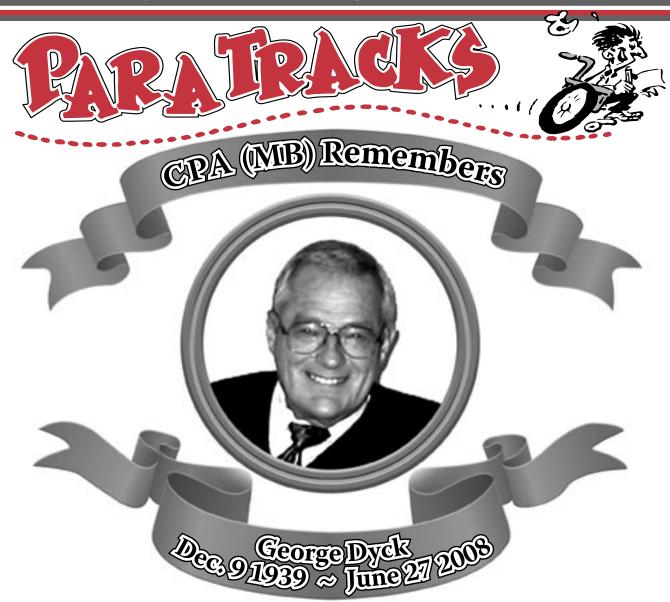


Canadian Association
Paraplegic Canadiénne des
Association Paraplegiques
(Manitoba) Inc.

MANITOBA PARAPLEGIA FOUNDATION INC.

November 2008 Fall Issue

Newsletter of the Canadian Paraplegic Association (Manitoba) Inc.



ALSO IN THIS ISSUE:

~We Focus on Equipment Options Available to Consumers with an SCI ~Our Research Article is on Brain Computer Interfaces ~CPA Welcomes New Staff Member Ekhlas Ahmed ~And A CPA Member's Journey to Self-Employment

ParaTracks is a publication of:

Canadian Paraplegic Association (Manitoba) Inc.

825 Sherbrook Street Winnipeg, Manitoba R3A 1M5

Tel: (204) 786-4753 Fax: (204) 786-1140 Toll-free: 1-(800) 720-4933 (within Manitoba only)

E-mail: winnipeg@canparaplegic.org Website: www.cpamanitoba.ca Supported by Manitoba Paraplegia Foundation Inc.

> Circulation: 850 copies **Estimated Readership:** 5,000

> > Editor: Ron Burky Layout: Mike Nickle

Advertising Rates:

Advertising rates for photo ready copy: Full Page - \$160 Half Page - \$87 Quarter Page - \$55 Business Card Size - \$33 Classified ads free to CPA members

> ParaTracks publishes three times a year

Canada Post Publication Agreement #40050723

Board of Directors

Art Braid * - Executive Corrine Deegan * **Nicole Dubois** Dr. Karen Ethans **Ed Giesbrecht - Vice President** Jeannette Gougeon **Shannon Guerreiro Ernie Hasiuk - Past President Leonard Steingarten * - Treasurer** Debbie VanEttinger * Lynda Walker John Wallis - President John Wyndels * JoAnn Young

*spinal cord impairment

Email Addresses & Voice-Mail Extensions: Phone: (204) 786-4753

Staff Name Roslyn Dooley	E-mail Address rdooley@canparaplegic.org	Ext 221	
Adrienne Conley	aconley@canparaplegic.org	222	
Val Reith	vreith@canparaplegic.org	223	
Ron Burky	rburky@canparaplegic.org	224	
Darlene Cooper	djcooper@canparaplegic.org	225	
Greg Winmill	gwinmill@canparaplegic.org	226	
Al Schultz	aschultz@canparaplegic.org (currently on extended leave)	227	
Maria Cabas	mcabas@canparaplegic.org	228	
Ramona Santos-Fearn	rsantosfearn@canparaplegic.org.	229	
Laurence Haien	lhaien@canparaplegic.org.	234	

Please note that Ekhlas Ahmed, CPA Hospital Services can be reached at the following telephone number: (204) 787-2026

Toll-free: (800) 720-4933 (within Manitoba only)

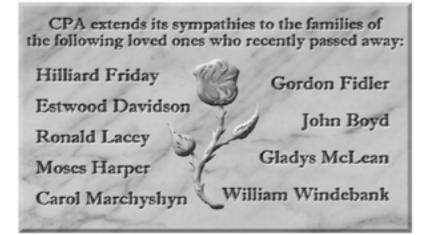
Visit CPA's website at www.cpamanitoba.ca



CPA Nationa

MPF Inc.

(Manitoba) Inc. is just a click away. Simply visit our website at www.cpamanitoba.ca and click on DONATE. From here you can make a donation by credit card directly to CPA (Manitoba) Inc.



MANITOBA PARAPLEGIA FOUNDATION INC. (MPF) NEWS

MPF funds go to work in four main areas:

Special projects, product testing, research and direct aid to persons with spinal cord injuries. CPA thanks MPF for its continued support to improving the quality of life of persons with spinal cord injuries.

MPF has approved several requests for financial support during the past few months.

Some of the highlights are as follows:

During the month of August 2008:

- Funding was granted for the purchase of a backrest for a CPA member. This backrest will promote optimal positioning and stability when sitting in a manual wheelchair. This will aid the individual in improving functional mobility and ability to independently participate in their occupation.
- Financial support was provided for the purchase of ceiling track lifts for two CPA members who
 - reside within an area of the province where their regional health authority does not provide ceiling track lifts. These lifts will allow just one caregiver to assist with transfers on and off beds and for repositioning while in bed.
- Financial support was provided for the purchase of Arjo Maxi Slide bed sheets for a CPA member who has experienced a lot of skin breakdown over the years. This member must be turned in bed

MPF Trustees

(President) Doug Finkbeiner, Q.C

(Vice-President) Arthur Braid, Q.C

(Treasurer) James Richardson Jr.

Isabel Auld Lawrence Cohen Dr. Lindsay Nicolle Ernie Hasiuk John Wallis on a regular basis. These bed sheets are made from a slippery material which allows for turning, repositioning, transfers, etc. with a sliding motion as opposed to lifting.

Funding was provided to cover the cost of first term tuition, books and transportation for a CPA member who is attending Brandon University. By assisting this member to gain an education, their marketability will be enhanced in their chosen field.

During the month of September 2008:

So Funding assistance was provided to a CPA member for books while taking upgrading courses at Red River College. By providing this assistance, this member will be able to enhance their marketability in the future.

You can visit MPF's website at:

www.cpamanitoba.ca/mpf

Applications for assistance are available through the website or by contacting the CPA office.

CPA Staff Changes

Welcome to:

Ekhlas Ahmed Rehabilitation Counsellor, Hospital Services



Ekhlas joined the staff at CPA on August 25, 2008. Ekhlas has worked in the social services field in Thompson and in Toronto prior to accepting this position. Ekhlas has many years of hospital service experience in Riyadh, Saudi Arabia as well.

Ekhlas looks forward to meeting our new members and their families on RR5 and assisting with the recovery and transition to the community processes.

Seasons Greetings from the Staff of CPA (Manitobal Inc. May Peace, Hope and Joy Fill Your New Year!



Rick Hansen Foundation and the Manitoba Provincial Solutions Team announces our deadline for Quality of Life Funding applications will be February 15, 2009. Funded projects will be announced by March 31, 2009

Applications are available at www.cpamanitoba.ca They are also available at the Canadian Paraplegic Association (Manitoba) Inc., Room 211, 825 Sherbrook, Winnipeg, MB or by calling Adrienne Conley (CPA) at (204) 786-4753, ext. 222

Successful applications will identify and deliver Solution projects that respond to the priority needs of people living with spinal cord injuries in Manitoba using funds raised through Wheels in Motion.

Individuals and/or community projects that benefit persons with spinal cord injuries are eligible to apply. For further information on Quality of Life funds, please go to www.scisolutionsnetwork.ca

> Projects must clearly demonstrate that the expected impact of the project will improve the quality of life of a person or group of people with spinal cord injuries.



- Stair, Van and Porch Lifts
- Manual Wheelchairs
- Power Wheelchairs
- Scooters
- Lift Chairs
- Wheelchair Ramps
- **Specialized Seating Systems**
- Bath Safety Equipment
- Commodes
- **Incontinence Products**
- **Wound Care Supplies**



On-site Service Department With Qualified Technicians

 SERVICE • SALES • • INSTALLATION • REPAIRS •

> Direct Billing; DVA, EI, MPI, WCB





NOW 4 locations to serve you!

865 Bradford St. Phone: (204) 786-6786 Fax: (204) 783-7496

18-2727 Portage Ave. (The Courts of St. James) Phone: (204) 953-0020

Access Ability 9-1341 Henderson Hwy. Phone: (204) 925-4599

Tache Medical 75 Goulet St. Phone: (204) 235-0914



George Dyck

In June of this year CPA lost one of its longest standing members and strongest supporters, George Dyck.

George had been a member since 1950 when, at the age of ten, he became a paraplegic as a result of a shooting accident. He spent a year and a half in Deer Lodge Hospital recuperating and it was there that he came in contact with the Second World War veterans and was introduced to Tony Mann and CPA. He became the youngest ever client of CPA and one of its greatest success stories.

Almost everything George did in his early life as a paraplegic involved breaking barriers-systemic, attitudinal and physical. At high school or university



George with son Matthew

or in the community, he was a pioneer, breaking ground for others to follow. These were the days where ramps and elevators were the exception. George persevered and obtained both a Bachelor and a Masters degree at the University of Manitoba. George often recounted with humour how his classmates would pull him around campus on a sled and lift his wheelchair up four flights of stairs to

attend classes.

After graduation he began working in the radio isotope laboratory of the Cancer Clinic and he finished his professional career as an instructor in nuclear medicine at Red River Community College. In 1969 he married Marjorie and eleven years later they were blessed with a son, Matthew.

In 1965 George was the first recipient of the CPA Award of Merit as "someone who showed exceptional effort both with regard to his own rehabilitation and in helping others". From his early days at university, George was involved with various volunteer activities, particularly wheelchair sport and recreation. He played a key role in the establishment of what later evolved into the Manitoba Wheelchair Sport Associa-

tion. In 1967 he and Alan Simpson were the sparkplugs for the first truly international wheelchair games held outside of England at Stoke Mandeville Hospital. This venture was so successful that it resulted in the creation of a Canadian national wheelchair sports governing body and later an international organization. Great oaks from little acorns grow!

George's service to CPA was exceptional. He was a member of the Board for a total of 29 years. (1966-1974 and 1987-2008) He also served as President for two years in the 1990's. His counsel was often sought by and always freely given to the officers and staff of CPA. When CPA needed someone to make a presentation to an honoree or introduce a guest speaker, George

was the "go-to guy". His ability to remember past (and sometimes slightly embarrassing) events and his wry sense of humour made these occasions memorable and enjoyable to both his listeners and the subjects of his remarks. George also served for the last several years as CPA's rep on the 1010 Sinclair Board.

Upon the untimely death of Henry Enns, the Executive Director of the Canadian Centre on Dis-



At a CPA annual general meeting with, at that time, President Shelly Malkin

ability Studies, George responded to the request for assistance and volunteered to serve in his stead on a short term basis. This short term basis extended for a couple of years and when it finally concluded he was elected by that organization to continue in a leadership role by becoming its President and Chair of the Board of Directors. He still held this position at the time of his death. His leadership was instrumental in helping CCDS to remain a viable and effective organization after the death of its founder and guiding spirit.

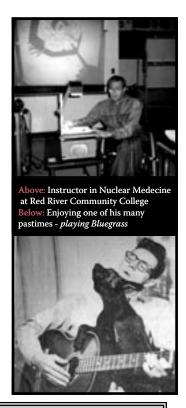
George is survived by his wife Marjorie and son Matthew. He leaves behind him countless of others whose lives have been enriched by his own.

~E. Arthur Braid~

Above: George obtained both a Bachelor and a Masters degree at the University of Manitoba Below: After graduation he began working in the radio isotope laboratory of the Cancer Clinic

~George Dyck Continued~





THIS ISSUE IS FOCUSING ON SOME EQUIPMENT OPTIONS AVAILABLE TO CONSUMERS.
READERS ARE REMINDED THAT PRIVATE VENDOR RECOMMENDATIONS ARE INTENDED FOR INFORMATION ONLY AND CPA (MANITOBA) INC. NEITHER ENDORSES OR GUARANTEES ANY OF THE PRODUCTS OR SERVICES ADVERTISED IN PARATRACKS.
READERS ARE STRONGLY URGED TO INVESTIGATE THE PRODUCTS AND COMPANIES BEFORE PURCHASE.

I think there's a monster (skin breakdown) under my bed?



With spinal cord injuries, post injury promotes skin breakdown from four factors.

- A) loss of sensation
- B) decreased mobility
- C) decreased circulation
- D) diaphoresis (sweating)

Since we spend on average 7-10 hours in bed each night, the mattress is the biggest source of healing or harm. Pressure from staying in one spot for longer than a few minutes starts the process of breakdown. A sustained pressure point now begins by getting warm and the skin acts like as if you were sitting in a bath for too long. Your skin gets soft and mushy. It will look like a red mark that doesn't go away when the pressure is removed. You need to remove the pressure as soon as possible. Allow the skin to be pressure free and allow air to circulate. If the redness still continues the best

resource is your doctor or home care nurse practitioner to monitor the area. Your skin is giving you a warning sign! It is a great idea to have a mirror by your bed to allow you to see all of your skin. Pay special attention to areas that are pressure points like your tail bone (coccyx), hips, shoulders, spine, and heels. These are the most common areas for skin breakdown.

If you don't catch it at this point, it can now progress to the bigger monster. The pressure now begins to break down the outer skin and can progress to the tissue below the surface. The skin looks like the top layer has sloughed off and the site can be red and is at high risk for infection. It is very important that you seek medical attention now. Infection is the biggest risk and can be life threatening if the wound progresses.

Everything that comes in contact with the skin can affect its integrity. Sheets with a high thread count allow for less friction and shear. An air mattress like the Ultra Air, which has "True Low Air Loss" (huge amount of



air), Alternating Pressure, and Pulsation mode to stimulate blood flow to the pressure area, is an excellent tool for prevention and treatment. There are many air mattresses available but many have foam integrated in the top. A mattress that has foam works against you even if it is an air mattress. The foam creates heat and the heat starts the process of breakdown (mushy-like being in the bath tub too long). There are air mattresses that have low air loss but not "True Low Air Loss" (high volume of air). There are mattresses that have alternating pressure but not the low air loss. The Ultra Air has both modes, with the option of having both "True Low Air

technology produces the lowest pressure automatically as it senses your pressure.

Mattresses that have alternating pressure are an excellent prevention tool but are not recommended for people who have a new spinal cord injury due to the hyper-stimulation of the nervous system. Once the injury is stable the mattress can be a lifesaver and keep

your skin the way it is meant to be.... intact!

Loss" and alternating pressure or just one at the touch of

a button. The Floatation therapy also has an auto-firm

mode to assist with repositioning. The SMART Sensor

~Melanie Evans RN~

MGMedical
Division of Medigas Manitobs Limited

150 McPhillips St. Winnipeg, MB R3E 2J9

Ph 204-786-4719 Fax 204-786-1972 www.mg-medical.com E-mail: melaniee@medi-gas.com

Toll Free in Manitoba 1-800-665-5585

Melanie Evans is a Registered Nurse with seventeen years experience in Canada and the U.S. Her background is ICU (Surgical & Medical/Transplants), ER & ER Transport, and homecare. She is a current member of the Canadian Association of Wound Care and has passed the SWAT Certification for wound care in Manitoba. If you would like more information please contact MG Medical at 204-786-4719.

Overhead Lift Systems from MEDIchair

The ability to provide safe lift and transfer capabilities in the home and institutional environment has been tremendously enhanced by the availability of the overhead patient lift system. Instead of being limited to a single straight track affixed to the ceiling, several temporary and permanent track configurations are available. Temporary track systems are pressure-fit between the floor and the ceiling and have a 2000 kg/440 lb weight capacity. These systems can satisfy short term requirements without damage to the environment. Permanent track systems can be installed several ways and can make entire rooms accessible. Increased track options allow us to customize installations to the client's needs and environment. Being able to adapt to a wider variety of client needs has subsequently increased demand for these lifts which has motivated MEDIchair to develop a specialized team able to quickly respond to all requests.

Overhead lifts have the safety and strength of a floor lift without the inherent difficulties. An overhead lift eliminates concerns regarding staff ability to move the lift when someone is elevated, client concern and comfort when being moved while elevated, the type of flooring present in the room or rooms, and accommodating

such a large piece of equipment.

Overhead lifts are physically easier to use throughout the lift and transfer process, decreasing the number of staff required and increasing staff safety and retention. Moreover, 2-person moderate or maximum assists can quickly be reduced to 1-person minimum assist or even independent.

In private homes or institutional settings, from pediatric to palliative care, overhead lift systems provide versatile lifting and transfer options that can be configured and customized to the client's specific needs. MEDIchair Winnipeg welcomes every opportunity to speak to clinicians, facilities, and families and/or individuals on the options available to best address the situations at hand. Call MEDIchair at (204)-949-2300 and ask for Dave Sjoberg or Jeff Cook for consultation on any of the above information.

MEDICHAIY.
the home medical equipment specialists

385 - 550 Century St Winnipeg MB R3H 0Y1 Tel: (204)-949-2300 Fax: (204)-774-2191 winnipeg@medichair.ca David Sjoberg



MPF PRODUCT TESTING ~ by Greg Winmill~

The Manitoba Paraplegia Foundation Inc. has purchased some equipment to be tested in an effort to determine the quality of the equipment and whether we can recommend C.P.A. clients purchase it.

In this issue of ParaTracks we review two of these products

Roho Comfort Products. Most CPA clients will recognize the name Roho as the maker of wheelchair cushions. Roho also markets a line of non-medical products that may be useful for persons with spinal cord injuries. The Airhawk and LTV are low profile cushions that incorporate adjustable interconnected air-filled cells the same as the medical Rohos. They are in no way intended to replace Roho cushions designed for wheelchairs. They are marketed as a cushion that can provide comfort for any individual. They sell for the fraction of the cost of a medical Roho.

The *Airhawk* is a truck seat cushion designed for long-haul truckers. It comes with a cover and strap which holds it onto the seat. It claims to reduce numbness, soreness and fatigue while driving long-distance. After purchasing an Airhawk cushion, MPF loaned it to an able-bodied trucker. We received positive feedback which means the cushion seems to be doing what the advertisements claim. The cushion is now on loan to a paraplegic who is using it in his personal car. We are still waiting for feedback here.

The *LTV* is a general-purpose cushion. It is smaller than an Airhawk and portable. It can be used in a car, on a plane, a lawn tractor or a boat etc.

Once again this cushion is not meant to replace a medical Roho. However, if you are a person with a spinal cord injury and you currently have no problem with skin breakdown on your rear end, this cushion may very well help keep your skin intact during times when you can't use your proper wheelchair cushion.

I personally decided to give the LTV cushion a try on a driving vacation this summer. I used it in my truck on a trip from Winnipeg to Prince Albert National Park in northern Saskatchewan. It was my first long trip since buying my truck and I had concerns about how far I could drive without putting my skin at risk. After a couple of short days behind the wheel I found the cushion prevented me from having any redness at the end of the day. As I grew more confident I pushed things a little longer and on the way home drove nonstop from Saskatoon to Winnipeg.

So what's the verdict on this cushion? Hey I'm buying one! No redness after long days behind the wheel. Also, the cushion is a very slim design so I didn't notice the seating height difference as being a problem in my truck. The Airhawk sells for \$99.95 US, the LTV starts at \$89.95 US. They can be ordered directly from www.therohostore.com

Seating, the Next Generation

For the past 2 ½ years CHCP (Canadian Health Care Products) has been the Authorized Dealer for Ride Cushions in Manitoba. We have distributed over 25 cushions locally within Manitoba to clients ranging from high level spinal cord injuries to ablebodied clients requiring increased seating tolerance.

People with spinal cord injuries are living longer. Baby boomers are coming of age and acquiring disabling conditions at an increasing rate. Ironically, Manitoba's improved trauma and ER care has increased the survival rate of people with traumatic injuries, and improved long-term management of secondary factors, has significantly decreased their mortality rate. Wheeled seating and mobility provid-

ers are now faced with supporting the largest-ever generation of people aging with severe disabilities. *This is the challenge.*

As people age with disabilities that impair mobility, their needs for wheelchair seating and mobility solutions become more complex. In the case of spinal cord injuries, early intervention has emphasized support of good skin integrity. Traditional seating interventions utilize a variety of designs and materials with the emphasis on distributing pressure evenly over the surface of the cushion support and, to some extent, controlling shear forces. To do this, a material must conform to body shape and bony prominences, and respond dynamically to movement and shear. Unfor



tunately, the more effective a material is at distributing pressure and controlling shear, the less effective it is at supporting postural stability. Imagine trying to walk on an air or water bed and you will understand the impact these materials have on postural control.

Aging paraplegics who have had success with traditional seating technologies are developing severe over-use syndromes of the upper extremities, chronic pain and deterioration of postural alignment and control. Their skin's tolerance of pressure, no matter how well distributed, diminishes with age. In addition, deteriorating functional independence and postural issues become superimposed over severe and chronic skin problems, and people often lose their ability to sit. It is not uncommon to meet formerly active and independent paraplegics, fifteen years post-injury, relying on power or power-assisted mobility, tilt and recline systems, overhead lift systems for transfers and modified minivans for transport.

The mobility side of the industry is doing a relatively good job at introducing new and/or enhanced manual, power, and power-assisted wheelchairs with or without power seating options. The seating industry, however, has developed few significant improvements for addressing the constellation of seating challenges faced by people aging with an SCI. Good pressure distribution through use of foams, gels, fluids and air most often comes at the price of postural stability. The consumer and seating practitioner are forced to choose between skin OR posture. But if the provided system results in skin breakdown, it can't be used. Skin always wins.

More aggressive custom contoured systems may provide a better platform for postural control but are not appropriate for high-risk skin clients due to the systems' inability to respond to postural dynamics and positioning error. Imagine a cushion made by having the consumer sit in wet concrete. In its liquid state, the concrete will flow to conform to body shape. Once it solidifies it will match the exact shape of the consumer's bottom at that point in time. Now imagine moving even subtly within the contours of that custom seat. What happens? The relationship of bony prominences to the contours of the seat changes, and the result is increased loading of at-risk areas and unloading of areas that should be supported. Movement within the shape increases shear and thus the risk of skin break-down. This is how conventional

contoured seating performs. It has little to no ability to accommodate change in a person's activities, weight, tissue atrophy, posture and functional skills.

Conventional contoured seating systems are also hot and non-breathing. Heat and moisture are gaining on pressure and shear as primary risk factors for skin breakdown, yet few wheelchair seating systems effectively reduce heat and moisture build-up at the seating interface.

In a perfect world nobody would need a wheel-chair. But in this imperfect world, wouldn't it be better if people could have wheelchair seating that is built uniquely for them? That achieves optimal skin integrity *and* postural control without compromise? That is breathable to keep them dry, and also help them stay warm in the winter and cool in the summer? That doesn't weigh much at all? Why not construct it in a way that ensures an accurate fit to the wheelchair to further enhance the user's balance, control and mobility? Why not make it capable of changing as a consumer's needs change?

All these goals can be achieved by presently available techniques and materials. Transfer of material technologies from other industries, coupled with orthotic and prosthetic principles, has created a seating option that can be uniquely applied to each consumer, namely the Ride Custom Cushion. These cushions can promote good skin integrity without compromise of postural control. The cushion material is breathable, thereby reducing heat and moisture build-up. Information about peoples' shapes can be captured in their wheelchairs, not in simulators detached from mobility, ensuring optimal functional performance. This material-savvy, orthotically informed approach will define the future of seating and mobility. Please Contact Joe Perry

(CHCP)/Thomas R. Hetzel PT, ATP)



Head office

6–3166 Portage Ave. Winnipeg, MB R3K 0Y5

P:(204)-832-9963 F:(204)-888-9609 Kildonan Crossing Mall

835–1615 Regent Ave.

Winnipeg, MB R2C 5C6

P:(204)-888-2427 F:(204)-667-6157



WILL-TO-WIN

In 2008 the Will to Win Classic celebrated our 25th anniversary. Our original commitment, in 1983, was to raise \$125,000 over five years. The monies donated in that initial five year period, along with matching funds and the commitment of ongoing funding, allowed Dr. Larry Jordan and his confreres to create the Spinal Cord Research Centre (SCRC) within the Department of Physiology in the Faculty of Medicine at the University of Manitoba. Throughout the past 25 years the Will to Win has funded the Will to Win Scholarship (financial support for a member of the SCRC research team) and special events such as the Will to Win Symposium (a gathering of spinal cord researchers from around the world). In 2008 the donation to the Manitoba Paraplegia Foundation Inc. (MPF), in the name of the Spinal Cord Research Center, was over \$150,000.00. This donation brings the 25 year cumulative total to well over \$1,000,000.00.

In 2009 we again embark on a new and exciting five year commitment to the MPF and the SCRC. We have arranged the opportunity to create an academic position in the Faculty of Medicine. This position will be in the Department of Physiology and will be filled by a scientist whose research complements the studies of our spinal cord research team. An international search will take place to recruit the "brightest and the best" candidate available. The funding for the laboratory update and the successful candidate's salary, over the next 5 years, will be provided by funds generated by the Will to Win Classic. We are confident that the Will to Win will continue to be a source of funding for the ongoing endeavours of the SCRC.

Our committee appreciates the cooperation of a number of members of our corporate community in the past 25 years. Without the support of corporate citizens such as Laddie Huthchison, Cliff Penner. Lawrie Pollard, Bob May, the McNaught family, the Rice family, the Saladin family and corporations such as Manitoba Blue Cross and Manitoba Hydro we would not have been able to accomplish our goals.



~ By Krís Kowley, PhD~

Brain Computer Interfaces: Is It Their Time Yet?

Research

Brain Computer Interfaces (BCIs) have been in the works for many years, and one of the leading researchers interested in developing BCIs, Dr. JR Wolpaw, was just in Winnipeg.

Dr. Wolpaw gave us an update on work attempting to develop BCIs. These interfaces record the signals from the brain (in humans) and then uses these signals to drive a computer-controlled device, like a cursor or a robotic arm.

People who could potentially benefit from these devices are persons paralyzed due to spinal cord injury or other diseases such as amyotrophic lateral sclerosis (ALS).

In Dr. Wolpaw's BCI system, the subject is first fitted with a cap of electrodes that record brain signals from the scalp. The cap is attached by wires to a personal computer. The computer program is able to analyze the subject's EEG (electroencephalogram)--a recording of the voltage on the skull generated by electrical currents arising from nerve cells in the brain.

To select a brain wave with which to begin training, investigators tell a subject to imagine an activity. "We suggest that they think about moving a hand or foot, but subjects are free to try different types of imagery and see what works for them," says Dr. Wolpaw. "One person thought about shooting baskets; another thought about lifting weights." The computer then selects the brain wave

that the subject is best able to control and links the brain wave to the movement of a cursor on a computer screen. The subject gradually learns to control the amplitude of that particular brain wave to control the movement of the cursor.

Learning to vary the amplitude is a somewhat mysterious process that requires several weeks of practice to master well. "It's basically a trial-and-error process, much like the way you learn any other skill," says Dr. Wolpaw. "When you first start playing tennis, you try different ways of holding the racket. If something works, you do it again. If it doesn't, you don't." Eventually, subjects become so skilled in moving the cursor that they do not need to rely as much on their imagery. "It becomes natural, like moving an arm," he says.

In one-dimensional control, subjects vary the brain wave amplitude to move the cursor up or down on a computer monitor. Learning to move the cursor in one dimension enables subjects to answer yes or no questions--they move the cursor to the top of the screen to answer "yes" or move it to the bottom to answer "no." Learning to vary the amplitude more precisely allows subjects to operate simple word-processing programs.

This simple application allows the user to write about one word per minute. This seems very slow, but for those who cannot speak, or move their eyes, it is the only way



they can communicate.

But this does highlight the fact that these interfaces are at their very early stage of development. In fact, one of the comments made by Dr. Wolpaw in his talk was that the BCI is sometimes prone to error, sometimes overshooting its target. This will be the next stage of development – trying to see how the speed and accuracy of the interface can be improved.

Some of the information used in this article was taken directly from: http://www.nibib.nih.gov/HealthEdu/eAdvances/21Oct04, and for more information go to: http://www.sott.net/articles/show/168489-Harnessing-The-Power-Of-The-Brain to read excerpts from a recent interview on "60 Minutes" chronicling BCI devices for a person with locked in syndrome, which aired on November 3, 2008.



Automotive Modifications at Assistive Technology Products and Services

Assistive Technology Products and Services (ATPS)

is a division of the Rehabilitation Engineering Department at the Health Sciences Centre. ATPS provides vehicle modifications for residents of Manitoba with disabilities who have a valid driver's license.

The Automotive Services of ATPS can install a variety of devices to a range of motorized vehicles. For example, hand controls can be installed to enable the driver to control the gas and brake pedals with their hands. A left-foot gas pedal allows the driver to use their left foot rather than their right. Special light-action controls and modified loweffort steering enables quadriplegic drivers to drive independently. Electronic modifications to a vehicle can put the dimmer, wipers, signals, and the horn within easy reach of the driver, while using hand controls.

The ATPS staff work with an Occupational Therapist who assesses a client's strength, range of motion, cognitive and perceptual skills before vehicle modifications take place. This ensures the changes made will work effectively and safely for the client.

The ATPS automotive section also works closely with the Driver and Vehicle licensing division of MPI to ensure that the correct license is issued to the client before modifications can take place. These modifications can be done on Driver's Ed vehicles and may include hand controls, left foot gas pedal, right hand turn signals, or steering wheel spinner devices. If modifications are extensive they can be done in the client's own vehicle for private lessons or for the Driver's Ed. Course.

For more information please contact Assistive Technology Products and Services at: 787-2366.



From Left to Right:
Wendy Wood: Liaison Officer, Driver Education Department,
Manitoba Public Insurance
Paul Tustin: Supervisor Mechanical Services,
Assistive Technology Products & Services, Rehab.
Engineering Department, HSC
Ramona Santos-Fearn: Rehabilitation Counsellor,
Vocational Services





A Member's Testimonial: Journey to Self-Employment

My name is Kevin Funk and I would like to take a moment of your time to tell you my story....

Friday, April 29, 1989 at 3:00 a.m. is the moment that changed my life forever. I recall the evening's events just minutes before the tragic car accident. My next conscious thought was a day later when I awoke to discover myself strapped to a hospital bed with a metal halo attached to my head. There are no words

that can explain how I felt at that moment. It began to make sense as the doctor stood there beside me, as I lay helpless, and informed me that there was an accident and as a result I had a neck fracture that left me with C6 quadriplegia. The moments that followed defined who I became – there I was 19 years old and never going to walk again. Right from the start I decided that I would not be held back by this – I was alive and merely had an altered version of the person I once was.

I spent the next 81/2 months in the Rehab. Hospital at the Health Sciences Centre learning to adapt to my new way of life. Upon release from the Rehab. Hospital I decided the best step for me was to start my independence by living on my own, so I got an apartment and entered the home care system. After several questionable years, I decided to remove myself from home care and enter the world of self managed care, which gave me the ability to hire my own certified orderlies and

ensure that I got the care that I felt I deserved. Among the people I hired was Jeff Middleton, an orderly that I dealt with when I was a home care client. When it came to client care, he was superior.

In 2003 Jeff and I bought a duplex together - this arrangement has worked very well for us and a great friendship evolved. It was around this time that Jeff and I started to discuss various services that were available for people with disabilities and elderly citi-

zens. Through our discussions we began to notice the shortcomings of those services and started coming up with ideas to fill the voids. My own personal desire to have the best care possible motivated us to come up with a service that provides others with that very same care.

is about you, your independence and your freedom to decide what you want to do any given day.))



In late 2007 after bouncing around ideas for several years we came up with the concept of our company. Jeff and I began looking at ways to make our ideas a reality. In early 2008 with the help and support of SMD Ventures and ORGOC we officially launched "Go Orderly".

The concept is also the foundation of our company. "Go Orderly" strives to provide the best possible care for our clients, to meet their special needs and challenges and give them self-directed independence. We provide a unique service for anyone who needs assistance getting to appointments, completing errands or attending events because of their age, medical condition or disability. It's about getting people where they want to go, when they need to be there, secure in the knowledge that they are accompanied by certified home care attendants every step of the way. "Go Orderly" operates on the principle of true independence, the

freedom to decide what you want to do on any given day.

It's been twenty years since my accident. I have learned to adapt to my way of life. I know that one of the most important things is staying independent. I hope that "Go Orderly" will help others be as independent and help them feel secure and comfortable in maintaining a normal life style.

~ Kevin Funk~



Therapy First

Recipients of the 2008 MSOT "Outstanding Occupational Therapist Award"

We specialize in Spinal Cord Injury Rehabilitation

Occupational Therapy Services include:

Wheelchair Seating and Mobility, Pressure Sore Prevention and Management, Home Accessibility, Hospital Discharge Planning, Functional Retraining and more.

Together We Can!



Referral forms available online at www.TherapyFirst.ca

Or Contact Corinna at 204-612-0399 or Angie at 204-612-0398

Therapy First is a private Occupational Therapy company providing service in Winnipeg, Manitoba and surrounding areas. Together, the owners, Corinna Klassen and Angie Maidment have over 30 years of combined experience as Occupational Therapists.

We are pleased to announce that Therapy First has hired a part time Accessibility Consultant, Rick Klassen.

Rick is a certified engineering technologist with many years of experience in residential design and construction. As an Accessibility Consultant Rick is able to do home visits, in consultation with an Occupational Therapist when necessary and provide recommendations for accessibility and safety within a home. Rick Klassen has his degree in Structural Engineering Technology. He has experience in building and renovating homes and is well versed in barrier-free standards and building codes. Rick provides practical and economically responsible recommendations and will consider individual functional requirements; structural issues and concerns related to personal finances and insurance company protocols. Rick is available to prepare simple recommendations or complex proposals including architectural drawings.



Examples of accessibility issues that may arise include:

- bathroom modifications such as wheel-in showers, sink access, storage, door modifications, toilet access and safety issues
- ~ bedroom modifications such as closet access
- ~ kitchen renovations with accessible sinks, cupboards, counter tops stoves, wheel under countertops,
- ~ ramps or elevators,
- ~ custom residential design for visitability or wheelchair access
- ~ whole home renovation for wheelchair access
- ~ evacuation plans for individuals with disability

Rick has prepared proposals for individuals and for Manitoba Public Insurance clients and is available to help you. He is available to provide services with or without an Occupational Therapist already providing service to the individual.

Please contact Therapy First at OT@TherapyFirst.ca or 204-612-0398 for further information or contact Rick Klassen directly at Rick@TherapyFirst.ca or 204-612-1527.



Registered Disability Savings Plan Securing the Future for Canadians with Disabilities

The Registered Disability Savings Plan became law on December 14th, 2007, when legislation received royal assent. RDSPs will become available at financial institutions in December, 2008.

The RDSP is a new vehicle that will assist families in planning for the long-term financial security of our relatives with disabilities. Over time, the RDSP will provide billions of dollars to supplement income, enable home ownership, and enhance quality of life for as many as 700,000 Canadians with disabilities.

Our dream is that peace of mind be defined only when our relatives live life to its fullest - when their lives are filled with family and friends, and when their dreams become reality. In our experience financial security and social well-being are two of the biggest keys. We hope that the RDSP becomes vehicle for achieving financial security.

Highlights of the Registered Disability Savings Plan

- ~ Like Registered Education Savings Plans, the plan will allow funds to be invested tax-free until withdrawal.
- Any individual that is eligible for the Disability Tax Credit may establish an RDSP
- ~ In the case of a minor child, a parent or guardian can establish and direct the RDSP
- ~ \$200,000 lifetime contribution limit
- ~ Contributions permitted by the individual, any family member or friends
- ~ No annual limits on contributions
- ~ Contributions grow on a tax deferred basis
- No restrictions on when the funds can be used or for what purpose
- Upon withdrawal, the income, the Grant, and the Bond are taxed in the hands of the beneficiary, and are likely to be taxed at a much lower rate.

Highlights of the Canada Disability Savings Grant

- ~ The Canada Disability Savings Grant will provide a federal contribution to assist families in saving for the future.
- ~ Grants are greater for families in the lower and middle-income categories.
- ~ When annual net income is less than \$74,357 the grant will contribute:
 - ~ \$3 for every \$1 contributed on the first \$500
 - ~ \$2 for every \$1 contributed on the next \$1,000.
- ~ When annual net income is over \$74,357, the grant will contribute:
 - ~ \$1 for every \$1 contributed up to \$1,000.
- ~ The Grant can be received up to a maximum RDSP amount of \$70,000, and until the beneficiary turns 50.
- ~ Beneficiaries must wait 10 years after last Grant or Bond is received to avoid penalties.

Highlights of the Canada Disability Savings Bond

- When annual net income is \$20,833 or less, the Canada Disability Savings Bond will provide \$1,000 per year without any contribution.
- ~ The RDSP thus becomes accessible to persons with disabilities whose family does not have the resources to

make contributions.

~ Like the Grant, the Bond can be received for up to \$20,000 or until the person reaches their 50th birthday.

Withdrawals from the RDSP

- ~ The beneficiary of a plan can receive Disability Savings Payments as soon as the RDSP is established. There are no restrictions on when the funds can be withdrawn, or for what purpose, but any Grant or Bond received within 10 years must be repaid.
- Each dollar withdrawn is considered to be comprised of contribution, Grant or Bond, and income. The proportion that is Grant, Bond or income is taxable.

Provincial Implications

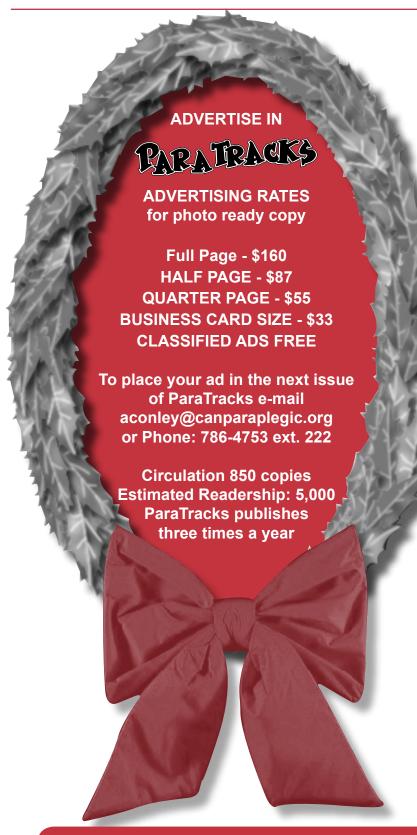
British Columbia, Newfoundland and Labrador, Saskatchewan and Yukon Territory have exempted the RDSP as assets when determining a person's eligibility for provincial disability benefits. In these provinces/territories, a person who is eligible for provincial disability benefits may receive disbursements from an RDSP without fear of disqualification from the provincial benefits. This will allow people with disabilities and their families to use the plan in whatever way they see fit to secure the future and improve their lives. Other provinces and territories have not yet made a decision on the RDSP.

Planned Lifetime Advocacy Network (PLAN) is a non-profit social enterprise established in 1989 by and for families committed to future planning and securing a good life for their relative with a disability. PLAN has led the advocacy work and has been promoting the creation of a Disability Savings Plan for five years.

Stay Informed and Get Involved!

- Make sure you or your relative are qualified for the Disability Tax Credit and have submitted a 2007 tax return
- ~ Visit PLAN's new RDSP blog at www.rdsp.com
- Become a PLAN Associate today to receive important RDSP updates and other great benefits
- ~ Register for a free RDSP Telelearning Seminar at www. plan.ca
- ~ For more information on the RDSP and to become a PLAN Associate, go to our website www.plan.ca





CPA (Manitoba) Inc. neither endorses or guarantees any of the products or services advertised in ParaTracks. Readers are strongly urged investigate the products and companies before purchase. Material printed in ParaTracks may not be reproduced without the written permission of CPA (Manitoba) Inc.



SIZZLE THIS **SEASON**

- ♥ CLUB WEAR ♥ KAMA SUTRA
- ♥ DRESSES
- **♥** GAMES
- ♥ NOVELTIES
- ▼ LADIES/MEN'S LINGERIE



DISCREET BOUTIQUE 340 DONALD ST. AT ELLICE OPEN WEEKNIGHTS UNTIL 10PM www.discreet.mb.ca



Please help support the Canadian Paraplegic Association by ordering a copy of our Music CD

\$10.00 + shipping,To purchase your copy of the CD with all proceeds to the CPA Call 204-786-4753, ext. 222 1-800-720-4933, ext. 222.

FOR SALES

Van with 6 way power seat and lift. Not safetied. Prefer to sell Van with lift included. Call Joe at 694-1503

Canadian Paraplegic Association (Manitoba) Inc. 825 Sherbrook St., Winnipeg MB R3A 1M5



MEMBERSHIP APPLICATION

YES! Count me in as a member of the Canadian Paraplegic Association (Manitoba) Inc. All members receive "ParaTracks" CPA (Manitoba) newsletter, "Total Access" CPA National Magazine and voting privileges at the Annual General Meeting. Members also receive discounts at various health care supply stores - Stevens Home Health Care Supplies (special pricing for supplies & 10% off equipment), The Access Store (10%), Northland Home Health Care (10% off medical supplies). Disabled Sailing membership (25% discount).

Northland Home Health Care (10% off medical supplies), Disabled Sailing membership (25% discount).				
I wish to select the following cate	gory of Membership:			
\$15 - \$24 - Member		\$250 - \$499 - Charter Member		
\$25 - \$99 - Support	ing Member	\$500 and over - Patron Member		
\$100 - \$249 - Sustai	ining Member			
All Monies donated remain in Manitoba to support CPA (Manitoba) Inc. An income tax receipt will be issued for any amount over \$15.00. Sustaining, Charter and Patron Members will receive recognition of their generous contribution in the context of events such as our Annual General Meetings or in the programs of other CPA (Manitoba) Inc. functions.				
** IMPORTANT ** According to Canada's Personal Information Protection and Electronic Documents Act, commencing January 1, 2004, all businesses and organizations are required to obtain an individual's consent when they collect, use or disclose their information. Unless you indicate otherwise by checking the box below, signing and returning this form to CPA, you are providing a form of consent that permits CPA to use the information you provide on this membership form for the purposes of sending out membership receipts and cards, reminder notices with membership applications and newsletters as noted above.				
Personal information is provided to If you have any questions, please I do not consent to CPA usi	o a third party only for call the CPA office. ng my personal informa	nformation and does not rent out mailing lists. or the purpose of sending out CPA's newsletters. ation as noted above and I understand that I will hinder notices or CPA newsletters.		
Name:	Signature:	Date:		
Make cheque payable to: Canadian Paraplegic Association (MB) Inc.	PLEASE ENTER A MEMBERSHIP FOR: Name			
Nail to:	Address			
#211 - 825 Sherbrook Street Winnipeg MB R3A 1M5	,			
or more information:	Postal Code	Phone _ ()		
Phone: 204-786-4753	E-mail address			
Fax: 204-786-1140 E-mail: aconley@canparaplegic.org		New Renewal		
	*			