Annual Report Division of Internal Medicine Department of Medicine - Jewish General Hospital January 1 - December 31, 2018

SUMMARY

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.

- Susan Kahn was awarded co-director and nominated Principal Investigator for the CanVECTOR Network (CIHR- and Partner-funded national research and training network in venous thromboembolism) with grants in the amount of 7,475,822 from the CIHR.
- **Dr. Ernesto L. Schiffrin** received a seven-year Foundation grant funded by CIHR from its first live pilot foundation scheme for his research project entitled "Vascular remodeling in hypertension and cardiometabolic disease: from mice to humans" as Principal Investigator starting July 1, 2015 ending June 30, 2022 for a total amount of \$3,164,111.

1. Research and Publications:

Internal Medicine Division for 2018 has secured research by Dr. Susan Kahn for her research in grants Epidemiology & Venous Thrombosis, Dr. Vicky Tagalakis received a one million dollar grant for Multi-site Cancer - VTE study.

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:

Cummings, Beth Ann:

--Dory V, Gomez-Garibello C, Cruess R, Cruess S, Cummings BA, Young M. The challenges of detecting progress in generic competencies in the clinical setting. Med Educ. 2018 Dec; 52(12):1259-1270. doi: 10.1111

Hoffer, L. John:

--Hoffer, LJ. Alterations in Macronutrient Metabolism in Starvation and Disease. In: Robinson, MK, editor. Scientific American medicine. Hamilton (ON): Decker Intellectual Properties, May 2018. DOI: 10.2310/7900.9006.

Kahn, Susan:

- --Kahn SR, Morrison DR, Diendéré G, Piché A, Filion KB, Klil-Drori AJ, Douketis JD, Emed J, Roussin A, Tagalakis V, Morris M, GeertsW. Interventions for implementation of thromboprophylaxis in hospitalized patients at risk for venous thromboembolism. Cochrane Database of Systematic Reviews April 24, 2018, Issue 4. Art. No.: CD008201. DOI: 10.1002/14651858.CD008201.pub3.
- --Anderson D, Dunbar M, Murnaghan J, Kahn SR, Gross P, Forsythe M, Pelet S, Fisher W, Belzile E, Dolan S, Crowther M, Bohm E, MacDonald S, Gofton W, Kim P, Zukor D, Pleasance S, Andreou P, Pantelis; Doucette S, Theriault C, Abianui A, Carrier M, Kovacs M, Rodger M, Wells P, Vendittoli P-A. Aspirin or Rivaroxaban for VTE Prophylaxis Post-Hip or Knee Arthroplasty. NEJM 2018 Feb 22;378(8):699-707

--Schünemann HJ, Cushman M, Burnett AE, Kahn SR, Beyer-Westendorf J, Spencer FA, Rezende SM, Zakai NA, Bauer KA, Dentali F, Lansing J, Balduzzi S, Darzi A, Morgano GP, Neumann I, Nieuwlaat R, Yepes-Nuñez JJ, Zhang Y, Wiercioch W. American Society of Hematology 2018 guidelines for management of venous thromboembolism: prophylaxis for hospitalized and non-hospitalized medical patients. Blood Advances. 2018 Nov;2(22):3198-3225.

Schiffrin, Ernesto L:

-- Schiffrin EL. Global Impact of the 2017 American College of Cardiology/American Heart Association Hypertension Guidelines: A Perspective From Canada. Circulation. 2018;137:883-885. doi: 10.1161/CIRCULATIONAHA.117.032849. PMID: 29483168 -- Caillon A, Paradis P, Schiffrin EL. Role of immune cells in hypertension. Brit J Pharmacol. 2018. doi: 10.1111/bph.14427.

Tagalakis, Vicky

-- Carrier M, Abou-Nassar K, Mallick R, Tagalakis V, Shivakumar S, Schattner A, Kuruvilla P, Hill D, Spadafora S, Marquis K, Trinkaus M, Tomiak A, Lee AYY, Gross PL, Lazo-Langner A, El-Maraghi R, Goss G, Le Gal G, Stewart D, Ramsay T, Rodger M, Witham D, Wells PS; AVERT Investigators. Apixaban to Prevent Venous Thromboembolism in Patients with Cancer. N Engl J Med. 2018 Dec 4. doi: 10.1056/NEJMoa1814468. [Epub ahead of print].

--van Es N, Louzada M, Carrier M, Tagalakis V, Gross PL, Shivakumar S, Rodger MA, Wells PS. Predicting the risk of recurrent venous thromboembolism in patients with cancer: A prospective cohort study. Thrombosis Research 2018; 163:41-46

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 awards or recognition:

Bunea, Ruxandra

- Teaching Recognition:

Teacher of the Year Award

- Formal Teaching

TCP – 3 Full sessions – 50 hrs/sessions

RAC – 2 Full sessions – 25 hrs/sessions

ERAD – 3 hours

Simulation Centre – IM residents – 20 hours, GIM Fellows – 6 hours, McGill medical residents – 20 hours.

- Clinical Teaching:

Medical students, Residents, Fellows – 250 hours: CTU, ERC, IMCS, IM outpatient clinics.

Elizov, Michelle

- Formal Teaching

Residents, IM academic, SIM Center, GIM academic half day, Faculty workshops, lectures, Grand Rounds.

- Clinical Teaching

Medical students, Residents, Fellows – 250 hours: CTU, ERC, IMCS, IM outpatient clinics.

Koolian, Maral

- Formal Teaching

Residents, IM academic, SIM Center, GIM academic half day, Faculty workshops, lectures, Grand Rounds.

- Clinical Teaching

Medical students, Residents, Fellows – 250 hours: CTU, ERC, IMCS, IM outpatient clinics.

- Research Trainee Supervision:

Dr. T. Cafaro, Dr. J. Tabah, Dr. Sana Swaleh, - Residents project supervision completed.

Dr. C. Simard, Dr. T. McConnell, Dr. D. Yiahari – Residents new project supervision.

Mamane, Samuel

- Formal Teaching

TCP (8 weeks, split with another physician)

2 academic half-day lectures

1 ultrasound simulation

1 procedures simulation

4 journal clubs

- Clinical Teaching

Medical students, Residents, Fellows – 6 weeks CTU, 4 weeks ERC, DTC Clinics, Pre-op Clinics, Ward Consults.

Schiffrin, Ernesto L

- Teaching Recognition:

Repeated invitations to give CPD lectures

- Formal Teaching

Courses for Internal Medicine Clinical Scholars Program on Clinical Research (1h), CIP (2h) and MD-PhD program 1.5h) on Hiring and Tenure, all at McGill.

Teaching of Masters, PhD students and postdocs at LDI, mentoring of young scientists (1h/week). Chair of Medical Grand Rounds at JGH, the major CME accredited activity in the hospital.

- Clinical Teaching:

Whenever we have Internal Medicine or Nephrology fellows who apply to our Cardiovascular Prevention Centre for training, I see patients with them and do clinical teaching in the outpatient setting.

- Research Trainee Supervision:

1 PhD student, 2 Master's students and 4 postdocs.

1 PhD student received his PhD at the beginning of the year.

Schwartz, Blair

- Formal Teaching

Transition to Clerkship

TCP: Expert physician rounds

Simulation Center Sessions on Chest Tube Insertion

Classroom session on procedural sedation

McGill Aviation Medicine Course; Airborne management of the critically ill patient.

- Clinical Teaching

Medical students, Residents, Fellows – 250 hours: CTU, ERC, IMCS, IM outpatient clinics.

- Research Trainee Supervision:

Dr. Erica Rubin (GIM PGY-5) – Safety and effectiveness of heparin nomogram in medicine patients. Data Analysis and presentation preparation.

Dr. Sana Swaleh (Resp PGY- 4) – Design of study and associated tools looking at improvement in IVC filter placement and retrieval post Health Canada warning.

Tagalakis, Vicky

- Teaching Recognition

CanVECTOR QE Platform co-Leader

Associate Editor, Thrombosis Research

Research post doc fellows excelled with two international oral presentations and two awards Mentorship, research training and teaching

- Clinical Teaching:

-Supervision of resident: Justin Tabah, "Appropriateness of direct oral anti-coagulant prescriptions in tertiary care Emergency Department outpatients with acute Deep Vein - Thrombosis" Awarded: Can VECTOR Research Start-up award (2,000.00)

- -Supervision of students (2): **Diana Olaya Escobar**, foreign trained medical student. "The risk of Thrombosis in patients with lung cancer". **Frederique Ste Pierre**, McGill University. BMJ review on superficial thrombophlebitis.
- -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:

Hoffer, L John

McGill University Departments

- 1. "Ten Clinical Pearls for Identifying, Evaluating and Managing Serious In-Hospital Malnutrition Diseases, JGH Medical grand rounds, January 8, 2018.
- 2. Diabetes mellitus. Departments of Neurology, Neurosurgery and Experimental Medicine Course 531-550B: Free Radical Biomedicine. February 19, 2018
- 3. Diagnosis and Treatment of Malnutrition in Hospitalized Patients. Lecture 2/3 to one-third of the McGill Med 3 class of UGME 2019, February 20, 2018
- 4. Diagnosis and Treatment of Malnutrition in Hospitalized Patients. Lecture to 3/3 to one-third of McGill Med 3 UGME grad year 2019, February 20, May 8 and Sept 18, 201
- 5. JGH Internal medicine divisional rounds, May 10, 2018
- 6. Seven Clinical Pearls for Evaluating and Managing Malnutrition in Surgical Patients, Jewish General Hospital Surgical Grand Rounds, May 31, 2018

Kahn, Susan R

McGill University Departments

- 1. The TRAPS Trial. Journal Club Facilitator, McGill General Internal Medicine fellowship Program Academic half day. November 27, 2018
- 2. Is there a role for thrombolysis in DVT? Interpreting the results of an NIH-funded RCT Clinical Epidemiology Research Rounds, JGH. November 20, 2018.
- 3. Is there a role for thrombolysis in DVT? Results of the ATTRACT Trial. LDI Principal Investigator Rounds. May 23, 2018.
- 4. Is there a role for thrombolysis for DVT? Medical Grand rounds, Saint Mary's Hospital. April 5, 2018
- 5. The ATTRACT Study. JGH Internal Medicine Divisional Rounds. January 25, 2018.

National

- 6. La prévention des thromboembolies veineuses dans un contexte periopératoire. Department of surgery, University of Montréal. Montreal, Canada, December 12, 2018.
- 7. Roundtable facilitator, The Role of Thrombolysis in Iliofemoral VTE, Annual Education Conference, Thrombosis Canada. Montreal, Canada, October 27, 2018.
- 8. Emergent Evidence in Venous Thrombosis Management. Advances In Thrombosis Management 2018, Annual Education Conference, Thrombosis Canada. Montreal, Canada, October 27, 2018.
- 9. Entrepreneurship as a Model for a Research Career in VTE. CanVECTOR 3rd Annual Conference, Trainee & Early Career Investigator Session. Montreal, Canada, October 25, 2018.
- 10. Thromboprophylaxie chez les patients médicaux et chirurgicaux. Visiosymposium/visioconferences "Thrombose et cancer » of the Société des sciences vasculaires du Québec (SSVQ). Institut de cardiologie de Montréal. June 15, 2018

International

- 11. Special Education Session on ASH Clinical Practice Guidelines on Venous Thromboembolism. Prophylaxis of Venous Thromboembolism (VTE) in Hospitalized Medical Patients. 60th ASH Annual Meeting, San Diego, CA, December 3, 2018.
- 12. Modern compression stocking studies and pharmaco-mechanical catheter directed clot lysis failed to prevent post-thrombotic syndrome: Is there now no role for compression and interventional treatment for patients with acute DVT? VEITH 2018 Symposium, New York, USA, November 16, 2018.
- 13. Prevention of Post-Thrombotic Syndrome: Non-interventional approaches. ISTH Educational Webinar series, June 20, 2018.
- 14. Prevention of VTE Sequelae: Post-thrombotic Syndrome and Chronic Thromboembolic Pulmonary Hypertension. March 9, 2018. Thrombosis and Hemostasis Societies of North America (THSNA) Bi-Annual Meeting, San Diego, California, March 8-10, 2018.
- 15. PTS Case Discussions. Invited Discussant. 22nd European Vascular Course, Maastricht, the Netherlands, March 4, 2018.
- 16. The value of conservative treatment in PTS patients in 2018. 22nd European Vascular Course, Maastricht, the Netherlands, March 4, 2018.
- 17. What to Do Next? Lessons Learned From the ATTRACT Trial. Day of Innovation and Science, Feb 20, 2018; American Venous Forum 30th Annual Meeting, Tucson, AZ February 20-23, 2018.

Schiffrin, Ernesto L

International

- 1. "Vitamin C Therapy and the Principles of Orthomolecular Medicine". 47th International Orthomolecular Medicine Today, April 28, 2018
- 2. "Comparison of AHA/ACC hypertension guideline and Hypertension Canada guidelines". 2nd Vietnam Congress of Hypertension, Nha Trang City, Vietnam, May 12, 2018.
- 3. "Is hypertension an immunological disease?" State-of-the-Art lecture, 28th European Meeting on Hypertension and Cardiovascular Protection, Barcelona, Spain, June 11, 2018.
- 4. "Comparison of Hypertension Canada Hypertension Guidelines and 2017 AHA/ACC Hypertension Guideline" Lecture at a post-ESH meeting on hypertension guidelines, Barcelona, Spain, June 12, 2018.
- 5. "Immune mechanisms in hypertension". Lecture at XXII Congress of the InterAmerican

- Society of Hypertension, Guayaquil, Ecuador, July 14, 2018.
- 6. "Comparison of Hypertension Canada Hypertension Guidelines and 2017nAHA/ACC Hypertension Guideline" Lecture at XXII Congress of the InterAmerican Society of Hypertension, Guayaquil, Ecuador, July 14, 2018.
- 7. "Recent Advances in our Understanding of Inflammation, Immunity & Cytokines". State-of-the-Art Lecture at the AHA Hypertension Council, AHA Council on Kidney in Cardiovascular Disease and American Society of Hypertension Joint Scientific Sessions 2018, Chicago, IL, September 6, 2018.
- 8. The Canadian Guideline: Differences and Similarities to the European Guideline. State-of-the-Art Lecture at the AHA Hypertension Council, AHA Council on Kidney in Cardiovascular Disease and American Society of Hypertension Joint Scientific Sessions 2018, Chicago, IL, September 8, 2018.
- 9. "Hypertension Canada Guidelines and 2017 AHA/ACC Hypertension Guideline", Lecture at the "Symposium: Hypertension Guideline Worldwide" session at the Japanese Society of Hypertension Annual Meeting, Asahikawa, Japan, September 15, 2018.
- 10. "Immune mechanisms in hypertension". Lecture at the "Symposium: Inflammation and immunity in hypertension" session at the Japanese Society of Hypertension Annual Meeting, Asahikawa, Japan, September 15, 2018.
- 11. "Gamma/delta immune cells in hypertension". Lecture at the 18th International SHR Symposium, Shanghai, PRC, September 18, 2018.
- 12. "Novel immune mechanisms of vascular dysfunction". State-of-the-Art Lecture at the 27th Scientific Meeting of the International Society of Hypertension (ISH), Beijing, PRC, September 21, 2018.
- 13. "Debate on role of peripheral blood pressure vs. central blood pressure on stroke." 18th International Meeting of the Artery Society, Guimaraes, Portugal, October 20, 2018

Tagalakis, Vicky

McGill University Departments

1. Thrombosis and Cancer: Special Topics. Oral presentation at: Medical Grand Rounds, McGill University Health Centre, Montreal Canada, 2018.

National

- 2. AOD et cancer. Oral presentation at: Société des sciences vasculaires du Québec (SSVQ); 2018 December 1; Montreal, Canada.
- 3. Thromboembolie veineuse. Oral presentation at: Société des sciences vasculaires du Québec (SSVQ); 2018 November 29; Montreal, Canada.
- 4. Anticoagulant options for the management of acute cancer-associated thrombosis. Thrombosis Canada Interactive Webinar; 2018 October 16.
- 5. The role of direct oral anticoagulants in cancer associated thrombosis. Medical Grand Rounds; 2018 Sept 17; Lakeshore Hospital, Montreal, Quebec.
- 6. Management of Cancer-associated Thrombosis. Oral presentation at: The 2018 Annual Thrombosis Canada Education Conference; 2018 October 27; Montreal, Quebec.
- 7. Le rôle émergent des anticoagulants oraux directs (AOD) pour la thrombose associée au cancer. Oral presentation at: Société des sciences vasculaires du Québec (SSVQ); 2018 June 15; Montreal, Canada.

International

- 8. Antithrombotic Therapy: New Drugs and Technology. Moderator. 60th ASH Annual Meeting and Exposition, San Diego. December 3rd, 2018.
- 9. Thromboprophylaxis in Palliative Care. Oral presentation at: 22nd International Congress on Palliative Care; 2018 October 3; Montreal, Canada.

4. Partnerships: None to report

5. Honours, Awards, and Prizes:

Dr. Ruxandra Bunea, Received award for "TEACHER OF THE YEAR" by the McGill Internal Medicine Residents at the Jewish General Hospital.

Dr. Susan Kahn, Named Ambassador to Montreal by Palais des Congres in recognition of instrumental role in Montreal being awarded XXXI Congress with 69th Annual SSC Meeting – International Society on Thrombosis and Haemostasis (to be held June 2023)

Dr. Susan Kahn Winner of the 2018 Canadian Hematology Society Paper of the Year Award for "Aspirin or Rivaroxaban for VTE Prophylaxis after Hip or Knee Arthroplasty", NEJM 2018 Feb 22;378(8):699-707.

Dr. Susan Kahn Paper of the Month- August 2018 (for EPCAT Trial, NEJM 2018), Lady Davis Institute for Medical Research

Dr. Susan Kahn received the U.S. Clinical Research Forum Top 10 Clinical Research Achievement Award for 2018, presented at National Press Club in Washington, D.C., on April 18, 2018, for paper "Pharmacomechanical Catheter-Directed Thrombolysis for Deep-Vein Thrombosis" (N Engl J Med. 2017; 377:2240-2252). This annual competition seeks to identify major advances in nation's investment in research to benefit health and welfare of citizens

Dr. Vicky Tagalakis One Million dollar industry grant for a multi-site cancer-VTE study with 7 sites initiated for recruitment.

7. Milestones:

Dr. **Samuel Mamane** was appointed to the Department of Medicine, Division of Internal Medicine in July 2018.

8. Fundraising: None to report.

SECTION 1 – DIVISION STATUS

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.

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, Assistant Dean Faculty Development, McGill University

Dr. L John Hoffer: Professor of Medicine, McGill University.

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. Samuel Mamane: Assistant Professor of 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, Director, General Internal Medicine Division, Department of Medicine, 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

Kahn, Susan R

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

- 2. Canadian Institutes of Health Research ICRH Community Development Program Grants Sleep and Circadian Rhythms and Venous Thromboembolic Diseases Clinical \$1,500,000 (CIHR component) + \$3,800,000 (Partner support) 2015-2022
- 3. Heart and Stroke Foundation of Ontario: Age-adjusted D-dimer cutoff levels to rule out deep vein thrombosis (The ADJUST-DVT Study) \$255,538. 2015-2018
- 4. Canada Research Chairs (CRC) Tier 1 Chairs: Improving long term outcomes after venous thromboembolism (VTE); \$1,400,000 2014-2021

Schiffrin, Ernesto L

- 5. Salary Award: Canada Research Chair (Tier 1)
- 6. Current grants: CIHR First Pilot Foundation Grant for \$3,250,000, 7 years, 2015-2022. Peer reviewed (CIHR)
- 7. Multicenter trial of aprocitentan, endothelin antagonist, in resistant hypertension. Funding from IDORSIA. Member of Steering Committee and responsible for Canada and South America. Will extend from 2018-2022or 2023. Amount per patient recruited \$1,600.
- 8. Completed: Funding from Actelion for registry of resistant hypertension. 2017-2018. \$40,000. Led the study across Canada and South America.

Grant Panels and Reviews:

College of reviewers CIHR

Editorial Activities

Editor-in-Chief, American Journal of Hypertension

Editorial Board member for Hypertension, J. of Hypertension, J. of Vascular Research Reviews for Circulation, Circ. Research, Hypertension, J. of Hypertension, Nature

Communications, Scientific Reports

Member Program Committee for Annual Meeting of Hypertension Canada.

Tagalakis, Vicky

- 9. Canadian Institutes of Health Research "New Oral Anticoagulants for the Prevention of Venous Thromboembolism in High-Risk Ambulatory Cancer Patients: A Randomized Placebo-Controlled Double-Blind Clinical Trial" \$836,841.00 2012-2018
- 10. Canadian Institutes of Health Research "Statins for Venous Event Reduction in patients with venous thromboembolism \$424,298.00. 2016-2019
- 11. Canadian Institutes of Health Research: "Statistical Methods in Pharmacoepidemiology and Perinatal Epidemiology" \$1,071,720. 2015-2022
- 12. Canadian Institutes of Health Research: "ICRH Community Development Program Grants Sleep and Circadian Rhythms and Venous Thromboembolic Diseases Clinical Trials Grant 1,500,000. 2015-2020

2. Scholarly works published in the 2018 calendar year:

Hoffer, L. John

- Hoffer, LJ. Determining Protein Requirements in the Acutely Ill Patient. In: Robinson, MK, editor. Scientific American medicine. Hamilton (ON): Decker Intellectual Properties, May 2018. DOI: 10.2310/7900.9050.
- 2. **Hoffer, LJ.** Alterations in Macronutrient Metabolism in Starvation and Disease. In: Robinson, MK, editor. Scientific American medicine. Hamilton (ON): Decker Intellectual Properties, May 2018. DOI: 10.2310/7900.9006.

- 3. **Hoffer LJ.** High-protein hypocaloric nutrition for non-obese critically ill patients. Nutr Clin Pract 2018;33:325-332 (June 1, 2018)
- 4. **Hoffer LJ**, Bistrian BR, Driscoll DF. Enteral and parenteral nutrition therapy. In Jameson JL, Fauci AS, Kasper DL, Hauser, SL, Longo DL, Loscalzo J, eds. Harrison's Principles of Internal Medicine, 20 ed. 2018, pp 2324-2332

Kahn, Susan R.

- 13. Schünemann HJ, Cushman M, Burnett AE, **Kahn SR**, Beyer-Westendorf J, Spencer FA, Rezende SM, Zakai NA, Bauer KA, Dentali F, Lansing J, Balduzzi S, Darzi A, Morgano GP, Neumann I, Nieuwlaat R, Yepes-Nuñez JJ, Zhang Y, Wiercioch W. American Society of Hematology 2018 guidelines for management of venous thromboembolism: prophylaxis for hospitalized and non-hospitalized medical patients. Blood Advances. 2018 Nov;2(22):3198-3225.
- 14. Murad MH, **Kahn SR**. Response. Chest. 2018 Aug; 154(2):460-461.
- 15. Anderson DR, Doucette S, **Kahn SR.** Venous Thromboembolism Prophylaxis after Hip or Knee Arthroplasty. Research letter. NEJM 2018 May 10; 378(19):1848-1849.
- 16. Ma KA, **Kahn SR**, Akaberi A, Dennie C, Rush C, Granton JT, Anderson D, Wells PS, Rodger MA, Solymoss S, Kovacs MJ, Rudski L, Shimony A, Hernandez P, Aaron SD, Pena E, Abikhzer G, Hirsch AM; for the ELOPE Study group. Serial imaging after pulmonary embolism and correlation with functional limitation at 12 months: Results of the ELOPE Study. Res Pract Thromb Haemost. 2018; 2(4):670-677.
- 17. **Kahn SR,** Morrison DR, Diendéré G, Piché A, Filion KB, Klil-Drori AJ, Douketis JD, Emed J, Roussin A, Tagalakis V, Morris M, GeertsW. Interventions for implementation of thromboprophylaxis in hospitalized patients at risk for venous thromboembolism. Cochrane Database of Systematic Reviews 2018, 4:CD008201.
- 18. Rabinovich A, **Kahn SR.** How I treat the post-thrombotic syndrome. Blood 2018 May 17;131(20):2215-2222.
- 19. Galanaud JP, Blaise S, Sevestre MA, Terrisse H, Pernod G, Gaillard C, Genty C, Monreal M, Rabah Y, **Kahn SR**, Quéré I, Bosson JL; OPTIMEV-SFMV investigators. Long-term outcomes of isolated superficial vein thrombosis in patients with active cancer. Thromb Res. 2018 Apr 20. [Epub ahead of print].
- 20. Wik HS, Enden TR, Ghanima W, Engeseth M, **Kahn SR**, Sandset PM. Diagnostic scales for the post-thrombotic syndrome. Thromb Res 2018 Apr;164:110-115.
- 21. Rodger M, Langlois N, Middeldorp S, **Kahn SR**, Sandset PM, Brighton T, Huisman M, Meyer G, Konstantinides S, Ageno W, Morange P, Garcia D, Kreuziger LB, Young L, Key N, Monreal M, Jiménez D. Initial strides for invent-VTE: Towards global collaboration to accelerate clinical research in venous thromboembolism. Thrombosis Res, March 2018;163:128-131.
- 22. Anderson D, Dunbar M, Murnaghan J, **Kahn S**, Gross P, Forsythe M, Pelet S, Fisher W, Belzile E, Dolan S, Crowther M, Bohm E, MacDonald S, Gofton W, Kim P, Zukor D, Pleasance S, Andreou P, Pantelis; Doucette S, Theriault C, Abianui A, Carrier M, Kovacs M, Rodger M, Wells P, Vendittoli P-A. Aspirin or Rivaroxaban for VTE Prophylaxis Post-Hip or Knee Arthroplasty. NEJM 2018 Feb 22;378(8):699-707.
- 23. **Kahn SR,** Pengo V. Special issue: Late consequences of venous thromboembolism. Thromb Res. 2018 Thromb Res. 2018 Apr;164:99.
- 24. Rabinovich A, Ducruet T, **Kahn SR**; SOX Trial investigators. Development of a clinical prediction model for the postthrombotic syndrome in a prospective cohort of patients with proximal deep vein thrombosis. J Thromb Haemost 2018 Feb;16(2):262-270.

- 25. Galanaud JP, Bertoletti L, Amitrano M, Fernández-Capitán C, Pedrajas JM, Rosa V, Barrón M, Lorenzo A, Madridano O, Quéré I, **Kahn SR**, Prandoni P, Monreal M; RIETE registry investigators. Predictors of Post-Thrombotic Ulcer after Acute DVT: The RIETE Registry. Thromb Haemost. 2018 Feb;118(2):320-328.
- 26. Wan T, Rodger M, Zeng W, Robin P, Righini M, Kovacs MJ, Tan M, Carrier M, Kahn SR, Wells PS, Anderson DR, Chagnon I, Solymoss S, Crowther M, White RH, Vickars L, Bazarjani S, Le Gal G. Residual pulmonary embolism as a predictor for recurrence after a first unprovoked episode: Results from the REVERSE cohort study. Thromb Res, 2018Feb;162:104-109.

Lipes, Jed

- 1. Chetrit M, **Lipes J**, Mardigyan V. A Practical Approach to Pericardiocentesis with Peri-Procedural use of ultrasound. Can J Cardiol. 2018 Sep;34(9):1229-1232
- 2. Peretz-Larochelle M, Blissett S, **Lipes J**, Kovacina B, Afilalo J, Rudski L. Clot or Not? CASE (Phila). 2018 Feb 14;2(2):47-50.

Mamane, Samuel

- 1. Psoas Muscle Area in Healthy Adults: Effect of Normal Aging and Derivation of Reference Values. **Samuel Mamane**, Christos Galatas, Wayne Lok, Mina Girgis, Chams Cherid, Louis Mullie, Amanda Trnkus, Antoinette Colacone, Xiaoqing Xue, Marc Afilalo, Jonathan Afilalo. J Frailty Aging 2018;7(S1):61-91. Conference: ICFSR: 8th International Conference on Frailty & Sarcopenia Research. Miami, CA, USA.
- 2. Semi-automated segmentation of psoas muscle area in older adults undergoing aortic valve replacement Wayne Lok Ok Choo, **Samuel Mamane**, Louis Mullie, Matthew Ades, Amanda Trnkus, Jose Morais, Giuseppe Martucci, Nicolo Piazza, Jonathan Afilalo J Frailty Aging 2018;7(S1):92-173. Conference: ICFSR: 8th International Conference on Frailty & Sarcopenia Research. Miami, CA, USA.

Schiffrin, Ernesto

- 1. Coelho SC, Berillo O, Ouerd S, Fraulob-Aquino JC, Caillon A, Barhoumi T, Offermanns S, Paradis P, **Schiffrin EL**. Three-month endothelial human endothelin-1 overexpression causes blood pressure elevation and vascular and kidney injury. Hypertension. 2018;71:208-216. DOI: 10.1161/ HYPERTENSIONAHA.117.09925.PMID: 29133362
- 2. **Schiffrin EL.** Year in Clinical Hypertension from other pages. Amer J Hypertens. 2018;31:136–138. doi.org/10.1093/ajh/hpx206. PMID: 29186309.
- 3. **Schiffrin EL.** Hypertension in 2017: Novel mechanisms of hypertension and vascular dysfunction. Nat Rev Nephrol. 2018;14:73-74. doi: 10.1038/nrneph.2017.178. PMID: 29292372.
- 4. Flack JM, Calhoun DA, **Schiffrin EL.** The New ACC/AHA Hypertension Guidelines for the prevention, detection, evaluation, and management of high blood pressure in adults (Editorial). Amer J Hypertens. 2018; 31:133-135. doi.org/10.1093/ajh/hpx207. PMID: 29228096.
- 5. **Schiffrin EL.** Global Impact of the 2017 American College of Cardiology/American Heart Association Hypertension Guidelines: A Perspective From Canada. Circulation. 2018;137:883-885. doi: 10.1161/CIRCULATIONAHA.117.032849. PMID: 29483168
- 6. **Schiffrin EL.** Second Opinion: Does endothelin-1 raise or lower blood pressure in humans? Nephron. 2018;139:47-50. DOI: 10.1159/000487346. PMID: 29448245.

- 7. **Schiffrin EL**. In Memoriam Jacques Genest Sr., C.C., MD, MACP, FRCPC. Amer J Hypertens. 2018; 31:385-386. DOI:10.1093/ajh/hpy012.
- 8. **Schiffrin EL.** In memoriam: Jacques Genest Sr. Hypertension. 2018;71:548-549. DOI: 10.1161/HYPERTENSIONAHA.118.10875.
- 9. Paradis P, **Schiffrin EL.** Editorial: CXCL1-CXCR2 lead monocytes to the heart of the matter. Eur Heart J. 2018; 39:1832-1834.doi:10.1093/eurheartj/ehy114. PMID: 29528395.
- Cerrato R, Crabtree M, Antoniades C, Kublickiene K, Schiffrin EL, Channon KM, Böhm F. Effects of Endothelin-1 on intracellular tetrahydrobiopterin levels in vascular tissue. Scandinavian Cardiovasc J. 2018. DOI: 10.1080/14017431.2018.1453942. PMID: 29566572.
- 11. Daskalopoulou SS, Rabi DM, **Schiffrin EL**, Feldman RD, Padwal RS, Tremblay G, Khan NA. Hypertension Guidelines in the United States and Canada. Are We Getting Closer? Hypertension.2018Jun;71(6):976-978.doi: 10.1161/HYPERTENSIONAHA.117.10772.PMID: 29686013
- 12. Caillon A, Paradis P, **Schiffrin EL**. Role of immune cells in hypertension. Brit J Pharmacol. doi: 10.1111/bph.14427.
- 13. **Schiffrin EL.** Proceedings of the 11th International Workshop on Structure and Function of the Vascular System, 8–10 February 2018 in Paris, France. Amer J Hypertens. 2018; doi: 10.1093/ajh/hpy070
- 14. Lulita MF, Duchemin S, Vallerand D, Barhoumi T, Alvarez F., Istomine R, Laurent C, Youwakim J, Paradis P, Arbour N, Piccirillo CA, **Schiffrin EL**, Girouard H. CD4+ Regulatory T lymphocytes prevent impaired cerebral blood flow in angiotensin II-induced hypertension. DOI:10.1161/JAHA.118.009372.
- 15. Higaki A, Caillon A, Paradis P, **Schiffrin EL.** Innate and Innate-like Immune System in Hypertension and Vascular Injury. Current Hypert Rep. DOI: 10.1007/s11906-019-0907-1.
- 16. Calhoun A, **Schiffrin EL**, Flack JM. Resistant Hypertension: An Update. Editorial. Amer J Hypert. 31:1-3.doi:10.1093/ajh/hpy156.
- 17. Nerenberg KA, Zarnke KB, Leung AA, Dasgupta K, Butalia S, McBrien K, Harris KC, Nakhla M, Cloutier L, Gelfer M, Lamarre-Cliche M, Milot A, Bolli P, Tremblay G, McLean D, Padwal RS, Tran KC, Grover S, Rabkin SW, Moe GW, Howlett JG, Lindsay P, Hill MD, Sharma M, Field T, Wein TH, Shoamanesh A, Dresser GK, Hamet P, Herman RJ, Burgess E, Gryn SE, Grégoire JC, Lewanczuk R, Poirier L, Campbell TS, Feldman RD, Lavoie KL, Tsuyuki RT, Honos G, Prebtani APH, Kline G, Schiffrin EL, Don-Wauchope A, Tobe SW, Gilbert RE, Leiter LA, Jones C, Woo V, Hegele RA, Selby P, Pipe A, McFarlane PA, Oh P, Gupta M, Bacon SL, Kaczorowski J, Trudeau L, Campbell NR, Hiremath S, Roerecke M, Arcand J, Ruzicka M, Prasad GVR, Vallée M, Edwards C, Sivapalan P, Penner SB, Fournier A, Benoit G, Feber J, Dionne J, Magee LA, Logan AG, CotéA-M, Rey E, Firoz T, Kuyper LM, Gabor JY, Townsend RR, for Hypertension Canada. Hypertension Canada's 2018 Guidelines for Diagnosis, Risk Assessment, Prevention, and Treatment of Hypertension in Adults and Children. Canadian Journal of Cardiology. 2018; doi: 10.1016/j.cjca.2018.02.022.
- 18. **Schiffrin EL.** New blood pressure cut-offs, prevalence of hypertension and control, and mood disorders: Are patients benefitting from lower cut-offs for defining hypertension? Editorial. Eur Heart J. doi: 10.1093/eurheartj/ehj891.
- 19. **Schiffrin EL.** Immune mechanisms in vascular remodeling in hypertension. Microcirculation in Cardiovascular Diseases. Rosei E, Heagerty AM, and Rizzoni D, Eds. Springer Nature

- 1. Carrier M, Abou-Nassar K, Mallick R, **Tagalakis V,** Shivakumar S, Schattner A, Kuruvilla P, Hill D, Spadafora S, Marquis K, Trinkaus M, Tomiak A, Lee AYY, Gross PL, Lazo-Langner A, El-Maraghi R, Goss G, Le Gal G, Stewart D, Ramsay T, Rodger M, Witham D, Wells PS; AVERT Investigators. Apixaban to Prevent Venous Thromboembolism in Patients with Cancer. N Engl J Med. 2018 Dec 4. doi: 10.1056/NEJMoa1814468. [Epub ahead of print].
- 2. Carrier M, Blais N,Crowther M, Kavan P, Le Gal G, Moodley O, Shivakumar S, **Tagalakis** V, Wu C, Lee A.Y.Y. Treatment algorithm in cancer-associated thrombosis: Canadian expert consensus. Current Oncology. 2018; 25(5):329-337.
- 3. Laskov I, Kessous R, Abitbol J, Kogan L, Badeghiesh A, **Tagalakis V**, Cohen S, Salvador S, Lau S, Gotlieb WH; SOGC Communities of Practice. Risk of thromboembolic disease with cost estimates in patients undergoing robotic assisted surgery for endometrial cancer and review of the literature. J Obstet Gynaecol Can. 2018 Sep 24. pii: S1701-2163(18)30271-8.
- 4. **Tagalakis V**, Go B. Thrombose et cancer quoi de neuf? Médecin du Québec 2018; 53(5): 47-52.
- 5. van Es N, Louzada M, Carrier M, **Tagalakis V,** Gross PL, Shivakumar S, Rodger MA, Wells PS. Predicting the risk of recurrent venous thromboembolism in patients with cancer: A prospective cohort study. Thrombosis Research 2018; 163:41-46.
- 6. Klil-Drori A, **Tagalakis V.** Direct Oral Anticoagulants in End-Stage Renal Disease. Seminars in Thrombosis and Hemostasis 2018.

Published Abstracts (Research posters or oral presentations at scientific meetings)

Respectfully Submitted

Rubin Becker, MD Chief, Division of Internal Medicine