Gairdner winners bumped to \$100 000 next year

The 2008 winners of Canada's most internationally recognized prize for biomedical research have been unveiled by the Gairdner Foundation. The recipients of this year's Gairdner International awards, who were announced Apr. 15, 2008, will each receive \$30 000, a certificate and a La Coeur statue.

Gairdner Foundation president Dr. John Dirks said the 5 International recipients "have made major advances in human biology and disease."

The Gairdners were founded 49 years ago by the late Toronto businessman James Gairdner and today rank among the most prestigious awards in science. Some 70 of 288 Gairdner recipients have gone on to win the Nobel Prize (www.gairdner.org).

The 2008 Gairdner winners are:

Harald zur Hausen, Professor Emeritus and recent Chairman and Scientific Director, German Cancer Research Centre, Heidelberg, Germany, "for the discovery of the causative role of papillomaviruses in cancer of the cervix which led to the development of a successful HPV [human papillomavirus] vaccine." Zur Hausen is renowned for having speculated in the early 1970s that there is a link between sexually transmitted human papillomaviruses and cervical cancers after noting that there was a much higher incidence of the disease among prostitutes than nuns. He proved the link a decade later and has since been involved in the discovery of a large number of novel virus types, including HPV 6, 11, 16, 18 and the African Green Monkey Epstein-Barr Virus.

Victor Ambros, professor of Molecular Medicine, University of Massachusetts Medical School in Worcester,

Massachusetts, United States and **Gary Ruvkun**, professor of genetics, Department of Molecular Biology, Harvard Medical School, Boston, Massachusetts, United States "for the discovery of microRNAs and their mechanism of gene regulation." The tiny, noncoding single-stranded ribonucleic acid molecules known as microRNAs are believed to have a complementary role to messenger RNAs during the process by which they are bound to DNA and then with amino acids to create the proteins that make up the human body. Essentially, microRNAs are believed to mediate the production of protein by messenger RNAs of specific target genes.

Nahum Sonenberg, professor, Department of Biochemistry and McGill Cancer Centre, McGill University, Montréal, Quebec, "for discovery of mechanisms controlling gene expression in human cells at the level of protein synthesis."

Harald zur Hausen

Gary Ruvkun

Samuel Weiss

Victor Ambros

Nahum Sonenberg

Alan Bernstein

Samuel Weiss, professor of cell biology and anatomy and pharmacology and therapeutics, University of Calgary, Calgary, Alberta, “for his seminal discovery of adult neural stem cells in the mammalian brain and its importance in nerve cell regeneration.”

The Foundation also issued a special award, the 2008 Gairdner Wightman for outstanding leadership in Canadian medicine to Global HIV Vaccine Enterprise Executive Director **Alan Bernstein** “for his outstanding contribution to Canadian health research as a scientist, research institute director and as the inaugural President of the Canadian Institutes of Health Research.” Bernstein assumed the CIHR presidency in 2002 and resigned last year (*CMAJ* 2007;177[3]:241 and *CMAJ* 2007;177[8]:844-5).

Bernstein receives the 11th Gairdner Wightman to be awarded. Hereafter, it will be awarded annually. Commencing in 2009, the cash value of all Gairdner awards will be bumped to \$100 000 as a consequence of the Foundation having received a \$20 million endowment from the government in the 2008 federal budget. — Wayne Kondro, *CMAJ*

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Global Health forum urges training programs

When it comes to staffing levels at Bundibugyo District Hospital in western Uganda, the gap between the ideal and the reality is as jarring as the rough drive through the Rwenzori Mountains to reach the isolated community.

Though government guidelines say the hospital should have 7 doctors, they instead have 2. Where they are supposed to have 46 enrolled nurses, they have 26. Instead of 25 midwives, they have 10. In all, more than a third of positions are unfilled and many jobs are done by under-qualified workers.

“The workload is great,” says David Muhindo, a nursing officer at the hospital. “It is not possible to achieve all the required results.”

The staffing problem at the hospital, which often has to squeeze 300 or more patients into the 100-bed facility, stretches across Uganda, most of Africa and the rest of the developing world, where a growing health worker shortage is undermining basic medical services.

Last month, experts gathered in Uganda to discuss the problem and lobby developed countries — which benefit from the migration of workers from developing countries — to play a role in levelling the playing field.

The 1500 delegates produced a series of resolutions that primarily call on governments to lead coordination efforts and encouraged them to explore public-private partnerships as part of the solutions.

The resolutions also encouraged all partners to focus on improving and expanding training programs in the hardest hit countries — an alternative to another proposed solution to have developing countries receive compensation from those who recruit foreign workers.

Both proposals work under the belief that health workers cannot be forced to remain in their home countries.

“One cannot simply interdict such movement since it is a human right to migrate freely, and the idea that developed countries should pay reparations for workers who have migrated doesn’t get to the root of the problem,” says Dr. Peter Walker, former dean of medicine at the University of Ottawa and a presenter at the conference.

Instead, solutions should focus on working conditions in the originating country so workers no longer feel compelled to seek greener pastures, he adds.

The conference was highly anticipated because of its role in bringing together government, nongovernmental organizations, business and academic leaders in the hopes they would produce a coordinated plan for attracting attention, and dollars, to the cause.

Organizers cited research that suggests tens of billions of dollars will be needed to implement the proposals, but the conference resolutions steered clear of those figures.

“Nobody knows the exact amount of money needed to address this crisis,” says Dr. Francis Omaswa, executive di-

Christopher Mason

In Ugandan hospitals, it is a requirement, when someone is admitted to hospital, that family members supply bedding, clothes, sheets and sometimes food. When a woman gives birth, for example, she must also supply the doctor and nurses with 2 pairs of latex gloves. Here, 2 children leave Bundibugyo District Hospital with supplies after a relative is released from a ward.

rector of the Global Health Workforce Alliance, the conference organizers.

Regardless of wealth, countries around the world are facing a growing crisis in adequately staffing health care facilities. World Health Organization figures estimate that more than 4 million health workers are needed worldwide to achieve international health and development standards.

But research suggests the problem is especially concentrated in Africa, which carries 25% of the global disease burden despite having only 3% of the world’s health workers and 1% of its economic resources.

“The lack of workers is one of the biggest challenges we face in meeting our development goals,” says Uganda’s Health Minister Dr. Stephen Mallinga. “Health workers are the engine and everything else follows.” — Christopher Mason, Kampala, Uganda

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