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Celebrating 10 Years of Fun and Friendship!

Come join us for another great year of MS Summer Camp at Easter Seals Camp Merrywood in Perth, Ontario from August 8-15, 2015.

IN ORDER TO APPLY, YOU MUST

- Be 8-21 years of age
- Have a diagnosis of MS confirmed in writing by a Neurologist
- Not plan to attend another pediatric MS summer camp in 2015

The camp is FREE for Canadian campers! Applicants from the United States are invited to apply, though preferences will be given to Canadian applicants.

For more information visit www.msociety.ca/camp or contact Holly Godlake, Camp Coordinator via email at hgodlake@easterseals.org or call free at 1-800-668-6252 ext. 325
West Kootenay Glacier Challenge
Scotiabank MS Bike Tour
August 22—23, 2015

Register or donate online at:
www.westkootenayglacierchallenge.ca

We would like to thank The Goat (formerly Mountain FM) for being an annual **Platinum Sponsor** of the WKGC Scotiabank MS Bike tour.

**Platinum Sponsor Profile:**

The Goat is a truly unique music station in the Kootenays. They provide a familiar blend of ‘Greatest Of All Time’ classic rock and new rock from the late 70’s, through the 80’s, 90’s and 2000’s. They feature local enthusiastic on-air hosts that keep the energy flowing! So if you are looking for a pick me up in the morning, or any time of day, be sure to tune in to get in on the enthusiasm!

But Beyond Music, The Goat is committed to the spirit of providing reliable local news, weather and sports coverage as well as relevant local content to keep their listeners entertained and well informed. Be sure to listen for News Director Glenn Hicks to get up to date info!

The Goat embodies Vista Radio’s strong community giveback commitment. You’ll see them at community events and working with not-for-profit groups, including the West Kootenay Chapter of the MS Society. Watch for them along the route of the West Kootenay Glacier Challenge Scotiabank MS Bike tour again this summer, cheering on the riders at their rest stops each day. The Goat Rocks!

Check them out on Facebook and Twitter, or head to their website at
www.mykootenaynow.com/the-goat
www.vistaradio.ca

Please support the businesses that support the MS Society!
It’s time to Register, Lace Up, and Kick-start your Fundraising Today for 2015 Scotiabank MS Walks!!

SUNDAY, MAY 24 LAKESIDE PARK, NELSON
GYRO PARK, TRAIL

The first step is the easiest! Go to www.mswalks.ca and register. For help with registration, please call or email Janice 1-800-268-7582 ext 7254 or janice.cooper@mssociety.ca Then use our handy tools on-site to create your participant page, fundraise online, and invite others to join you in the campaign to end MS!

Fundraise Online
Register online at mswalks.ca and make fundraising easy! Set your goals and create a personal fundraising page. Visit your participant Centre to tell your story, request donations and to track your progress. Your friends and family can donate from anywhere in the world and asking is just a click away!

Register today! #MSbike #endMS #whateverittakes
www.westkootenayglacierchallenge.ca

Join us for an extraordinary, fully supported two day bike tour that loops around the Kokanee Glacier. The tour begins and ends in New Denver, with an overnight in Nelson. It’s a fabulous weekend with friendly people, incredible volunteers, and great food!

All the money raised supports West Kootenay/Boundary programs and services, and funds ground breaking MS research.

Register - Donate - Volunteer

Do you live with MS and want to show your support for the riders? Would you say “Lunch is on me!”?

For $12 you can buy lunch for one of the riders or volunteers. Visit here, or get in touch with Lonnie or Leona to find out how.

Are they riding for you? Or someone you know?
Say "Thank you" by buying them lunch!
Latest MS Research News

MS Scientific Research Foundation-supported study highlights puberty as a significant factor in development of multiple sclerosis

January 30, 2015

Mounting evidence suggests that a number of biological, genetic, and environmental factors contribute to one’s risk of developing multiple sclerosis (MS). One of the more widely accepted factors is sex; females are reported to be three times more likely to develop MS than males, and this effect seems to only occur after the age of 12. According to a recently published article by Jennifer Ahn, University of Toronto graduate student and recipient of the Lawrason Foundation MS Society of Canada Doctoral Studentship, the observation that a higher risk of developing MS among females than males after age 12 implies that puberty may be playing a role. One explanation is that an increase in levels of testosterone in males during puberty may have a protective effect against MS, as testosterone has been shown to have a positive effect in reducing MS disease. The role that female hormones play in MS is less defined, as studies have produced mixed results that require further research. In a study by Ms. Ahn and colleagues involving clinical data analysis and studies with mice, the impact of puberty on risk of developing MS in young females is explored.

The study involved participants from the Canadian Pediatric Demyelinating Disease Study, an initiative supported by a collaborative grant from the MS Scientific Research Foundation. The study, led by renowned pediatric neurologist and researcher Dr. Brenda Banwell and immunology expert Dr. Shannon Dunn, involved 23 centres across Canada, and sought to follow children with early demyelinating events over time to determine why some go on to develop MS and others fully recover. In the study, Ms. Ahn identified 94 participants from the pediatric multi-site study who reached their first menstrual cycle during analysis, 40 of whom were diagnosed with MS. The first menstrual cycle is often considered the central event of female puberty. Ms. Ahn and colleagues sought to determine if age of first menstrual cycle was associated with risk of developing MS.

To further support this work and determine the mechanism underlying a potential puberty-effect in MS, the researchers also looked at pubertal status in mice with an MS-like disease. Mice in the pre-pubertal group were treated with surgery in order to prevent entry into puberty, whereas mice in the post-pubertal group were given a sham procedure and started to cycle normally. This allowed the researchers to determine if puberty affects the risk of a mouse developing MS-like disease, irrespective of age. Additional experiments involving the white blood cells extracted from the two groups of mice were also undertaken to compare the inflammatory nature of the cells.

Analysis of the clinical data collected from the
94 Canadian Pediatric Demyelinating Disease Study participants revealed that the first menstrual cycle (onset of puberty) occurred at a younger age in females who developed MS after an early demyelinating event, compared to those who did not go on to develop MS, even when age and other MS risk factors like low vitamin D status were adjusted for. In the animal experiments, it was found that there were more mice who developed an MS-like disease in the post-pubertal group (mice that reached puberty) than in the pre-pubertal group (mice that did not reach puberty). Further analysis revealed that white blood cells from the post-pubertal mice were very active and produced higher levels of inflammatory substances than cells from the pre-pubertal mice. According to the researchers, these findings indicate a robust autoimmune response in post-pubertal female mice. Additional cell experiments also conferred that pubertal status influences susceptibility to MS-like disease in mice.

Although the study highlights potential biological mechanisms that could explain how puberty influences development of MS, the exact process is still unclear. What is clear is that pubertal status of a female – meaning when she reaches puberty – may enhance risk of MS, especially in female adolescents who present with early events of demyelination. In mice it was also evident that onset of puberty more than likely led to an MS-like state, possibly through an enhanced autoimmune reaction in the central nervous system.

Much research is underway to better understand the preponderance of MS among females, in order to develop tools to identify and treat high-risk individuals. This study employs a novel approach in that it looks at MS in a younger population, which could help point to potential early MS triggers and explanations for the disparity between males and females. Data generated from this study not only unveils a potential risk factor for MS, but may ultimately point to mechanisms of MS development based on changes that occur in the body (i.e. changes to the immune and hormonal systems) during and shortly after puberty.

Source

MEsenchymal Stem cell therapy for CAnadian MS patients (MESCAMS)

The discovered potential of mesenchymal stem cells (MSC) in treating Multiple Sclerosis (MS) has culminated in the launch of MESCAMS (MEsenchymal Stem cell therapy for CAnadian MS patients), a phase II clinical trial that is funded in part by the MS Scientific Research Foundation, Research Manitoba and A&W Food Services of Canada Inc. Spearheaded by Dr. Mark Freedman (Ottawa Hospital Research Institute, University of Ottawa), principal investigator (PI) at the Ottawa site and Dr. James Marriott (University of Manitoba), PI at the Manitoba site, MESCAMS is part of an international mesenchymal stem cell research effort encompassing nine countries.

The aim of this study is to determine if treatment with autologous (originating from the same person receiving treatment) MSC in people with MS is safe, can reduce harmful inflammation in the brain, and possibly contribute to repair of the central nervous system.

The MESCAMS study is the first Canadian clinical trial evaluating the safety and efficacy of MSC as a treatment for multiple sclerosis. This marks an important step forward in MS research and treatment, as early experiments with stem cell therapies have shown encouraging results. One major factor which distinguishes this study from the previously conducted Canadian bone marrow transplantation (BMT) trials that participants are not subjected to intensive chemotherapy, which is required prior to BMT to effectively eliminate the diseased immune system. MSC therapy, on the other hand, works by subduing the harmful immune cells that drive MS, and so the researchers anticipate that the procedure will carry a lower risk to participants, since no chemotherapy is required and the MSC have the potential of controlling inflammation in the absence of other MS medications. As well, the study design uses autologous MSC, in which each participant receives their own stem cells, thus diminishing the risk of the participant’s immune system rejecting the cells.

The results of the MESCAMS trial will be pooled with data emerging from the concurrent international MSC trial, culminating in a rich body of information that could not otherwise be attained by individual research centres alone. The Canadian contribution to the trial is poised to make Canada a leader in researching MSC therapy in MS, largely owing to the seasoned expertise of the lead investigators and other collaborators, as well as substantial investment into state-of-the-art stem cell facilities built in compliance with stringent government regulations. Ultimately, the hope is that the findings from the MESCAMS study will build on results seen in pioneering MSC studies and help lead to treatment options for people with MS.
Calling artists and those who appreciate art!

MS Expressions is an art exhibition showcasing visual arts created by people living with multiple sclerosis (MS) and neuromyelitis optica (NMO). Art forms such as painting, photography, printmaking, drawing, ceramics and studio crafts will be on display.

Ways to participate:
Share your visual artwork for exhibit
RSVP to attend and appreciate the artworks.

For information, go to https://beta.mssociety.ca/news/article/call-for-artwork-for-exhibition

Shannon Jones... aka the “Clumsy Cook”

Here is the face behind the recipes! Shannon is an amazing volunteer who has been writing our “Clumsy Cook” recipes for the West Kootenay Contact for many years. Shannon is a dream to work with... she’s efficient, punctual and her articles are the reason many of our readers pick up our newsletter! Thank you Shannon for your dedication to our newsletter, and for the delicious recipes that many of us have added to our own favourites! (see next page for this month contribution)
THE CLUMSY COOK
Shannon Jones

Easter is coming and the stores are full of artificial sugary chocolate-y yumminess to tempt us! Keep to the outer isles of the grocery store, focusing mainly on healthy and natural produce (colour yourself a pile of boiled Easter Eggs!) and meats. But don’t forget to give yourself a little treat now and again. Try the treats below! 😊

SILKY SMOOTH CHOCOLATE FUDGE CAKE
A seriously dense, intense chocolate experience!
Great for birthdays too!
- 500 grams (18 ounces) of dark chocolate (I used 70%)
- 1 cup of coconut oil
- 1/2 cup of maple syrup (could also use honey)
- 1/4 teaspoon salt
- 6 eggs

Break the chocolate into pieces. Melt the chocolate and coconut oil together over a double boiler or very slowly and carefully over medium-low heat. Remove from heat once all of the chocolate has melted. Stir in the maple syrup and salt. Beat eggs in one at a time.
Grease a 9" spring form pan and dust with cocoa powder. Pour batter in and line the outside of the pan with foil. Place the pan in a water bath that goes half way up the side of the pan.
Bake in a pre-heated 275°F oven for 50 minutes. It will still look a bit shiny and wet in the middle when it comes out of the oven.
Cool at room temperature for one hour and then put it in the fridge for a few more hours before releasing it from the spring form pan.
Garnish or decorate however you like (serve it with a raspberry sauce and coconut whipped cream, top it with crushed nuts and a drizzle of caramel sauce, etc.). Makes 16 dense, intense servings!

CINNAMON BUN MUFFINS
Full of cinnamon yumminess, these tasty treats will become a favourite!
Muffin Ingredients
- 1/2 cup coconut flour, sifted
- 1/4 teaspoon baking soda
- 1/4 teaspoon salt
- 4 eggs
- 1/3 cup coconut milk OR other preferred milk OR yogurt
- 1/2 cup honey OR maple syrup
Cinnamon Topping Ingredients
- 2 tablespoons ground cinnamon
- 4 tablespoons honey OR maple syrup
- 2 tablespoons unsalted butter, melted OR coconut oil
- 1/4 cup chopped nuts (any kind you prefer!)

Combine all the topping ingredients in a bowl and whisk until well-blended.
Preheat your oven to 350°F. Prepare a muffin pan with 8 muffin liners.
For the muffins, combine coconut flour, baking soda, and salt and blend well.
Add the eggs, milk, and honey to the dry mixture and blend well by hand, or use a mixer or food processor. Let the batter sit for a few minutes to allow the coconut flour to absorb the moisture.
Fill muffin liners about 1/4 of the way with batter. Spoon about a tablespoon of topping over each muffin and then top off each muffin with more batter, about 3/4 of the way filled. Drizzle the remaining topping over each muffin and use a toothpick, fork, or spoon to blend the topping into the batter.
Bake for about 24 minutes, or until a toothpick inserted in the center of a cupcake comes out clean. Cool and enjoy! Store for a couple days at room temperature, store in the refrigerator for a couple weeks, or seal and freeze for a few months.
Makes 8 yummy muffins!
Volunteers always welcomed!

With busy lives, it can be hard to find time to volunteer. However, the benefits of volunteering are enormous to you, your family, and your community. The right match can help you find friends, reach out to the community, learn new skills, and even advance your career. Volunteering can also help protect your mental and physical health.

Do you have special skills that would benefit our Chapter? A great phone voice, organizational skills, financial, legal or medical background? Able to do physical work? Own a truck that would help us during our fundraising events? Contact our office and let us know! Call 1-800-268-7582, extention 7259 and talk to Lonnie. We would love to welcome you to our “family”!
MS Society-funded fellow publishes study that examines new class of compounds with the potential to protect against nerve damage and halt MS progression

One of the defining characteristics of multiple sclerosis, particularly in the progressive phase, is the extensive damage that occurs to axons, or nerve fibres, that are found underneath the myelin sheath in the central nervous system. This axonal damage is part of a process called neurodegeneration, and is believed to result in the permanent neurological deficits and disability that are seen in progressive MS. While all of the clinically-approved therapies for MS to date target some aspect of the inflammatory process that triggers disease relapses, combating the neurodegeneration and worsening disability of progressive MS continues to be elusive.

An exciting new study was published this month in *Nature Neuroscience* and attempts to address this gap in our understanding. The study, conducted by postdoctoral fellow Dr. Jeffery Haines – whose fellowship is jointly funded by the MS Society and Fonds de Recherche du Québec – Santé (FRSQ) – and colleagues identified a molecular target that is thought to play a role in the axonal damage underlying MS and other neurodegenerative disorders. In addition, they tested a new class of compounds to see whether they could protect against this damage and halt the progression of disability.

Specifically, the group examined a protein called CRM1 (chromosome region maintenance protein 1), a molecular “shuttle” that transports important regulatory proteins out of the nucleus of nerve cells and into the surrounding gel-like compartment of the cell, called the cytoplasm. Previous research has shown that in certain neurodegenerative conditions, CRM1 is produced in abnormal quantities and forces these regulatory proteins to inappropriately accumulate in the cytoplasm, where they contribute to axonal damage. The aim of this study was to determine if inhibiting CRM1 could have a beneficial therapeutic role in preventing axonal damage and promoting neuroprotection.

The authors investigated two molecules that are known to inhibit CRM1 to determine if they could prevent axonal damage and halt progression of MS-like disease in mice. Firstly, however, they examined and compared CRM1 protein content in post-mortem brain tissue of people with MS versus healthy controls. Then they induced an MS-like disease in mice and administered each of the CRM1 inhibitors or an inactive control drug after mice began to develop characteristic symptoms of MS. To determine whether the treatment can be used prophylactically to prevent disease onset and encourage neuroprotection, CRM1 inhibitors were also given before the MS-like disease was induced in a separate group of mice. A wide variety of outcomes were measured to test the potential therapeutic benefits of the CRM1 inhibitors, including: progression of motor disability, axonal destruction in tissue samples, myelin repair, and inflammatory activity.

Finally, the authors set out to identify the specific molecular targets of the CRM1 inhibitors by screening molecules in the treated nerve cells that were retained in the cell nucleus, where they would have a neuroprotective effect. The authors found that CRM1 proteins levels were significantly higher in the brain tissue of people with MS compared to healthy controls, indicating that higher levels of this protein are associated with MS. When they tested the CRM1 inhibitors in mice with an MS-like disease, they discovered that the inhibitors halted disease progression via a two-pronged approach that targets both neuroprotection and immune function. Specifically, while mice with MS-like disease developed paralysis of
The authors also saw fewer inflammatory lesions and a reduction in the number of harmful immune cells following treatment with CRM1 inhibitors, both locally around lesions sites and in the peripheral bloodstream. They noted that the drug did not destroy or inactivate immune cells; rather, it worked by preventing them from rapidly multiplying. Lastly, they found that when CRM1 was inhibited, certain proteins that have been associated with axonal damage in other disorders were retained in the nuclei of nerve cells, where they are thought to exert a neuroprotective effect.

Although therapies that target the immune system and modify the inflammatory process – termed immunomodulatory therapies – are the mainstay of treatments used to manage relapsing-remitting MS, they are nonetheless unable to stop the progression of axonal damage that leads to lasting disability. This study lays the foundation for a new approach to potentially combatting progressive MS by exploring a new class of compounds that are both immunomodulatory and neuroprotective. An added benefit of these compounds is that they can be administered orally and easily cross the blood brain barrier to enter the central nervous system, making them promising candidates for drug testing and validation down the road. A great deal more work needs to be done, however, before these early but encouraging preclinical findings can be translated into viable treatment options for people living with MS.


New national client services database

The MS Society of Canada recently started utilizing the first phase of a new national client services database in our daily work, nationwide. The database is being used in information and support tracking, for events and creating distribution lists. This accomplishment is a first in our client services’ history.

The benefits a nationwide client services database brings are significant: the system enables us to organize our work and track follow-up activities for clients, as well as the capacity to identify the number of client service interactions we engage in, the main purpose of their interaction with the MS Society, as well as the solutions and support we have provided.

The reporting capacity of the system will help to measure and assess the impact and reach of the client services programs, as well as provide information to support strategic directions identified in our strategic plan, Action to End MS. An additional benefit of the new system is that it increases work efficiencies and streamlines operations.

The second phase of the database, for tracking funding programs, is ready to move to the pilot stage later this month. The MS Society of Canada is pleased to be starting this new chapter in the delivery of client services.
SELF-HELP/SUPPORT GROUPS

Self-Help Groups are formed by volunteers who are interested in bringing together individuals and families whose lives are affected by MS. These groups operate independently, supported by the MS Society of Canada with information and resources. The West Kootenay Chapter recognizes the importance of support in one’s own community, and of providing a means for individuals and families to reach out and connect with each other. The following is a list of communities in which there are volunteers who provide support to individuals with MS and their families. Each community is unique in the kind of support that is available. For further information on a particular group, please get in touch with the contact person as listed.

Valley Support Group - meets the last Thursday of each month from 2 till 3:30 pm at the Slocan Lake Community Health Center Education Room at 401 Galena Avenue in New Denver. Contact Linda at 250-358-2220 or 250-358-2203.

West Kootenay Yoga for MS Group—Offers regular, specialized yoga classes for people with MS and their care-partners, followed by a monthly social coffee party as well as fundraising events and occasional group gatherings. Based in Castlegar, but open to all. Call Janice for more information at 250-365-5428.

Trail MS Support Group - meets the first Wednesday each month at 10 am at Rose Wood Village in the Games Room in Trail. For more information, call Jenny at 250-364-1767 or Inge at 250-368-9493.

We are always looking for volunteers willing to start groups… if you’re interested, please call Lonnie at 1-800-268-7582, ext. 7259 for details.
Foot Care Clinic for West Kootenay Chapter Members

Are you interested in subsidised foot care? Is it difficult for you to trim your toenails and remove callouses? Our Chapter, with financial help from Kokanee Chapter IODE) can pay for $20 (about half) of each visit from a certified foot care nurse, who would come to your home every six to eight weeks to help keep your feet healthy. Contact Lonnie at 1-800-268-7582, ext. 7259 if you have MS and have difficulties caring for your feet.
Day of Peace Yogathon

Hello Everyone. To those of you who came to our Day Of Peace Yogathon and supported us in so many ways, thank you. Our Yogathon fundraiser for the WK Yoga For MS Support Group was a wonderful success. We had seven teachers leading us through some of the many traditions of yoga. The Doukhobor Family and Friends Choir opened the day leading us in chanting OM. We experienced chakra drum meditation, yin yoga, hatha yoga, pranayama (breathing exercise) yoga nidra (guided meditation) yoga from Swami Padma, heart chakra flow and of course everyone’s favorite; savasana. We witnessed performance yoga by the Brilliant Children's Yoga Kang and the Garland Of Letters by the Peaceful Warriors and the Super Novas which was spectacular!!!!!

Lunch was all homemade and delicious. Carrot ginger soup with Doukhobor bread, fresh vegetables and fruit with dips, coffee donated by Oso Negro and a sweet little snowball for dessert. We had prizes for the top sponsors and door prizes too.

Our own members were all involved, did a great job and had fun. We have a Wellness Products Craft Club now going strong and we made rice bags to be heated up, meditation cards, greeting cards, yoga rocks, flower pot art sculptures and we had our yoga blankets and wood yoga blocks for sale. And they sold!! Especially Wendy's beautiful cards.

The Day Of Peace was held at the Brilliant Cultural Centre, a most peaceful and friendly place. We had fabulous flower arrangements, lots of space and lots of help. The Karma Crew outdid themselves with the planning, organizing and completion. We hope to have this day again next year and hope you all will join us. This is a wheelchair access centre with an elevator.

With love and peace, Janice Ferraro and the WK Yoga for MS Support Group
Camp Squamish Summer Recreation Program
Five-day recreation program - Mon May 25 - Fri May 29, 2015

A chance to experience camping at its best! Join us for our five-day recreation programs at Camp Squamish, a BC Easter Seals Camp located 45 kms north of Vancouver, British Columbia.

For: Adults (18 yrs+) living with a disability.
Cost: $1,750 per person - Subsidies available based on eligibility criteria - please inquire for more details.

Program includes:
- Meals, accommodation, and local transportation for five days and four nights.
- Daily activities including swimming, hiking, nature trails, day trips (to Victoria & Sea-to-Sky Gondola), arts & crafts, and sporting activities.

Important Dates:
- Application deadline: Friday March 20, 2015
- Program date: Monday May 25 - Friday May 29, 2015

Please carefully complete all sections of the 2015 Summer Holiday Application (Camp Squamish) and ensure that all requirements are sent in by deadline date.

Application deadline is Friday March 20, 2015.

For more information or to receive an application package, please contact:
Keith Rashid
krashid@marchofdimes.ca
1-800-263-3463 ext.7213

We look forward to seeing you! Register early as space is limited.
Our Mission: To be a leader in finding a cure for multiple sclerosis and enabling people affected by MS to enhance their quality of life.

The West Kootenay Chapter gratefully acknowledges the financial assistance of the Province of BC in producing our newsletter.