

In Memoriam: Frederick Andermann, MD

Frederick Andermann, MD, FRSC, FRCP(C), OC, FRCOQ died on June 16, 2019. Fred was a major force in the world of child neurology and epilepsy. He was a distinguished researcher and clinician, a dedicated teacher, and a generous father and mentor. A great deal has already been written about him and his career. In this memoriam, we would like to share our memories of Fred from different perspectives: as a teacher, as a longtime friend and colleague, as an internationally recognized investigator, and as a parent. We hope that this tribute will help others to understand the depth and breadth of feelings so many of us had for him.

As a Teacher (D.L.S.)

My first encounter with Fred occurred shortly after I arrived as a first-year resident at the Montreal Neurological Institute (MNI). One day, we were summoned to meet him in the early afternoon on the ward so he could review plans regarding the evaluation of a young man admitted to his service with Kleine–Levin syndrome. He arrived right after lunch and brought with him a large pizza and a box of chocolates. He asked that we follow him into the patient’s room and just “sit and observe.” After making the young man comfortable with the assembled crowd, he asked the young man if he would like some pizza, to which the young man responded “no,” as he had just finished lunch. Fred cut himself a small sliver, ate it and pronounced that the pizza was “delicious.” Fred just nodded in an approving gesture to the young man, who then proceeded to eat the rest of the pizza over the next 20 minutes or so, after which he consumed a significant number of the chocolates. When we were back at the nursing station, Fred described the difference between the “hyperphagia” of Kleine–Levin and the overeating seen in gluttony. Showing us the difference was far more impactful than just discussing it. This was one of many impactful teaching moments that I experienced with Fred. Fred loved to teach, was a master at it, and instilled that enthusiasm in me and I am sure in many of his other former students.

Another memory of Fred and Eva was their annual “Sugaring-Off Party.” Every year, in the early spring, they would host this event at their farm in Mansonville,

Quebec to celebrate the end of a long Montreal winter and to harvest that year’s maple syrup crop. These events were family affairs, and Fred and Eva made everyone feel like they were truly a part of their family.

As a Longtime Friend and Colleague (J.B.M.)

Fred Andermann and I were colleagues at McGill University and MNI in the 1970s and 1980s, and renewed our friendship at many professional meetings over the years. At the meeting of the American Academy of Neurology in Vancouver in 2016, I visited with a number of good friends, but it was the visit my wife and I made to the University of British Columbia’s Museum of Anthropology that brought us back into contact with Eva and Fred. The museum has an emphasis on the “First Nations Peoples,” in keeping with the broad interests of the Andermanns. We had a delightful chat, during which time I learned that Mark, their son, was now in Boston and on the Harvard Medical School faculty at the Beth Israel Deaconess Medical Center. Sadly, in retrospect, it was the last time I would see Fred.

Fred was a remarkable enthusiast of everything that crossed his path. His education, after immigrating to Canada, was at McGill and the University of Montreal. He was fluent in both French and “Quebecois,” which served him well during his later research, often with Eva, on rural French-Canadian families with recessively inherited disorders related to consanguinity. These studies led to the discovery of many unique neurologically important developmental and epileptic syndromes. He was as comfortable visiting these rural communities and talking with families as he was lecturing on the national or international stage, where he described their findings. Andermann syndrome (agenesis of the corpus callosum associated with peripheral neuropathy, which is now known to be due to mutations in the *SLC12A6* gene) was one of their many discoveries.

Fred was affable, a gentle giant in his field, and a constant presence of cheer and good will during the 8 years I spent at McGill University, the last 2 years as Chief of Service at MNI. Together with Peter Gloor and Ted Rasmussen, the epilepsy service served as the court of last resort for patients from all over the world. Fred was

the master clinician, the dedicated explorer of the unknown, and a generous man who always appeared to care as much about those he mentored as he did for himself. He was unique and will be greatly missed.

As an International Organizer and Investigator (C.A.W.)

Little did I know when I started collaborating with Fred that it would become a family affair. I knew of Fred through his writings on cortical malformations, which I read while I was a resident and searching for my own research direction. I thought, “Wow, how cool would it be to be able to figure out even one of those disorders.”

After I began studying periventricular nodular heterotopia, I started collaborating with Fred and Eva. When we first met, at the American Epilepsy Society Meeting in 1995, I identified with them as a husband and wife team with complementary academic interests similar to my wife, Ming Hui, and me. Fred was amazing in his warmth and generosity, his memory for patient-related details, and his way of bringing people together, including former trainees and colleagues from all over the world, to make the world of neurology a better place. We ended up studying this disorder together, as well as “double cortex” syndrome, named by Fred and his colleagues.

Just when I thought our collaborations were ending, another generation of Andermanns appeared! Maria

Lehtinen, married to their son Mark, joined my laboratory as a postdoc. She trained at Harvard and had spent time in Dr Anna-Elina Lehesjoki’s laboratory in Finland, where they had studied the largest Finnish family with perisylvian polymicrogyria, described by the Andermanns years earlier. This new collaboration led us to identify yet another cortical malformation gene. When I last saw Fred at Mark and Maria’s home in 2017, his health was failing, yet we were still able to share the latest about the new gene, while surrounded by a scurrying crowd of third-generation Andermanns. I speak for more than one generation of people, not just his trainees and others who were influenced by him, in celebrating his remarkable gifts of humanity and intellect. I have met his son, daughters, their spouses, and grandchildren, illustrating how genetics is the study of families, in more ways than one.

As a Parent (M.L.A.)

When I was growing up, my sisters and I thought every household invited guest speakers to sleep over on a monthly basis; that it was normal to invite anyone who crossed your path to join your family at a Chinese restaurant that evening; that it was routine to invite dozens of residents and fellows to join your family at the cottage for the weekend. We were fortunate to join my father and mother on trips to visit colleagues throughout the world. My father did not believe in boundaries between home and work, in part because he had so much love



FIGURE 1: Fred and Eva relaxed and surrounded by family at the Andermann cottage in Mansonville, Quebec, 2016.

that there was plenty to go around. Consequently, we became family to his work colleagues, and they became family to us. Fred Andermann was an only child, but he built a community for his family and friends for which there was no perimeter, no fence. During the shiva ceremony following his passing, I heard many stories from nurses, colleagues, patients, and friends about how Fred had listened to them, helped them, and gently steered them, much as he had done for his own kids. I realized that Fred's caring and concern for others truly did not have family borders, and did not need to. One story stood out. A nurse had once caught herself saying to my father, "Yes, Dad ...". She paused and considered it. It was the only time before or since that she had made that verbal slip. I was happy to hear it, happy that I could share this loving man with the world.

As demonstrated from our memories of him noted above, Fred meant so many things to us and to those he taught, worked with, collaborated with, treated, and raised.

We all feel honored to have known such a truly wonderful person.

Donald L. Schomer, MD,¹
Joseph B. Martin, MD, PhD,²
Christopher A. Walsh, MD, PhD³ and
Mark L. Andermann, PhD⁴

¹Department of Neurology, Beth Israel Deaconess Medical Center, Harvard Medical School, Boston, MA, ²Department of Neurobiology, Harvard Medical School, Boston, MA, ³Childrens Hospital, Department of Neurology, Harvard Medical School, Boston, MA, and ⁴Beth Israel Deaconess Medical Center, Harvard Medical School, Boston, MA

Potential Conflicts of Interest

Nothing to report.

DOI: 10.1002/ana.25627