

A Message from the President



*Yves Savoie
President and Chief Executive
Multiple Sclerosis Society of Canada*

When we look back on the last several decades of MS research, I wholeheartedly believe that 2007 will stand out as one of the most progressive years in our history.

The beginning of the year brought the news that a pregnancy-related hormone, prolactin, has the ability to encourage the spontaneous rebuilding of myelin.

It ended with the discovery of an antibody that can stimulate myelin repair. Even better, researchers have found a way to produce these antibodies in a laboratory setting.

The months in between both of these groundbreaking discoveries, research helped to uncover a host of new ways to prevent, treat, and diagnose multiple sclerosis. A few of the most interesting and important investigations are outlined in this issue of your **Progress Report**.

Every new piece of information... every new clue in the mystery that is MS... represents years of hard work by researchers, years of funding by the MS Society and others, years of volunteer efforts, and years of generosity from people like you.

Today, your kindness is paying off in new hope and practical therapies for the thousands of people in Canada who struggle with MS.

On behalf of all of us at the MS Society, I could not be more grateful for your support.

Researchers Identify Antibody That Stimulates Myelin Repair



As you know, multiple sclerosis causes the inflammation and breakdown of myelin, disrupting the transmission of signals along nerve fibres and causing many of the debilitating symptoms of multiple sclerosis.

That is why myelin repair is a major focus of the MS Society of Canada, and why we are thrilled to be making significant inroads in this vital area of research.

The latest finding, reported at the annual meeting of the American Neurological Association, reports the discovery of an antibody that can stimulate the repair of myelin in mice with an MS-like disease.

Dr. Moses Rodriguez, MD and Art Warrington, Ph.D., working at the Mayo Clinic in Rochester, NY, not only identified the antibodies that target and attach to cells in the brain and spinal cord that make myelin (oligodendrocytes), they also found a way to produce these antibodies in the laboratory.

Their research was funded in part by the MS Society of Canada, and the generosity of people like you.

Although these findings warrant further study, **the results take us one step further in efforts to stimulate myelin repair in people with MS.**

DID YOU KNOW...

Thanks to the support of volunteers, donors and friends, last year the MS Society of Canada invested a record \$10,735,000 in MS research.

“I feel that it is my responsibility to help others.”



***MS Family & Friends
Neighbourhood Drive volunteer Parinaz A.
takes fundraising to the next level!***

Since Mrs. Parinaz A. moved from Iran to the Toronto area in 1999, she has been reaching out to her community by volunteering and raising funds for good causes.

So when the MS Society of Canada called asking if she would participate in the MS Family & Friends Neighbourhood Drive, she didn't hesitate for a moment.

But just sending out letters to her friends and family members asking for their support wasn't enough for this energetic and generous woman. Instead, she decided to go one step further and create her own fundraising campaign!

Parinaz used the occasion of her birthday to throw an MS event – and asked all her friends to bring a cheque for the MS Society in lieu of gifts.

“It was a good excuse for me to have a party!” Parinaz claims. And it made her birthday feel even more special to know that she was helping to find a cure for MS.

The result? In total, Parinaz raised an incredible \$2,512 for MS Society research and services.

“I know that the MS Society is funding good research,” she says, “and if we can find the cause and a cure for MS, we can share that benefit with the whole world.”

When we do find a cure, it will be in large part because of the compassion and commitment of dedicated volunteers like Parinaz A.

***If you are interested in finding out more
or would like to volunteer,
please call (800) 361-2985.***

Research in Brief

Acne Medication Shows Promise for MS Treatment

A new \$4 million, multi-centre study funded by the MS Society of Canada will help determine whether a commonly used acne medication known as minocycline can offer patients an inexpensive option for the treatment of early MS.

Initial studies of minocycline showed an 84% reduction of MS lesion activity when MRIs were taken of participants.

“The benefits of minocycline are straight forward,” says Dr. Luanne Metz, the principal investigator for the study. “It's relatively cheap, has few side effects, and can be taken in pill format.”

“The aim of our research,” she continues, “is to see if this common drug can reduce the occurrence of further disease activity in people who have experienced an initial attack of MS symptoms and who are at high risk of progressing to definite MS. Without treatment, two thirds of people facing this circumstance are expected to be diagnosed with MS within six months.”

“We believe minocycline can reduce this number.”

Minocycline works by inhibiting the activities of an enzyme and immune cells that are keys to initiating MS attacks. It has been used in acne treatment for its antibacterial effects but studies have shown that its anti-inflammatory properties could be important factors in slowing down MS.

The MS Society of Canada funded the initial studies of minocycline.

Eye Scan May Help Diagnose and Track Progression of MS

A simple eye scan known as optical coherence tomography (OCT) not only appears capable of spotting MS earlier in the course of the disease, it may also be able to track progression of the illness, says a report in the October 2007 issue of *Neurology*.

This new technology has the ability to gauge the thickness of the retinal nerve fibre, which becomes the optic nerve and is affected early in the course of MS. One of the most exciting aspects of this technology is that it may be used to measure decreases in the brain's volume, an indication of how many neurons are dying.

OCT technology adds another vital tool in the diagnostician's arsenal that can enhance early detection of MS. The method most commonly up to this point has been MRI or magnetic resonance imaging, which measures decreases in the brain's volume, an indication of how many neurons are dying.

Vaccine for MS Moves Closer to Reality

In Phase I testing, an experimental vaccine appears to produce beneficial changes in the systems and brains of people living with MS.

The study was carried out at four academic institutions in Canada and the U.S.. Dr. Amit Bar-Or, a long-time grantee of the MS Society of Canada, and one of the most innovative researchers in the field of MS, was the lead investigator for the study.



Dr. Amit Bar-Or

The experimental vaccine, BHT3009, was shown to be safe and well tolerated. And it suggested evidence of reduced or stabilized clinical relapses, as well as a reduction in the number and volume of brain lesions in study participants who received the vaccine.

Dr. Amit Bar-Or comments that while the results are promising, the study of the vaccine is in an early phase, and a larger trial is needed. A Phase II, multi-centre trial with more than 250 participants with MS is now underway.

Your monthly support can keep hope alive for Canadians living with multiple sclerosis.

Have you ever considered making a monthly gift to the MS Society of Canada? You can pledge as little as \$5... or as much as you like. Most importantly, by committing to a monthly gift, you will:

- Ensure the Society has a steady flow of income to help us sustain the **lifesaving momentum** of promising MS research for better treatments and to find a cure.
- **Help your neighbours** with MS receive the vital information and support they need.
- **Receive Newsletter Updates** keeping you informed about the ongoing fight to end MS.
- Help **solve the puzzle** of what causes MS and why Canada has one of the highest rates of MS in the world.
- **Feel good** knowing that your monthly gift is working to eradicate multiple sclerosis and help thousands of Canadians who live with MS every day.

The final reason to make a monthly donation? It will help us move even faster toward new treatments and a cure for MS!

To learn more, visit www.mssociety.ca/en/give/monthly-giving.htm.
Or call (800) 268-7582.



The 2008 Carnation Campaign is just around the corner on May 8-10.

Not only is the MS Carnation Campaign the Society's longest-running fundraiser, thanks to our dedicated team of volunteers, it is also one of our most successful. Today, more than \$45 million has been raised on behalf of MS research and services, and 2007's Campaign was no exception, providing the Society with \$1.6 million in vital funding.

Because women are diagnosed with MS three times as often as men – and because so many Canadians with MS are mothers – the campaign takes place just before Mother's Day each year.

Call (800) 268-7582 to volunteer.

The Carnation: A Symbol of Hope in the Fight Against MS

In the early 20th century, Ann Jarvis (the "mother" of Mother's Day) chose the carnation to be the holiday's enduring symbol. Carnations express love, fascination, and distinction – qualities that are evident in every MS Society volunteer.

Fast facts:

- The carnation's scientific name, *Dianthus caryophyllus*, means "flower of love" or "flower of the gods."
- The carnation is one of the world's oldest cultivated flowers.
- Light red carnations indicate admiration, the dark red version expresses love and affection. White carnations are associated with purity and luck, and pink carnations are often given as a sign of gratitude.



Super Cities WALK Raises \$13 million

A heartfelt thank you goes out to everyone who helped us reach this amazing total in 2007 – volunteers, fundraisers, and corporate sponsors! Want to participate in your local Super Cities Walk for MS or support a walker? Go to www.supercitieswalk.ca



"I walk because I have relapsing-remitting MS and I feel fortunate. I believe there will be a cure for MS, and I want to contribute to that."

Celebrate a Special Occasion with an Extra-special Gift

*Looking for a birthday, anniversary,
or wedding gift that will have real meaning?*

Instead of a candelabra or a pair of fuzzy slippers, consider making a gift to the MS Society of Canada in honour of that special occasion. Your donation will help fund the research that is searching for a cure for MS, so it will affect thousands of lives. It's a wonderful way to let someone special know how much you care.

We will send a card to the recipient of your choice, letting them know that a gift has been made in his or her honour. The gift amount will not be disclosed. Your gift, of course, is tax-deductible.

**Go to www.mssociety.ca/donate to make your gift.
Or call the MS Society at (800) 361-2985.**



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