

the icordian

ICORD'S COMMUNITY NEWSLETTER • FALL 2013

Welcome to the premier issue of the new ICORDian quarterly community newsletter!



This was the scene at the grand opening of the Blusson Spinal Cord Centre five years ago, on November 18th, 2008.

THE BSCC IS TURNING 5! COME AND CELEBRATE WITH US.

Join the researchers, clinicians and staff who work at the Blusson Spinal Cord Centre (BSCC) along with community partners and special guests for an open house to celebrate the fifth anniversary of the Blusson Spinal Cord Centre. Enjoy a free lunch while you learn about the innovative work we do. We'll have information booths from lots of organizations connected with the BSCC, as well as a panel discussion about the past, present and future of SCI research, and guided tours of some of ICORD's state-of-the-art research facilities.

Tuesday November 19th

12:00 - 2:00 information booths, lunch, BSCC Atrium

12:30 - 1:00 panel discussion, BSCC Atrium

1:00 - 1:30 PARC grand opening, Access Lab

1:15 - 2:00 tours (meet at Resource Centre)



ICORD's 2012-13 Annual Report is now available. [View it online](#), or contact us to request a printed copy.

SUPPORT ICORD AT THE SPINAL CHORD GALA

Join your friends and colleagues at *Spinal Chord* on Saturday, November 2nd. Presented by Medtronic, *Spinal Chord* is a gala evening in support of ICORD and the Vancouver Cantata Singers. This is your chance to get all dressed up, hear an award-winning choir in the spectacular atrium of the Blusson Spinal Cord Centre, enjoy fabulous hors d'oeuvres and bid on an array of uncommon silent auction items.

At ICORD, funds raised from *Spinal Chord* galas have been used to support the Community Resource Centre, an educational hub located in the Blusson Spinal Cord Centre established to increase awareness, provide education and offer community resources on SCI to ICORD's visitors. We also used funds for [Spinal Chord Awards for staff Excellence in Research and Service](#), for the Physical Activity Research Centre (PARC). Most recently, proceeds of the *Spinal Chord* gala have funded the purchase of three new pieces of important research equipment.

Tickets are \$100 (with a tax receipt for \$80), available [online](#) or in person from the ICORD Admin Office. For more information, check out the [event website](#), like it on [Facebook](#), or contact us by email or phone.

OUR PHYSICAL ACTIVITY RESEARCH CENTRE IS NOW OPEN!

A new Physical Activity Research Centre (PARC) for people with spinal cord injuries is open at the Blusson Spinal Cord Centre. PARC is a unique initiative of researchers at ICORD.

"Our vision for PARC was not only to provide an accessible fitness facility for the spinal cord injury community, but to provide a platform to bring ICORD researchers and members of the spinal cord injury community together as partners in the research process," said Dr. Tania Lam, ICORD researcher and an Associate Professor at the UBC School of Kinesiology. Dr. Lam and her ICORD colleagues are working with PARC participants to study the effects of physical activity and fitness on people with spinal cord injuries. They hope that the results of this work will help to create improved strategies to increase physical activity participation and to raise awareness about the critical role of exercise in the life-long management of people living with spinal cord injury.

Equipment at PARC includes adaptive strength-training machines that can be used directly from a wheelchair, wheelchair-accessible upper and lower body bikes, and GameCycle ergometers that incorporate popular video games for cardiovascular training. Participants use Smart Cards to track their progress as well as providing raw data for researchers to analyze.

"Being at PARC is an amazing feeling. At any other gym, even with adapted equipment, I always feel like I am fighting to fit in. I didn't realize until I got to PARC how great it is to work out somewhere totally accessible where I'm comfortable—just one of the crowd," said PARC participant and ICORD staffer Jocelyn Tomkinson.

Over the past several months, the number of participants at PARC has increased from five to fifty, and there is space for more. "Anyone with a spinal cord injury who is 19 or older and wants to participate in research is welcome to join once they've been given the go-ahead by their doctor," said Megan Brousseau, a UBC Kinesiology Co-op student and PARC coordinator.

In addition to being a state-of-the-art centre for people with spinal cord injuries to work out, PARC also provides valuable hands-on experience for UBC students considering careers in rehabilitation, physio- and occupational therapy, and other SCI-related areas. There are currently thirty students volunteering at PARC.

Grants from the Canada Foundation for Innovation, BC Knowledge Development Fund and Rick Hansen Foundation enabled the purchase of all the equipment at PARC, while funding for three part-time paid staff and operations comes from Spinal Cord Injury BC, HAL Industries, and proceeds from the ICORD-Vancouver Cantata Singers annual Spinal Cord Gala.

Participation in PARC research is currently open to people with traumatic SCI only, but research participation may be opened up to people with other types

of non-traumatic spinal cord injuries once funding for the facility increases.

The official opening of PARC will take place on November 19th, as part of the Blusson Spinal Cord Centre's 5th Anniversary celebration.



SO, WHAT DO WE MEAN BY "CURE"?

When you hear the word "cure" in relation to spinal cord injury, do you think about getting out of a wheelchair and walking again? Or do you think about regaining bladder / bowel function or being able to use your hands effectively? At ICORD, we take a very broad view, and say that a cure is any intervention to return a person to greater functionality after a spinal cord injury. This could mean treatments to protect the injured spinal cord tissue from secondary degeneration. It could mean helping existing nerve cells create new pathways or helping injured nerve cells regenerate, and developing rehabilitation strategies that could enhance these regenerative efforts. Cure applies to people with new injuries and people who've been living with SCI for many years. We think that a cure for paralysis after SCI will lie in several, incremental cures.



ICORD: from cells to community, solutions for spinal cord injury



ICORD ON THE ROAD

Earlier this month, ICORD PhD student Peggy Assinck travelled to Vanderhoof, BC to take part in W. L. McLeod Elementary School's 15th annual John Ryan Ultimate Tournament in support of SCI research. Peggy spent her first day in Vanderhoof giving presentations about spinal cord injury, ICORD research, and her own experiences as a paralympic athlete to students at four local elementary schools as well as the high school. "It was really awesome visiting the schools," said Peggy. "The kids were so enthusiastic—they really paid attention, and asked great questions.

I hope I've inspired at least a few of them to consider becoming scientists when they get older." On the day of the tournament, Peggy led students through some wheelchair obstacle courses when she wasn't cheering them on in their games. "It was a lot of fun to represent ICORD up in Vanderhoof, and everyone made me feel so welcome. I hope some of the kids I met will come and visit ICORD one day!" *Special thanks to Kim Worthington at W. L. McLeod School who organized Peggy's visit.*

RESEARCH IN FOCUS: STEM CELLS

Find out what's going on in SCI research in this regular column on the SCRIBE Blog. Our blog presents easy-to-understand summaries of published SCI research happening at ICORD and around the world. We are aiming to capture main ideas and points of interest from the research articles, but for all the details, you can read the full papers. In the first edition of **Research in Focus**, we discuss a study published in 2012 conducted by researchers from California and Germany, and published in the journal *Cell*. The study looked at the use of stem cells after SCI in rodent models. While promising results were achieved, there are many factors that need to be further investigated before this type of treatment is tried in human patients.

[Click here](#) to read the full summary. [Click here](#) to see the original paper.

MAKING THE PARALYMPIC GAMES SAFER AND MORE FAIR.

Many athletes who participate in the Paralympics have spinal cord injuries that limit their ability to regulate their heart rate and blood pressure. An increased heart rate and elevated blood pressure gives athletes the energy and stamina they need to compete in strenuous sports. For top-level athletes, this can be a huge competitive disadvantage. Some athletes go to extreme lengths to spike their blood pressure ahead of a competition – occasionally going so far as to break a toe or hold their urine. Known as “Paralympic boosting,” this is a dangerous practice that can lead to heart damage, stroke, even death.

ICORD researcher [Dr. Andrei Krassioukov](#), a professor in the Department of Medicine at UBC, is studying the cardiovascular and autonomic dysfunctions that disadvantage some athletes during competition. Dr. Krassioukov is collaborating with the

International Paralympic Committee (IPC) to design a cardiovascular /autonomic classification for paralympic athletes to complement existing IPC classifications that primarily account only for motor dysfunctions. The IPC classification of athletes is a complex and frequently challenging process, but the main goal of the classification is to allow all athletes to compete according to the paralympic values of fair play and honourable sports competition.

Dr. Krassioukov began his work at the 2008 Paralympic Games in Beijing, continued at the 2010 games in Vancouver, the 2012 games in London, and is now on his way to Sochi, Russia for the 2014 Winter Paralympics games. This ongoing project has received support from the Craig Nielsen Foundation, ICORD/UBC, Coloplast, and West Shore Construction.



From March 6th to 16th of next year, Dr. Andrei Krassioukov and a team of ICORD researchers will be in Sochi, Russia, running a Cardiovascular Health educational clinic at the Winter Paralympic Games.

Here he is with his team in 2012 at the London games.

ICORD (International Collaboration on Repair Discoveries) is a world leading health research centre focused on spinal cord injury. From the lab-based cellular level of understanding injury to rehabilitation and recovery, our researchers are dedicated to the development and translation of more effective strategies to promote prevention, functional recovery, and improved quality of life after spinal cord injury. Located at Vancouver General Hospital in the Blusson Spinal Cord Centre, ICORD is supported by UBC Faculties of Medicine and Science, Vancouver Coastal Health Research Institute and the Rick Hansen Foundation.



Our administrative office is located on the third floor of the Blusson Spinal Cord Centre, 818 West 10th Avenue, Vancouver, BC. Find us online at www.icord.org, call us at 604-675-8844, or follow us on Facebook and Twitter. [f](#) [t](#)