History of respiratory medicine in Canada: A new *Canadian Respiratory Journal* series

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The farther backward you can look,
the farther forward you can see.

—Winston Churchill

Respiratory diseases have been, and remain, responsible for a large human and socioeconomic burden in Canada, as in the rest of the world (1). Canada has a long history of excellence, innovation and enviable research productivity in the field of respiratory medicine. The amount and quality of scientific work, and number of innovative initiatives to improve respiratory health in our country are among the highest per capita worldwide. Indeed, not only has Canada been home to some of the best respiratory clinicians, including international 'stars', such as William Osler (1849 to 1919) and Norman Bethune (1890 to 1939), Canadian respiratory researchers have been recognized to 'punch above their weight' on the global scene (2). As an example, between 1995 and 2003, Canadian researchers ranked fourth behind western Europe, the United States and Japan with respect to the number of publications in respiratory medicine (3).

Respiratory medicine in Canada is not only recognized for its excellence but for the friendship and collegiality among its members. 'Respirology' or 'Pneumologie' (en français) was initially mostly 'phtysiologie', the study of tuberculosis, a plague that affected and continues to impact many Canadians. However, in the 20th century, the discipline evolved toward a genuine medical subspecialty focusing on a wide spectrum of increasingly prevalent lung diseases such as asthma, chronic obstructive pulmonary disease and lung cancer, and encompassing many so-called 'new diseases' previously poorly described or unknown such as sleep apnea, cystic fibrosis and interstitial/immune lung diseases. In collaboration with their colleagues in infectious diseases, respirologists are also at the forefront of research and treatment of new infectious diseases, such as severe acute respiratory syndrome caused by a previously unknown coronavirus that caused a frightening epidemic in Canada a decade ago, as well as respiratory infections with the constantly mutating influenza virus.

Canadian researchers have been pioneers in the field of respiratory research and modern respiratory care, for example in demonstrating that the alveolar and extra alveolar vessels behave differently (Charles C Macklin); that respiratory muscle fatigue contributes to ventilatory respiratory failure (Peter Macklem); that the small membranous bronchioles are the site of increased resistance in chronic obstructive pulmonary disease (Jim Hogg); and that airway response to inhaled allergen is dependent on allergic sensitization and nonspecific airway responsiveness (Donald W Cockcroft, Frederick E Hargreave). Not forgetting the essential work of Jean-Luc Malo, André Cartier and Moira Yeung in occupational asthma, and that of Yvon Cormier on allergic alveolitis, in addition to the initial work on producing evidence-based guidelines by the group at McMaster University (Hamilton, Ontario) and the discovery of the *CFTR* gene responsible for cystic fibrosis by Lap Chee Tsui in Toronto (Ontario), to name just a few.

However, the fascinating history of respiratory medicine in Canada is unknown to many. Sadly, in the past months, the Canadian respiratory community has lost some of its most prestigious members, such as Drs Peter Macklem, Frederick E Hargreave and Peter Warren, famous worldwide for their respective work in the field of respiratory physiology, asthma and occupational diseases. Unfortunately, further testimony on key aspects of respiratory history has been lost.

It would be unfortunate to lose our collective memory of the many highlights and fabulous work of our predecessors in the field of respirology in Canada. Previous publications, such as those reported in the *Canadian Respiratory Journal* (CRJ) in October 2007 to celebrate the 50th Anniversary of the Canadian Thoracic Society (4), have given us a taste of the outstanding scientific work and accomplishments of Canadian respiratory research.

The present series is a continuation of this previous work, focusing in more depth on the discoveries, the individuals and the institutions where they have worked. It will include historical perspectives on the development of respiratory medicine in the various provinces and institutions, in addition to reviews on the Canadian contribution to our understanding of specific respiratory diseases. The series will be complemented by biographies of our most famous researchers and clinicians. Some of them are already members of the Canadian Medical Hall of Fame, such as James C Hogg, Jonathan C Meakins and Peter Macklem (5), and we believe that the description of the accomplishments of these and other 'celebrities' will be of great interest to the respiratory community. An extended abstract will be published in the print version of the CRJ and a longer version of the text and figures will be available on the CRJ and the Canadian Thoracic Society websites.

This initiative has already received an enthusiastic response from many of our colleagues who have kindly agreed to contribute, and we hope it will prove to be an inspiration for the readers of the CRJ. We are fortunate to have most appreciated help from the historians of the Royal College of Physicians and Surgeons of Canada for this initiative. At the end of the series, we hope to produce a book that will include all of these publications in addition to new material.

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