

**Annual Report
Division of Pulmonary Diseases
Department of Medicine - Jewish General Hospital
January 1 - December 31, 2020**

SUMMARY

The Division of Pulmonary continues to pursue its goals of excellence in clinical care, research and teaching.

Clinical Activities:

COVID-19 greatly impacted the clinical activities of our division and all of our 10 full time GFT pulmonologists re-organized their clinical activities to meet the important demands of the pandemic.

As of March 2020, Dr. Pepe has been co-director of the COVID-19 CTU along with Dr. April Shamy (Hematology Oncology). Throughout the pandemic they have and continue to ensure that the COVID-19 units are well staffed with physicians and oversee the good functioning of the ward.

Drs. Pepe, Saad, Zhao, Jagoe, and Hirsch served as attending physicians on the COVID-19 CTU.

During the first wave of the pandemic, the in-patient pulmonary consultation service was re-organized to provide a new, dedicated consultation service for COVID-19 positive patients in addition to its usual in-patient consultation service.

Despite the demands and restrictions imposed due to COVID-19, the division continued, largely through telemedicine, its clinical activities on an outpatient basis in general pulmonary medicine and super-specialized, multi-disciplinary clinics in:

- 1) Severe asthma
- 2) COPD
- 3) Pulmonary Vascular Disease
- 4) Thrombosis
- 5) Tuberculosis
- 6) Pulmonary Oncology
- 7) Cancer Nutrition and Rehabilitation
- 8) Pulmonary Rehabilitation/ Tele-Rehabilitation
- 9) Sleep Medicine

These clinical activities take place in the out-patient pulmonary division, The Peter Brojde Lung Cancer Centre (Directors Dr. Jason Agulnik and Thomas Jagoe), and Mount Sinai Hospital.

The respiratory therapists from the respiratory physiology lab were largely reassigned throughout the hospital providing essential care to COVID-19 patients. Despite limited resources, it continued to provide limited pulmonary physiology testing, and the pulmonary procedure lab continued to provide urgent invasive airway and pleural procedures.

Dr. Nathalie Saad is a member of our internal medicine policy committee and Director of the Outpatient Pulmonary Rehabilitation Program at Mount Sinai Hospital,

The innovative Balloon Pulmonary Angioplasty Program initiated in 2018 by Dr. Andrew Hirsch along with the division of Cardiology for the treatment of distal chronic thromboembolic pulmonary hypertension continues to be the only center in Quebec, and one of only two centres in Canada providing this novel therapy for this disease with limited treatment options.

1. Research and publications:

The division of Pulmonary Medicine continues to be active in research organized by sub-specialty including 1) Airway Center: Encompassing COPD and Asthma and Pulmonary Rehabilitation, 2) Pulmonary Oncology, 3) Pulmonary Vascular Disease, and 4) Epidemiology.

With the advent of COVID-19, the division spear-headed a clinical trial for a novel COVID-19 therapy for which it was a lead recruiter in Canada. It collaborated closely with other COVID-19 research teams at the JGH to promote the success of all.

We currently have an active research program in severe asthma and in COPD. The division is participating in multi-centre clinical trials focused on the treatment of patients with these diseases.

In Pulmonary Oncology we continue to offer a wide variety of clinical protocols to all stages of our lung cancer population. We are concentrating on cutting edge targeted and immunologic therapies in this extremely vulnerable patient group.

In pulmonary vascular disease we continue to be involved in clinical trials for pulmonary hypertension patients, as well as various trial in acute and chronic pulmonary embolism.

Dr. Ernst is the Deputy Research Director at Mount Sinai Hospital. He continues to be very productive in pharmaco-epidemiologic studies in a wide variety of diseases.

Dr. Agulnik was awarded a Department of Medicine Clinical Research Award in 2019-2020.

2. Teaching and learning (undergraduate and graduate):

COVID-19 interrupted most teaching and learning activities. We nonetheless continued to be active in clinical teaching with a pulmonary elective service for fellows, residents and students.

Dr. Nathalie Saad is Chair of Internal Medicine undergraduate education at McGill University. She is also Director of Undergraduate Education at the Jewish General Hospital.

Dr. Agulnik is a member of the McGill Undergraduate Medical Education Committee

Dr. Pepe is the respirology elective site supervisor for the JGH

Drs. Hirsch, Agulnik, Pepe, Sakr, Saad, Jagoe and Zhao all continue to teach on the Internal Medicine CTUs with excellent reviews from the residents and students.

Dr. Agulnik is the JGH site director for the TCP course.

Dr. Hirsch teaches the first-year thrombo-embolism lecture.

Dr. Ernst teaches epidemiology first-year medical students lectures and small groups as well as the advanced Pharmaco-epidemiology course.

Dr. Sakr participates in the first year small group respiratory physiology sessions

Dr. Jagoe teaches a lecture in the Experimental Medicine Graduate course and is involved in PIAT-Putting It All Together journal club for fourth year medical students

Drs. Ernst and Jagoe supervise MSc and PhD students.

Dr. Agulnik was co-presenter Grand Medical Rounds at JGH (October 5 2020)

3. Involvement in the community:

We continue to be very involved in the community. Under the direction of Dr. Nathalie Saad, our pulmonary rehabilitation program, run out of Mount Sinai Hospital, remains extremely active in the community. Quebec's first tele pulmonary rehabilitation program continues to thrive under the leadership of Dr. Saad. Mount Sinai offers a decentralized eight-week program to regional different centres in Quebec, via the secure and free telemedicine system. Its format is the same as that of the outpatient program. The educational component and the muscle-strengthening component (half of the 60 minutes of exercise) are offered by our team through the telemedicine system. The cardio-vascular component, whether on stationary bicycle, treadmill or supervised walk, is supervised by the local team. These patients benefit from the same follow-up after pulmonary rehabilitation as the patients who come to Mount Sinai Hospital, and are seen after one, three, six and twelve months via the Telemedicine system. Via the same system, we offer tele-consultation across the province, thus offering support to primary care physicians and specialists in managing their more complicated COPD patients.

4. Partnerships:

Our Pulmonary Oncology team continues to partner with the Rossy Cancer Network and Dr. Agulnik is a co-leader for the Disease Site Group for lung cancer. The partnership includes research initiatives across McGill hospitals which include our Pulmonary Oncology team.

Dr. Agulnik is a member of the Segal Cancer Centre Chemotherapy Prioritization Committee and chair of the JGH Oncology Tumor Board Committee

The thrombosis clinic continues to be a model of inter-disciplinary cooperation with Internal, Medicine, Hematology, Respiriology, nursing and research partners across Canada.

Dr. Hirsch works in partnership with Cardiology Department, the cardiac catheterization lab and Cardiac Surgery, in the treatment of patients with pulmonary hypertension and chronic thrombo-embolic disease. He also participates in collaborative clinics with the Rheumatology Department and the Cardiology Department for the treatment of patients with rheumatic disease and lung disease and or pulmonary hypertension.

Dr. Saad works in partnership with at the MUHC where she conducts out-patient clinics.

5. Milestones: New hires, promotions, and retirements

Dr. Nan Zhao was appointed to the attending staff of the JGH Division of Pulmonary Diseases in the Department of Medicine. She will also serve as Assistant Professor in the Department of Medicine at McGill University.

6. Honours, awards, and prizes:

None to report.

7. Fundraising:

None to report.

SECTION I - DIVISION STATUS UPDATE

1. Mission and objectives of the Division

The Division of Pulmonary Diseases aims to provide excellence in patient care and teaching. The mission of the Division of Pulmonary Diseases is to increase accessibility to respiratory services and to provide optimal care to patient suffering from respiratory diseases.

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

Full-time (GFT) members:

Dr. Andrew Hirsch, Chief of the Division of Pulmonary Diseases, Associate Professor, McGill University

Dr. David Small, Associate Professor, McGill University

Dr. Mark Palayew, Assistant Professor, McGill University

Dr. Pierre Ernst, Professor, McGill University

Dr. Jason Agulnik, Associate Professor, McGill University

Dr. Carmela Pepe, Assistant Professor, McGill University

Dr. Thomas Jagoe, Associate Professor, McGill University

Dr. Lama Sakr, Assistant Professor, McGill University

Dr. Nathalie Saad, Assistant Professor, McGill University

Dr. Nan Zhao, Assistant Professor, McGill University

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

1. Grants and awards received

Dr. Jason Agulnik

Liquid biopsy for Non-Small Cell Lung Cancer: comparing plasma cell-free DNA/RNA to tissue NGS to assess turnaround time, patient distress and cost effectiveness

Sponsor: Rossy Cancer Network, QCROC

EGFR testing on liquid biopsy samples for Non-Small Cell Lung Cancer: feasibility, results, turnaround time and impact on cost and patient

Sponsor: Department of Medicine, JGH

Achieving Value in Cancer Diagnostics: Blood vs tissue molecular profiling – a prospective Canadian Study (VALUE)

Sponsor: University Health Network, Toronto

Understanding clinical practice and survival outcomes in patients with stage III unresectable non-small cell lung cancer in a single-centre in Quebec, Canada

Sponsor: Astra Zeneca Inc.

Active Industry sponsored:

Keynote-789: Study of Pemetrexed + Platinum Chemotherapy With or Without Pembrolizumab (MK-3475) in Adults With Tyrosine Kinase Inhibitor- (TKI)-Resistant Epidermal Growth Factor Receptor- (EGFR)-Mutated Metastatic Non-squamous Non-small Cell Lung Cancer (NSCLC) 2018-

CheckMate 037: A Study to Compare BMS-936558 to the Physician's Choice of Either Dacarbazine or Carboplatin and Paclitaxel in Advanced Melanoma Patients That Have Progressed Following Anti-CTLA-4 Therapy 2017-

Dr. Andrew Hirsch

Investigator Initiated:

CanVECTOR (Canadian Venous Thromboembolism Clinical Trials and Outcomes Research) Network

Agency: Canadian Institutes of Health Research (CIHR), Fonds de recherche Santé Québec, JGH Foundation, McGill University

Role: Co-investigator

Predicting disease progression and mortality in myositis-associated interstitial lung disease

Agency: Fonds de recherche Santé Québec

Role: Primary investigator

A study to evaluate the safety of withholding anticoagulation in patients with subsegmental PE who have a negative serial bilateral lower extremity ultrasound (SSPE)

Agency: Ottawa Hospital Research Institute; Heart & Stroke Foundation of Ontario

Role: Co-investigator

Active Industry sponsored:

RESOLUTION: Study of LAU-7b for the Treatment of COVID-19 Disease in Adults 2020-2021

SAVER Pilot Study: StAtins for Venous Event Reduction in Patients With Venous Thromboembolism Pilot Study 2016-2020

TRITON: The Efficacy and Safety of Initial Triple Versus Initial Dual Oral Combination Therapy in Patients With Newly Diagnosed Pulmonary Arterial Hypertension 2015-2020

Dr. Pierre Ernst

Canadian Network for Observational Drug Effect Studies (cNODES)
Agency: CIHR

Statistical Methods in Pharmacoepidemiology and Perinatal Epidemiology
Agency: CIHR (Foundation Scheme)
Beta 2 agonists and the incidence of Parkinson's disease
Agency: Parkinson Canada

Thomas Jagoe

Multimodal Exercise, Nutrition and Anti-inflammatory Treatment For Palliation of Cancer
Cachexia: MENAC study
Role: Principal Investigator
Agency: CIHR

Using multimodal prehabilitation to improve outcomes for frail patients undergoing resection of colorectal cancer
Source of Funding: Rossy Cancer Network Grant
Role: Co-Investigator

Dr. Carmela Pepe

SPIRIT: Study of Safety of QAW039 in Patients With Asthma Inadequately Controlled on Standard-of-care Asthma Treatment 2017-2020

Dr. Mark Palayew

NTHi-MCAT002: An observer-blind study to evaluate the efficacy, safety, reactogenicity and immunogenicity of the GSK Biologicals' investigational vaccine GSK3277511A when administered to COPD patients 2017 – 2020

2. Research Trainees

Dr. Pierre Ernst

Tanja Tran	Co-supervisor, PhD in Epidemiology and Biostatistics	2014-2020
------------	--	-----------

Dr. Thomas Jagoe

Tom Zakharov	Supervisor, MSc in Experimental Medicine
Rima Nasrah	Supervisor, PhD in Experimental Medicine
Monica Parmar	Thesis committee member, PhD in Nursing

3. Scholarly works published in the 2020 calendar year:

- Agulnik J, Kasymjanova G, Pepe C, Hurry M, Walton RN, Sakr L, Cohen V, Lecavalier M, Small D. Understanding clinical practice and survival outcomes in patients with unresectable stage III non-small-cell lung cancer in a single centre in Quebec. *Curr Oncol*. 2020 Oct; 27(5):e459-e466. Epub 2020 Oct 1.
- Agulnik J, Law JH, Juergens R, Laskin J, Laurie S, Hao D, Ezeife DA, Le LW, Kiedrowski LA, Lanman RB, Leighl NB. Defining VALUE: Routine liquid biopsy in NSCLC diagnosis - a Canadian trial in progress. *AACR Special Conference on Advances in Liquid Biopsies. Clin Cancer Res* 2020 Jun; 26(11 Supplement): A26. DOI: 10.1158/1557-3265.LiqBiop20-A26
- Avram AT, Blostein MD, Hirsch AM, Warkentin TE. Venous limb gangrene and pulseless electrical activity (PEA) cardiac arrest during management of deep-vein thrombosis and progressive limb ischemic necrosis following vascular surgery. *Am J Hematol*. 2020 Jun;95(6):712-717. doi: 10.1002/ajh.25768. Epub 2020 Mar 20. PMID: 32112441.
- Bhalla A, Zhao N, Rivas DD, Ho T, Perez de Llano L, Mukherjee M, Nair P. Exacerbations of Severe Asthma While on Anti-IL-5 Biologics. *J Investig Allergol Clin Immunol*. 2020;30(5):307-316. doi: 10.18176/jiaci.0628. Epub 2020 Jun 23. PMID: 32573459.
- Brunetti VC, St-Jean A, Dell'Aniello S, Fisher A, Yu OHY, Budgen SC, Daigle JM, Hu N, Silvia AS, Shah BR, Ronksley PE, Lix LM, Ernst P, Filion KB. Characteristics of new users of newer antibiotic drugs in Canada and the United Kingdom. *Pharmacoepidemiology and Drug Safety*. 2020. 29: 220.
- Carli F, Bousquet-Dion G, Awasthi R, Elsherbini N, Liberman S, Boutros M, Stein B, Charlebois P, Ghitulescu G, Morin N, Jagoe T, Scheede-Bergdahl C, Minnella EM, Fiore JF Jr. Effect of Multimodal Prehabilitation vs Postoperative Rehabilitation on 30-Day Postoperative Complications for Frail Patients Undergoing Resection of Colorectal Cancer: A Randomized Clinical Trial. *JAMA Surg*. 2020 Mar 1;155(3):233-242. doi: 10.1001/jamasurg.2019.5474. PMID: 31968063; PMCID: PMC6990653
- Couëtoux du Tertre M, Marques M, McNamara S, Gambaro K, Hoffert C, Tremblay L, Bouchard N, Diaconescu R, Blais N, Couture C, Pelsser V, Wang H, McIntosh L, Hindie H, Parent S, Cortes L, Breton YA, Pottiez G, Croteau P, Higenell V, Izzi L, Spatz, A, Cohen V, Batist G, Agulnik, J. Discovery of a putative blood-based protein signature associated with response to ALK tyrosine kinase inhibition. *Clinical proteomics*. 2020; 17, 5. <https://doi.org/10.1186/s12014-020-9269-6>
- Douros A, Lix LM, Fralick M, Dell'Aniello S, Shah BR, Ronksley PE, Tremblay É, Hu N, Alessi-Severini S, Fisher A, Bugden SC, Ernst P, Filion KB. Sodium-Glucose Cotransporter-2 Inhibitors and the Risk for Diabetic Ketoacidosis : A Multicenter Cohort Study. *Ann Intern Med*. 2020 Sep 15;173(6):417-425. doi: 10.7326/M20-0289. Epub 2020 Jul 28. PMID: 32716707.

- Filion KB, Lix LM, Yu OH, Dell'Aniello S, Douros A, Shah BR, St-Jean A, Fisher A, Tremblay E, Bugden SC, Alessi-Severini S, Ronksley PE, Hu N, Dormuth CR, Ernst P, Suissa S; Canadian Network for Observational Drug Effect Studies (CNODES) Investigators. Sodium glucose cotransporter 2 inhibitors and risk of major adverse cardiovascular events: multi-database retrospective cohort study. *BMJ*. 2020 Sep 23;370:m3342. doi: 10.1136/bmj.m3342. PMID: 32967856.
- Fisher A, Fralick M, Filion KB, Dell'Aniello S, Douros A, Tremblay É, Shah BR, Ronksley PE, Alessi-Severini S, Hu N, Bugden SC, Ernst P, Lix LM; Canadian Network for Observational Drug Effect Studies (CNODES) Investigators. Sodium-glucose co-transporter-2 inhibitors and the risk of urosepsis: A multi-site, prevalent new-user cohort study. *Diabetes Obes Metab*. 2020 Sep;22(9):1648-1658. doi: 10.1111/dom.14082. Epub 2020 Jun 4. PMID: 32383792.
- Frohlich M, Buhlaiga N, Wang H, Patenaude F, Sirois C, Sakr L. Systemic sarcoidosis mimicking metastatic renal cell carcinoma with subsequent cardiac involvement. *Respir Med Case Rep*. 2020 Dec 31;32:101334. doi: 10.1016/j.rmcr.2020.101334. PMID: 33457201; PMCID: PMC7797905.
- Frohlich M, Wang H, Sakr L. Sarcoid-like Reaction Discovered on EBUS-TBNA of Intrathoracic Lymph Nodes During Immunotherapy for Metastatic Melanoma. *J Immunother*. 2020 Feb/Mar;43(2):75-78. doi: 10.1097/CJI.0000000000000298. PMID: 31567703.
- Giorgianni F, Ernst P, Dell'Aniello S, Suissa S, Renoux C. Beta 2 agonists and the incidence of Parkinson's disease. *Am J Epidemiol*. 2020 Aug 1;189(8):801-810. PMID:32016345
- Hudson M, Dell'Aniello S, Shen S, Simon TA, Ernst P, Suissa S. Comparative safety of biologic versus conventional synthetic DMARDs in rheumatoid arthritis with COPD: a real-world population study. *Rheumatology (Oxford)*. 2020 Apr 1;59(4):820-827. doi: 10.1093/rheumatology/kez359. PMID: 31504972; PMCID: PMC7188346.
- Juergens RA, Ezeife DA, Laskin JJ, Agulnik JS, Hao D, Laurie SA, Law JH, Le LW, Kiedrowski LA, Shepherd FA, Cohen V, Shokoohi A, Vandermeer R, Li JJ, Hanson I, Fernandes R, Salvarrey AM, Lanman RB, Leighl NB. Demonstrating the value of liquid biopsy for lung cancer in a public health care system. *Journal of Clinical Oncology*. 2020; 38(15_suppl): 3546-3546. DOI: https://doi.org/10.1200/JCO.2020.38.15_suppl.3546
- Lacasse V, Zahedi R, Richard V, Wang H, Mitsa G, Poetz O, Redpath M, Papdakis A, Elchebly M, Cohen V, Agulnik JS, Batist G, Borchers C, Spatz A. Liquid chromatography coupled to multiple reaction monitoring (LC-MRM) for quantification of PD-L1 and PD1-signaling proteins in non-small cell lung carcinoma (NSCLC). *Journal of Clinical Oncology*. 2020; 38(15 suppl): e21040. DOI: 10.1200/JCO.2020.38.15_suppl.e21040
- Lawson CC, Mondragon P, Noya FJ, Ernst P, Ducharme FM. A multifaceted intervention to improve asthma control via asthma education, medical follow-up and regular self-monitoring after pediatric emergency department visits for asthma. *Canadian Journal of Respiratory, Critical Care, and Sleep Medicine*. 2020 Mar 12, DOI: 10.1080/24745332.2020.1727302

- Michalovic E, Jensen D, Dandurand RJ, Saad N, Ezer N, Moullec G, Smith BM, Bourbeau J, Sweet SN. Description of Participation in Daily and Social Activities for Individuals with COPD. *COPD*. 2020 Oct;17(5):543-556. doi: 10.1080/15412555.2020.1798373. Epub 2020 Aug 18. PMID: 32811208.
- Nasrah R, Van Der Borch C, Kanbalian M, Jagoe RT. Defining barriers to implementation of nutritional advice in patients with cachexia. *J Cachexia Sarcopenia Muscle*. 2020 Feb;11(1):69-78. doi: 10.1002/jcsm.12490. Epub 2019 Aug 21. PMID: 31436033; PMCID: PMC7015253.
- Porres-Aguilar M, Kahn SR, Hirsch AM. Direct oral anticoagulants in thrombotic antiphospholipid syndrome associated with chronic thromboembolic pulmonary hypertension. *J Thromb Haemost*. 2020 Mar;18(3):755-756. doi: 10.1111/jth.14705. PMID: 32112537.
- Sketris IS, Carter N, Traynor RL, Watts D, Kelly K, following contributing members of the CNODES Knowledge Translation Team: Pierre Ernst, JM Gamble, Brenda Hemmelgarn, Colleen Metge, Michael Paterson, Robert Platt, and Gary Teare. Building a framework for the evaluation of knowledge translation for the Canadian Network for Observational Drug Effect Studies. *Pharmacoepidemiol Drug Saf*. 2020 Jan;29 Suppl 1:8-25.
- Suissa S, Dell'Aniello S, Ernst P. Comparative Effects of LAMA-LABA-ICS vs LAMA-LABA for COPD: Cohort Study in Real-World Clinical Practice. *Chest*. 2020 Apr;157(4):846-855. doi: 10.1016/j.chest.2019.11.007. Epub 2019 Nov 22. PMID: 31759966.
- Suissa S, Dell'Aniello S, Gonzalez AV, Ernst P. Inhaled corticosteroid use and the incidence of lung cancer in COPD. *Eur Respir J*. 2020 Feb 20;55(2):1901720. doi: 10.1183/13993003.01720-2019. PMID: 31744837.
- Suissa S, Dell'Aniello, Ernst P. Response. *Chest*. 2020 Aug;158(2):832-833. PMID: 32768072
- Suissa S, Ernst P. Avoiding immortal time bias in observational studies. *Eur Respir J*. 2020 Mar 20;55(3). PMID: 32198272
- Suissa S, Ernst P. Response. *Chest*. 2020 Apr;157(4):1045-1046. doi: 10.1016/j.chest.2019.12.030. PMID: 32252914.
- Suissa S, Ernst P. Response. *Chest*. 2020 May;157(5):1395-1396. doi: --Tran T, Assayag D, Ernst P, Suissa S. Effectiveness of proton pump inhibitors in idiopathic pulmonary fibrosis: a population-based cohort study. *Chest*. 2020 Aug 31;S0012-3692(20)34310-5. PMID: 32882251
- Venegas C, Zhao N, Ho T, Nair P. Sputum Inflammometry to Manage Chronic Obstructive Pulmonary Disease Exacerbations: Beyond Guidelines. *Tuberc Respir Dis (Seoul)*. 2020 Jul;83(3):175-184. doi: 10.4046/trd.2020.0033. Epub 2020 Jun 18. PMID: 32610835; PMCID: PMC7362747.
- Yu OHY, Dell'Aniello S, Shah BR, Brunetti VC, Daigle JM, Fralick M, Douros A, Hu N, Alessi-Severini S, Fisher A, Bugden SC, Ronksley PE, Filion KB, Ernst P, Lix LM; Canadian Network for Observational Drug Effect Studies (CNODES) Investigators. Sodium-Glucose Cotransporter 2 Inhibitors and the Risk of Below-Knee Amputation: A Multicenter Observational Study. *Diabetes Care*. 2020 Oct;43(10):2444-2452. doi: 10.2337/dc20-0267. Epub 2020 Aug 5. PMID: 32759360.

4. Academic and community engagement service outside of McGill by individual members of the unit

Dr. Andrew Hirsch

- PHA Canada medical advisory board
- Chair: CTS Pulmonary Vascular Sub-Committee

Dr. Pierre Ernst

- President of government committee on the optimal use of medications; Comité d'excellence clinique- utilisation optimale du médicament, part of INESSS
- Member, CIHR College of reviewers
- Member, Board of Directors, Transplant Quebec
- Regular reviewer, Editorial or manuscript reviews for multiple scholarly journals including Chest, JAMA, BMJ and ERJ.
- Medical expert, Régie de l'assurance automobile du Québec.

Dr. Carmela Pepe

- Royal College examiner

Nathalie Saad:

- Member of the Committee on Specialities, Royal College of Physicians and Surgeons of Canada
- Vice-president and Member of the Board, College des Médecins du Québec

Mark Palayew

- Board member of the Association des pneumologues de la province de Québec

SECTION III - CONFIDENTIAL INFORMATION

1. Consulting activities: None to report.

Submitted by:

Andrew Hirsch MD
Chief Division of Pulmonary,
Department of Medicine,
Jewish General Hospital