



involving two 27-year-old Ontario men who drank similar amounts of Upper Canada Lager while taking moderately high doses of phenelzine. Within 45 minutes of drinking the beer both men experienced severe occipital headache, chest pain, nausea and neck stiffness. Hypertension was well documented in both cases, with systolic blood pressures of approximately 200 mm Hg and diastolic pressures

ranging from 110 to 120 mm Hg at maximum. No permanent damage occurred in either case.

Warning issued on test kits

Health Canada is reminding physicians of potentially fatal misdiagnoses when group B streptococcal (GBS) antigen test kits are used. The Health Protection Branch said GBS antigen tests are

only an adjunct to diagnosis and multiple studies have shown they are not an appropriate substitute for bacterial cultures in the diagnosis of GBS colonization or infection. The warning followed a similar alert from the US Food and Drug Administration, which said GBS test kits have produced false-negative results in specimens from pregnant women and infants, who subsequently died from GBS disease.

Winnipeg centre created to study aging, prepare for problems

Some sobering predictions about the health and average age of Manitobans in 2007 have prompted the St. Boniface Hospital Foundation to build a unique facility to study of aging. "In 10 years 25% of this province's population will be over 65," says Dr. John Foerster, director of research for the St. Boniface General Hospital. "That will be the highest percentage in Canada."

To help cope with an anticipated increase in the number of cases of senile dementia, the foundation has launched a campaign to raise \$12.6 million to build a Centre for Health Research on Aging, the first of its kind in Canada. It is expected to open next year in late spring or early summer. To date more than \$6 million has been raised privately to build the centre, and the balance is expected to be collected by year's end.

"In the future illnesses such as Alzheimer disease (AD), stroke and dementia will afflict almost half of Manitoba seniors over age 85 and 20% of those between 75 and 85," says Foerster. When fully operational, the centre will have a staff of 100 researchers, 2 surgical theatres, a state-of-the-art scanning electron microscope and access to 3 MRI machines, 2 of which allow surgery while patients are inside the machine.

The main facility will be on the fourth floor of the hospital's research centre, next to the main hospital. As well, memory-disorder clinics will be located in seniors' fa-



Dr. Francis Amara: many developments under way

cilities in downtown Winnipeg, where researchers will have direct access to patients with AD or dementia.

Dr. Francis Amara, an associate professor of molecular biology at the University of Manitoba, joined the centre last summer as its first

principal investigator. He leads a team that is investigating familial-AD-linked mutations in the amyloid precursor protein (APP) gene that disrupt a regulatory secondary stem loop structure in APP messenger ribonucleic acid (RNA).

"We are examining the possibility that these mutant-messenger RNAs will lose the ability to regulate normally the translation of APP and produce abnormally high amounts of neurotoxic APP products," Amara says.

His team is also developing a diagnostic blood test to support clinical evaluations for the diagnosis of AD. "Recently, we have identified 2 abnormal protein spots that were present in 20 samples of cerebrospinal fluid [CSF] from Alzheimer patients, but were not present in 30 samples of CSF from non-Alzheimer patients."

Dementia caused by strokes and viruses will also be studied at the centre. This research will include clinical trials of drugs and other treatments to prevent strokes, medications that minimize damage after a cerebrovascular accident, and the use of MRIs to examine brain structure and function. Viral research will focus on how viruses such as HIV cause brain damage that leads to dementia. — © David Square