

Canadian Anesthesiologists' Society – Oral Histories

Dr. Donald Miller, interviewed by Archives & Artifacts Committee Member Dr. Étienne de Médicis
August 19, 2024

Dr. Donald Miller served as Editor-in-Chief at the *Canadian Journal of Anesthesia* from 2005 until 2013. Dr. Miller completed anesthesia residency at the University of Ottawa (1984), followed by a cardiovascular anesthesia fellowship at University of Toronto (1986). He is currently a Professor of Anesthesiology at the University of Ottawa, and Staff Anesthesiologist at The Ottawa Hospital.



**Archives
& Artifacts
Committee**



Don

Many thanks to the CAS Archives Committee for inviting me to participate in this initiative. It is important to record the history of the Society's many activities, including the CAS Guidelines, the Annual Meeting, the *Journal*, the Awards Program, the support of research through CARE, and international outreach initiatives through CASIEF. Archiving and understanding our past helps to inform future generations of anesthesiologists to strategize on how we best move forward as a society, as a scientific and clinical body, and as a national forum.

Regarding my early interest in anesthesiology as a career path, it originated from informal mentorship during my early years at the medical school at Queen's University. During clinical rotations in fourth year, I was impressed by the expertise and knowledge of many of my supervisors. Dr. Frank Cervenka made an enormous impression. He was a brilliant anesthesiologist who demonstrated tremendous knowledge, wisdom, patience, and kindness to patients and all members of the perioperative care team. I thought, "Wow, if I could model myself after one person in my future career, it would be this individual." Frank had an understated manner and could express complex scientific concepts in simple terms. He demonstrated confidence in the student – which really empowers the learner.

I undertook anesthesia residency at the University of Ottawa where faculty there encouraged me to consider academic pursuits. Following residency, I undertook a Fellowship in cardiac anesthesiology at the University of Toronto. I am especially grateful to two faculty supervisors: Dr. Sallie Teasdale, former Deputy Anaesthetist-in-Chief at Toronto General Hospital, and Dr. Richard Weisel, Division of Cardiac Surgery. Clinical trials at the time included strategies to optimize myocardial protection for cardiac surgery, efficacy of high dose opioid anesthesia on myocardial function and metabolism, and pharmacological strategies to control post-cardiopulmonary bypass hypotension. I grew to understand and appreciate the importance of an energetic, experienced multidisciplinary research team.

Étienne

Your training, then, was a perfect match between your interests in cardiology and anesthesiology.

Don

These melded because I was particularly interested in the science of pharmacology and physiology of cardiovascular function.

Étienne

Did the Ottawa Heart Institute exist at the time you returned to Ottawa?

Don

The Ottawa Heart Institute opened in 1976, several years prior to my residency. After returning to Ottawa, I chose to subspecialize in anesthesia for major vascular surgery. Several years later, we were fortunate to recruit Dr. Earl Wynands as our Professor and Chair of Anesthesiology. Dr. Wynands was a superb mentor

to me and many other colleagues. During his term as Chair, I served as Research Director of the Department.

Étienne

So, given your research and subspecialty interest, what was your link with the *Canadian Journal of Anesthesia*?

Don

During my early research years, the *Journal* was an obvious target journal for publication, given the “Canadian connection”, the CJA’s growing international importance and rising impact factor and its orientation to clinical relevance of published articles. Dr. David Bevan, former Editor-in-Chief, was also very influential to me. To a considerable extent I was influenced by his insightful comments on submitted manuscripts and this piqued my interest in the whole peer review process.

During the term of Dr. Douglas Craig [Dr. Bevan’s predecessor], the Editorial Board of the *Canadian Journal* had one representative from each of the Canadian University Departments of Anesthesia. Later, when a vacancy from the University of Ottawa arose, my candidacy was advanced to the Editorial Board. I was honored to serve in that role, while learning the role and responsibility of editorial board members and the importance (and limitations) of the editorial peer review process.

Étienne

That would have been in the late ‘90s.

Don

Yes. Dr. Bevan served as Editor from 1989 to 2000, followed by Dr. Jean François Hardy who served as Editor-in-Chief from 2001 to 2004. Upon reflection, the period from 2003 to 2004 was a critical transition period, because the workload of the Editor-in-Chief had expanded well beyond the original scope, due to an ever-increasing number of article submissions to the *Journal*, and because of the strategic imperative to keep the *Journal* abreast of evolving models of publication. The *Journal* had continued its operations from an “in-house” model of publication which had been in place since 1954. Dr. Roderick Gordon, the founding Editor-in-Chief, served a remarkable 29 years from the original Toronto Office. Printing and distribution were done from University of Toronto Press; with online publication at HighWire Press introduced in the 90’s. From the early days, there was one editor, one copy editor, one typesetter, and one person involved with journal advertising. It was indeed a small but efficient process, and while the editorial board expanded over the years, it was increasingly challenging to manage journal operations from the CAS office. I became Editor-in-Chief in 2005, aware of the challenges and opportunities at the time.

Étienne

To put things in context, in the early 2000s we were still handling the *Journal* by paper. I do not believe the journal was internet savvy yet. Or am I mistaken?

Don

I had committed to transforming the editorial peer review process to an electronic platform. There were concerns at the time from the Society regarding operating costs of online platforms such as Editorial Manager™ and ScholarOne™, so we established a manuscript handling system that operated by e-mail. Carolyn Gillis as our amazing editorial assistant at the time, and paper workflow was phased out over the course of a year. Meanwhile, manuscript submissions continued to increase. Readership surveys at those times were favorable, and the *Journal* was generating steady profits for the Society, however the workload in the editorial office was becoming further strained. We advised the CAS Board of Directors

that it was time to advance journal operations to an external publisher. A request for proposal [RFP] was launched in 2007 and the Editorial Board and the CAS Board of Directors alike were impressed that the major international STM [International Association of Scientific, Technical and Medical Publishers] publishing houses submitted formal and competitive proposals. There was clearly a wide interest internationally in the *Canadian Journal of Anesthesia*.

Springer's proposal was considered to be the soundest from a publishing and business perspective. The move to Springer provided a business case to establish a Senior Editorial team and to hire a part-time biostatistician to support the editorial peer review process. Equally important, manuscript submission and peer review were transferred to Editorial Manager™, and the online Journal was transferred from Highwire Press to Springerlink. Meanwhile, the printed journal transferred from UTP to Springer. In retrospect, moving *Journal* operations to Springer was one of the biggest advances in the history of the CJA and the Society, ensuring stability of journal operations and publication for years to come.

Étienne

I totally agree. I'll do a little segue because you mentioned that for many years the editorial board had representation from all 17 Canadian University departments of Anesthesiology. I joined the Editorial Board based upon my research interests and faculty position at the University of Sherbrooke. I remember the entire process. I think now it is obvious, but people did not appreciate the change of mindset in editorial board composition and how it evolved, and how much work goes into it. Becoming an editorial board member was fully new territory for me. It's like someone who plays in the Ontario Hockey League then goes on to the NHL [National Hockey League], it's an entirely different scope!

Don

Over time, to ensure we were publishing the best science of relevance to the readership, editorial board composition evolved further to carefully consider scholarship and content expertise. Among other things that were critical, during my second term from 2009 to 2013, we developed an updated business plan to support Associate Editor roles for the *Journal* that became imperative for distribution of workload and manuscript handling while expanding content expertise.

We were fortunate to have recruited Dr. Penelope Brasher from the University of British Columbia, as a Statistical Editor. Her reviews were logical and informative. It is my strong view that no scientific journal should recommend article publication without detailed biostatistical review, routine screening for plagiarism detection, rigorous peer review, and adherence to standardized reporting guidelines.

Étienne

I remember very well at a previous editorial meeting, when Dr. Brasher gave us a basic primer on common statistical issues in submitted manuscripts, which was quite fascinating.

Don

Several other initiatives during my second term included modernizing the Instructions to Authors, and undertakings steps to enhance the accuracy and transparency of published manuscripts. The Board endorsed the validated reporting guidelines of CONSORT [Consolidated Standards of Reporting Trials] statement for standardized reporting of clinical trials, the STROBE [Strengthening the Reporting of Observational Studies in Epidemiology] statement, PRISMA [Preferred Reporting Items for Systematic reviews and Meta-Analyses] statement.

Another element was plagiarism screening, using iThenticate™ software, which became available in 2004. With this software, each submission was screened by an editor during the initial manuscript review process. We and others encouraged Universities and Departmental Chairs to ensure that their researchers

undertake their own plagiarism screening prior to submission. It's easy to see how sentences or entire paragraphs can be repeated verbatim through manuscripts, particularly when one is describing an established model. Sometimes that may be appropriate when describing one's propriety work, but in most forums, plagiarism is considered a type of scientific misconduct. Linking the *Journal* as a member of the international Committee on Publication Ethics [COPE] provided further guidance and consistency on editorial policy. During my term as editor, over 30 articles were retracted from the journal archives where evidence of scientific and/or ethical misconduct became known. Several of the authors were found to have submitted fraudulent work across several journals in our specialty. The details, presented in related Retraction Notices and described in linked editorials, are now part of the *Journal* archives.

Étienne

I do have a question. How much dedicated time did you have for the *Journal*?

Don

"On paper" I allocated two to two and a half days per week of non-clinical time to the *Journal*. It was closer to a full-time job. It becomes in part, a labor of love for most Editors-in-Chief of good biomedical journals, publishing monthly and handling close to 1000 new manuscript submissions per year. Metrics such as submission to initial decision times, and final acceptance to publication times are important, and keep the journals competitive. There are elevated expectations in an environment where rapid access to information and publication is prioritized.

Étienne

Yes, exactly. Some of these become publicity metrics, right?

Don

To a degree, yes. Journals are in competition for the best manuscripts that will be of relevance to their readerships and have a high citation rate.

Étienne

Yes. I think a lot of people do not understand that full process. When you look back and see where the *Journal* was when you came in as an editor [versus] when you left, there was tremendous growth. You must feel proud of all those accomplishments!

Don

I would say that "it takes a village" to run a journal successfully. The Editorial Board was incredible during my two terms. It was really the team that enabled us to achieve what we saw as some of the successful metrics, including the steadily rising impact factor which increased by about two and a half fold during those nine years. Journal circulation and article downloads also increased tremendously, the results from readership surveys were positive, and the *Journal* remained profitable for the Society.

We are also proud of the Continuing Professional Development [CPD] modules published by the *Journal*, under the leadership of Dr. François Donati, Deputy Editor-in-Chief. Importantly, these modules were approved under Section 3 credits by the Royal College of Physicians and Surgeons of Canada and have become an immensely popular CPD activity that is freely available to CAS members.

Also, during my term, we focused on publication of theme-based issues relevant to practicing clinicians and publishing an annual update to the CAS Guidelines to the Practice of Anesthesia.

Étienne

That's quite a legacy. What do you see as some of the challenges in the years ahead?

Dr. Miller, CJA Editor-in-Chief (2005-2013)

Page 4 of 6

Don

We continue to see the *Journal* grow and mature under the stewardship of my successors, Dr. Hilary Grocott and Dr. Stephan Schwarz, our current Editor-in-Chief.

In terms of challenges for the *Journal*, one is the Open Access movement. Under the Creative Commons license, the *Journal* offers an open access publication option for individual articles through Springer. For this, the author agrees to pay a publication fee for the opportunity to retain copyright of her/his article which becomes freely available without subscription from the moment of online publication. While providing a clear benefit to readers and for science, in many jurisdictions, the Open Access movement has disrupted publication business models, and that is something the *Journal* and the CAS will continue to need to review.

Another ongoing challenge is ethical and or scientific misconduct. This is far from unique to the *Canadian Journal of Anesthesia*, but because we've retracted articles in the past, we must remain vigilant in ensuring a rigorous editorial review process.

Finally, the Society must continue to support the *Journal* while respecting its editorial independence.

Étienne

How about a word to a person I consider to be an unsung hero, Ms. Carolyn Gillis? She was quite instrumental in the running of the of the journal.

Don

It was an enormous pleasure working with Carolyn Gillis. She was the Editorial Assistant for over 20 years. She was recruited by Dr. Hardy during his term at the University of Montreal. It was during the transition of editors and moving the editorial office in 2005 that we considered the possibility of remote work. Carolyn agreed to work from her home office in Montreal, with the Editorial office moved to Ottawa. She handled that transition beautifully. When we transitioned workflow to Editorial Manager, there was over a month of transition time when we toiled night and day to customize Editorial Manager (working closely with Springer), without interrupting manuscript flow. During her term Carolyn communicated with authors and editors, undertook reference verification, and technical copy editing. I was continuously impressed by the thoroughness and accuracy of her work and smiling dedication to the *Journal*.

Étienne

Full agreement here! We should segue for a moment to your life after being Editor of the *Journal*.

Don

It was an enormous pleasure and honor to have served. I shall reflect on my CJA years as being the most inspiring, and challenging years of my professional career. Since that time, it has been the pleasure to observe the continued growth and maturation of the *Journal*, the importance and quality of the published content, and its rising Impact Factor. Meanwhile, I continue to appreciate my clinical work at The Ottawa Hospital, and teaching residents and medical students. New professional challenges continue to appear, while the more recent arrival of grandchildren has become incredibly special in my personal life.

Étienne

You probably have better sleep hygiene than most of your colleagues.

Don

Well, you raise an important point. As I reflect, I realize how frequently during our professional careers that the clinical, academic and family demands compromise our sleep. We have all worked hard; at the same time, it's healthy to be at a career stage where one can get seven hours of sleep most nights!