

Annual Report
Division of Internal Medicine
Department of Medicine - Jewish General Hospital
January 1 - December 31, 2017

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.

Of note are the following appointments:

- **Dr. Beth Cummings** was nominated Associate Dean of Undergraduate Medical Education, Faculty of Medicine, McGill University
- **Vicky Tagalakis** was nominated Director, Division of General Internal Medicine, McGill University.
- **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.
- **Ernesto Schiffrin** received a CIHR First Pilot Foundation Grant in the amount of \$3,250,000 for 7 years. “Vascular remodeling in hypertension and cardiometabolic disease: from mice to humans”

1. Research and Publications:

Internal Medicine Division for 2017 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. Dr. Schiffrin received \$3,250,000.00 over seven years for CIHR First Pilot Foundation Grant.

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:

1. Mueller C, Cyr G, Bank I, Bhanji F, Birnbaum L, Boillat M, Bolduc ME, Chankowsky J, Constantin E, **Cummings BA**, Fisher R, Legault P, Marchand H, Monton L, Rudkin T, Sabsabi B, Soilis N, Zigman D, Aggarwal R (2017). The Steinberg Centre for Simulation and Interactive Learning at McGill University. *Journal of Surgical Education*. Published online: July 5, 2017. <http://dx.doi.org/10.1016/j.jsurg.2017.05.022>
2. Young M, **Cummings BA** & St-Onge C (2017). Ensuring the quality of multiple-choice exams administered to small cohorts: A cautionary tale. *Perspectives in Medical Education*. 6:21. doi:10.1007/s40037-016-0322-0
3. **Elizov M**, Card S, Clark HD, Kassam, N. The Evolution of General Internal Medicine (GIM) in Canada: International Implications *Journal of General Internal Medicine* May 2017, Volume 32, Issue 5, pp 576–581

4. Barhoumi T, Mian MOR, Fraulob-Aquino JC, Idris-Khodja N, Huo KG, Rehman A, Ebrahimian T, Lehoux S, Paradis P, **Schiffrin EL**. Matrix metalloproteinase-2 knockout prevents angiotensin II-induced endothelial dysfunction and vascular remodeling, oxidative stress and inflammation. *Cardiovasc Res*. 2017; in press. DOI: 10.1093/cvr/cvx115.
5. Caillon A, Mian MOR, Fraulob-Aquino JC, Huo K-G, Barhoumi T, Ouerd S, Sinnaeve PR, Granger CB, Paradis P, **Schiffrin EL**. Gamma delta T cells mediate angiotensin II-induced hypertension and vascular injury. *Circulation*. 2017; 135:2155–2162. doi.org/10.1161/CIRCULATIONAHA.116.027058.

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:

Kahn, Susan was named «Grands noms de la médecine au Québec» (Great Name in Quebec Medicine) by Fédération des médecins spécialistes du Québec (FMSQ).

Teaching Activities:

Schiffrin, Ernesto L

Repeated invitations to give CPD lectures

- Quantity of formal teaching:
- Courses for Internal Medicine Clinical Scholars Program on Clinical Research (1h),
- CIP (2h)
- 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 per week).
- Chair of Medical Grand Rounds at JGH, the major CME accredited activity in the hospital.

Research trainee supervision

- (MSc and PhD graduate students, postdoctoral fellows, medical students, residents).
- Thesis committees
- 1-2 hrs per week per trainee
- 2 PhD students received their PhDs, 1 PhD student committee for a 3rd PhD student.
- 2 MSc students
- 2 Postdocs

Tagalakis, Vicky

- 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
- Supervision of Resident Justin Tabah, “Appropriateness of direct oral anti-coagulant prescriptions in tertiary care Emergency Department outpatients with acute Deep Vein Thrombosis” Awarded: CanVECTOR 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
- The Management of Venous Thromboembolism in 2017.

3. Involvement in the community:

Hoffer, L John

1. 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)
2. 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)

Kahn, Susan R

1. Management of Distal DVT. JGH GIM rounds. February 9, 2017.
2. ELOPE study: Evaluation of long-term outcomes after PE. McGill General Internal Medicine Division Rounds. February 1, 2017.
3. Anticoagulation is a double-edged sword. JGH Thrombosis Rounds. January 24, 2017.
4. Methodology of clinical decision rules. McGill GIM Clinical Scholars Program. January 24, 2017.
5. The ELOPE study: Evaluation of longterm outcomes after pulmonary embolism. Clinical Epidemiology Research Rounds, JGH. January 10, 2017.

Schiffrin, Ernesto L

1. “Debate: Animal models are or not an appropriate for study of human hypertension”. Invited speaker, Quebec Hypertension Society Annual Meeting, Montreal, QC, January 17, 2017.
2. “Vascular remodeling in hypertension: From structure to therapeutic targets with a systems biology approach”. Medical Grand Rounds, Department of Medicine, Miller School of Medicine, University of Miami, Miami, FL, March 22, 2017.
3. "How low should BP be lowered and a new definition of hypertension following SPRINT". Invited lecture to “Capri Cardiovascular Conference 2.0”, Capri, Italy, April 7, 2017.
4. “Canada & ISH Position on SPRINT”. Invited lecture, InterAmerican Society of Hypertension Scientific Meeting, Mendoza, Argentina, April 20, 2017.
5. “Messages to leave the meeting with: the news regarding the SPRINT trial and Guidelines”. Invited lecture, Argentine Society of Hypertension Scientific Meeting, Mendoza, Argentina, April 22, 2017.
6. “Immune cells in hypertension: the good, the bad and the ugly”. Invited State-of-the-Art Lecture at Experimental Biology 2017 Featured Topic, American Physiological Society Cardiovascular Section, Chicago, IL, USA, April 23, 2017.
7. “Inflammation and immune system in the hypertensive injury”. Invited lecture at “International Symposium: From Arterial Hypertension to Heart Disease” organized by Hypertension Research Center – Federico II University of Naples, supported by the Fondazione Internazionale Menarini, Naples, Italy, May 4, 2017.
8. “Immune system and vascular injury in hypertension”. Invited lecture at the 2017 Oriental Congress of Cardiology, Shanghai, P.R. of China, May 25-28, 2017.
9. “Primary aldosteronism”, invited speaker at International Society of Hypertension-Asia Pacific Society of Hypertension-Chinese Hypertension League Hypertension Summer School, Shanghai, P.R. of China, August 1, 2017.

10. “Who to investigate”, invited speaker at International Society of Hypertension-Asia Pacific Society of Hypertension-Chinese Hypertension League Hypertension Summer School, Shanghai, P.R. of China, August 4, 2017.
11. “Pheochromocytoma”, invited speaker at International Society of Hypertension-Asia Pacific Society of Hypertension-Chinese Hypertension League Hypertension Summer School, Shanghai, P.R. of China, August 4, 2017.
12. “Endothelin, immune system and hypertension”. Invited keynote lecture, Endothelin-15 Scientific Meeting, Prague, October 7, 2017.
13. “Blood Pressure Measurement: Which one matters?” Invited speaker at Cardiovascular Seminar, 2017 American Heart Association Scientific Sessions, Anaheim, CA, USA, November 12, 2017.
14. “Gamma/Delta T cells in Hypertension”. Invited Speaker, Cardiovascular Seminar entitled “Inflammation and Immunity in the Pathophysiology of Hypertension”, 2017 American Heart Association Scientific Sessions, Anaheim, CA, USA, November 13, 2017.

Tagalakis, Vicky

McGill University Departments

Tagalakis V. The SOME trial. Oral presentation at: Epidemiology Rounds, Center for Clinical Epidemiology, Jewish General Hospital, McGill University, Montreal, Canada, 2017.

International

Tagalakis V. The Complexity of Cancer and Thrombosis. Oral presentation at: Chilean Hematologic Society; 2017 November 17-19; Santiago, Chile.

4. Partnerships: None to report

5. Honours, Awards, and Prizes:

Dr. Ruxandra Bunea was awarded Teacher of the Year Transition to Clinical Practice Award by McGill Faculty of Medicine.

Dr. Michelle Elizov was named Assistant Dean Faculty Development. Dr. Elizov was also honoured as the Osler Fellow to the class of 2017

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. Susan R. Kahn received a seven-year Foundation grant funded by CIHR for her research project entitled “Improving long-term outcomes after venous thromboembolism (VTE)” as Principal Investigator starting July 1, 2015 ending June 30, 2022 for a total amount of \$2,050,824.

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. 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.

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

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, 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 Lipos: 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

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)/ Anderson A/ Berry R/ Camlioglu E/Cushman M/ Douketis J/ Emed J/ Filion K/ Galanaud J-P/ Gandara E/ Garg A/ Geerts W/ Ginsberg J/ Guidon E/ Kearon C/ Kovacs M/ Lazo-Langner A/ Morris M/ Prandoni P/ Ramsay T/ Rodger M/ Roussin A/ Schulman S/ Shapiro S/ Shariff S/ Solymoss S/ Tagalakis V/ Wakefield T/ Wells P/ Wu C; \$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)/ Rodger M (Co-PI)/ Afilalo M/ Anderson D/ Bates S/ Blostein M/ Carrier M/ Castellucci L/ Chagnon I/ Chitsike R/ Conway E/ Crowther M/ De Witt/Hogg K/ Demers C/ Dolan S/ Douketis J/ Duffett L/ Emed J/ Fergusson D/ Gandara E/ Geerts W/ Ginsberg J/ Gonsalves C/ Grad R/ Gross P/ Guindon E/ Haynes B/ Hirsch A/ Iorio A/ Kassis J/ Kearon C/ Kovacs M/ Lang E/ Lazo-Langner A/ Le Gal G/ Lee A/ Levinson A/ Levy A/ Liaw P/ Lim W/ Linkins L-A/ Louzada M/ McLeod A/ Moodley O/ Pai M/ Pluye P/ Ramsay T/ Ray J/ Roussin A/ Routhier N/ Schulman S/ Selby R/ Shivakumar S/ Siegal D/ Smith R/ Solymoss S/ Tagalakis V/ Takach Lapner S/ Thavorn K/ Weitz J/ Wells P/ Wu C/ Zarychanski R; \$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)/ Anderson D/ De Wit K/ Kahn SR (co-applicant)/ Kearon C/ Ramsay T/ Rodger M/ Righini M/ Shivakumar S/ Wells P; \$255,538

2014-2021: Canada Research Chairs (CRC)- Tier 1 Chairs: Improving long term outcomes after venous thromboembolism (VTE); \$1,400,000

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)/ Afilalo M/ Bates S/ Carrier M/ Douketis JD/ Gafni A/ Hirsch A /Julian JA/ Kahn SR (co-applicant)/ Kovacs MJ/ Lang ES/ Lazo-Langner A/ Le Gal G/ Linkins L-A/ Rodger MA/ Schulman S/ Shivakumar SP/ Takach Lapner S/ Wells PS/ Wu CM ; \$981,032

Schiffrin, Ernesto L

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

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” \$3,265,000

Tagalakis, Vicky

2012-2018: 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” Wells (PI) / Kahn / Anderson / Kovacs / Louzada / Carrier / Rodger / Gross / Lee / Ramsay / Tagalakis (Co-Investigator) \$836,841.00

2016-2019: Canadian Institutes of Health Research “StAtins for Venous Event Reduction in patients with venous thromboembolism (The SAVER Pilot Randomized Trial)” Rodger (PI) / Fergusson / Gandara / Kahn / Kearon / Kovacs / Le Gal / Ramsay / Shivakumar / Tagalakis (Co-Investigator) / Thavorn \$424,298.00

2015-2022: Canadian Institutes of Health Research: “Statistical Methods in Pharmacoepidemiology and Perinatal Epidemiology” Platt (PI) / Ernst / Kramer / Moodie / Suissa / 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) / Afilalo / Anderson / Bates / Blostein / Carrier / Castellucci / Chagnon / Chitsike / Conway / Crowther / Hogg / Demers / Dolan / Douketis / Duffett / Emed / Fergusson / Esteban / Geerts / Ginsberg / Gonsalves / Grad / Gross / Guindon / Haynes / Hirsch / Iorio / Kassis / Kearon / Kovacs / Lang / Langlois / Lapner / LazoLangner / Le Gal / Levinson / Levy / Lee / Liaw / Lim / Linkins / Louzada / McLeod / Moodley / Pai / Pluye / Ramsay / Ray / Roussin / Routhier / Schulman / Selby / Shivakumar / Siegal / Smith / Solymoss / Tagalakis (Co-Investigator) / Thavorn / Weitz / Wells / Wu / Zarychanski; \$1,500,000

Personal Support Awards

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

2. Scholarly works published in the 2017 calendar year:

Hoffer, L. John

1. Hoffer LJ, Parenteral nutrition: amino acids. *Nutrients* 2017, 9, 257; doi 10.3390/nu9030257
2. Hoffer LJ, Dickerson RN, Martindale RG, McClave SA, Gautier JBO. Will we ever agree on protein requirements in the intensive care unit? *Nutr Clin Pract* 2017; 32 (1 suppl): 94S-100S.

- Hurt RT, McClave SA, Martindale RG, Ochoa Gautier JB, Coss-Bu JA, Dickerson RN, Heyland DK, Hoffer LJ, Moore FA, Morris CR et al. Summary points and consensus recommendations from the international protein summit. *Nutr Clin Pract* 2017; 32 (1suppl):142S-151S

Kahn, Susan R.

- Vedantham S, Goldhaber SZ, Julian JA, Kahn SR, Jaff MR, Cohen DJ, Magnuson E, Razavi MK, Comerota AJ, Gornik HL, Murphy TP, Lewis L, Duncan JR, Nieters P, Derfler MC, Filion M, Gu CS, Kee S, Schneider J, Saad N, Blinder M, Moll S, Sacks D, Lin J, Rundback J, Garcia M, Razdan R, VanderWoude E, Marques V, Kearon C; ATTRACT Trial Investigators. Pharmacomechanical Catheter-Directed Thrombolysis for Deep-Vein Thrombosis. *NEJM* 2017 Dec 7;377(23):2240-2252.
- *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* 2017 Nov 28. [Epub ahead of print]
- Ikesaka RT, Kahn SR, Galanaud J-P, Vazquez FJ, Roche-Nagle G, Carrier M, Le Gal G, Rodger M, Gandara E. The importance of post thrombotic syndrome as an outcome after deep venous thrombosis: A survey of Canadian thrombosis clinicians. *Thrombosis Research* 2017 Nov 1;159(Supplement C):13-15.
- Wik HS, Enden TR, Ghanima W, Engeseth M, Kahn SR, Sandset PM. Diagnostic scales for the post-thrombotic syndrome. *Thromb Res* 2017 Oct 28. [Epub ahead of print].
- Farren-Dai L, Carrier M, Kovacs J, Rodger M, Kovacs MJ, Le Gal G; REVERSE investigators (includes Kahn SR). Association between remote major venous thromboembolism risk factors and the risk of recurrence after a first unprovoked episode. *J Thromb Haemost* 2017 Oct;15(10):1977-1980.
- Kahn SR, Akaberi A, Granton JT, Anderson DR, Wells PS, Rodger MA, Solymoss S, Kovacs MJ, Rudski L, Shimony A, Dennie C, Rush C, Hernandez P, Aaron SD, Hirsch AM. Quality of Life, Dyspnea and Functional Exercise Capacity Following a First Episode of Pulmonary Embolism: Results of the ELOPE Cohort Study. *Am J Med*. 2017 Aug;130(8):990.e9-990.e21.
- Galanaud JP, Monreal M, Kahn SR. Epidemiology of the post-thrombotic syndrome. *Thromb Res*. 2017 Jul 24. [Epub ahead of print].
- Wik HS, Ghanima W, Sandset PM, Kahn SR. Scoring systems for post-thrombotic syndrome. *Seminars in Thrombosis and Hemostasis* 2017 Jul;43(5):500-504.
- Galanaud JP, Sevestre MA, Pernod G, Kahn SR, Genty C, Terrisse H, Brisot D, Gillet JL, Quéré I, Bosson JL. Long-term Risk of Venous Thromboembolism Recurrence after Isolated Superficial Vein Thrombosis. *J Thromb Haemost* 2017 Jun;15(6):1123-1131.
- Kahn SR, Hirsch AM, Akaberi A, Hernandez P, Anderson DA, Wells PS, Rodger M, Solymoss S, Kovacs MJ, Rudski L, Shimony A, Dennie C, Rush C, Geerts WH, Aaron SD, Granton JT. Functional and Exercise Limitations after a First Episode of Pulmonary Embolism: Results of the ELOPE prospective cohort study. *Chest* 2017 May; 151(5):1058-1068.
- Galanaud J-P, Sevestre MA, Pernod G, Genty C, Richelet S, Kahn SR, Quéré I, Boulon C, Terrisse H, Quéré I, Bosson JL. Long-term outcomes of cancer-related isolated distal deep-vein thrombosis: The OPTIMEV study. *J Thromb Haemost* 2017 May;15(5):907-916.

12. *Ma K, Kahn SR, Hirsch AM, Akaberi A, Anderson DR, Wells PS, Rodger M, Solymoss S, Kovacs MJ, Rudski L, Shimony A, Dennie C, Rush C, Hernandez P, Aaron SD, Granton JT. N-terminal of prohormone brain natriuretic peptide predicts functional limitation one year following pulmonary embolism: Results from the ELOPE study. Thromb Res. 2017 May;153:47-49.
13. Kahn SR. Review: Thrombolysis for DVT reduces postthrombotic syndrome but increases bleeding complications. Ann Intern Med 2017 Mar 21;166(6):JC30.
14. Galanaud JP, Sevestre MA, Pernod G, Kahn SR, Genty C, Terrisse H, Brisot D, Gillet JL, Quéré I, Bosson JL. Long-term Risk of Venous Thromboembolism Recurrence after Isolated Superficial Vein Thrombosis. J Thromb Haemost 2017 Jun;15(6):1123-1131.
15. Rodger MA, Le Gal G, Anderson DR, Schmidt J, Pernod G, Kahn SR, Righini M, Mismetti P, Kearon C, Meyer G, Elias A, Ramsay T, Ortel TL, Huisman MV, Kovacs MJ; REVERSE II Study Investigators. Validating the HERDOO2 rule to guide treatment duration for women with unprovoked venous thrombosis: multinational prospective cohort management study. BMJ. 2017 Mar 17;356:j1065.
16. Weitz JI, Lensing AWA, Prins MH, Bauersachs R, Beyer-Westendorf J, Bounameaux H, Brighton TA, Cohen AT, Davidson BL, Decousus H, Freitas MCS, Holberg G, Kakkar AK, Haskell L, van Bellen B, Pap AF, Berkowitz SD, Verhamme P, Wells PS, Prandoni P; EINSTEIN CHOICE Investigators (includes Kahn SR). Rivaroxaban or Aspirin for Extended Treatment of Venous Thromboembolism. NEJM 2017 Mar 30;376(13):1211-1222.
17. *Rabinovich A, Kahn SR. The postthrombotic syndrome: current evidence and future challenges. J Thromb Haemost 2017 Feb;15(2):230-241.
18. Sista AK, Miller LE, Kahn SR, Kline JA. Persistent right ventricular dysfunction, functional capacity limitation, exercise intolerance, and quality of life impairment following pulmonary embolism: Systematic review with meta-analysis. Vasc Med 2017 Feb;22(1):37-43.

Schwartz, Blair

Miller CS and Schwartz BC, A very cool electrocardiogram: Osborn waves of hypothermia.

Schiffrin, Ernesto

1. **Schiffrin EL**, Calhoun DA, Flack JM, Ito S, Webb RC. Update from the Editors to our readers. Amer J Hypert. 2017;30(1):1-2. doi: 10.1093/ajh/hpw141. PMID: 27940428.
2. **Schiffrin EL**. A SPRINT to lower blood pressure targets? In “First-line management of hypertension. Medicographia #131. 2017;39(2).
3. *Idris-Khodja N, Ouerd S, Trindade M, Gornitsky J, Rehman A, Barhoumi T, Offermanns S, Gonzalez FJ, Neves MF, Paradis P, Schiffrin EL*. Vascular smooth muscle cell peroxisome proliferator-activated receptor γ protects against endothelin-1-induced oxidative stress and inflammation. J Hypertens. 2017;35(7):1390–1401. doi: 10.1097/HJH.0000000000001324. [Feb 22. Epub ahead of print]. PMID: 28234672.
4. *Caillon A, Mian MOR, Fraulob-Aquino JC, Huo K-G, Barhoumi T, Ouerd S, Sinnaeve PR, Paradis P, Schiffrin EL*. Gamma Delta T Cells Mediate Angiotensin II-Induced Hypertension And Vascular Injury. Circulation. 2017; 135:2155–2162. doi.org/10.1161/CIRCULATIONAHA.116.027058. Originally published March 22, 2017. PMID: 28330983

5. Leung AA, Daskalopoulou SS, Dasgupta K, McBrien K, Butalia S, Zarnke KB, Nerenberg K, Harris KC, Nakhla M, Cloutier L, Gelfer M, Lamarre-Cliche M, Milot A, Bolli P, Tremblay G, McLean D, Tobe SW, Ruzicka M, Burns KD, Vallée M, Prasad GV, Gryn SE, Feldman RD, Selby P, Pipe A, **Schiffirin EL**, McFarlane PA, Oh P, Hegele RA, Khara M, Wilson TW, Penner SB, Burgess E, Sivapalan P, Herman RJ, Bacon SL, Rabkin SW, Gilbert RE, Campbell TS, Grover S, Honos G, Lindsay P, Hill MD, Coutts SB, Gubitz G, Campbell NR, Moe GW, Howlett JG, Boulanger JM, Prebtani A, Klein G, Leiter LA, Jones C, Côté AM, Woo V, Kaczorowski J, Trudeau L, Tsuyuki R T, Hiremath S, Drouin D, Lavoie KL, Hamet P, Grégoire JC, Lewanczuk R, Dresser GK, Sharma M, Reid D, Lear SA, Moullec G, Gupta M, Magee LA, Logan AG, Dionne J, Fournier A, Benoit G, Feber J, Poirier L, Padwal RS, Rabi DM for Hypertension Canada. Hypertension Canada's 2017 Guidelines for Diagnosis, Risk Assessment, Prevention, and Treatment of Hypertension in Adults. *Can J Cardiol*. 2017;33:557-576. DOI: <http://dx.doi.org/10.1016/j.cjca.2017.03.005>. Epub 2017 Mar 10. PMID: 28449828.
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Respectfully Submitted

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