# Hugh A. Smythe, 1927-2012

### FOUNDING FATHER

Murray B. Urowitz

Dr. Hugh Arthur Smythe died peacefully at his home in Toronto, Canada, on Sunday, October 14, 2012, at age 85, with his family around him: his beloved wife of 62 years, Bernice, his children Richard (Barb), Anne (Bob), and Conn (Christine).

I have known Hugh for over 4 decades but have always found it a challenge to adequately describe this very eclectic person. Hugh was a physician, a scientist, an educator, an administrator, a hockey doctor, a collector and patron of the arts, and a philanthropist.

As a physician, Hugh cared for patients with rheumatologic diseases for almost a half century. When he began his career, there were only a handful of rheumatologists in all of Canada and he can truly be credited with attracting so many into the field, including me. He was instrumental in having rheumatic disease units achieve equal recognition with the other medical subspecialties for government healthcare resources and was an important influence in having rheumatology recognized as a speciality by the Royal College of Physicians and Surgeons of Canada. The many students that he taught over the years carry on his caring legacy.

As a scientist, Hugh was engaged in basic, clinical, and epidemiologic research. His work with Fraser Mustard on the role of platelets in the development of atherosclerosis has stood the test of time. Similarly, he studied the mechanisms of inflammation in the heart/aorta of patients with ankylosing spondylitis. In clinical investigation he was a leader in the description of fibromyalgia as a valid clinical entity and he studied its associated mechanical and sleep-associated mechanisms. Hugh was an ardent advocate for valid clinical measurement of rheumatologic diseases, and his joint and point count studies remain relevant today. His "pooled index" predated the ACR20 by many years.



Personal non-commercial use only. The Journal of Rheumatology Copyright © 2013. All rights reserved.

Urowitz, et al: Tribute to Dr. Smythe 343

Finally, Hugh was also influential in epidemiologic studies as diverse as that of spondy-loarthritis among the Haida of British Columbia and the early studies in the Institute for Work and Health in Ontario. All of this work gave rise to many journal articles, textbook chapters, and presentations at scientific meetings.

As an educator, Hugh was on staff at the University of Toronto all of his professional life. He was chief of rheumatology and head of the Rheumatic Disease Unit from 1978 to 1992. Some of his teaching materials prepared for medical students and residents are still used today.

In addition to his administrative duties at the university, Hugh was on the board of The Arthritis Society from 1961 to 1999 and served on its medical, scientific, and manpower panels. Hugh also served as the president of The Journal of Rheumatology from its inception in 1974 until 2008 and was an associate editor until this year.

Hockey and the Toronto Maple Leafs were so important to Hugh's early life. He was very proud to be the team doctor for the Maple Leafs from 1949 to 1969, during which time the team won 4 Stanley Cups. This was a legacy he bequeathed to me and he never let me forget that the Stanley Cup has not returned to Toronto since.

Hugh's work in medicine afforded him many opportunities to travel. He and his wife, Bernice, saw much of the world together. During his travels, his love of the arts and of culture, and his efforts to understand the nature of rheumatic disease, combined to make him an avid collector of headrests, which he proudly displayed in his home.

In addition to being a "doer" himself, Hugh was a promoter of medical research and innovation through his philanthropic activities. He took on the role of chairman of the Conn Smythe Foundation, a legacy of his father, a group whose good work has fostered and continues to foster rheumatic disease initiatives at the university and Toronto Western Hospital.

Hugh's absence leaves a distinct vacuum in our program. It is not everyone who has the privilege of saying that they worked with one of the fathers of their field. I have that privilege.

### ENLIGHTENING US WITH A PROVOCATIVE TWIST

Video tribute by the late Duncan Gordon to the editorial board reception, November 2012

The Boston orthopod, Clem Sledge, stated that Hugh Smythe looked like Bill Buckley and talked like Billy Graham. Hugh's multifaceted role in *The Journal*, from its inception to the entrusting of our mission — guided by Arthur Bookman, Gunnar Kraag, and Michel Zummer — to the Canadian Rheumatology Association, can only be described as outstanding.

While you may be well aware of Hugh's many activities related to our specialty, the highlights are as follows: As an overseas fellow, he met Kellgren (of Kellgren and Lewis fame), which led to his appreciation of deep referred pain. And his understanding of this concept contributed to his becoming a master at the clinic, at the bedside, and as a hockey sports physician — including 4 Stanley Cups. With Harvey Moldofsky, his identification of tender points, their significance, and the importance of sleep in chronic pain, revitalized our interest in this common malady. With Phil Gofton, they detected an increased HLA\*B27 heredity in the Haida First Nation of British Columbia. His love of statistical analysis and measurement of disease activity, inspired by Eric Bywaters, was exemplified by his "trademark" homunculus.

There were few areas in which Hugh's interest did not enlighten us, always with a provocative twist, much like *The Journal*'s founding editor Metro Ogryzlo. And Hugh's synergy with his wife Bernice enhanced the pleasure of their company, both at home and abroad, with their fine appreciation of the arts. Hugh Smythe will be remembered as our colleague, teacher, and our friend.

## PHYSICIAN, RHEUMATOLOGIST, RESEARCHER, COLLEAGUE, FRIEND

Charles H. Goldsmith

I first met Hugh in 1972 at the request of Walter O. Spitzer, as Hugh was working on some research writing that needed statistical input. I met with both Hugh and Antoine Helewa, a physical therapist from The Arthritis Society in Toronto. Little did we know that this meeting was the beginning of the 3 of us working together for the next 40 years. Out of that initial meeting came the Multi-Centre Trial Group, a label that was in some sense a misnomer, because while we were from 3 locations, we never did a study with patients or subjects from more than 1 location. But the name stuck. And we are still working together to this day, although the work today looks a little different, because finishing the last manuscript of our joint work is left to me to complete, now that both Antoine and Hugh have died.

As part of the 2003 tribute to Hugh's scientific career, I conducted an analysis of Hugh's CV, including describing his publications and collaborators. Many in attendance knew Hugh for his fibromyalgia (FM) work and so were surprised to hear that both Antoine and I were the top coauthors on Hugh's published papers even though we had never worked on FM with him. I was pleased to be able to add to Hugh's accolades through drawing attention to the importance and volume of his Multi-Centre Trial Group work.

In preparing this current tribute, I again conducted an analysis of Hugh's publications and collaborators (in this case using the database Scopus because his recent CV was not available to me). Hugh published 101 papers, including 12 editorials, with a total of 121 coauthors over his 56-year publishing career. His first publication was in 1957 and his last in 2011. And there remains at least 1 posthumous publication to come. Many of Hugh's publications were about one of his favorite topics: FM. Indeed, all 4 of Hugh's most-cited papers (all with citation counts above 100) were about FM. Hugh's most-cited paper was his 1990 *Arthritis & Rheumatism* report on FM classification criteria with 18 other authors — this had been cited 3950 times by the time of this writing. Hugh published as many as 7 papers in 1 year, with a mean of 1.8, a median of 3, and a mode of 1. This is a publishing career many of his era would be proud to have.

As was the case in 2003, Hugh's most frequent coauthors over his entire publishing career were both Antoine Helewa and me (on 25 publications apiece). Other frequent coauthors included Murray Urowitz (21 publications), Metro Ogryzlo (12), Dan Buskila (11), and Peter Lee (11). As one of his most frequent collaborators, I again want to draw attention to his work with the Multi-Centre Trial Group. Through this work, he contributed to developing measurement tools, evaluating therapies that are still in use today, working with patients with a variety of musculoskeletal problems, and creating a group CV, an idea that many other research groups have found useful to track the many things that groups do together and with others. The creation of the many drafts of papers before submission meant that Hugh often hosted Antoine and me at his family cottage at Lake Simcoe or his family farm in Caledon, as well as the Smythe home in Toronto. During these meetings we would debate many issues about how to do studies to help patients with various musculoskeletal problems. The debates were often vigorous and far-ranging, with Hugh contributing knowledge from clinical rheumatology and general medicine as well as his interests in exploring statistical software packages and statistics books. Even when we disagreed, we were able to resolve things. We always parted as colleagues and friends and that is one reason that the relationship with Hugh was a joy for me. I will remember Hugh as a great rheumatologist, a superb researcher, a respected colleague, and a dear friend. I will certainly miss him.

# HUGH SMYTHE AND THE BIRTH OF CONTEMPORARY FIBROMYALGIA Fred Wolfe

I had no interest in fibrositis...at the start.

— Hugh Smythe

Hugh Smythe and Harvey Moldofsky were the inventors of fibromyalgia (FM). Before them, fibrositis, as FM was then called, was a vague mishmash of descriptions and symptoms. Everybody knew what it was even if they couldn't define it or believe in it. In 1962, the 35-year-old Smythe was on his way to being "a real rheumatologist," as he put it, when Wallace Graham died<sup>1,2</sup>. According to Smythe, "Graham had been given the job of writing the chapter on fibrositis for Pemberton's and then Hollander's textbook. Wallace died suddenly in 1962, and shortly afterwards a letter came. And at that point, Wallace had been writing a chapter on the shoulder and on ankylosing spondylitis and on fibrositis. So a letter was received by me and by Metro Ogryzlo asking us to take over those chapters. Now, I had had no interest in fibrositis as a topic, but Metro was the senior man, so I was the junior man, and got the unwanted, unloved topic of fibrositis." And with it he became the author of the Hollander and later, the Kelley textbooks for several decades<sup>3</sup>. Until publications about the new fibrositis began to come out in the early 1980s, Smythe was the primary voice of fibrositis in the English-speaking world.

Smythe's central contribution to the syndrome he and Moldofsky made famous was to call attention to tenderness and referred pain. Although previous authors had sporadically identified muscle tenderness, it was not mandatory to have tenderness. Smythe made it mandatory. Smythe's interest in referred pain and tenderness came from the work of Kellgren in the UK<sup>4,5</sup>. From Kellgren he learned that with referred pain came referred tenderness. Similarly, it was Moldofsky's interest in sleep and fatigue, his observations of patients with fibrositis, and his attempts to induce fibrositic symptoms by interrupting sleep that led to the incorporation of these ideas into the fibrositis definition<sup>6,7</sup>. The key paper that catapulted fibrositis into general knowledge was their "Two contributions to understanding of the 'fibrositis' syndrome", which was published in 1977<sup>8</sup>. Strangely, despite their common interest and fame, they published only 4 papers together, only 1 of which followed "Two contributions."

Hugh Smythe was an extraordinary physical anatomist. In the 1989 training sessions for the 1990 American College of Rheumatology FM criteria study<sup>9</sup> he taught us all how to do the tender point examinations. We were nonplussed, as he described in site after site exactly where the tenderness began and ended, and how to elicit it properly. Here was a large group of "experts" who were about to start a study where tenderness was key, and none of us could hold a candle to Hugh Smythe. But he was a good teacher, and some of the investigators learned how to do the examination.

It was the cervical spine that was of most interest to Smythe. He thought it was the source of most of the symptoms and physical findings of FM, and he wrote about it in a paper on the C6-C7 syndrome<sup>10</sup>. Anyone who visited him at home was shown a pile of stones and asked to say what they were, while he smiled loudly. What they were was stone "pillows" that he acquired in Africa, and other places in the world, that people used to protect the cervical spine and make sleep comfortable.

Hugh Smythe was a kind, thoughtful scholar and teacher, who went out of his way to help people. Many of his fellows went on to be interested in FM and teach it across the world. He was kind to me when I wrote to him in 1980 about my first paper that had been rejected by *Arthritis & Rheumatism* and asked him why. He gave a beginner good advice, and I never made the same mistake again.

Several months before he died I spoke to him on the telephone. I wanted to get his ideas about his career and the future of FM. I asked him if there was still an interest in FM in Toronto, now (June 2012). No, he said, "I get all kinds of inquiries, and I tell them that there's nobody in our hospital that I could refer them to that would give them the message

I was giving them. Nobody in Toronto, nobody in Ontario, and nobody in Canada. And I could probably go on and say nobody in North America."

"What do you think is going to happen with fibromyalgia now? What's the future?" I asked. His response: "I suppose it's going to have to be rediscovered. It's dead now." "And it's going to have to be rediscovered in terms of the tenderness that you see?" I asked. "Yes. The idea that the pain is psychogenic in origin or neurogenic in origin is just ignoring all the experimental work of Kellgren and Lewis and all the stuff that we did, up to 1990 or beyond that."

Whether Smythe was right or wrong in some of his pronouncements, he opened up a new world of observation. Perhaps when the swirling debates about FM are resolved, we will arrive "where we started and know the place for the first time."

### MURRAY B. UROWITZ, MD, FRCPC,

Toronto Western Hospital, University Health Network, 399 Bathurst Street, 1E409, Toronto, Ontario M5T 2S8, Canada. E-mail: m.urowitz@utoronto.ca

### CHARLES H. GOLDSMITH, PhD,

Maureen and Milan Ilich/Merck Chair in Statistics for Arthritis and Musculoskeletal Diseases, Arthritis Research Centre of Canada and Faculty of Health Sciences, Simon Fraser University, Faculty of Health Sciences, Blusson Hall Room 9510, Burnaby, BC V5A 1S6, Canada. E-mail: charles\_goldsmith@sfu.ca

### FREDERICK WOLFE, MD.

National Data Bank for Rheumatic Diseases and University of Kansas School of Medicine, 1035 N. Emporia, Suite 288, Wichita, KS 67214, USA.

E-mail: fwolfe@arthritis-research.org

#### REFERENCES

- 1. Graham W. The fibrositis syndrome. Bull Rheum Dis 1953;3:33-4.
- Graham W. Fibrositis syndrome (non-articular rheumatism). In: Hollander JL, editor. Arthritis and allied conditions: A textbook of rheumatology. Baltimore: Williams & Wilkins; 1960:723-36.
- 3. Smythe HA, Hollander JL. The fibrositis syndrome. In: Arthritis. Philadelphia: Lea & Febiger; 1966.
- 4. Kellgren JH. Observations of referred pain arising from muscle. Clin Sci 1938;3:175-90.
- Lewis T, Kellgren JH. Observations relating to referred pain, viscero-motor reflexes and other associated phenomena. Clin Sci 1939;4:47-71.
- Moldofsky H, Scarisbrick P, England R, Smythe H. Musculoskeletal symptoms and non-REM sleep disturbance in patients with "fibrositis syndrome" and healthy subjects. Psychosom Med 1975;37:341-51.
- Moldofsky H, Scarisbrick P. Induction of neurasthenic musculoskeletal pain syndrome by selective sleep stage deprivation. Psychosom Med 1976;38:35-44.
- Smythe HA, Moldofsky H. Two contributions to understanding of the "fibrositis" syndrome. Bull Rheum Dis 1977;28:928-31.
- Wolfe F, Smythe HA, Yunus MB, Bennett RM, Bombardier C, Goldenberg DL, et al. The American College of Rheumatology 1990 criteria for the classification of fibromyalgia. Report of the Multicenter Criteria Committee. Arthritis Rheum 1990;33:160-72.
- Smythe HA. The C6-7 syndrome Clinical features and treatment response. J Rheumatol 1994;21:1520-6.

J Rheumatol 2013;40:343-7; doi:10.3899/jrheum.121357