



The Foundation Newsletter

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Passing: Richard (Dick) Elliott Barr



Dick Barr, a devoted friend of the Scottish Rite Charitable Foundation, died Sept. 22, 2007 at the age of 78 after a short battle with cancer.

Dick joined Vancouver Lodge #68 in 1956 and it was the start of a colorful and active career in Freemasonry. Vancouver Lodge was formed by Matthew Barr in 1913 and Dick became Worshipful Master in 1965. His brother Lyle and brother-in-law Bill were also Past Masters. He became a District-Deputy Grand Master of the Grand

Lodge of BC in 1979 and was representative of the Grand Lodge of Hawaii for many years.

He was a 33rd degree Mason in the Ancient and Accepted Scottish Rite of Freemasonry of Canada and Deputy for BC from 1994-2000 in addition to being a director of the Scottish Rite Charitable Foundation and chairman of the Foundation's Valley Representatives.

He was an avid member of the Gizeh Shriners and was potentate of BC & the Yukon in 1989. During his time he was instrumental in setting up the Gizeh Shriners Burn Unit at the Vancouver Children's Hospital.

One of his greatest loves was being an active Patrolman since 1960 until the day he passed. He was a member of Joppa Chapter #31, Royal Arch Masons, a member of the Red Cross of Constantine and a member of the Royal Order of Scotland. He was also president of the Vancouver Masonic Centre Association for the past 25 years.

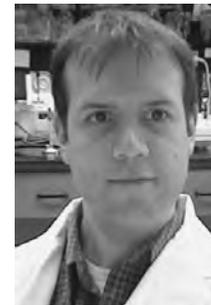
Dick's professional life was as active and productive as his role in the Masonic fraternity. At the age of 25 he bought his first real estate company and for the next 20 years he pursued his passion and rose to VP of Real Estate with Canada Permanent Trust where he had 1,800 salesmen and offices across Canada. Dick also developed several residential and commercial properties throughout his career and was active in the Powell River real estate market for the past 23 years.

He is survived by his wife Enid, daughter Lynn, her partner Mairzee, son Jack, his wife Michelle, son Jim, his wife Cathy and his six grandchildren, Stephanie, Katelyn, Christina, Jacob, Allison and Emily.

VIRTUS JUNXIT MORS NON SEPARABIT
(What virtue has united, death cannot separate)

Seeking genes, autism links

Following is new research being funded by the Scottish Rite Charitable Foundation.



Dr. Martin Houle

Autism affects one to five per 1,000 people (depending on the studied population) and mostly boys at a 4:1 ratio. Currently it can only be diagnosed through behavioural analysis. There is

no genetic or diagnostic test that can confirm or predict Autism. Researchers at the Institut de Recherches Cliniques de Montréal (IRCM) are hoping to learn which of the 30,000 genes are defective in Autism, to help prevent it, accelerate diagnosis and correct the impaired brain function.

Researchers have identified about 15 genes that may be the culprits. With \$35,000 in funding annually from the Scottish Rite Foundation, over three years, Dr. Martin Houle and Dr. Marie Kmita are focusing on two genes: Hoxb4 and Hoxd4. They're important to the development of the embryonic brain, but seem to be abnormally shaped in Autism patients.

Mice brains mutated by Hoxb4 and Hoxd4 are helping the IRCM scientists figure out when and how they become abnormal.

Surprisingly, research with mice is expensive. "Mice housing is like a five star resort. It costs tens of thousands yearly," said Dr. Houle. "But the value of

a validated animal model for Autism is priceless in terms of neurological findings, prevention and eventually treatment.”

Probing early Alzheimer's

Following is new research being funded by the Scottish Rite Charitable Foundation.



Alasdair Barr

University of British Columbia researcher Alasdair Barr is delving into the causes of the onset of Alzheimer's Disease.

With \$35,000 in funding per year over the next three years from the Scottish Rite Foundation, his team of scientists will examine the earlier stages of the disease which are associated with abnormalities in the ability of neurons to communicate between each other, at specialized regions known as 'synapses'.

These neurons, which are located on either side of the synapse, rely on a unique set of proteins known as complexin I and II, to communicate with each other.

Reduced amounts of two of these proteins are associated with cognitive decline in schizophrenia.

Barr and his team are studying whether there are possible links between complexin I and II, and cognitive impairment in postmortem tissue, to help understand the physiology of early stages of Alzheimer's.

And he has established an important relationship with the Rush Memory and Aging Project – a major U.S. research consortium that has recruited 1,000 aged volunteers – to study the risk factors for Alzheimer's Disease.

“This funding is absolutely essential, and will endow us with resources to develop this into a long-term project of significant importance,” said Barr.

Research begins with new lab

Following is new research being funded by the Scottish Rite Charitable Foundation.

A new lab, a new question to answer.

Funding from the Scottish Rite Foundation is vital to scientists such as University of Montreal researcher Dr. Karl Fernandes.

“It creates stability and opens doors toward new investigations,” said Fernandes. “It's very exciting for me.”

In the past year he's been busy setting up a new laboratory at the university.

With the promise of \$35,000 annually over the next three years from the Scottish Rite Charitable Foundation, he can begin work on a two-stage test of a hypothesis that recently surfaced: that Alzheimer's Disease may affect the normal functioning of the brain's neural stem cells.



Dr. Karl Fernandes

As a Canada Research Chair in stem cell neurobiology, Dr. Fernandes wants to see if this hypothesis is true.

Neural stem cells are supposed to maintain normal adult brain tissue by replacing the small numbers of brain cells that are continually dying. But even a small disturbance in the replacement of these cells may cause deficits over the long-term.

Using transgenic mice that develop Alzheimer-like brain lesions as they age, Fernandes wants to see if stem cells are a potential source of the problem, and whether physical exercise can reverse the effects of Alzheimer's on neural stem cells.

Improving recall in bipolar patients

Following is new research being funded by the Scottish Rite Charitable Foundation.



Dr. Margaret McKinnon

People with mood disorders often have difficulty recalling details of factual events; such as the time of day it occurred, what the weather was like outside, or what a person was wearing.

Dr. Margaret McKinnon, a cognitive neuroscientist in the Mood Disorders Program at St. Joseph's Healthcare in Hamilton, Ontario, is researching ways to help improve the recall of such details.

So far, the principal investigator has interviewed 10 patients.

But with a total \$55,054, spread over two years, from the Scottish Rite Charitable Foundation, Dr. McKinnon can examine the memories of more patients.

“How emotions impact or improve memory hasn't yet been looked at in these patients,” said McKinnon.

Her project is entitled, ‘Autobiographical memory for emotionally valenced events in bipolar disorder’.

Bipolar disorder is characterized by periods of depression and elated mania. It occurs in up to 1.6 per cent of the population and studies suggest almost half of bipolar patients spend half their time with some level of symptoms.

Through systematic interviews with adult patients with recurrent bipolar disorder, Drs. McKinnon and Glenda MacQueen ask their subjects to recall an event and like a police interviewer, the researchers try to help fill in the voids of specific detail.