

Annual Report
Division of Rheumatology
Department of Medicine - Jewish General Hospital
January 1 - December 31, 2019

Introduction:

A new member of the division is Dr. Valerie Leclair who joined in the spring of 2018. She is currently pursuing a PhD in clinical epidemiology at the Karolinska Institute in Sweden.

Divisional members provide clinical services on Clinical Teaching Unit (CTU), out-patient clinic coverage, consult service as well as supervision of Internal Medicine residents and Rheumatology fellows as follows:

Consult service 3 months/year (Dr. Baron, Dr. Berkson, Dr. Fallavollita, Dr. Gyger); Dr. Hudson Dr.

Leclair: 1 month

Out-patient clinic (Dr. Baron seven ½ days per week; Dr. Berkson six ½ days per week; Dr. Fallavollita six ½ days per week; Dr. Gyger seven ½ days per week; Dr. Hudson 1 day per week)

Musculoskeletal ultrasound (Dr. Fallavollita 1 day)

Video capillaroscopy (Dr. Gyger ½ day)

In-Patient Follow up (Dr. Hudson 3 hours/day)

Supervision of research trainees for 2 half-days per week (Dr. Hudson 8 hours)

Staff members strive for clinical innovation.

Drs. Baron, Gyger and Hudson have an ongoing scleroderma clinic and rheumatic disease/lung clinic. Drs. Hudson and Leclair have a myositis clinic and participate in monthly inter-disciplinary neuromuscular rounds at the Montreal Neurological Institute. Drs Baron and Berkson attend an osteoporosis clinic. Dr Hudson has a clinic for rheumatic manifestations of checkpoint inhibitors and participates at regular immuno-oncology rounds at the JGH.

We have initiated our own vaccine clinic for our patients who are immunocompromised.

1. Research:

Dr. Baron's primary research interest is scleroderma. Dr. Baron has established the Canadian Scleroderma Research Group (CSRG) and the International Systemic Sclerosis Inception Cohort. Dr. Baron's research has focused on ways of measuring disease activity and damage in scleroderma. He is involved multiple working groups of the Scleroderma Clinical trials Consortium and site on the extended executive

Dr. Hudson was on sabbatical leave during the 2018-2019 academic year to develop a program of research in cellular therapies for systemic autoimmune rheumatic diseases. In July 2019, she was awarded a CIHR grant to conduct a Phase I/II randomized controlled trial of mesenchymal stromal cells in severe systemic sclerosis. In the fall of 2019, she agreed to lead a McGill inter-divisional initiative to implement personalized care in rheumatoid arthritis. In December 2019, she held a Symposium on Clinical Trial Readiness in Myositis which was attended by local, national and international faculty. Her other research interests include immune-related adverse events from cancer immunotherapies. In 2019, Dr Hudson established the Montreal Immune-Related Adverse Events (MIRAE) Biobank at the JGH and the national Canadian Research Group of Rheumatology in Immuno-Oncology (CanRIO) cohort.

Dr. Leclair is enrolled as a PhD student in Clinical Epidemiology at Karolinska Institutet in Stockholm

Sweden under the co-supervision of Dr. Marie Holmqvist in the myositis research group of Prof Ingrid Lundberg and Dr. Hudson. Her research projects are focused on outcomes in myositis.

2. Teaching and learning (undergraduate and graduate):

The division continues to participate in undergraduate and post-graduate medical education. Its members provide clinical supervision to medical students, residents and fellows regularly during their 2-week as attendings on the medical wards, full-day weekly general rheumatology clinics and consult service. They participate in the CaRMS Admission Committee for Internal Medicine (3 hours/year).

Dr. Berkson continues as Osler fellow in 2018, and as Chair of the Program Evaluation and Curricular Outcomes Committee UGME. In 2018 she delivered JGH Grand Rounds on Giant Cell Arteritis, as well as an audiovisual recording on GCA for the Internal Medicine residents.

Dr. M. Baron

2 months on rheumatology consult service,
Frequently with students and residents in outpatient clinic
Co-supervision of rheumatology fellow with Dr. Hudson

Dr. L. Berkson

Osler Fellow 4 hours/ month
12 weeks attending on consult service
½ day per week supervising residents in ambulatory care

Dr. S. Fallavollita

Working on developing US curriculum for students
Teaching undergraduate / postgraduate students and fellows
Chair of TCP at McGill

Dr. G. Gyger

Capillaroscopy course at the Rheumatology week-end (12 hours)
Capillaroscopy course to rheumatologists (around 25-30 hours per doctor)
RAC course (13 hours 45 min)
Scleroderma introduction yearly (1 hour)
Scleroderma GI disease and capillaroscopy for pediatric fellows (45 min)
6 hrs "MSK Physical exam" 1st year medicine small group on introduction to MSK exam

Dr. Hudson

Supervision of research trainees, including:

Post-doctoral fellows

Dr Sabrina Hoa, successful in securing multiple training awards, including a Canada Graduate Scholarship Master award, FRQS Master award and Arthritis Society scholarship. She identified a “window of opportunity” for the treatment of scleroderma lung disease and her findings were recognized by the Arthritis Society as one of the Top 10 Research Advances of 2019 (<https://arthritis.ca/what-we-do/research/top-10-research-advances-of-2019>).

PhD students

Valerie Leclair, Karolinska Institutet, Stockholm, Sweden; Co-supervisor 2018/09-2021/08.

Project: Autoantibodies and clinical phenotypes in Idiopathic Inflammatory Myopathy

Master students

Nancy Maltez, Epidemiology, Ottawa University; Principal supervisor 2018/09-2020/08

Project: Autologous hematopoietic stem cell transplant for systemic sclerosis - Real-World Outcomes

Funding: Clinical fellowship funded by The Ottawa Hospital (08/2018-08/2020) and Fonds France Quebec pour la recherche travel scholarship (\$3500)

Outputs: first-authored manuscript accepted in *Arthritis Rheumatol*

Peter Jeon, Master in experimental medicine, McGill University; Co-supervisor with Dr Ines Colmegna 2018/09-2020/08

Project: Characterization of umbilical cord mesenchymal stromal cells as therapeutic products for systemic sclerosis

Emily-Ann Butler, Master in Epidemiology, Dalhousie University; Thesis supervisor 2017/09-2019/05

Project: Developing a core set to define scleroderma renal crisis using consensus methodology

Outputs: first-authored manuscript published in *Arthritis Rheumatol* 2019

Medical residents

Julie D'aoust, McGill, PGY5, Rheumatology, 2020

Project: The spectrum of scleromyositis - novel serological and histopathological findings

Outputs: Poster presented at the 2019 American College of Rheumatology in Atlanta, GA in November 2019; manuscript in preparation

Boyang Zheng, McGill, PGY5, Rheumatology, 2019

Project: A comparison of the trajectories of interstitial lung disease in systemic sclerosis by autoantibody subset

Outputs: Poster presented at the 2019 American College of Rheumatology in Atlanta, GA in November 2019; manuscript in preparation; World Scleroderma Congress travelling scholarship, Prague, Czechoslovakia, March 2020. He will undertake a post-doctoral fellowship in interstitial lung disease at Harvard University in the Fall of 2020.

Hyein Kim, UBC, PGY5, Rheumatology, 2019

Project: Renal disease in SSC: changing mortality and morbidity of scleroderma renal crisis and chronic renal disease – A systematic literature review

Outputs: Poster presented at the 2019 American College of Rheumatology in Atlanta, GA in November 2019; first-authored manuscript in *Journal of Scleroderma and Related Disorders*

Mayank Jha, McGill, PGY3, Internal Medicine 2018.

Project: hs-cTnT, NT-proBNP, and CRP as predictors of cardiac and pulmonary outcomes in systemic sclerosis

Outputs: first-authored manuscript submitted; matched to Rheumatology at the University of Toronto;

Mazen Alamr, McGill, PGY4, Neurology, 2019

Project: Proteomic analysis of myositis with evidence of mitochondrial pathology

Output: Data acquisition and bioinformatics completed, data analysis in progress

Jessica Salituri, McGill, PGY3, Internal Medicine, 2019.

Project: Activation of mammalian target of rapamycin in renal tissue of patients with scleroderma renal crisis

Outputs: matched to Rheumatology at McMaster University; first-authored manuscript published in *J Scleroderma Related Disorders*

Peter Maliha, McGill, PGY1, Nuclear Medicine 2022.

Project: The role of FDG-PET CT as a cancer screening tool in inflammatory myopathy

Output: first-authored manuscript published in *Nucl Med Commun* 2019

Medical students

Tedi Quendro, third year medical student at McGill, first-authored manuscript published in *J Rheumatol* (July 2019).

Post Graduate Teaching

15 hrs McGill Simulation Center: Ethics (Internal Medicine R2 and 3)

Shoulder and Knee Injection and Aspiration (Internal Medicine R4)

3 hrs McGill Internal Medicine PGY4 Academic Half Day MSK exam

1 hr Family Medicine academic half day: Commonly encountered joint complaints

1 hr Internal Medicine PGY4 half day: Approach to Rheumatoid Arthritis

1 hr Academic half-Day: Rheumatology

1 hr Rheumatology Fellows: Approach to joint injections

72 hrs Internal Medicine TCP small group Teaching

10 hrs what is rheumatoid Arthritis

3 hrs/ week 2 residents

Supervision of Fellow Continuity Clinic

JGH Site Director Rheumatology Program

Supervision of trainees (undergraduate and postgraduate)

3. Involvement in the community:

Dr. Baron holds the position of immediate past President of the Scleroderma Clinical Trials Consortium.

In April 2019, Dr Hudson was named Co-director (Immunity) of MI4.

Dr Hudson has been asked to sit as a member of the McGill University Department of Medicine Departmental Promotions/Tenure Committee.

Dr. Hudson is medical advisor for Myositis Canada, a national grass-roots advocacy organization and AWISH, a local self-help group for patients with arthritis. She presented in November 2019 to Arthritis South Shore, also a local self-help group for patients with arthritis.

4. Partnerships:

Dr. Berkson is collaborating with Dr. Vartan Mardigyan (cardiology) in the treatment of patients with refractory pericarditis.

Dr. Fallavollita is a member of a national organization developing a core clinical dataset for quality care for Rheumatoid Arthritis

Dr. Gyger is part of an international consortium studying rare GI manifestations of scleroderma.

Dr. Gyger is on a committee of the Scleroderma Clinical Trials Consortium seeking to establish training programs and a certification process for the use of video capillaroscopy in Scleroderma

The rheumatology research group has instituted the development of a new international research organization called The International Systemic Sclerosis Inception Cohort (InSync) with the aim of closely following the first few years of illness in patients with scleroderma from many different countries to develop a large enough cohort for important research. In Sync includes researchers from Canada, United States, Germany, Holland, Sweden, Australia and Spain.

Dr. Baron is past President of scleroderma clinical trials consortium, a worldwide body of scleroderma researchers.

Dr. Hudson co-leads the Scleroderma Clinical Trials Consortium working groups on scleroderma renal crisis and defining disease onset.

Dr. Hudson participates in numerous other local, national and international research networks including CSRG, INSYNC, Tri-Nation cohort, and CIMS

5. Milestones: There were no changes in staffing except as above.

6. Honours, awards, and prizes:

Dr. Leclair received funding for her PhD salary from the Dahlin Börje foundation in Stockholm, Sweden.

7. Fundraising: None to report

SECTION I - DIVISION STATUS UPDATE

1. Mission and objectives of the Division

The Division strives to provide high level clinical care, education and research.

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

Murray Baron, MD: Professor of Medicine
Marie Hudson, MD: Associate Professor with tenure
Genevieve Gyger, MD: Assistant Professor
Laeora Berkson, MD: Associate Professor of Medicine
Sabrina Fallavollita, MD: Assistant Professor
Valerie Leclair, MD: Assistant Professor

SECTION II - GRANTS, PUBLICATIONS, AND SERVICE OUTSIDE OF McGill

1. Grants and awards received

Baron, Murray

Scleroderma Society of Ontario
-Canadian Scleroderma Research Group

Grouping of Canadian Companies and Corporations:

-A multicenter, open label study to describe the safety of daily subcutaneous injections of Anakinar (r-metHuIL-1ra) in patients with rheumatoid arthritis.

University of Michigan

-A phase II study to evaluate subcutaneous abatacept vs placebo in diffuse cutaneous systemic sclerosis- a double-blind, placebo-controlled, randomized controlled trial (IM101-344)(ASSET)

Bayer (Canada) Inc

-A randomized, double-blind, placebo-controlled phase II study to investigate the efficacy and safety of riociguat in patients with diffuse cutaneous systemic sclerosis (dcSSc) (Study 16277)

Mount Sinai Hospital:

-The Canadian ArTHritisCoHort (CATCH): A prospective cohort study of adults with new-onset inflammatory arthritis symptoms.

Hoffmann-La Roche Ltd, Canada :

-A Phase II/III, multi-centre, randomized, double-blind, placebo-controlled study to assess the efficacy and safety of tocilizumab versus placebo in patients with systemic sclerosis.

JSS Medical Research

-A Canadian randomized controlled trial (RCT) of real world Cimzia treatment in RA: Randomizing to stop vs continued DMARDs.

Abbott Laboratories:

-Real life evaluation of rheumatoid arthritis in Canadians taking HUMIRA.

Hudson, Marie

Personal salary support

-Fonds de la recherche en santé du Québec (FRSQ)

Recherches observationnelles portant sur les maladies systemiques autoimmunes rhumatismales 2015-2019, Chercheur-clinicien Senior

Current operating funds (ordered by end date)

-10/2019 01/2022 CIHR

Phase I/II trial of umbilical cord-derived mesenchymal stem cells in systemic sclerosis

PI

\$420,000

-08/2018-07/2021 Genome Canada/Genome Quebec
Precision Medicine in Cellular Epigenomics
Co-Investigator with Lakhali-Chaieb, Lajmi; Daley, Denise; Labbe, Aurélie; Zhang, Tieyuan
PIs: Greenwood, Celia and Oualkacha, Karim
\$660,512

-06/2019 - 05/2021 SCTC
International Scleroderma Renal Crisis Study II
PI
\$30,000 USD

-06/2017 - 01/2020 CIORA
Bringing Patients and Therapies Together Sooner: Building Clinical Research Capacity to Improve Outcomes in Myositis
PI: Hudson
\$119,300

-01/2019-12/2019 CIMS Symposium – Clinical Trial Readiness in Myositis
Industry partners (Grifols, Corbus, Sanofi, BMS, Pfizer) and MI4
PI: Hudson
\$30,000

-11/2018-11/2019 World Scleroderma Foundation
Development and evaluation of a patient decision aid for autologous hematopoietic stem cell transplantation in systemic sclerosis
Co-Investigator with Thombs, Brett; Thonen-Velthuisen, Jessicas; Schraven, Linda
PI: Kwakkenbos L
\$50,000

-12/2018-11/2019 Roche
MIRAE
PI: Hudson
\$35,000

10/2016 - 09/2019 TAS
Randomized Controlled Trial of an Internet-based Exercise Program to Improve Hand Function in Patients with Scleroderma: A Scleroderma Patient-centered Intervention Network (SPIN) Study
Co-PI (PI Dr. Brett Thombs)
\$359,686

-10/2016 - 09/2019 The Arthritis Society
Improving Influenza Immunization Responses in Rheumatoid Arthritis: A Strategy to Enhance Protection Against a Preventable Cause of Death in an At-Risk Population? (PI Colmegna)
Co-PI \$360,000

-07/2016 - 07/2019 CIHR
Randomized Controlled Trial of an Internet-based Scleroderma Self-Management Program: A Scleroderma Patient-Centered Intervention Network (SPIN) Study
Co-PI (PI Dr. Brett Thombs)

\$561,909

-08/2016 - 07/2019 CIHR

Pragmatic, multi-centre, cluster, cohort randomized controlled treat-to-target trial for treatment of small intestinal bacterial overgrowth in SSc (Baron)

Co-PI (PI Dr M. Baron)

\$117,000

-07/2018-06/2019 BMS

MIRAE

PI: Hudson

\$35,000

-03/2018-02/2019 Canadian Institutes of Health Research, Patient-Oriented Research Collaboration Grants.

Developing a Program to Enhance Physical Activity in Scleroderma: The SPIN-PACE Study

Co-Investigator with Bartlett, Susan; Fortune, Catherine; Godard, Dominique; Gottesman, Karen;

Guillot, Genevieve; Kwakkenbos, Linda; Carrier, Marie-Eve; Leite, Catarina; Mouthon, Luc; Nielsen, Karen; Portales Guiraud, Alexandra

PIs: Shrier I, Thombs BD, Sauve M, Pelaez S

\$40,000

-02/2018-01/2019 CIHR

The Scleroderma Support Group Leader Education (SSLED) Program

Co-applicant; PI Dr. Brett Thombs

\$100,000

Fallavollita, Sabrina

JSS Medical Research:

-Prospective observational study to evaluate the use of musculoskeletal ultrasonography to improve rheumatoid arthritis management: Canadian experience (Echo Study).

MUHC PI: Dr. Ines Colmegna:

-liT Profile and functional implications of the production of age- associated inflammatory cytokines by hematopoietic progenitor cells in RA

Abbott Laboratories Ltd:

-Drug Canadian HUMIRA. Post Marketing Observational Epidemiological Study: Assessing Effectiveness in AS. Site contact and in charge of patient recruitment

2. Research Trainees Supervised

Hudson, Marie

Dr. Hudson supervised 10 research trainees during 2019, including 3 master and 1 PhD student. She is also on the mentorship committee of 2 junior faculty members at Université de Montréal.

3. Scholarly works published in the 2019 calendar year

1. **Baron M**, Kahaleh B, Bernstein EJ, Chung L, Clements PJ, Denton C, Domsic RT, Ferdowski N, Foeldvari I, Frech T, Gordon JK, **Hudson M**, Johnson SR, Khanna D, McMahan Z, Merkel PA, Narain S, Nikpour M, Pauling JD, Ross L, Valenzuela Vergara AM, Vacca A. An Interim Report of the Scleroderma Clinical Trials Consortium Working Groups. *Journal of scleroderma and related disorders* 2019;4:17-27.
2. Butler EA, **Baron M**, Fogo AB, Frech T, Ghossein C, Hachulla E, Hoa S, Johnson SR, Khanna D, Mouthon L, Nikpour M, Proudman S, Steen V, Stern E, Varga J, Denton C, **Hudson M**, Scleroderma Clinical Trials Consortium Scleroderma Renal Crisis Working G. Generation of a Core Set of Items to Develop Classification Criteria for Scleroderma Renal Crisis Using Consensus Methodology. *Arthritis & rheumatology (Hoboken, NJ)* 2019;71:964-71.
3. Esfahani K, Al-Aubodah TA, Thebault P, Lapointe R, **Hudson M**, Johnson NA, Baran D, Bhulaiga N, Takano T, Cailhier JF, Piccirillo CA, Miller WH. Targeting the mTOR pathway uncouples the efficacy and toxicity of PD-1 blockade in renal transplantation. *Nat Commun* 2019;10:4712.
4. Esfahani K, Meti N, Miller WH, Jr., **Hudson M**. Adverse events associated with immune checkpoint inhibitor treatment for cancer. *CMAJ* 2019;191:E40-E6.
5. Ferdowski N, Huq M, Stevens W, **Hudson M**, Wang M, Tay T, Burchell JL, Mancuso S, Rabusa C, Sundararajan V, Prior D, Proudman SM, **Baron M**, Nikpour M, Scleroderma Clinical Trials Consortium Damage Index Working Group TASIGCSR, Scleroderma Clinical Trials Consortium Damage Index Working Group TSIGCSR. Development and validation of the Scleroderma Clinical Trials Consortium Damage Index (SCTC-DI): a novel instrument to quantify organ damage in systemic sclerosis. *Annals of the rheumatic diseases* 2019;78:807-16.
6. Ferdowski N, Stevens W, **Baron M**, Nikpour M. Damage indices in rheumatic diseases: A systematic review of the literature. *Seminars in arthritis and rheumatism* 2019;49:27-34.
7. Harel D, **Baron M**. Methods for shortening patient-reported outcome measures. *Statistical methods in medical research* 2019;28:2992-3011.
8. Harrison M, Spooner L, Bansback N, Milbers K, Koehn C, Shojania K, Finckh A, **Hudson M**. Preventing rheumatoid arthritis: Preferences for and predicted uptake of preventive treatments among high risk individuals. *PLoS One* 2019;14:e0216075.
9. He C, Levis B, Riehm KE, Saadat N, Levis AW, Azar M, Rice DB, Krishnan A, Wu Y, Sun Y, Imran M, Boruff J, Cuijpers P, Gilbody S, Ioannidis JPA, Kloda LA, McMillan D, Patten SB, Shrier I, Ziegelstein RC, Akena DH, Arroll B, Ayalon L, Baradaran HR, **Baron M**, Beraldi A, Bombardier CH, Butterworth P, Carter G, Chagas MHN, Chan JCN, Cholera R, Clover K, Conwell Y, de Man-van Ginkel JM, Fann JR, Fischer FH, Fung D, Gelaye B, Goodyear-Smith F, Greeno CG, Hall BJ, Harrison PA, Harter M, Hegerl U, Hides L, Hobfoll SE, **Hudson M**, Hyphantis TN, Inagaki M, Ismail K, Jette N, Khamseh ME, Kiely KM, Kwan Y, Lamers F, Liu SI, Lotrakul M, Loureiro SR, Lowe B, Marsh L, McGuire A, Mohd-Sidik S, Munhoz TN, Muramatsu K, Osorio FL, Patel V, Pence BW, Persoons P, Picardi A, Reuter K, Rooney AG, da Silva Dos Santos IS, Shaaban J, Sidebottom A, Simning A, Stafford L, Sung S, Tan PLL, Turner A, van Weert H, White J, Whooley MA, Winkley K, Yamada M, Thombs BD, Benedetti A. The Accuracy of the Patient Health Questionnaire-9 Algorithm for Screening to Detect Major Depression: An Individual Participant Data Meta-Analysis. *Psychotherapy and psychosomatics* 2020;89:25-37.
10. Hoa S, Bernatsky S, Steele RJ, **Baron M**, **Hudson M**. Association between immunosuppressive therapy and course of mild interstitial lung disease in systemic sclerosis. *Rheumatology (Oxford, England)* 2019.
11. Ishihara M, Harel D, Levis B, Levis AW, Riehm KE, Saadat N, Azar M, Rice DB, Sanchez TA, Chiovitti MJ, Cuijpers P, Gilbody S, Ioannidis JPA, Kloda LA, McMillan D, Patten SB, Shrier I, Arroll B, Bombardier CH, Butterworth P, Carter G, Clover K, Conwell Y, Goodyear-Smith F, Greeno CG, Hambridge J, Harrison PA, **Hudson M**, Jette N, Kiely KM, McGuire A, Pence BW, Rooney AG,

- Sidebottom A, Simning A, Turner A, White J, Whooley MA, Winkley K, Benedetti A, Thombs BD. Shortening self-report mental health symptom measures through optimal test assembly methods: Development and validation of the Patient Health Questionnaire-Depression-4. *Depress Anxiety* 2019;36:82-92.
12. Jamal S, **Hudson M**, Fifi-Mah A, Ye C. Immune-related Adverse Events Associated with Cancer Immunotherapy: A Review for the Practicing Rheumatologist. *J Rheumatol* 2020;47:166-75.
 13. Kim H, Levy DM, Silverman ED, Hitchon C, Bernatsky S, Pineau C, Smith CD, Tucker L, Petty R, Arbillaga H, Zummer M, **Hudson M**, Fortin P, Huber AM, Chedeville G, Peschken C, Pope JE. A comparison between childhood and adult onset systemic lupus erythematosus adjusted for ethnicity from the 1000 Canadian Faces of Lupus Cohort. *Rheumatology (Oxford, England)* 2019.
 14. Kwakkenbos L, Thombs BD, Khanna D, Carrier ME, **Baron M**, Furst DE, Gottesman K, van den Hoogen F, Malcarne VL, Mayes MD, Mouthon L, Nielson WR, Poiraudreau S, Riggs R, Sauve M, Wigley F, **Hudson M**, Bartlett SJ. Performance of the Patient-Reported Outcomes Measurement Information System-29 in scleroderma: a Scleroderma Patient-centered Intervention Network Cohort Study. *Rheumatology (Oxford, England)* 2019.
 15. **Leclair V**, Landon-Cardinal O, **Hudson M**. Letter in response to 'Myositis and neuromuscular side-effects induced by immune checkpoint inhibitors'. *Eur J Cancer* 2019;112:47-8.
 16. Lu T, Klein KO, Colmegna I, Lora M, Greenwood CMT, **Hudson M**. Whole-genome bisulfite sequencing in systemic sclerosis provides novel targets to understand disease pathogenesis. *BMC Med Genomics* 2019;12:144.
 17. Maliha PG, **Hudson M**, Abikhzer G, Singerman J, Probst S. 18F-FDG PET/CT versus conventional investigations for cancer screening in autoimmune inflammatory myopathy in the era of novel myopathy classifications. *Nucl Med Commun* 2019;40:377-82.
 18. Montastruc F, Renoux C, Dell'Aniello S, Simon TA, Azoulay L, **Hudson M**, Suissa S. Abatacept initiation in rheumatoid arthritis and the risk of cancer: a population-based comparative cohort study. *Rheumatology (Oxford, England)* 2019;58:683-91.
 19. Montastruc F, Renoux C, **Hudson M**, Dell'Aniello S, Simon TA, Suissa S. Abatacept initiation in rheumatoid arthritis and the risk of serious infection: A population-based cohort study. *Seminars in arthritis and rheumatism* 2019;48:1053-8.
 20. Morrisroe K, **Hudson M**, **Baron M**, de Vries-Bouwstra J, Carreira PE, Wuttge DM, Wang M, Frech TM, Stevens W, Proudman SM, Nikpour M. Determinants of health-related quality of life in a multinational systemic sclerosis inception cohort. *Clinical and experimental rheumatology* 2018;36 Suppl 113:53-60.
 21. Nevskaya T, Zheng B, Baxter CA, Ramey DR, Pope JE, **Baron M**. Skin improvement is a surrogate for favourable changes in other organ systems in early diffuse cutaneous systemic sclerosis. *Rheumatology (Oxford, England)* 2019.
 22. Peschken CA, Wang Y, Abrahamowicz M, Pope J, Silverman E, Sayani A, Iczkovitz S, Ross J, Zummer M, Tucker L, Pineau C, Levy D, **Hudson M**, Hitchon CA, Huber AM, Smith CD, Avina-Zubieta A, Arbillaga H, Chedeville G, Wynant W, Fortin PR, Ca NFI. Persistent Disease Activity Remains a Burden for Patients with Systemic Lupus Erythematosus. *J Rheumatol* 2019;46:166-75.
 23. Pokharel G, Deardon R, Barnabe C, Bykerk V, Bartlett SJ, Bessette L, Boire G, Hitchon CA, Keystone E, Pope J, Schieir O, Tin D, Thorne C, Hazlewood GS, Canadian Early Arthritis Cohort I, **Baron M**, Bessette L, Boire G, Bykerk V, Colmegna I, Fallavollita S, Haaland D, Haraoui P, Hazlewood G, Hitchon C, Jamal S, Joshi R, Keystone E, Nair B, Panopoulos P, Penney C, Pope J, Rubin L, Thorne C, Villeneuve E, Zummer M. Joint Estimation of Remission and Response for Methotrexate-Based DMARD Options in Rheumatoid Arthritis: A Bivariate Network Meta-Analysis. *ACR open rheumatology* 2019;1:471-9.

24. Qendro T, de la Torre ML, Panopalis P, Hazel E, Ward BJ, Colmegna I, **Hudson M**. Suboptimal Immunization Coverage among Canadian Rheumatology Patients in Routine Clinical Care. *J Rheumatol* 2020;47:770-8.
25. Richard N, **Hudson M**, Wang M, Gyger G, Proudman S, Stevens W, Nikpour M, Canadian Scleroderma Research G, Australian Scleroderma Interest G, **Baron M**. Severe gastrointestinal disease in very early systemic sclerosis is associated with early mortality. *Rheumatology (Oxford, England)* 2019;58:636-44.
26. Ross L, Prior D, Proudman S, Vacca A, **Baron M**, Nikpour M. Defining primary systemic sclerosis heart involvement: A scoping literature review. *Seminars in arthritis and rheumatism* 2019;48:874-87.
27. Ross L, Stevens W, Wilson M, Strickland G, Walker J, Sahhar J, Ngian GS, Roddy J, Major G, Proudman S, **Baron M**, Nikpour M. Can patient-reported symptoms be used to measure disease activity in systemic sclerosis? *Arthritis care & research* 2019.
28. Shao X, **Hudson M**, Colmegna I, Greenwood CMT, Fritzler MJ, Awadalla P, Pastinen T, Bernatsky S. Rheumatoid arthritis-relevant DNA methylation changes identified in ACPA-positive asymptomatic individuals using methylome capture sequencing. *Clin Epigenetics* 2019;11:110.
29. Suissa S, **Hudson M**, Dell'Aniello S, Shen S, Simon TA, Ernst P. Comparative safety of abatacept in rheumatoid arthritis with COPD: A real-world population-based observational study. *Seminars in arthritis and rheumatism* 2019;49:366-72.
30. Thombs BD, Aguila K, Dyas L, Carrier ME, Fedoruk C, Horwood L, Canedo-Ayala M, Sauve M, Kwakkenbos L, Malcarne VL, El-Baalbaki G, Pelaez S, Connolly K, **Hudson M**, Platt RW, Team S-SSGA. Protocol for a partially nested randomized controlled trial to evaluate the effectiveness of the Scleroderma Patient-centered Intervention Network Support Group Leader Education (SPIN-SSLED) Program. *Trials* 2019;20:717.
31. Thombs BD, Dyas L, Pepin M, Aguila K, Carrier ME, Tao L, Harb S, Malcarne VL, El-Baalbaki G, Pelaez S, Sauve M, **Hudson M**, Platt RW, Team S-SPA. Scleroderma Patient-centered Intervention Network-Scleroderma Support group Leader Education (SPIN-SSLED) program: non-randomised feasibility trial. *BMJ Open* 2019;9:e029935.
32. Wu Y, Levis B, Riehm KE, Saadat N, Levis AW, Azar M, Rice DB, Boruff J, Cuijpers P, Gilbody S, Ioannidis JPA, Kloda LA, McMillan D, Patten SB, Shrier I, Ziegelstein RC, Akena DH, Arroll B, Ayalon L, Baradaran HR, **Baron M**, Bombardier CH, Butterworth P, Carter G, Chagas MH, Chan JCN, Cholera R, Conwell Y, de Man-van Ginkel JM, Fann JR, Fischer FH, Fung D, Gelaye B, Goodyear-Smith F, Greeno CG, Hall BJ, Harrison PA, Harter M, Hegerl U, Hides L, Hobfoll SE, **Hudson M**, Hyphantis T, Inagaki M, Jette N, Khamseh ME, Kiely KM, Kwan Y, Lamers F, Liu SI, Lotrakul M, Loureiro SR, Lowe B, McGuire A, Mohd-Sidik S, Munhoz TN, Muramatsu K, Osorio FL, Patel V, Pence BW, Persoons P, Picardi A, Reuter K, Rooney AG, Santos IS, Shaaban J, Sidebottom A, Simning A, Stafford L, Sung S, Tan PLL, Turner A, van Weert HC, White J, Whooley MA, Winkley K, Yamada M, Benedetti A, Thombs BD. Equivalency of the diagnostic accuracy of the PHQ-8 and PHQ-9: a systematic review and individual participant data meta-analysis. *Psychological medicine* 2020;50:1368-80.
33. Zheng B, Nevskaya T, Baxter CA, Ramey DR, Pope JE, **Baron M**. Changes in skin score in early diffuse cutaneous systemic sclerosis are associated with changes in global disease severity. *Rheumatology (Oxford, England)* 2019.

4. Grant reviews

Hudson, Marie

-CIORA grant review committee Chair (awards approximately \$700,000/year; third largest funding agency for arthritis research in Canada)

SECTION III - CONFIDENTIAL INFORMATION

1. Consulting activities:

Name of Faculty Member	Private Sector Consulting (# of days)	Public Sector Consulting (# days)	Other (# of days – please explain)	Total
Fallavollita, S.	Abbott		2 days	2
Fallavollita, S.	Janssen		2 days	2
Fallavollita, S.	BMS		1 day	1
Fallavollita, S.	Roche		1 day	1
Fallavollita, S.	UCB		1 day	1

Submitted by:

Murray Baron, MD

Chief, Division of Rheumatology, JGH