



The Foundation Newsletter

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Windsor, Halifax okayed to open Learning Centres

Windsor and Halifax are the latest Valleys to receive approval to develop Learning Centres to tutor dyslexic children. A Learning Centre has been operating for the past two years in London.

The Windsor Learning Centre is expected to open this September in the Windsor Masonic Temple, according to Carl Fairthorne, chairman of the project. They are hoping to attract 6-7 tutors and 12-15 students in their first year of operation. The local school board is helping to recruit tutors.

Plans to raise the initial \$40,000 for the project are progressing well, says Carl. He expects the Valley, which is traditionally one of the largest donors to the Scottish Rite Charitable Foundation, will easily meet its goal.

Harold Crosby of Halifax Valley is chairman of their project's steering committee. Enthusiasm is high but the project is having problems finding affordable space. Unlike London and Windsor, Halifax does not have space available in its Masonic Lodge building. Like Windsor, Halifax is hoping to be open this September.

Participation rate slowly edges upward

Following are the top 10 participation rates for individual donations to the Scottish Rite Charitable Foundation as of December 31, 2004. The Foundation is aiming for all Valleys to reach a minimum of 10%. The fiscal year ends May 31.

Windsor	12.0
Chatham	8.9
Victoria	8.3
London	8.3
Summerside	7.4
Kamloops	5.6
Guelph	5.3
Central Alberta	4.9
Sydney	4.7
Halifax	4.2

Dyslexia knows no boundaries

Two months after the London Scottish Rite Charitable Foundation Learning Centre had opened, a mother phoned from Toronto to enquire about getting help for her dyslexic son.

She said that she had been living in Grenada, and had taken her 14-year-old son to a Learning Disabilities clinic in Bridgetown, Barbados. In discussing a program for her son, and the relatively high cost of commuting between Grenada and Barbados, or the difficulties and cost of boarding him in Bridgetown, the clinic in Bridgetown advised the mother to seek help from the new Scottish Rite Charitable

A (web) site to see

The Scottish Rite Charitable Foundation now has its own web site at www.srcf.ca.

The site was created by Dr. Gareth Taylor, who is a member of the Foundation, co-ordinates the SRCF grants and scholarships procedure and is Director of Government Research Grants at the Mount Sinai Research Centre in Toronto.

The previous SRCF web site was part of the Scottish Rite Supreme Council site. Now, as a stand-alone site, its goal is to provide information to researchers about funding opportunities and allow applicants to apply on-line.

The site includes back issues of SRCF annual reports and newsletters. Discussions are now being held to consider using the web site for fund raising by credit card and the provision of information about planned giving.

If you have any suggestions for additional uses for the web site, please email info@srcf.ca

Foundation Learning Centre in London. The London Centre advised that it could not help, having a full schedule, but she was given the name of a reliable reference in Toronto to contact, together with telephone and e-mail contact information.

The need is so great for remedial help for dyslexia, that word had travelled very quickly and over some distance, at least as far as Barbados, in such a short time. The nature of the help being offered by the program is obviously respected far and wide!

*(From 'Snippets,'
the London Learning Centre newsletter.)*

Alzheimer's Disease

Both genetics, environment likely play role in Alzheimer's Disease

Almost a hundred years ago in Germany, Dr. Alois Alzheimer presented the first scientific paper describing the disease that now bears his name. Today, all over the world, researchers are working with better methods and technology than ever before, to try to solve the riddle of Alzheimer's Disease.

In Dallas, researchers have vaccinated lab mice against the buildup of amyloid proteins – the tangle of deposits that form in the brain of AD patients, be they humans or “transgenic” mice that have had human genes artificially inserted into them. The gene-based vaccine in Dallas looks promising. In mice.

Elsewhere, researchers see hope in human stem cells, those undifferentiated cells that give rise to other cell types – perhaps, one day, even new neurons to replace damaged ones. Yet this controversial research is generations away from yielding treatments.

In Canada, the Scottish Rite Foundation funds several promising lines of research that would have astounded Dr. Alzheimer. For more than three years, Dr. Christopher Shaw of the University of British Columbia has researched ALS-Parkinsonism Dementia Complex (ALS-PDC), which combines symptoms of Parkinson's Disease and Alzheimer's Disease with those of Amyotrophic Lateral Sclerosis (ALS), commonly called Lou Gehrig's disease. The existence of ALS-Parkinsonism Dementia Complex suggests these diseases are related.

ALS-PDC occurs only in people on Guam, and they get it by eating the seed of a plant, the cycad. In earlier research funded by the Scottish Rite Foundation, Shaw's team created a map of the disease's progress in mice. And it is increasingly clear that ALS-PDC is a key to understanding neurodegenerative

diseases. “We continue to lay the foundation for the notion that the Guamanian disease is a neurological Rosetta Stone,” said Dr. Shaw. “The Scottish Rite Foundation has been fabulous in helping us drive that work forward.”

They can now duplicate the human disease in mice fed the seed of the cycad. “We have identified molecules we believe are the toxins involved, and we're testing those,” said Shaw. “We know for sure there is a needle in THIS haystack.”

The compounds that look the guiltiest are called sterol glucosides. They are related to sterols, a class of compounds found naturally in the body. The sterol glucosides are like sterols, but they have an attached sugar molecule. “The sugar part changes how they work,” said Shaw. “We don't yet understand how, but we can see that in a cell culture dish it kills neurons.” Shaw's team just recently synthesized enough of the suspect molecule to experiment with it. Next they will test the compound on mice, to see if it causes the symptoms of the disease as the cycad itself does. The work is methodical and time consuming as any solid research always must be.

As he learns more about his neurological Rosetta Stone, Shaw has come to believe that a combination of genetic and environmental factors are responsible for neurodegenerative diseases such as Alzheimer's. “We are coming around to the conclusion that everyone is exposed to some kind of background toxicity, much as we are all exposed to flu viruses and the like in the environment. But everyone's susceptibility is different.”

This knowledge represents a turning point in research. Traditionally, those who believed these diseases were

caused by genetic factors were in an opposing camp from those who suspected something in the environment. Now those two views must mesh.

Is there hope for a future where diseases like Alzheimer's can finally be beaten? Yes, said Shaw. He compares it to the battle against infectious disease. We don't wait for people to come down with cholera, malaria, diphtheria. We beat another neurological scourge, polio, the same way. “We didn't beat polio by learning to regrow motor neurons. We beat it by cleaning up the water, by vaccination and not letting people get polio.”

Similarly, neurodegenerative disease will fall to ongoing research. “If we understand what the toxins are, we can keep people away from them. If we can understand the genetic resistance factor, we can bolster it. These diseases will ultimately be treated by prevention, detection and early treatment. Not by waiting for people to get the disease and then trying to do something with a broken nervous system.”

Newsletter changes format

This edition of the Scottish Rite Charitable Foundation newsletter is just two pages this time because we printed a 6-page newsletter in October. The new format allows us to run all the grant, award and bursary winners in the Fall, close to their announcement. Our budget calls for eight pages per year, hence the 6 page and 2 page publishing schedule.