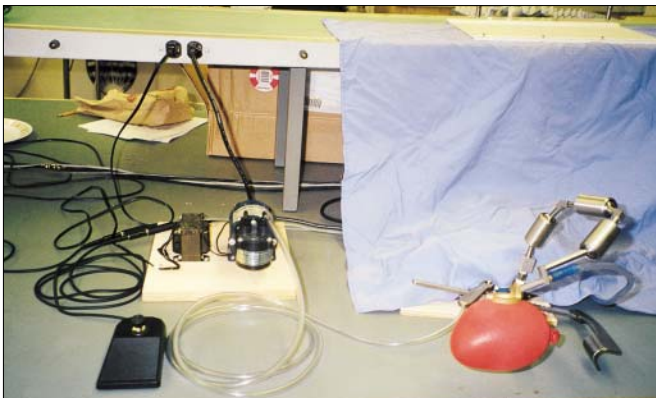




## UBC gets to heart of problem

Researchers at the University of British Columbia have designed a device that stabilizes cardiac tissue during open-heart surgery and avoids cardiopulmonary bypass procedures. The HeartStabilizer was conceived by Drs. Sam Lichtenstein and Kassem Ashe, surgeons at St. Paul's Hospital in Vancouver, and the design work was done by Dr. Tim Salcudean, associate professor in UBC's Department of Electrical and Computer Engineering, and Terence Gilhuly, a graduate student. It is believed to be the only device of its kind in the world.



UBC's HeartStabilizer

The stainless steel unit, which weighs less than 1 kg, enables surgeons to operate and suture while the heart continues to beat during bypass grafting surgery. The primary benefit is that procedures can be carried out without using cardiopulmonary bypass. The researchers say that heart-bypass procedures damage blood cells and that patients who receive them spend an extra 3 days in hospital, adding substantially to the cost of care. The HeartStabilizer is easily mounted to a chest retractor and moves with the heart, reducing the risk of injury from the unit if the patient moves during surgery. The unit can be quickly turned on and off using two foot pedals, and can be fully sterilized.

The tissue holder has been tested on pigs and more animal tests are planned for the next few months. Developing a workable, easy-to-use system presented the main challenge, says Salcudean. He spent 18 months observing operations and refining the design with Gilhuly. The only similar product available is much more cumbersome than the lightweight HeartStabilizer, he says.

Development was funded by Canada's Institute of Robotics and Intelligent Systems. Gilhuly is now seeking commercial support for the device, with Lichtenstein and Ashe acting as consultants. — © Heather Kent

## Canada spends much more for similar health care results, UK dean says

Dr. Peter Bundred, the recently appointed dean of health sciences at Liverpool University, says Canada outspends the UK when it comes to health care but has little to show for the extra money. Bundred made the comments during a recent seminar on primary health care reform at the University of Ottawa's Health Sciences Centre. "How come someone from a health care system judged by the American literature as the crappiest in the world has been invited to come and talk about that system in Canada?" he asked with a rhetorical flourish. The answer, apparently, is that Bundred has thought his way through one of the most difficult challenges facing health care providers: how to dein-

stitutionalize health care while reconceptualizing an Industrial Age model for the Information Age in which we now live.

With the Industrial Age model, he explained, resources and respect are accorded to tertiary, secondary and primary medical care, while the whole area of informal health care is ignored. However, no developed country can afford to continue in this direction, since it is rapidly becoming too expensive and it does not solve problems related to population health. Bundred noted that Canada spends 2.7% more of its gross domestic product on health care than the UK, yet it is not clear what added value it is getting for the extra money. Indicators such as infant

mortality and life expectancy are the same on both sides of the Atlantic.

In an Information Age model, Bundred continued, the "triangle of health care" is inverted. The apex of the system — tertiary, secondary and primary medical care — receives fewer resources and less encouragement, while services and networks outside the formal medical system get boosted. In this sea of "informal" contacts Bundred included individual self-care, friends and family networks, self-help groups and complementary medicine. "We must discourage spending on hi-tech hospital care, which is often poorly researched, and encourage people to

(see page 1350)



# Your Editorial Board: Dr. Peter Warren

Dr. Peter Warren, the associate dean, undergraduate education, at the University of Manitoba medical school, graduated from Cambridge University in 1964. A respirologist, he practises in the Respiratory Unit at the Health Sciences Centre in Winnipeg.

### Who was your most influential teacher?

Sir John Batten of St. George's Hospital, London, who exemplified the notion that personal commitment to patient care could be combined with scholarly curiosity and clinical research.

### What aspect of your work gives you the most pleasure?

The success of a caring and dedicated student for whom the hard task of medical education has not been easy.

### What research paper has had the most influence on your career?

Pepys J, Jenkins PA, Festenstein GN, Gregory PH, Lacey M, Skinner FA. Farmer's lung: thermophilic actinomycetes as a source of 'farmer's lung hay' antigen. *Lancet* 1963;ii:607. It was some years before I discovered



that Gregory, an eminent agricultural mycologist, spent some of his early research life in Winnipeg.

### What is your favourite pastime?

Cross-country skiing with the dog in the Manitoba countryside.

### What book did you last read?

I reread old friends constantly. The last new book is *Such a Long Journey* by Rohinton Mistry.

### What alternative profession would you have liked to pursue?

Archeology.

### What illness do you fear most?

Stroke with dysphasia.

### What complementary therapies have you tried?

For acute illness, boiled halibut and parsley sauce.

### What advice do you have for a young physician?

To use the words of my current interest, William Osler: "The measure of success is doing the day's work as faithfully and honestly and energetically as in your power." He also said: "Every day do some reading or work apart from your profession."

### What was your biggest mistake?

My failure to learn to write well.

### What was your biggest achievement?

The Maccabean Medal for writing *Some aspects of medicine in the Greek Bronze Age*.

### What make and year of car do you drive?

A 1994 Volvo 850.

(continued from page 1348)

think of health care professionals as facilitators and partners."

Bundred also provided a vivid example of the cost pressures created by new technology and new drugs. As district officer of health in the Wirral, an area near Liverpool with

a population of 360 000, he did a cost-benefit analysis of Viagra, which has not yet been released in the UK. If each man in the area who had talked about erectile dysfunction with his GP was prescribed 4 Viagra tablets a month, said Bundred, it would cost the Wirral region alone £500 000, or \$1.2 mil-

lion, annually. But the Wirral budget is already stretched to the limit, with no increases in sight. This leads to one of the major questions facing publicly funded health care. How can administrators decide whether they can afford to accept new technologies and drugs? —

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