

20th

International Seating Symposium



March 4th - 6th, 2004

Westin Bayshore Resort & Marina
1601 Bayshore Drive
Vancouver, BC Canada

Pre-Symposium Workshops

Wednesday March 3rd, 2004
at various locations

- Adding Evidence to Clinical Research and Practice
- The Business Side of Assistive Technology
- Power Wheelchairs: Maximizing Potential
- A Team Protocol for Prevention and Treatment of Pressure Wounds
- The Basis of Wheelchair Maintenance
- Human Sitting Behaviour
- Making the Match: From Assessment to Product
- Molded Seating: Where do I Start?
- Seating System Fabrication

SPONSORED BY:

**Sunny Hill Health Centre
for Children**
Vancouver, BC

**Interprofessional Continuing
Education**
The University of British
Columbia

**School of Health and
Rehabilitation Sciences**
The University of Pittsburgh

RESNA, Washington, DC



Wednesday March 3rd, 2004



Pre-Symposium Workshops

Registration for the Pre-Symposium workshops and Symposium proper are on one form, on the last page of this brochure. Please see registration form on the last page of this brochure and indicate which workshop(s) and instructional sessions you will be attending at this event.

Workshops PS1 through PS8 will be held at the Westin Bayshore.
PS9 will be held at the Sunny Hill Health Centre for Children.

Adding Evidence to Clinical Research and Practice

William C. Miller Jan Miller-Polgar
Morning Session: 9:00 am to 12:30 pm

Single-subject research design (SSRD) is a quantitative, flexible, rigorous, clinically oriented approach that provides an ideal method to identify whether intervention has produced change in the targeted outcome within an individual. Thus, SSRD is one method that provides clinicians with an evidence-based approach that can be used to validate their daily practice and contribute to research. This quasi-experimental research approach, in which the subject acts as their own control and uses repeated measurements of the targeted behaviour or outcome over time is ideal for the area of wheelchair and seating practice. SSRD primarily relies on visual analysis and requires minimal statistical manipulation. In this interactive workshop we will define and review different SSRD designs using examples relevant to the area of wheelchair and seating practice. Participants are encouraged to bring their ideas so they can leave with a research design to address their clinical and research irritations.

(PS1) Cost : \$75
 (\$65 if Symposium registrant)

The Business Side of Assistive Technology

Corrinne Carriere
Afternoon Session: 1:30 pm to 4:30 pm

This interactive workshop will discuss the business side of Assistive technology and the planning necessary to be effective and efficient in today's competitive work environment. It will include setting goals and objectives, time management, identifying target markets, developing a business plan, documenting results and outcomes, and knowing your product and service.

(PS2) Cost : \$75
 (\$65 if Symposium registrant)

Power Wheelchairs: Maximizing Potential

Ian Denison Doug Gayton
Susan Johnson Taylor
Full Day: 9:00 am to 4:00 pm
Limited Enrollment

If you manage to stay awake for the duration of the workshop, you will leave knowing more about power wheelchairs and the factors to consider when helping a client select one than you can imagine! This workshop will help you understand "why?" and enable you to help your clients select the most appropriate chair for their needs. During this workshop the limitations inherent in the five basic configurations and descriptions of successful and not so successful attempts to overcome these limitations will be explained. Hands-on opportunities to adjust the chairs to optimize their performance for a variety of clients will be provided. You will drive numerous chairs to see what they are capable of. The workshop also features an opportunity to interact with a number of power wheelchair users to hear their side of the story as well as a chance to meet the manufacturers representatives.

(PS3) Cost : \$150
 (\$135 if Symposium registrant)

A Team Protocol for Prevention and Treatment of Pressure Wounds

Jillian Swain, Stephen Sprigle, Gilbert Logan,
Karen Lagden, Salimah Mitha, Eric Wasylenko, Ed
Thompson, Bryan Smith, Jim MacKinnon
Full Day: 9:00 am to 4:00 pm
Limited Enrollment

This day workshop will provide you with a written protocol and manual for wound prevention and treatment from a team perspective. Each team member will present the section from the protocol which includes assessment tools, interpretation and goal setting. Extensive practical sessions will include: interface pressure mapping, wound measurement and risk assessment. This protocol is applicable in acute care, long term care, and community care. It is a framework for seating clinic to provide assessment and provision of assistive technology that will prevent sitting acquired pressure wounds (SAPUs). A clinical protocol for providing and interpreting interface pressure mapping will also be distributed. This workshop is appropriate for all team members and teams interested in a systematic assessment framework.

(PS4) Cost : \$150
 (\$135 if Symposium registrant)

The Basis of Wheelchair Maintenance

Mark Dilabio Wendi Harder
Morning Session: 9:00 am to 12:30 pm
Limited Enrollment

Small wheelchair adjustments significantly impact wheelchair performance. This hands-on workshop will provide opportunities to learn and practice wheelchair adjustments and routine maintenance. Opportunities for adjusting seating components will also be offered. This workshop will be of interest to wheelchair users, therapists and care-givers.

(PSS) Cost : \$75
 (\$65 if Symposium registrant)

Human Sitting Behaviour: What Influences What

Bengt Engstrom
Two Hours 9:00 am to 11:00 am
Limited Enrollment

This highly interactive instructional session reviews normal sitting behaviour in relation to seat unit design. The goal is discovering how humans compensate in sitting - and why - to better understand long-term, "abnormal" sitting behaviour and compensations often leading to negative consequences for the client. The main discussion is about the position of the head, spine and pelvis based on compensations of the legs and arms and functional differences between symmetrical and asymmetrical postures.

(PS6) Cost : \$50
 (\$45 if Symposium registrant)

Making the Match: From Assessment to Product

Joanne Yip Francine Miller
JoAnne Chisholm
Two Hours 11:00 am to 1:00 pm
Limited Enrollment

Moving from assessment to final product is often the most challenging part of the seating process. Understanding just how your physical, functional, socio-economic and environmental findings translate into a seating and mobility system that will fulfil your client's needs and wishes is key to successful outcomes. The ability to articulate these findings as product parameters is a skill that requires conceptualizing the final product, communicating clearly to others what is desired and working in partnership with your medical equipment dealer and seating technician.

(PS7) Cost : \$50
 (\$45 if Symposium registrant)



Thursday March 4th, 2004 Symposium

8:00 **Registration**

8:30 **Opening Remarks**

Maureen O'Donnell

8:45 **Keynote**

Towards International Collaboration on Repair Discoveries and the Accessable City

Honourable Mike Harcourt

9:30 **Plenary**

Life is Communication: Sitting Patterns - Pathological or Logical?

Bengt Engstrom

10:00 **Plenary**

Why Current Pediatric Seating Systems Configured to "Support Growth" are Not Working

Karen Kangas

10:30 *Refreshment Break (held in the exhibit hall)*

11:15 **Plenary**

Pressure Management

Jillian Swain

11:40 **Plenary**

Brain Interfacing

Gary Birch

12:05 **Plenary**

Seating & Positioning: An Interactive CD Rom e-Learning Tool

Iona Novak

12:30 *Lunch (registrants are on their own)*

2:00 Instructional Sessions – Group A

A1

In Search of Seating Alternatives that Elevate Both Functional AND Skin Outcomes for the Aging Wheelchair User

Joan Padgitt Tom Hetzel

Intermediate

Because persons with disabling impairments live longer, and lead more active lives, there has been a dramatic increase in the number of people using wheelchairs for 20 or more years. While posture is always considered when recommending seating components, skin integrity issues are paramount in keeping a person safely seated in their wheelchair for functional lengths of time. We are often faced with the choice between achieving good skin outcomes **or** good postural outcomes. This presentation will introduce the concept of "force isolation" and discuss mechanisms for providing firm accurate postural support while meeting the challenging combination of both skin and postural control goals.

A2

Eight Days a Week

Kathryn Fisher Brenlee Mogul-Rotman Intermediate

This instructional session will explore issues beyond basic and essential seating and mobility. The presentation will address various daily activities and the integration of assistive technologies. Case studies will illustrate the use of equipment for alternate positioning, sleep, bathing, transfers, community access, vocation, and leisure pursuits. How client goals are met through coordination of team work and technology will be highlighted. As daily life becomes more hectic, our clients must be provided with the tools to keep up the pace...*eight days a week.*

A3

Early Equipment Interventions for the Pediatric Client

Sheena Schoger Beginner - Intermediate

Babies, diagnosed with a condition or disability, often have parents who are overwhelmed with the prospect of a future that involves surgeries, therapy appointments, wheelchairs, walkers, etc.. Our responsibility is to provide the parent with the required resources and equipment to ease parental loads and enhance acquisition of therapy goals. This presentation will provide an opportunity to exchange ideas and methods of providing equipment that will be accepted and assist these parents.

A4

Delivering Seating and Mobility to the Rest of the World

Wayne Hanson Kathleen Riley All Levels

How can we provide world class seating and mobility for people in third world countries? This presentation will address the many challenges that confront the wheelchair distribution team, when delivering seating and mobility.

Molded Seating: Where do I start?

Sheila Buck Todd Dinner
Two Hours 2:00 pm to 4:00 pm

Participants will understand how the assessment and simulation phase is critical to the ability to begin completing molded shapes. Common orthopedic and tonal changes will be reviewed with emphasis on determining when to mold. A demonstration will be completed on how to transfer simulation assessment findings to the completion of molded shapes. We will also review how the final shape can be enhanced to maximize the sitting tolerance, increase the pressure relief capabilities, and to accommodate orthopedic and tonal changes. Alternate materials used in off-the shelf seating will also be explored in how they can enhance molded systems.

(PS8) Cost: \$50
(\$45 if Symposium registrant)

Workshop to be held at the Sunny Hill Health Centre for Children

(bus transportation will be provided to and from this location to the Westin Bayshore Hotel)

Seating System Fabrication

Dave Cooper, Bob Stickney, Gord Broughton
Limited Enrollment (20)
Full Day: 9:00 am to 4:00 pm

This workshop will demonstrate the variety of techniques we use to position clients. Seating modalities for custom positioning of clients with moderate to complex needs will be covered. We will use foam in box, foam in place, and foam and plywood techniques. Modifications of commercial components to meet the needs of clients and caregivers will be presented. The use of the internet for seating and positioning related information will also be demonstrated.

(PS9) Cost: \$150
(\$135 if Symposium registrant)



Thursday March 4th, 2004

- A5** Successful Equipment Prescription for Specialty Populations of Bariatric and Geriatric Patients
Manufacturer Amy Bjornson All Levels
This workshop will address common problems and issues when prescribing equipment in both the bariatric and geriatric populations. The population of both of these groups is rapidly expanding in the US and will become an ever increasing portion of our business. This presentation will address the unique seating challenges that these populations present including cost and funding issues. Using case studies, this presentation will offer creative seating suggestions using currently available equipment.
- A6** Sports Galore
Nicole Wilkins Richard Peter Sonja Magnuson All Levels
Join us for an interesting inside view into a variety of manual and power wheelchair sports. Through discussion, video and slides you will have the opportunity to see how several sports are played and hear about the athletes' experiences. Several sport-specific wheelchairs will be reviewed and the athletes will share how their everyday wheelchairs are set-up.
- 3:00 Refreshment Break (held in the exhibit hall)
- 3:45 Instructional Sessions – Group B
- B1** Seating & Positioning for Medical Issues in Individuals with Developmental Disabilities
Karen Hardwick Intermediate
This presentation discusses the role of seating and positioning in treatment or management of medical conditions in individuals with developmental disabilities. The issues include positioning for medication administration, circulatory problems, poor esophageal motility, etc. Included is a discussion of technology that is available for use in evaluation and solutions for positioning challenges. Examples of technology used to gather information include Doppler ultrasound and Ankle Brachial Index (ABI).
- B2** Outside the Box, NOT Out of the Box
Kathleen Riley All Levels
This presentation will share unique applications of specialty controls, which have allowed two individuals to achieve independent mobility. Ari, a 19 year old with Werdnig Hoffman disease received a custom system with fiber optic switches while Rama, a 50 year old with ALS received a Magitek system with split sensors. Case presentation format will tell their stories.
- B3** My Shoulder Hurts, Now What? A Review of Pathomechanics
Patrick Meeker Intermediate
There is abundant research and information regarding the correlation between upper extremity overuse injuries and manual wheelchair use. However, in our practice, we often see clients with specific questions regarding what they should now do to correct their functional limitations and, most commonly, relieve their pain. Do we, as seating and mobility specialists, have an up-to-date understanding of current conservative treatments and surgical management options for shoulder and upper extremity injuries? This program will review the most common injuries to the upper extremity experienced by our clients including musculotendinous damage, cartilage and connective tissue defects, neurological damage and functional biomechanical aberrations. Assessment, conservative rehabilitation techniques and surgical repair options will be reviewed. Post-op prognosis and long-term outcomes will also be discussed to better understand the short-term and long-term implications these interventions will have on our clients' lives.
- B4** Seating Education for Clients, Caregivers & Colleagues: Is it Worth the Effort?
Ingrid Barlow All Levels
This workshop will explore the benefits, challenges and methods of education provided to Glenrose Rehabilitation Hospital clients and caregivers. The benefits include empowering clients in decision making, improving clinic effectiveness and efficiency, and providing options for service delivery. It is very important when using a client-centred approach to ensure the client is empowered to make decisions by being informed. When everyone has better information, referrals are more appropriate, seating and mobility issues are better identified at assessment and enhance clinic efficiency and effectiveness during intervention. Various educational methods will be described including individual counselling in assessments and fittings, developing printed materials (brochures and newsletters), in-services and workshops (e.g. Alberta Seating Workshop, Wheelchair and Seating Maintenance Workshop). How the workshops have been developed, evaluated and modified will also be discussed.
- B5** Sensory Processing & Integration in Childrens' Seating and Mobility Systems
Karen Kangas Intermediate - Advanced
In the past, primarily, adaptive seating systems were developed from an anatomical perspective with principles of physics implemented. Managing the body's skeletal system, particularly the spine and pelvis were believed to provide a child with the "right" and "optimal" posture to use. However, the body and its control of the skeletal system is not anatomical, but rather physiological in nature. Creating systems which support pelvic mobility, trunk control, and shoulder girdle strength can be challenging as children attempt to gain control and grow. Postural stability must be supported, but postural mobility must also be able to occur within a system. Sensory processing and sensory integration must be understood and supported as a repertoire of postural movements are supported and promoted within the structural components of seating systems.

B6 Powered Mobility: The Ever-changing Story of Center Wheel Drive
Manufacturer Michael Babinec

All Levels

The most recent technology advances in powered mobility over the last five years include those inherent to center wheel drive chairs. Not all center wheel drive chairs perform the same, and not all center wheel drive power chairs have the same application. This presentation will explore the development of center wheel drive power wheelchairs, address center of gravity management options for this choice, detail clinical and functional application of recent advancements, correlate these advancements to related needs of the powered mobility user and discuss the strengths and liabilities of this evolving mobility option.

4:45 **Reception (to be held in the exhibit hall)**



Friday March 5th, 2004

8:00 **Registration**

8:30 Instructional Sessions – Group C

C1 Effects of Tire Pressure and Type on Rolling Resistance

Bonita Sawatzky Ian Denison

Intermediate

Shoulder pain among wheelchair users who have spinal cord injuries is reported between 60 - 100%. Despite the shoulder problems, it's not uncommon to see wheelchairs with low or flat tires. To reduce the need for regular inflating of tires, people have switched to the popular solid tire. The use of these tires may still contribute to repetitive strain disorders. Data will be presented on how each tire performs during a standardized roll down protocol with the tires at their recommended pressure (RTP) as well as how these different tires perform under various pressures. Physiological energy expenditure that shows the human cost of wheeling with various tires and pressures will also be detailed.

C2 Comparison: Manual Tilt-in-space Wheelchairs Used in Long-term Care

Elizabeth Sebesta Sandy Daughen Danny Webb

Beginner - Intermediate

This presentation will begin with a review of some of the clinical reasons for prescribing a tilt-in-space wheelchair in a long-term care facility. Some wheelchair terminology will be defined. Six tilt-in-space wheelchairs, from a variety of manufacturers, will be presented. Charts comparing some of the most relevant features and specifications of the six chairs will be distributed, in order to assist therapists in making informed choices about which tilt-in-space wheelchair will best meet a resident's needs.

C3 Transportation for Children and Youth: BC Law and Clinical Best Practice

Sonja Magnuson

All Levels

Transportation safety is an important area for clinicians working with children and youths who have disabilities. This presentation comes with a powerful punch. An ex-coroner presents the circumstances of a tragic car crash that occurred in British Columbia (BC) several years ago. Four of the five occupants of this crash were children. The ensuing investigation of this crash highlights how child restraints and seat belts work to save lives. The BC laws regarding child restraints are reviewed with a specific focus on the implications and best practice for children and youth with disabilities. This population often has complex medical issues that need to be addressed for safe transportation. Although legalities and the case presented here are from BC, the best practice strategies for transportation of children and youth are drawn from various North American sources.

C4 Power to the People

Kathryn Fisher Sheila Buck Brenlee Mogul-Rotman

Beginner - Intermediate

This session will provide participants the opportunity to explore beyond the traditional realms of power mobility. Case studies will illustrate the use of power wheelchairs, scooters and power assists within various client populations and age groups. The assessment process to determination of need and outcomes will be discussed. Function, use and interaction will be reviewed to make the case for exploring power mobility through the stages of physical development, progression of a disability and aging.

C5 Just Weld it! Prescribing Custom Ultralights with Confidence

Kendra Betz

Intermediate

A wheelchair should "fit like a glove" with a highly customized configuration that provides optimized comfort, function and performance. The ultralight custom welded frames, when properly prescribed, are the lightest chairs available that best meet individual postural support and mobility needs. Additionally, the custom frames are responsive, efficient and low maintenance. This session will focus on strategies to confidently and competently prescribe custom welded manual chairs for appropriate candidates. Case examples will be utilized to demonstrate the evaluation process, use of empirical trials and successful prescription of custom frames.

C6 Functional Positioning/Independent Mobility for Clients with Complex Needs

Manufacturer Phil Mundy Nancy Balcom

Intermediate

The seminar objective is to provide practical instruction in assessing and dispensing adaptive mobility devices for people with disabilities. The presentation draws on clinical experiences of prescribing therapists, Rehab Technology Suppliers and PDG staff during their work developing various mobility related products with an emphasis on manual wheelchair positioning, bariatrics, individuals exhibiting high agitation, and device mounting applications.

Simultaneous Paper Sessions

Room 1

- 11:15 Effect of Seat Inclination on Seating Pressures of Individuals with SCI
Chris Maurer
- 11:25 Relationship Between Cushion Type, Backrest Height, Seated Posture and Reach
Stephen Sprigle
- 11:35 **Q & A**
- 11:40 Development of Reliable Measures of Postural Stability
Stephen Sprigle, Chris Maurer
- 11:50 A Seating Interface Test Fixture Design
Allen Sickman
- 12:00 **Q & A**
- 12:05 The Sub-ASIS belt: a New Concept
Allen Sickman
- 12:15 The Anti-Thrust Seat
Allen Sickman

Room 2

- Pressure Management in Positioning Clients with Severe Pelvic Obliquity using Pressure Mapping Technology
Michael Banks, Eva Ma
- Pilot Study to Detect Blanche Response
Jeanne Zanca
- Q & A**
- Customized Back Prosthesis Fitting
Peter Jung
- Development of a Cushion for Post-Surgery Relief
Gilbert Logan
- Q & A**
- Corrective Seating and Pain: A role for Intramuscular Stimulation
Daryl Caves, Grant Huston, Ian Denison
- Effects of Camber on Energy Cost in the Experienced and Inexperienced Wheelchair User
Angie Perdios, Bonita Sawatzky

Room 3

- Lateral Tilt-in-Space: Innovative Design for a Unique Problem
Kevin Clements
- A Retrospective of Three Years of Lateral Tilt-in-Space
Dave Cooper
- Q & A**
- Lessons Learned: The TOTWalker Grant Project
Christine Wright-Ott, Richard Escobar
- Interface Pressure Mapping Feet
Jillian Swaine, Shannon McGrath
- Q & A**
- Evaluation of an Intelligent Manual Wheelchair for Individuals with Visual Impairments
Richard Simpson, Ed LoPresti
- Pelvic Positioning Evaluations for Wheelchair Selection
Ana Allegretti

12:25 **Q & A**

Q & A

Q & A

12:30 *Lunch (provided in the exhibit hall)*

2:00 **Plenary** Seating, Mobility and ICF
William C. Miller

2:25 **Plenary** Manual Wheelchair Skills: Past, Present and Future
R. Lee Kirby

2:50 **Plenary** Seating via Telehealth: Benefits and Challenges
Angela Sekulic Ingrid Barlow
and
Tele Rehabilitation for Seating and Wheeled Mobility, Evaluation and Service Delivery
Laura Cohen

3:25 *Refreshment Break (held in the exhibit hall)*

4:10 **Chris Bar Research Forum**

5:15 Adjourn

Adaptation and Evaluation on the SRC Walker for Children with Severe Disabilities

Takeshi Shigenari

A Collaborative Project to Develop a Low-Cost, Low-Tech Air Loss Sensor System for Roho Seat Cushions

Tamara Vos, Mikel Wheeler

Item Analysis of the Seated Postural Control Measure

Lori Roxborough, Maureen Story

Seating Simulator for Remote Access

David Jordan

A Mobile Rocker Base to Provide Calming Sensory Input

Lynore McLean

Proto-type Device: Clinical Determination for the Stability of an Occupied Wheelchair

Andrew Brulé



Saturday March 6th, 2004

8:00 **Registration**

8:30 Opening Remarks **Maureen O'Donnell**

Simultaneous Paper Sessions

Room 1

8:45 Recovery of Postural Control Following Brain Injury
Beth Ott

8:55 Click It or Ticket: Seat Belt Usability Among Wheelchair Riders
Linda van Roosmalen M. Reed

9:05 **Q & A**

9:10 A Matter of Degree: Designing Seating for Varying Degrees of Deformity and the Challenges a Rural Area Presents
Susan Parker Tiffany Paavola

9:20 Seating Assessment / Prescription in a Rural Area
Joanna Rainer

9:30 **Q & A**

9:35 Effects on Discomfort and Wheelchair Use
Barbara Crane Margo Holm Doug Hobson

9:45 **Q & A**

9:50 *Refreshment Break*

10:00 Instructional Sessions – Group E

E1 The Evidence Basis of Using Gait Trainers
Virginia Paleg

Evidence that supports using gait trainers will be presented using videos and case studies to illustrate actual clinical protocols and outcomes using a variety of devices. This course will offer a brief review of the essential processes, both cortical and spinal, necessary for walking. Over ten different brands of gait trainers will be shown and compared.

Beginner

E2 How to do a Cost Analysis in Assistive Technology
Frances Harris Stephen Sprigle

This session will introduce the basic concepts and tools needed to perform cost analyses in assistive technology. Cost analyses are an integral part of economic evaluations, which have become one of the principal methodologies in outcomes research, both within the general health care field and specifically in assistive technology. Such analyses are useful, not only as tools for outcomes researchers, but also as a means for service providers to measure and evaluate the costs specific to their programs. We will consider cost variables unique to assistive technology and, using examples from the literature and our own experiences, illustrate the complexities inherent in assessing those variables. Special attention will be given to examining the various trade-offs, choices, and challenges each cost analysis strategy poses for clinicians and researchers.

Intermediate

E3 Modifications for Mobility
Richard Escobar Christine Wright - Ott

Is straight from the factory good enough for everyone? Over the past 3 years, we have completed over 150 support walker evaluations for clients requesting a means for upright mobility. The majority of clients required a specific custom modification to provide comfort, increased endurance and function. This presentation will provide an overview of custom modifications of support walkers, and other mobility devices including recreational equipment for children and adults. Features of support walkers that affect user performance and a "feature matching" method to select the most appropriate support walker, options or modifications for an individual will be included.

All Levels

Room 2

Best Practices of OT & PT Performing Seating and Mobility Evaluations
Mary Isaacson

Current Practices for Providing Pediatric Powered Mobility
Jan Furumasu

Q & A

Using a Scoring Guideline to Organize Scheduling of Wheelchair Evaluations
Judy Larson

A New Database System for Seating and Mobility
Ajax Lau

Q & A

Seating and Mobility Script Concordance Test Validation
Laura Cohen

Q & A

E4 Vertical Mobility: An Overlooked Necessity

Manufacturer Julianna Arva Mark Schmeler

Intermediate

Humans move in three dimensions and complete access to the environment requires the ability to move in all dimensions. Seat elevators and passive standing are common wheelchair features that provide vertical mobility. The purpose of this session is to review and discuss the state of evidence for vertical mobility from the perspective of their indications and how this relates to "medical necessity". How this relationship can be used to justify need will also be discussed. Case study examples, research evidence and sample methods of wording justification will be presented to assist practitioners in their daily work.

E5 "It's Just Like Riding a Bike" ... Seating Evaluation and Interventions for Handcycles

Kendra Betz **Advanced**

Handcycling has become one of the most popular and fastest growing adaptive sports for both recreation and competition. All factors considered for everyday wheelchair and seating system prescription must also be addressed with handcycles. The rider's type and extent of disability, functional skill level, musculoskeletal presentation, and intended use of the handcycle will guide equipment selection. Case examples of riders with disabilities will be utilized to illustrate interventions for equipment configuration and customization including the use of aftermarket products and design of custom cushions. The intent of his advanced level instructional session is to educate experienced seating clinicians about the evaluation, prescription and modification of handcycles to optimize rider performance, satisfaction and safety.

E6 Developing Client Centered Guidelines for Power Mobility

Ben Mortensen Jeanette Boily William Miller **All Levels**

Despite the advantages of power mobility, there are risks associated with its use. Accidents, which may occur for a variety of reasons including disease progression, behavioural issues and environmental factors, are a serious concern within residential facilities and within the community. Because of the impact of loss of independent mobility, the decision to withdraw a person's power mobility for safety reasons can be controversial and ethically problematic. In the absence of a gold standard to assess when a client is safe with power mobility, therapists generally rely on their clinical reasoning to make a decision about whether to provide, limit or discontinue power mobility use. As such, many agencies have developed guidelines to assist in decision making around such contentious issues. This interactive workshop will allow participants to review and critique a variety of strategies to deal with approaches to power mobility safety issues.

11:15 **Adjourn**

RELATED ACTIVITIES

Saturday 1pm **RESNA ATP and ATS exams** (4hrs, exams are simultaneous), **followed by RET Exams** (1.5 hrs)

March 6th, 7th & 8th **WGII Group Meeting**

Symposium Organizing Committee

Lori Roxborough (Chair)
MSc., OT/PT
Sunny Hill Health Centre for Children

David Cooper
MSc. (Kinesiology), Rehabilitation Technologist,
Sunny Hill Health Centre for Children

Margaret Francis
Administrative Assistant, Therapy Dept.
Sunny Hill Health Centre for Children

Elaine Liou
Director, Interprofessional Continuing Education,
University of British Columbia, Vancouver, BC

Maureen O'Donnell
MD, MSc, FRCPC, Head and Assistant Professor, Division of Developmental
Paediatrics, Department of Paediatrics, University of British Columbia,
Vancouver, BC

Maureen Story
BSR (PT/OT), Sunny Hill Health Centre for Children and Access Community
Therapist Ltd., Vancouver, BC

Bonita Sawatzky, Ph.D
Department of Orthopaedics, BC's Children's Hospital, Vancouver, BC

EXHIBITORS

- 21st Century Scientific Inc.
- Accessible Designs
- Action Products
- Adaptive Engineering Lab Inc.
- Advanced Health Care Products Inc.
- Altimate Medical Inc.
- Body Tech NW
- Bodypoint Designs, Inc.
- Freedom Concepts Inc.
- Frog Legs, Inc.
- Innovation In Motion
- Marken International Inc.
- Motion Concepts /PDC
- Ontario Rehabilitation Technology Consortium & Variety Ability Systems Inc.
- Otto Bock Health Care
- Sammons Preston Rolyan
- Shoppers Home Health Care
- SOS Rehab
- Symmetric Designs Ltd.
- Tekscan Inc.
- The Roho Group
- Varilite
- Vista Medical Ltd.
- Vitacare Inc.

(*please note exhibit space is still available at time of publication)

Symposium Presenters

A. Agustsson, PT, MS, Landspítali, University Hospital, Division of Rehabilitation, Kopavogur, Iceland

Ana Allegretti
University of Pittsburgh, Human Engineering Research Laboratories, Pittsburgh, PA

Beth Anderson, OTR/L, CDRS, Shepherd Center, Atlanta, GA

Julianna Arva, M.S., ATP
Pediatric Product Specialist, Permobil Inc. Chatham, NJ

Michael Babinec, OTR/L, ATP, ABDA
Manager, Rehab Training & Education, Elyria, OH

Nancy Balcom, B.Sc Kinesiology, PDG Inc., Vancouver, BC

Michael B. Banks, M.A., CRTS, ATS
Director, Walla Wall HomeMedical Inc. Walla Walla, WA

Ingrid Barlow, M.Sc., OT(C)
Adult Coordinator, Glenrose Hospital Seating Clinic, Edmonton, AB

Kendra Betz, MSPT
SCI Clinical Specialist, VA Puget Sound Health Care System, Seattle, WA

Gary Birch, Dr., BA, Sc.
Executive Director, Neil Squire Foundation and Adjunct Professor, Department of Electrical and Computer Engineering, University of British Columbia, Vancouver, BC

Amy Bjornson, PT, ATP
Sunrise Medical, Longmont

Alan Boyd, B.Eng., Motion Concepts, Milton, Ont.

Jeanette Boily, BScOT, CPL.OT, George Pearson Centre, Vancouver Hospital & Health Sciences Centre, Vancouver, BC

Gord Broughton, Seating Technologist, Sunny Hill Health Centre for Children, Vancouver, BC

Andrew Brulé, Ma.Sc., P.Eng, Sunny Hill Health Centre for Children, Vancouver, BC

Sheila Buck, B.Sc (OT), Reg. ATP (Ont)
Therapy NOW! Milton, ON

Corrine Carriere, President & Owner
Carriere Consulting Inc., Oakville, ON

Darryl Caves, B.Sc., PT
GF Strong Rehabilitation Centre, Vancouver, BC

JoAnne Chisholm, MSc. OT, Access Community Therapists Ltd., Vancouver, BC

Kevin Clements, Manager Seating and Mobility, Regency Park Rehabilitation Engineering, Regency Park, South Australia

Laura Cohen, PT, ATP
Research Associate, PhD Student, Human Engineering Research Laboratories, Pittsburgh, PA

Elizabeth Cole, Director of Education, Sunrise Medical Inc., Longmont, CO

Dave Cooper, Rehabilitation Technologist
Sunny Hill Health Centre for Children, Vancouver, BC

Barbara Crane, Ph.D, Department of Rehabilitation Science and Technology, University of Pittsburgh, Pittsburgh, PA

Sandy Daughen, OT, Coordinator of Rehabilitation Services, The Lodge at Broadmead, Tillicum and Veterans Care Society, Victoria, BC

Ian Denison, PT, ATP SCI Programme
GF Strong Rehabilitation Centre, Vancouver, BC

Mark Dilabio, Seating Technologist,
Sunny Hill Health Centre, Vancouver, BC

Todd Dinner, President
Signature 2000, Milton, ON

Bengt Engstrom
Bengt Engstrom Seating, Värmdö, Sweden

Richard Escobar, BSc, ATP
Mobility for Discovery, Palo Alto, CA

Kathryn Fisher B.Sc.OT, ATS, OT(C) Reg (Ont.)
Occupational Therapist, Therapy Supplies and Rental Ltd., Toronto, ON

Jan Furumasu, BSPT, CART, Rancho Los Amigos
National Rehabilitation Center, Downey, CA

Doug Gayton, ATP, GF Strong Rehab Centre,
Vancouver Coastal Health Authority, Vancouver, BC

Wayne Hanson, Director, Advanced Product Development for Pediatrics, Sunrise Medical, Bozeman, MT

Honourable Mike Harcourt
Vancouver, BC

Wendi Harder, B.Sc Kinesiology, ATS,
Motion Specialties

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Frances Harris, PhD, Center for Rehabilitation Technology, Helen Hayes Hospital, West Haverstram, NY

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Doug Hobson, Associate Professor, Co-Director, Rehabilitation Engineering Research Center, School of Health and Rehabilitation Sciences, University of Pittsburgh, Pittsburgh, PA

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Peter Jung, Orthotec Nottwil AG, Swiss Paraplegic Center, Nottwil, Switzerland

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Occupational Therapist, Clinical Educator, Practising Clinician and Consultant (private practice), Shamokin, PA

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Karen Langden, RN, ET, Wound Care Specialist
Judy Larson, OTR/L, Staff Occupational Therapist, Carrie Tingley Hospital, Albuquerque, NM

Ajax Lau, Seating Clinic, Prince of Wales Hospital, Physiotherapy Department, Hong Kong

Gilbert Logan, PhD
Director, Rehabilitation Engineering Centre, Royal Brisbane Hospital, Queensland, Australia

Ed LoPresti, PhD, President, AT Services
Eva Ma, OTR, ATP, Private Practic Consultant

Jim MacKinnon, Consumer, Calgary, AB
Sonja Magnuson, M.Sc, OT, Sunny Hill Health Centre for Children, Vancouver, BC

Joan Mather, B.Sc, PT, Glenrose Rehabilitation Hospital Seating Service, Edmonton, AB

Chris Maurer, MPT, ATP
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Patrick Meeker, MS, PT, Regional Clinical Specialist, The ROHO Group, Belleville, IL

Francine Miller, BSc. (OT) Access Community Therapists Ltd., Vancouver, BC

William C. Miller, PhD., Assistant Professor, UBC School of Rehab Sciences VGH OT Research Scientist, Vancouver, BC

Jan Miller-Polgar, PhD, Associate Professor
School of Occupational Therapy, University of Western Ontario, London, ON

Jean L. Minkel, PT, Principal, Minkel Consulting, New Windsor, NY

Salimah Mitha, RD, Dietician Consultant, Calgary, AB

Ben Mortenson, Clinical Practice Leader, Occupational Therapy, Purdy Pavillion ECU, Vancouver Hospital and Health Sciences Centre, Vancouver, BC

Phil Mundy, P.Eng, Product Design Group, Vancouver, BC

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Virginia Paleg, MS, PT, Silver Spring, MD
Susan Parker, PT, ATP

Marquette General Health Systems, Marquette, IL
Tiffany Paavola, OTR, ATP

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Angie Perdios, MSc Candidate

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Richard Peter, Program Coordinator, BC Wheelchair Sports Association, Vancouver, BC

Joanna Rainer, Vernon Jubilee Hospital, Vernon, BC

Kathleen Riley, PT, ATS, CRTS, Branch Manager, National Seating and Mobility, Mooresville, NC

Brenlee Mogul-Rotman, B.Sc.O.T., ATP, OT Reg. (Ont.), Occupational Therapist, Toward Independence, Richmond Hill, Ontario

Lori Roxborough, MSc., OT/PT, Sunny Hill Health Centre for Children

Yoshinori Saito, Kawasaki University of Medical Welfare, Dept. of Medical Welfare Environmental Design, Kurashiki City, Okayama Pref., Japan

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Mark Schmeler, MS, OTR/L, ATP, Director, Center for Assistive Technology, UPMC and Instructor, Dept. of Rehabilitation Science and Technology, University of Pittsburgh, Pittsburgh, PA

Sheena Schoger, Children's Rehabilitation Centre of Essex, Windsor, ON

Elizabeth Sebesta, OT

Tillicum and Veterans' Care Society, Victoria

Angela Sekulic, B.Sc.,OT(C)

Glenrose Rehabilitation Hospital Seating Service

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Takeshi Shigenari, Kinki Welfare University, Dept.

of Welfare Business, Faculty of Social Welfare,

Hukusaki-cho, Kanzaki-gun, Japan

Allen R. Siekman, Director of Design, Beneficial

Designs Inc., Santa Cruz, CA

Richard Simpson, PhD, ATP, Assistant Professor,

Department of Rehabilitation Science & Technol-

ogy, University of Pittsburgh, Pittsburgh, PA

Stephen Sprigle, Ph.D., PT, Director

Center for Assistive Technology & Environmental

Access, Georgia Institute of Technology,

Atlanta, GA

Brian Smith, Consumer, Calgary, AB

Bob Stickney, Seating Technologist, Sunny Hill

Health Centre for Children, Vancouver, BC

Maureen Story, BSR (PT/OT), Sunny Hill Health

Centre for Children, Access Community Therapists

Ltd., Vancouver, BC

Jillian Swaine, B.Sc. (OT), Occupational Therapy

Consultant, Jillian Swaine Occupational Therapy

Services, Calgary, AB

Susan Johnson Taylor, OTR/L, Rehabilitation

Institute of Chicago, Chicago, IL

Vern Taylor, Vista Medial, Winnipeg, MB

Ed Thompson, Consumer, Calgary, AB

Linda van Roosmalen, PhD, IDSA, Pittsburgh, PA

Tamara Vos, OTR, Dept. of Physical Medicine and

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Eric Wasylenko, MD, Palliative Care Consultant,

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Danny Webb, Rehab Equipment Specialist,

MEDiChair, Victoria, BC

Mikel Wheeler, COTA, Dept. of Physical Medicine

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Occupational Therapist; and Principal Investigator,

TOT Walker NIDRR Project, Mobility for Discovery,

Palo Alto, CA

Joanne Yip, BSR, OT/PT

GF Strong Rehab Centre, Vancouver/Richmond

Health Board, Vancouver, BC

Jeanne Zanca, MPT, PhD (candidate), Research

Associate, Department of Rehabilitation Science

and Technology, University of Pittsburgh, Pitts-

burgh, PA



General Information

Symposium Objectives

At the completion of this symposium, participants will be able to:

1. Describe the range of seating and mobility techniques available for clients with a variety of disabilities.
2. Discuss the emerging research evidence supporting seating and mobility practices.
3. Locate resources for seating and mobility practice.
4. Explain the advantages and disadvantages of a number of innovative service models and new technologies.

Location

The Westin Bayshore Resort & Marina

1601 Bayshore Drive (parallel to West Georgia Street)

Vancouver, B.C. Canada V6G 2V4

Hotel Accommodation

Please make your own reservation by calling the Westin directly. One night's guarantee by credit card is usually required. Identify yourself with the Seating Symposium. Hotel tax of 10% and 7% GST must be added to all rates. Telephone: toll free anywhere in North America 1-800-937-8461; Local calls 604-682-3377; Fax 604-691-6980.

Rates

CAD \$145 single

CAD \$155 double occupancy.

A block of rooms has been booked and will be held at the conference rate until **February 3rd, 2004**.

Tourism Information

Vancouver provides visitors with many opportunities to experience the West Coast lifestyle. If you would like more information on travelling in the area or other accommodations, please call these numbers:

Tourism BC 1-800-HELLO-BC (435-5622)

www.hellobc.com

Tourism Vancouver

Tel: 604-683-2000

Fax: 604-682-6838

www.tourism-vancouver.org

Registration

You may register by:

1. telephone or fax with credit card
2. online at www.interprofessional.ubc.ca
3. or by mail with a cheque or credit card.

Please see registration form for details. Pre-registration prior to **February 19th, 2004** is strongly recommended to ensure you receive your course selections. You may register for either the pre-symposium courses and/or full program (2½ days), or for single days.

Registration Fees

See Registration Form for details. All Symposium fees listed are in Canadian dollars (CAD\$). The tuition fee includes course materials, refreshment breaks and a reception scheduled for **Thursday, March 4th, 2004**.

Charge-by-phone

To charge by phone (Mastercard or Visa only), please call: **604-822-2801**, or **toll free within Canada 1-877-328-7744** or Fax **604- 822-4835**.

Registration via the internet

Secure, fast, online registration is available for Visa and Mastercard holders at the conference organizer's website: www.interprofessional.ubc.ca. Please ensure that you have a copy of the program to assist you in your workshop selections while online. A registration receipt will be mailed to all registrants regardless of payment method after processing by our office.

Refunds

Will be made (less a CAD\$50.00 processing fee) if written notice of withdrawal is received by **February 19th, 2004**. No refunds will be granted for withdrawal after that date.

Cancellation

The Division of Interprofessional Continuing Education reserves the right to cancel or move Pre-Symposium or main Symposium programs if registration is insufficient. In the event of cancellation, a refund, less a CAD \$50 handling charge, will be returned.

Study Credits and Certificate of Attendance

A Certificate of Attendance will be issued to all participants listing pre-approved continuing education credits

Physicians: MainPro and AMA Category 1 credits applied for.

American Occupational Therapy Association: Continuing education credits applied for.

Canadian Association of Occupational Therapists: Sponsorship has been applied for.

Registration

Register online at
www.interprofessional.ubc.ca

IN 9530

- ① Please type or print clearly
One registration form per person. Please copy if more are needed.

Last Name First Name Initials

Organization Name/Mailing Address

Mailing Address

City & Country Prov/State Postal Code

Daytime Telephone Number / Local Fax Number

Email Address

- DR.
 MR.
 MRS.
 MS.
 MISS.

Affiliation/Profession (select only one)

- Consumer
 Occupational Therapist
 Engineer
 Physiotherapist
 Equipment Supplier
 Physician
 Nurse
 Student
 Technician
 Other: _____
(please specify)

②

PRE-SYMPOSIUM SESSIONS

(Pick One full -day or Two half-day or one-three of the two-hour sessions)

- PS1 (half day)
 PS2 (half day)
 PS3 (full day)
 PS4 (half day)
 PS5 (half day)
 PS6 (two hours)
 PS7 (two hours)
 PS8 (two hours)
 PS9 (full day)

INSTRUCTIONAL SESSIONS

Rank all sessions in each set in the order of preference (1 = most preferred).

GROUP A GROUP B GROUP C

__ A1 __ B1 __ C1

__ A2 __ B2 __ C2

__ A3 __ B3 __ C3

__ A4 __ B4 __ C4

__ A5 __ B5 __ C5

__ A6 __ B6 __ C6

GROUP D GROUP E

__ D1 __ E1

__ D2 __ E2

__ D3 __ E3

__ D4 __ E4

__ D5 __ E5

__ D6 __ E6

③

REGISTRATION FEES

(Early Bird rate is prior to January 31st, 2004)
All values are in Canadian Currency

Pre-Symposium Workshops

(These are an additional cost to the Symposium fee)

	Attending just the workshop	Workshops & Symposium
PS1	<input type="checkbox"/> \$75	<input type="checkbox"/> \$65
PS2	<input type="checkbox"/> \$75	<input type="checkbox"/> \$65
PS3	<input type="checkbox"/> \$150	<input type="checkbox"/> \$135
PS4	<input type="checkbox"/> \$150	<input type="checkbox"/> \$135
PS5	<input type="checkbox"/> \$75	<input type="checkbox"/> \$65
PS6	<input type="checkbox"/> \$50	<input type="checkbox"/> \$45
PS7	<input type="checkbox"/> \$50	<input type="checkbox"/> \$45
PS8	<input type="checkbox"/> \$50	<input type="checkbox"/> \$45
PS9	<input type="checkbox"/> \$150	<input type="checkbox"/> \$135

Workshop Subtotal: \$ _____

Symposium Registration

(None of the following prices includes Pre-Symposium workshops which are an additional cost)

Entire 2 and a half-day Symposium

\$400 Early Bird \$475 Regular

Thursday, March 4th only

\$195 Early Bird \$215 Regular

Friday, March 5th only

\$195 Early Bird \$215 Regular

Saturday, March 6th only

\$95 Early Bird \$110 Regular

Registration Subtotal: \$ _____

Total: \$ _____

④

PAYMENT

Cheque

Please make your cheque payable to the University of British Columbia and send to:

IN 9530 Registration

Interprofessional Continuing Education, University of British Columbia, Room 105 - 2194 Health Sciences Mall, Vancouver, BC, Canada V6T 1Z3

Credit Card



We do not accept American Express

Cardholder's Name _____

Card # _____

Expiry Date _____ / _____

Purchase Order

If your organization will be paying with a purchase order on your behalf:

P.O. # _____

Manager's Name: _____

Manager's Tel. #: _____

Charge by Phone/Fax:

Local/Outside BC: 604-822-2801

Toll free (Canada): 1-877-328-7744

Register by Fax: 604-822-4835