



Calgary's Hospitality



Preparations are well underway for the 2007 Annual Meeting, and the Local Arrangements Subcommittee is working hard to showcase Calgary to the rest of the country.

Get your orientation to the city by attending the Welcome Reception on the Friday evening at the Telus Convention Centre, which is attached to both the

Marriott and Hyatt hotels in downtown Calgary. Join us at the Art Gallery of Calgary on Saturday evening to watch provincial teams put their artistic talents to the test as they try to win the Golden Glottis Cup! No doubt your provincial representatives will be asking for volunteers; don't worry — even the artistically challenged can join in, because a local artist will be there to assist you. The CARF Fun Run on Sunday will take place downtown along the beautiful Bow River, not far from the downtown hotels. We have already started to pray for good weather.

The wine and food pairing event organized last year was such a hit that we have decided to offer it again. It will be held on Sunday night at Catch, in the Hyatt hotel. Great wines and some of our famous Alberta beef will be sure to "catch" your interest. Tickets for this event are limited, so be sure to sign up early. This year's President's Dinner will be held in the ballroom at

the Hyatt hotel on the Monday night. We have kept the entertainment to a minimum to allow delegates to chat with old friends and meet new acquaintances. Be sure to stay long enough to taste the offerings on the dessert table later in the evening. You won't want to miss it!

For those who want to venture out to see some of the sights of Alberta, we have put links to a few tour companies on the CAS website. These companies can accommodate both large and small groups and take you to the many attractions that are within a day's drive of Calgary. And looking to make reservations for dinner? Don't leave home without 'em! Check out the CAS website for links to an article detailing the 60 best restaurants in Calgary for some great ideas. Finally, we strongly recommend that delegates book their hotel rooms early; I know the west is known for its hospitality, but you can't *all* stay at Dr JN Armstrong's house!

We look forward to seeing you in Calgary in June.

Joel Fox, MD FRCPC Chair, Local Arrangements Sub-committee



2007

Calgary

Is your artistic style that of the great Impressionists? Perhaps you are more of a Renaissance painter?

Get out your paint brushes and get ready for this year's Sixth-Annual Golden Glottis Cup Challenge.



Join us at the 2007 Annual Meeting in Calgary. Art Gallery of Calgary • Saturday June 23, 2007

For more information on how your team can participate, please contact your provincial representative.

In This Issue

Calgary's Hospitality	1
President's Message	2
News from the Board	2
Resident Has a Great Experience at the ASA Meeting	3
Anesthesiology in Rwanda: My Remarkable Experience	4
CARF Corner	5
CAS/Abbott Laboratories Ltd Career Scientist Award in Anesthesia	6
We Need to Hear from You!	7
Receive 100% Tax Receipt From Donated Stocks 7	
Resident Reports from Down Under	8

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President's Message

Our new Executive Director, Stan Mandarich, is settling in nicely at

the CAS office. He is helping the executive on many fronts and continues to gather background information on several matters. We both recently attended the Canadian Medical Association's Committee of National Medical Organizations meeting in Ottawa. Hot topics included health human resources and telemedicine. Several specialties were concerned about current or impending national shortages. The Wait Time Alliance project will continue and expand to other patient services besides the original chosen five. Tele-radiology is raising the question of "medicine at a distance." Issues of licensure, liability, and duty to the patient need to be clarified as more technology allows input from across town, other cities, other provinces, or even other countries. The Specialty Care Online Consultation process has flagged communication and physician collegiality, or lack thereof, as an issue for all specialists.

Like other specialists across Canada, our limited numbers have forced physi-

cians to embrace new models of healthcare delivery where other allied health professionals contribute to anesthetic patient care. Pilot projects in Ontario are moving forward with a keen eye on safety concerns. I have chosen anesthesia assistants as the topic for the political forum at the CAS Annual Meeting in Calgary. Be sure to attend to hear the pros and cons being debated by a panel that will include CAS members and representatives from the Canadian Society of Respiratory Therapists and the Canadian Nurses Association.

The Royal College is planning to increase its presence in the lives of all practicing specialists. Its mandate extends beyond the certification process to promote continuing medical education, research, and personal development. The College is surveying members to determine expectations on these topics as well as recertification. It has a new CEO, who is forging ahead to mould it into what Fellows will need in the year 2020. Please get involved in this process locally or nationally to express your opinions.

Shane Sheppard, MD FRCPC President



News from the Board

February 24-25, 2007

President's Report

Dr Shane Sheppard outlined three important issues he asked the Board to consider.

The first issue is defining scope of practice. We need to define what a specialist anesthesiologist "should" be doing as well as what patient care they "should not" be involved in. Our unique training and talents should be appropriately

applied to patient need. Also, we must define the roles of those who assist us as we care for our patients.

The second issue is getting our own house in order. We need to maintain the best training programs possible and ensure that ongoing CME is effective and pertinent. Once we are confident that we offer a consistent, highly specialized service to health care, we need to



News from the Board

February 24-25, 2007

negotiate adequate compensation for that service.

The third issue is to strive for excellence as a specialty. Our best scholars need the time and support to add new knowledge to the specialty. Our ability to document increased patient safety will become paramount in the new Anesthesia Care delivery models. New knowledge and improved safety will enhance every anesthetic encounter into the next generation.

Anesthesia Assistants

ACUDA advised that there is an urgent need to clarify the policies on Anesthesia Assistants. The Board directed the CAS Standards Committee to work with ACUDA to review the guidelines on the training, accreditation and scope of practice of anesthesia assistants. The Board will discuss this matter again when it meets in Calgary.

The Canadian Nurses Association met with CAS leadership in response to the position paper on Anesthesia Assistants. The nurses were seeking clarity on the role of the Anesthesia Assistant in the intraoperative and pre/post-operative periods. The CAS advised that the tasks are mostly technical during the intraoperative period.

Royal College Specialty Committee in Anesthesiology

The Spring 2008 exam format will change to:

- 1. 150 Multiple Choice Questions over three hours;
- Written Short Answer Questions of about 20–30 stems over three hours; and
- Oral examination of eight questions lasting 15 minutes each in one two-and-a-half hour session.

Canadian Medical Association (CMA)

The CMA has so far worked with five specialty societies in the Wait Time Alliance (WTA) initiative. Lack of anesthesiologists has been identified as one cause of increased wait times for health services. The CAS will continue to observe and monitor any issues that relate specifically to the role of anesthesiologists but will not officially join the WTA.

The CAS received a draft discussion paper from the CMA on the obligations of physicians and society in the event of a pandemic. The Board referred the paper to the Ethics Committee to provide feedback to the CMA.

Finances

The Board updated the CAS investment policy. Following the Executive Committee's recommendation, the Board approved ScotiaMcLeod as the CAS investment advisor.

Strategic Planning

The Board will hold a facilitated retreat at the October Board meeting to establish priorities and goals.

Annual Meeting Management

The CAS has retained Congress Canada, a full-service convention management company, to manage the 2007 annual meeting in Calgary. All registrations will be processed by Congress Canada this year.

Canadian Journal of Anesthesia (CJA)

The offset printing division of University of Toronto Press was sold to Thistle Printing, which will begin with the printing of the April issue of the *CJA*. A needs assessment survey is underway to plan the *CJA*'s Continuing Medical Education modules.

Resident Has a Great Experience at the ASA Meeting

I would like to thank the CAS for the opportunity to attend the American Society of Anesthesiologists (ASA) meeting in Chicago. There were 18,000 anesthesiologists present, attending lectures, discussing in problem-based learning seminars, and planning the future of the specialty. I attended an interesting session on the mechanics of having a cardiac anesthesia fellowship accredited. Other lectures involved reducing anxiety associated with anesthetizing children, updates on how to manage acute brain injury, and how Toronto's experience with SARS can help us plan for a flu pandemic.

I had the honour of meeting the present and past presidents of the ASA, and realize how quickly the specialty has evolved. I would like to thank Dr Mann for making me feel welcome. I was proud to be associated with the CAS, and eager to make a difference in our specialty. I encourage residents to contact the CAS and ask to speak to resident representatives if they are interested in becoming involved.

I have learned that conferences are an important part of continuing education once residency is completed, and they are useful for keeping one's practice current. I look forward to meeting some of you at the CAS Annual Meeting in Calgary in June.

Dr Julie Lajoie Resident Representative

Anesthesiology in Rwanda

My Remarkable Experience





A silverback male mountain gorilla in his natural environment.

I am a fifth-year resident in the McGill program, and I was selected by the department to accompany Dr Franco Carli, a McGill staff anesthesiologist, on a 1-month teaching mission in Rwanda supported by the CAS International Education Fund. The primary objective of the mission was to provide clinical teaching to residents and nurse anesthetists in two hospitals located in

Kigali Butare as part of an ongoing project. The challenges we faced were not only different the effects (or lack of effect) of certain drugs, such as halothane or bupivacaine for spinal anesthesia, but also the



Part of the anesthesia team in Kigali: Dr Punjat, Bonaventure, Dr Paquet, Dr Ibrahim, Dr Carli, and the three nurse anesthetists.

lack of equipment. Despite this, I was impressed and motivated by the nurse anesthetists and residents, who manifested great enthusiasm and a desire to learn and improve their clinical skills.



Rwandans collecting their water daily

With their active involvement, I was successful in creating summary sheets for preoperative visits and protocols for both equipment checkup and fluid resuscitation in burned patients. Field injections for postoperative pain relief were created, as well as intubation boxes and pediatric anesthesia carts. This experience was further enhanced by discussions with other surgical and anesthesiology specialists from around the world, including Belgium, France, and the United States. It was interesting to encounter different pathologies and see the various surgical treatment proce-

dures.

Apart from my experiences in the hospital, I was fortunate to have the opportunity to meet many Rwandans and delighted to learn about Rwandan values, culture, and religion. Most Rwandans are

Catholic, although a minority is devout Muslim. Rwandans are known to be very friendly, active in their society, and supportive of their family members. In addition to meeting the people, I had the chance to witness the remarkable beauty of this country. I will always remember the amazing animals in Akagera Park, the incredible sight of mountain gorillas with their babies, and hiking through the Nyungwe Forest and around Kivu Lake. Finally, the never-ending fields of potatoes, bananas, rice, and tea on the seemingly endless chain of hills was absolutely breathtaking. From the clinical setting to my exploration of Rwanda, it was a remarkable experience all around. I highly recommend it and hope



Dr Carli and the author after taking part in typical Rwandan dances, accompanied by Dr Désiré and anesthesia resident Paulin.

many other Canadian residents will be interested in spending part of their time caring for those who are less fortunate and benefiting from this rich personal and professional experience.

Catherine Paquet

Research in Translation: From Bench to Bedside Focus on Dr Angelina Guzzo,

2006 Recipient of the Abbott Laboratories/CAS Fellowship in Anesthesia

Identifying the substrates underlying the amnestic properties of anesthetics.



clinical Many anesthesiologists today feel that much of the anesthesia research done today is of minimal relevance to their

everyday practice. I am also willing to admit that I do not fully understand some of it. All of this does not foster an atmosphere of research support from us clinicians!

This is my first attempt at a series of articles that aim to "bridge the gap"; to help us anesthesia clinicians understand the relevance of basic science anesthesia research in the country. I interviewed Dr Angelina Guzzo about some of the work she is doing this year with her award.

Q. Describe to me the research project(s) you are working on now.

A. How do I word this without putting you to sleep (pun intended!)? My research can be divided into two areas:

1. How do general anesthetics mediate their effects at the molecular level?

The molecular mechanisms of general anesthetics are still not well understood despite their widespread use. Furthermore, future drug design is improved if we understand how anesthetics interact with their targets at the structural level to mediate their pharmacological effects. Most general anesthetics are believed to mediate their effects through the inhibitory neurotransmitter GABA. Our lab is working on the GABA alpha five subunit receptor which is required for the amnestic properties of etomidate. The GABA receptor is a pentamer and there are 18 other subunits that can potentially partner with the alpha five subunit. My research is focused on determining which other

subunits partner with the GABA alpha five subunit, using a molecular biology approach, in order to elucidate the structural properties of this receptor that has a key role in memory.

2. As clinicians, we have all seen different reactions from our patients to the same anesthetic drugs — what is the reason for this?

There is diversity in how each patient responds to our anesthetic drugs. These

differences range from the doses of drugs required to achieve anesthesia, to more deleterious effects such malignant hyperthermia and intraoperative awareness. Differ-**DNA** ences in sequence account for variation in how our patients respond to anesthetic drugs by

causing a change in the structure or number of targets available for the drug binding. Using the publicly available human DNA sequence database (Human Genome Project, completed in 2003 after 13 years), I am using the human GABA alpha five gene as a model probe whether natural DNA sequence variation can account for differences in the human responses to the amnestic properties of anesthetics.

Q. It is great to know that this genome project can be utilized for anesthesia related research, as I think that the future of treatment in medicine may well be based on our ability to understand the genetic basis of many diseases. What sparked your interest in this area? (Was there a case, a person who got you interested?)

A. My sister almost died 2 years ago due to a ruptured brain aneurysm. I watched as she relearned to walk and was in awe of how the brain is so plastic. This sparked my interest in neurophysiology. Naturally I was drawn to how anesthetics work on the brain at the molecular level.



Dr Angelina Guzzo in the lab.

Q. How do you see the ultimate results of this work beina applied to the clinical practice of anesthesia? Is this relevant to someone like me who takes care patients in the OR every day?

A. We are characterizing a protein that we know is a key factor for mem-

ory formation in mice but has yet to be characterized in humans. Memory impairment post anesthesia, labeled postoperative cognitive dysfunction, was found in a large study to be greater than 25% in patients older than 60 years of age. If we can understand memory at the molecular level we might be able to prevent postoperative cognitive dysfunction some day. Ultimately, the goal would be to design drugs that affect specific targets so that we can "custom design" anesthetics to achieve amnesia, hypnosis, immobility and analgesia without unwanted side effects such as memory dysfunction.

Continued on page 6.



CAS/Abbott Laboratories Ltd Career Scientist Award in Anesthesia

Stephan Schwarz

University of British Columbia, Vancouver BC

Mechanisms of supraspinal analgesia and neurotoxicity by local anesthetics: Lidocaine effects on signalling and calcium conductances in thalamocortical neurons

Dr Schwarz is an assistant professor in the Department of Anesthesiology, Pharmacology, and Therapeutics at the University of British Columbia and a staff anesthesiologist at St Paul's Hospital, where he has recently been appointed director of anesthesia research. His research focuses on three major areas:

- Fundamental mechanisms of anesthesia and analgesia, with specific emphasis on thalamocortical neuropharmacology.
- 2. Central actions of local anesthetics related to analgesia.
- 3. Novel approaches to peri-operative monitoring and drug delivery to enhance patient safety.

The overall aim of Dr Schwarz's laboratory research program is to identify the cellular and molecular mechanisms that local anesthetics such as lidocaine exert on supraspinal neurons to produce central analgesia.

Administered systemically in low

doses, lidocaine is among the few pharmacologic agents effective in the treatment of chronic pain syndromes such as neuropathic and central pain, which are notoriously resistant to conventional analgesic therapy. Intravenous lidocaine is also effective in reducing acute postoperative pain. In contrast, high concentrations produce central nervous system toxicity, including seizures, coma, and death. While the precise sites and mechanisms for these actions are still unknown, recent studies emphasize the role of the thalamus and signal transmission by thalamocortical neurons in mediating analgesia and alterations in conscious state.

In the laboratory, Dr Schwarz has recently identified a novel mechanism of low, clinically analgesic concentrations of lidocaine in rat thalamocortical neurons in vitro. Lidocaine produced a significant reduction in neuronal resistance, effectively shunting tonic and burst firing in the neurons. Subsequent-

ly, he found preliminary evidence that at toxic concentrations, lidocaine unmasks a high-threshold Ca²⁺ conductance. These findings provide an attractive and plausible mechanism for the central actions of lidocaine and correspond well to observations in vivo. The specific objective of Dr Schwarz's current laboratory investigations is to identify the precise mechanisms that underlie the observed effects of lidocaine in the thalamus and delineate its actions on Ca²⁺ signalling.

The significance of this research is that the results will help define the precise mechanisms of therapeutic (analgesic) and toxic concentrations of local anesthetics at their central site of action in the brain, using a "bedside to bench" approach. Dr Schwarz's vision is that the findings will provide the basis for generating the fundamental knowledge required to develop novel, effective, and safe therapeutic strategies for acute and chronic pain treatment and anesthesia.

CARF Corner
Continued from page 5.

Q. Can this knowledge be extended to other non-anesthetic areas of medical patient care?

A. Yes, an understanding of memory dysfunction at the molecular level might lead to clues about Alzheimer's disease, other dementia states and better treatment options.

At the end of the interview, I was impressed at the scope of Angelina's research. This is work that utilizes an exciting new, "futuristic" tool in medical research — the Human Genome database, has great potential to improve the anesthetics we give to our patients everyday, and has potential useful extensions to other areas in medicine.

Doreen Yee, MD FRCPC MBA (Clinical anesthesiologist) Chair, Canadian Anesthesia Research Foundation www.anesthesia.org/carf

We Need to Hear from You!



As Membership Services Committee Chair, I frequently ask myself, "What does this role mean?" I think

it means that the CAS needs to serve its members. But how do we do this, and how can we tell if we have been successful? Are we benefiting anesthesiologists, who are providing care in an environment with ever-greater expectations of healthcare delivery?

To serve its membership, I believe the CAS needs to listen, respond, lead, and communicate.

Listen

Listening to the needs and wants of our members will give us a good perspective at both the local and national levels. How do we get this information? Your letters and emails, feedback from our Annual Meeting, and reports to the Board from your provincial representatives give us a wide range of feedback.

But we need to hear from you! Your communication should relate to the needs of the "community of anesthesiologists" in your province, or better yet, your country. Please take the time to answer the questionnaires and fill in the evaluation forms you get at the Annual Meeting. They frequently cover common themes that cross many boundaries and give us our direction.

Respond

The Canadian Journal of Anesthesia is listening to our requests and strives to provide more high-quality information, including supplements, continuing medical education, and relevant articles that advance our knowledge. The CAS as a whole has also responded by making the Annual Meeting better every year. We do encounter problems, but I ask continuously about the meeting while it is being held, and I get good feedback. This does not decrease the desire for improvement; rather, it intensifies the desire to make it even better.

Lead

Leadership is important, but it must be service leadership. By this I mean that

the CAS needs to hear from its members, reflect in a critical manner, and respond in a way that governing agencies, hospitals, and more importantly, the patients we serve understand the value of specialist anesthetic care. Without guidelines, it would be more difficult to develop the leverage we need to maintain high-quality anesthetic machines and equipment that allow for the degree of safety we are known for.

Communicate

We also need to communicate with the Board and committees. As Chair of the Membership Services Committee, I believe it is my role to continue to be diligent in reminding the CAS that its role is that of service to the members who provide care.

Please feel free to contact the CAS (anesthesia@cas.ca) and let them know what you need and how they can help you provide an ever-higher degree of safe care.

Richard Bergstrom, MD FRCPC Chair, Membership Services Committee

Receive a 100% Tax Receipt from Donated Stocks

Looking for new ways to reduce your overall tax burden? Consider donating securities to the Canadian Anesthesia Research Foundation (CARF). The rules have changed to offer a greater incentive to donate.

The May 2006 federal budget states that when publicly traded securities that have appreciated in value since acquisition are donated to a charity, the capital gains resulting from the sale of the donated stock are no longer subject to taxation. The donor receives a charitable donation receipt for 100% of the value of the donated stock.

For more information and to properly analyze your specific situation, please contact Patrick O'Keeffe, First Vice-President, Investment Advisor at CIBC Wood Gundy, at 416-369-2224 or via email at patrick.okeeffe@cibc.ca.



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Anesthesia News

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Anesthesia News serves to inform CAS members about current CAS activities and topics of general interest to Canadian anesthesiologists.

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Resident Reports from

Down Under

Each year, the CAS sponsors a resident representative to attend the annual meetings of the anesthesia societies of Australia, Great Britain and Ireland, and the United States. As part of this initiative, the CAS funded my recent trip to the Australian Society of Anesthetists (ASA-AU) annual meeting just north of Brisbane.

There are two annual meetings in Australia. I attended the more clinically-based meeting that occurs during their spring. The other occurs during their winter and has a much greater focus on research. I was very glad to be able to attend this conference and was able to learn a lot from the sessions. The meeting also had a very strong social component with the President's Dinner being the apex of the social agenda. The hosts made every effort to include me in all these activities and their hospitality was exceptional.

During my time in Australia, I presented a report to the Group of Australian Society of Anesthetists Clinical Trainees (GASACT). This committee is comprised of Resident Representatives from each of the Australian States, the President of the ASA-AU and the President-Elect of the ASA-AU. In my report, I tried to outline the current role of the Resident Section in the CAS and the role we now play in organizing the Annual Residents' Day Meeting.

I wish to thank the Board for sponsoring my trip to Australia. I believe that not only did I benefit personally but also that I obtained information that will be of interest to the CAS and its members. I learned a lot about the structure and roles of the Resident Societies in Australia and the UK. I hope that this information will help our own Resident Component grow and become more active in the CAS.

Desmond Sweeney Chair — Residents' Section Canadian Anesthesiologists' Society

Register online

for the

CAS 2007 Annual Meeting in Calgary!

www.cas.ca/annual_meeting/registration