount Sinai Hospital - ½ day/week Brunswick Medical Centre-1 day/month</td>
<td>24</td>
<td>26</td>
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<tr>
<td>Dr. Luc Trudeau</td>
<td>Institut de Réadaptation - 1 day/month Internal Medicine Consults for Jewish Rehabilitation Hospital - 1 day/week</td>
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Respectfully Submitted
Rubin Becker, MD
Chief, Division of Internal Medicine