Nouvelles et analyses

MRC changes its name, doubles its budget

Medical Research Council of Canada President Henry Friesen is ready to call it quits, having accomplished his goal of disbanding the 40-year-old institution over which he presides. If all goes according to plan, the MRC will cease to exist sometime around the beginning of April, to be replaced by the brand-new Canadian Institutes of Health Research (CIHR).

"We should see bill C-13, the legislation establishing the CIHR and repealing the MRC act, become law by Apr. 1," Friesen said in an interview. A call for nominations for CIHR president and positions on the new governing council closed in mid-January, with more than 400 applications received. But Friesen's name was not among them.

"I have served notice that the stage is set and it would be right for a new council and president to take on the exciting challenges ahead," Friesen said. "I'm looking forward to a little less hectic pace. I really felt somebody younger and full of energy could be more effective in the next stage." Friesen said he will be happy to stay on until a new person is chosen "and then watch with great interest to see how things unfold."

The federal government announced its intention to create the CIHR in the February 1999 budget. An interim governing council was established shortly after, with Friesen as chair, and it has been working tirelessly since then to make the new institutes a reality, the MRC president said.

The CIHR will have a much broader mandate than the MRC. Through a network of research institutions, it will support a wide spectrum of health research, from basic science to clinical research to health services and population health. It will also have a much larger budget — by its second year of operation, the annual budget of the CIHR will be close to \$500 million, nearly double that of the MRC, Friesen said.

The idea for the CIHR first surfaced at an MRC council meeting in March 1998. The council recognized

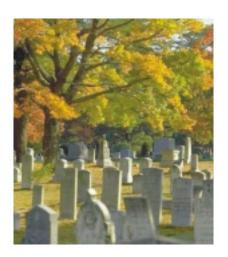
that it was "substantially at a disadvantage at an international level in terms of support for health and medical research," said Friesen, "and unless the MRC developed a strategy that was more inclusive, it would be left further behind." This led to the idea of replacing the council with a series of a "thematically focused institutes" linked through technology.

The new initiative did create "a certain ambivalence," Friesen admitted, "because there is a deeply felt loyalty to the MRC by its constituency — but I think you have to recognize the world is changing, and institutions are not immune."

The MRC governing council voted "virtually unanimously" in support of the idea, but acceptance within the medical community was a bit more guarded. "There were a lot of voices of caution, concern and scepticism," said Friesen, "but now I perceive a sense of exhilaration and excitement. Of course, it's helped by the increased funding." — Léo Charbonneau, Ottawa

Online obituary searching now available

CMA7 is the only Canadian journal to publish large numbers of physician death notices — a job it has been doing since it was first published in 1911. Now, thanks to staff at Montreal's McGill University Library, every death notice ever published in CMA7 or its predecessors — Maritime Medical News, the Montreal Medical Journal and the Canadian Medical and Surgical Journal — is now referenced online. For instance, visitors who type in "Osler" will learn instantly that Sir William's obituary appeared in CMA7 in 1920 (vol. 10, page 97). David Crawford, McGill's health sciences librarian, says the file contains reference information for more than 12 000 physicians. "As time, money and energy allow, we would like to add references to obits in other Canadian journals, but we have no immediate plans for this," he added. The site is located at www.health.library.mcgill.ca/osler/welcome.htm#obituary.



Booming "vanity medicine" industry under attack in Florida

Canadian snowbirds thinking of undergoing cosmetic or anti-aging medical procedures in Florida might want to think again, considering the findings of a recent investigation by the Fort Lauderdale's *Sun-Sentinel*.

The newspaper, which conducted a computer analysis of physician advertising and records from licensing, police and court records, found that more than 1700 Florida doctors now offer treatments aimed at people who are not ill. The services range from cosmetic surgery, hair transplants and weightloss programs to chelation therapy and "face peels."

The paper said such services account for the work of 1 in 17 doctors in private practice in the state, and is more than "the total number of doctors who specialize in treating heart disease and cancer combined." In a 36 000-word, 16-article series (www.sun-sentinel.com/news/new medicine.htm), the newspaper revealed that at least a dozen unlicensed cosmetic surgeons provide their services from offices, beauty salons and even hotel rooms. In one case, an unlicensed cosmetic surgeon was found to have used a dirty, bent cake spatula bought from a discount hardware store. That practitioner left a male bodybuilder with female breast implants and a "hideous" hole in his thorax, and a 27-year-old female with badly disfigured breasts.

Meanwhile, an owner of a chain of longevity centres who claimed on his Web site to be a physician was found to have no Florida licence. He explained that he had graduated from a Canadian medical school and was licensed to practise in Canada. Last summer, an

employee of one of those centres was arrested after he dropped a box of syringes, steroids and other hormones off at a flower shop, exchanging them for more than \$1100 in cash.

The *Sun-Sentinel* also found that 18% of doctors advertising chelation therapy had no medical insurance, and 28% of them had been sanctioned by Florida's medical licensing boards, compared with fewer than 2% of doctors in the general medical population.

Dr. Vincent De Gennaro, president of the Broward County Medical Association, told the newspaper: "I think your articles are right on in terms of the problem. However, in the same paper I see a very large ad for the very person you devote several columns to. We in the medical community are at times hamstrung by everyone's pursuit of profit." — *David Helwig*, London, Ont.

CMAJ appoints ethical-issues editor

For the first time in its 89-year history, *CMA7* will employ an editor who will assume responsibility for the journal's discussion of ethical issues. Dr. Peter

Singer, the Sun Life chair in bioethics and director of the University of Toronto Joint Centre for Bioethics, joined the journal as a part-time associ-



Dr. Peter Singer gives alms to a Buddhist monk in Thailand while participating in a workshop for medical school faculty

ate editor in March. Singer, an internist who graduated from the U of T in 1984, is one of the country's best-known ethicists. A Medical Research Council of Canada scientist, he has published 100 peer-reviewed articles on medical ethics, particularly in the areas of organ transplantation, ethics education and end-oflife care, and he has an "evolving interest" in global issues surrounding bioethics. Dr. John Hoey, the editor-inchief, said Singer has been a "series editor" at CMA7 for several years, having overseen a lengthy series of bioethics papers — Bioethics for Clinicians — that ran from 1996 to 1998. "We are now planning a new series that will include topics such as aboriginal bioethics, Islamic bioethics and the bioethics surrounding adverse drug reactions. In recognition of his role in producing this component of the journal, we are pleased that he accepted our invitation to join us as an associate editor."

Ontario MDs lose, Quebec MDs win in malpractice fee shuffle

Quebec doctors should see a dramatic reduction in their Canadian Medical Protective Association (CMPA) malpractice fees next year, while Ontario doctors will likely face a "substantial rise." The fees will be different because of the CMPA's new regional fee structure.

A recent cost-analysis study done for the association determined that awards or settlements in Quebec averaged about \$67 000, or half the national average of \$131 000, for the period 1989/1999. The average settlement in Ontario totalled \$172 000 — 156% higher than in Quebec. Differences in other parts of the country are less significant. The CMPA's governing council recently voted unanimously to move to a new regional fee structure to reflect these differences.

"The differences between Ontario and Quebec are dramatic," explained Dr. André Duranceau, a CMPA vice-president. "Regional differences in cost should be reflected in membership fee schedules in order that physicians, the medical community and governments in various parts of the country can see the relevance of the impact of court awards and settlements on costs in their particular region."

The CMPA moved to regional fees following a detailed actuarial analysis of its costs last summer. "As a not-for-profit organization run by and for physicians, the costs of providing service to our members are simply passed on to doctors through their membership fees," said Duranceau. "We cannot control costs such as those associated with court awards or settlements."

About 12 500 of the CMPA's 58 000 members are from Quebec.
— Steven Wharry, CMAJ

"Blood saves lives" theme of World Health Day 2000

Raising global awareness about blood safety and the importance of voluntary donors will be the focus of World Health Day on Apr. 7. In promoting the event, the World Health Organization cites an increasing need for safe blood donations. Worldwide, about 75 million units of blood are collected annually, but only 53% are from voluntary, nonpaid donors. About 18 million units are not tested for transfusion-transmissible infections; WHO says that between 5% and 10% of cases of HIV infection are caused by the transfusion of contaminated blood and blood products. WHO hopes to use the day to encourage governments and policymakers to achieve a safe blood supply (www.who.int/pht/blood_safety).



Rapid test may save money by allowing quicker emergency flights

A project by British Columbia's infant transportation team ambulance helicopter service is aimed at saving money while helicopters are on the ground.

Dr. Andrew McNab, director of the pediatric air ambulance program at the BC Children's Hospital, and Kyle Stevens, a paramedic and third-year medical student, are comparing results from the use of an iStat monitor, a point-of-care diagnostic tool, with conventional laboratory testing of blood gases prior to air-lifting patients to hospital. Analysis of the gases is a key factor in determining whether a patient is stable enough to fly. If this determination can be made faster it will save money, because it costs \$3000 an hour to have the ambulance helicopter standing by, and it takes about 2 hours to stabilize most patients.

The iStat monitor, which uses a tiny amount of blood, takes 2 minutes to produce results and can be used by paramedical personnel; the tests cost \$15-\$20 each. (The waiting time for conventional lab results ranges from 10 to 20 minutes, depending on the size of the hospital. McNab says that in a study he conducted involving 46 patients, the average wait for conventional results was 11 minutes.) The iStat units, which have been on the market for about 4 years, cost about \$8000. McNab predicts that using them routinely could result in significant savings because of reduced overtime for ambulance staff and less callback time for laboratory technicians. One in 4 flights results in overtime payments to paramedics, who carry out about 50% of the calls without an accompanying physician.

To provide a comparison, McNab said that an oximeter, which is now used heavily on these flights, paid for itself in less than a year. About 1000 children use the air ambulance service each year, and McNab estimates about half of them could benefit from iStat testing. Apart from the cost savings, children who are stabilized speedily will arrive at hospital in superior condition. "The better condition you are in when you arrive in the intensive care unit, the less likely you are to need overall hospital care," says McNab. The researchers plan to extend the project to headinjured children, a move that McNab says will result in "an even greater reduction in morbidity" and help optimize care during the transfer to the Children's Hospital.

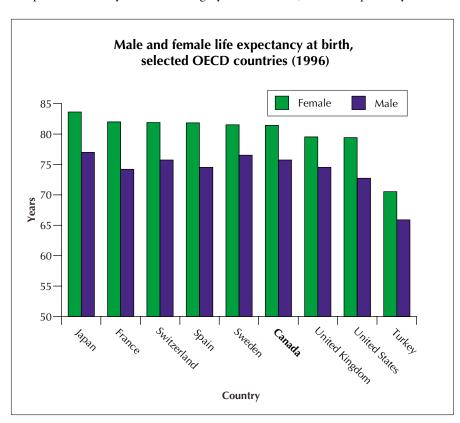
Stevens began the project as part of a summer program in pediatrics that is offered to first- and second-year medical students, and he will continue the work throughout this academic year. — *Heather Kent*, Vancouver

Pulse

Canada among leaders in OECD health results

The latest data from the Organization for Economic Cooperation and Development (OECD) indicate that Canada compares favourably with other highly industrialized countries when it comes to life expectancy but is in the middle of the pack in terms of infant mortality.

In 1996, the life expectancy at birth



for a Canadian woman was 81.4 years, which ranked Canada sixth among the 28 countries for which data were available. Only Japan (83.6 years), France (82.0), Switzerland (81.9), Spain (81.8) and Sweden (81.5) have higher life expectancy rates for females. The US, at 79.4 years, ranked 17th, while Turkey had the lowest life expectancy rate for women, 70.5 years.

Canada ranked fourth in life expectancy at birth for men, at 75.7 years. Only Japan (77.0 years), Sweden (76.5), and Iceland (76.2) had superior rates. The US ranked 19th at 72.7 years, while Turkey again had the worst rate, 65.9 years.

In terms of of infant mortality, Canada is tied with Belgium and the Czech Republic for 14th place among the 28 countries, with a rate of 6.0 deaths/1000 live births. The United States mirrors Canada, with an infant mortality rate of 6.1/1000. Iceland has the best rate, 3.7/1000 live births, followed closely by Japan (3.8), Finland (3.9) and Norway (4.0). Turkey, at 42.2/1000, had the highest infant mortality rate, with Mexico a distant second at 17/1000. — Shelley Martin, CMA, martis@cma.ca

Health promises scarce among US presidential candidates

Unlike 1992, when Bill Clinton rode the promise of universal health care right into the White House, this year's American presidential candidates are much more circumspect about using health care reform as a campaign issue. None is advocating any grand design to throw a safety net over the 44 million Americans who have no health insurance, but all are advocating incre-

mentalism. And none is even hinting at a single-payer national health service like Canada's — especially given the American media focus on ER shutdowns and growing waiting lists in Ontario, Quebec and most other provinces. Yes, these made headlines south of the border this winter.

In their run-up to the primaries, Democratic contenders Al Gore and Bill Bradley put forward proposals to expand health insurance to children through the State Children's Health Insurance Program (CHIP), provide tax breaks to small businesses to offer health insurance, add a prescription drug benefit to Medicare (the program that covers the nation's elderly

(Continued on page 1033)

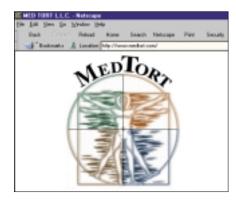
On the Net

Litigation online

If Canadians are lucky, they will never walk as far down the litigation trail as their American neighbours. However, the Internet is helping to spread the American gospel of victimization, and numerous sites are now available that publicize lawyers who specialize in targeting physicians.

Many American lawyers now have cyber practices and some certainly catch visitors' attention. The Shapiro and Shapiro site — www.shapiroshapiro.com — is home to Jim "The Hammer" Shapiro. This firm actively seeks medical malpractice cases with slogans such as "Sue the Bastards" and "I may be an S.O.B., but I am your S.O.B."

These days, however, not just fist-waving lawyers specialize in malpractice cases. Other sites, while presenting a friendlier face, still help build cases against doctors. For example, Med-Tort (www.medtort.com) claims to be the first completely online consultation service for attorneys and patients needing expert medical opinions.



The site was launched by a group of attorneys and physicians "in order to provide an efficient and economical means of identifying viable medical malpractice claims." Clients fill out online questionnaires, and within 7 days receive an emailed report stating whether or not they have a malpractice case. This service is currently restricted to the US, but can Canada be far behind?

Already there are signs of things to come. Medical and Surgical Litigation Consultants (www.medlit.com) is based

in Victoria and Toronto and offers a similar service to patients and lawyers. The 2 physicians involved, retired ob/gyn John Limbert and retired orthopedic surgeon Allan Gold, analyse and advise people on their rights regarding medical malpractice. They charge an average fee of \$200 to \$225 per hour; verbal reports cost \$600 to \$900, while written reports cost \$750 to \$1800.

A Calgary-based firm, Economica Ltd. (www.economica.ca), goes a step further with its electronic mailing lists. Here lawyers can discuss Canadian medical malpractice cases over the Internet or read a newsletter, *The Expert Witness*

With all of these sites available, it is comforting that a new site called Doctors First (www.doctorsfirst.com) has been launched. In the interest of putting the interests of doctors first, it advises: "Don't remain unarmed in our battle against frivolous suits. Reduce the risk of ending up on the wrong side of 'v.' "

— Michael OReilly, mike@oreilly.net

Election issues in US

(Continued from page 1032)

and some disabled patients) and provide scaled subsidies to families with limited incomes so that they might buy into the Federal Employees Health Benefits Program. That giant program, which is available to federal employees, pools hundreds of private plans to get members better rates and more options. Bradley, who lost the race to Gore, also would have required parents to buy insurance for their kids. On the Republican side, Texas Governor George Bush and Arizona Senator John McCain would

also make CHIP money more readily available and would expand the range of Medicare and Medicaid. Bush, who appeared certain to win the race, would push a national program to allow individuals to sue their HMOs for shoddy care or denial of coverage; this is already law in Texas. McCain had advocated a law to empower people to insist that insurers and HMOs conform to certain service levels.

Clinton too has waded into the campaign, pushing a \$110-billion package of health insurance initiatives including expansion of CHIP and Medicare and Medicaid, offering tax credits for small businesses that provide workers with insurance and al-

lowing workers as young as 55 to buy into Medicare; it is now available only to those 65 or older. He hopes Congress will act on his bill before he leaves next January, but there is little chance of that happening.

Even the insurance industry has come on board with a renewal of its famous Harry and Louise campaign, which in the early 1990s lampooned the Clinton attempts to impose a federal bureaucracy over the nation's health care. It has now modified its message to advocate making it easier for people to buy private insurance, government subsidies for low-income workers and tax credits for small employers. — *Milan Korcok*, Florida

Research Update

Eye-opening cataract study shows routine tests unnecessary

Blood counts, serum electrolyte measurements and electrocardiograms are routinely ordered for patients undergoing cataract surgery. Now new research from the US has found that these tests do not offer patients any medical benefit (*N Engl J Med* 2000; 342:168-75). "The study shows quite definitively that there is no role for routine medical testing for patients who are scheduled for routine cataract surgery," says lead investigator Dr. Oliver Schein, professor of ophthalmology at the Wilmer Eye Institute at the Johns Hopkins Medical Institute.

"Common practice is to simply say, 'OK, the patient is scheduled for surgery. The patient needs a history, physical and lab tests.' The history and the physical are still necessary but the lab tests offer no benefit," he notes.

Researchers at 9 medical centres throughout the US randomly assigned more than 19 000 patients scheduled for cataract surgery into 1 of 2 groups. One group received pre-operative testing and the other did not. All medical complications that occurred over the 7-day period following surgery were recorded.

No significant differences were found between the 2 groups in terms of events during or after the operation. For events during the operation, patients who underwent testing had 19.7 events per 1000 operations, compared with 19.2 for the group without testing. For events following the operation, the testing group had 12.1 events per 1000 operations while the no-testing group 12.6. Serious medical events were very rare in both groups, and the overall rate

of complications was similar, at 31.3 events per 1000 operations. In addition, researchers found no benefit to testing when the results were analysed by the patients' age, sex, race or existing medical conditions.

"We recommend that tests be ordered only when the history or a finding on physical examination would have indicated the need for a test even if surgery had not been planned," Schein says.

The results, he adds, may apply to most routine surgery. "We only studied cataract surgery, but there have been a lot of smaller studies over the years that relate to other non-major surgeries that have looked at the benefit of testing. They virtually all say the same thing — there is no benefit to testing." — Donalee Moulton, Halifax

Tuned in to the human voice

Human beings have a wonderful ability to recognize voices, even voices they haven't heard for years, and they can easily and accurately interpret a great deal of information about people from their voices, including sex, approximate age and emotional state. But little is known about the way the brain performs these neuronal feats.

Cognitive neuroscientist Pascal Belin has identified several regions of the superior temporal sulcus (STS) that are activated by the human voice (*Nature* 2000;403:307-12). Using functional magnetic resonance imaging, Belin and colleagues at the Montreal Neurological Institute demonstrated that areas of this deep fissure of the temporal lobe are much more active when test subjects listen to human voices than to other sounds. "This study increases our knowledge of the auditory cortex," says Belin, adding that the function of the

STS was unknown until now. "It also draws an important parallel with face perception, because the voice is the face of the auditory system. Research on face perception is a hot topic now, and I think this discovery will stimulate a similar amount of research into the organization of the auditory brain."

Sixteen normal adult men and women were scanned during silence or while listening passively to various stimuli. Vocal stimuli included not only words and sentences in different languages, but also nonspeech vocalizations such as laughter, sighs and coughs. Nonvocal stimuli included animal cries and natural and mechanical noises. Scanning showed that the voice-selective regions found bilaterally along the upper bank of the STS showed greater neuronal activity when subjects listened to vocal sounds than to nonvocal sounds.

In a second part of the experiment,

the subjects listened to control sounds of human origin such as finger snaps and to scrambled and filtered vocal sounds in order to characterize the response of the voice-sensitive regions to modifications of the acoustic structure of voice. "This allowed us to demonstrate that the 'voice area' is really selectively activated by voice, and is not simply responding to particular acoustic components that might be found in other sounds as well," says Belin.

This research might help increase understanding of how the human brain evolved, he suggests. "Whereas speech is unique to humans, the ability to perceive the voice and analyse the sounds made by other members of the same species is something we share with a lot of other animals, and it is likely that voice-selective areas exist in the brains of closely related primates." — Janice Hamilton, Montreal

Attack of the killer lymphocytes

Immune system cells that attack unwanted bacteria can also turn on certain healthy cells, researchers at Johns Hopkins University have discovered. The finding goes a long way in explaining the link between bacterial infections and the development of autoimmune diseases such as arthritis (*Nat Med* 2000;6:215-8).

"We've found this evidence that the immune system can be fooled, and it suggests subtle changes that could underlie many autoimmune diseases," says Dr. Mark Soloski, an associate professor of medicine at Johns Hopkins.

The researchers infected mice with salmonella bacteria, then observed the behaviour of a typical bacteria-fighting immune cell, the cytotoxic lymphocyte

(CTL), as it approached infected body cells. Cells invaded by bacteria normally give clear signals that they're infected. Attracted by this protein "flag," CTLs dock with the infected cells and trigger their rapid self-destruction. (This protein flag in infected mice is one that is common to certain bacteria associated with human arthritis, including Borrelia burgdorferi, which causes Lyme disease.) However, the researchers also found that the bacterial flag was almost identical to parts of a "universal housekeeping molecule" found in humans, mice and all living organisms that help proteins keep their shape. When the researchers coaxed the mouse cells to display this salmonella flag, their CTLs would readily attack. But they also went into attack mode if the cells displayed a piece of the mouse's own housekeeping molecule or the identical human version. "These cells have the potential to go over and destroy our own cells," notes Soloski. "Surprisingly, we found these cells were a dominant response in over half the animals. . . . There are hints the same thing is going on in humans."

It is still too early to assume a cause-and-effect relation between certain bacteria and specific autoimmune diseases, he adds. "We're not moving yet to state that arthritis is caused by a bacterial infection, but we're looking closely [at the idea] that some forms of arthritis may be triggered by this." — *Donalee Moulton*, Halifax

Saving saliva function during treatment for head and neck cancer

Two Edmonton doctors have pioneered a new surgical procedure that significantly boosts quality of life for patients with head and neck cancer by preserving saliva functioning.

The novel method, developed by Drs. Naresh Jha and Hadi Seikaly of the University of Alberta, involves permanently moving 1 of the 6 main (submandibular) saliva glands from under the jaw to beneath the chin, where it is more easily shielded from radiation during treatment. This rerouting of blood flow, nerve supply, and saliva drainage to the relocated gland, which adds only 45 minutes to initial cancer surgery, is performed before radiation therapy starts.

Preliminary results of the team's prospective trial (*Int J Radiat Oncol Biol Phys* 2000;46[1]:7-11) confirm that the approximately 300 mL of saliva produced daily by a single gland is enough to prevent dry mouth. "We all know that patients can function with one kidney or one lung," says Jha, an associate professor in the U of A's Department of Oncology. "Our hope was that if we

were able to save one major salivary gland, it would produce enough saliva to take care of the dryness problem."

Cancer of the head or neck is typically managed with some combination of surgery, radiation treatment and chemotherapy. The radiation component, however, destroys all of the patients' saliva glands, leaving patients with a permanent dry mouth (xerostomia). Besides causing problems with speech, chewing, tasting and swallowing, this condition also leads to loss of appetite and body weight, and to tooth decay.

Jha estimates that the new procedure could benefit up to three-quarters of all patients with head and neck cancer. The remaining 25% of patients with cancer of the nasopharynx or oral cavity, or with bilateral neck nodes, are not eligible for the operation.

Since getting the green light for their prospective trial from the Alberta Cancer Board in June 1999, Seikaly has successfully performed 30 of the operations through Edmonton's Cross Cancer Institute. While they won't have long-term follow-up results for at least an-

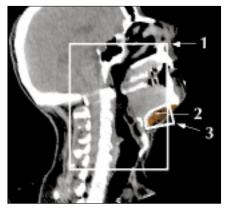


Diagram shows how the relocated salivary gland is shielded from radiation: 1) area affected by radiation (radiation field); 2) wire defining posterior border of salivary gland relocated to below the chin; 3) area shielded from radiation during therapy.

other year, the pair is continuing to do the procedure outside of the trial. "Based on the very favourable preliminary results," says Seikaly, assistant clinical professor in the Department of Otolaryngology, Head and Neck Surgery, "we feel it is unethical not to offer it to patients." — *Greg Basky*, Saskatoon