

# 22<sup>nd</sup>

# International

# Seating

# Symposium



*Featuring the:*

**Sixth Annual Chris Bar Research Forum**

*sponsored by Roho, Inc*

## March 2 - 4, 2006

### Pre-Symposium Workshops

Wednesday March 1<sup>st</sup>, 2006

at various locations

- First Steps - Fundamental Skills of a Seating Assessment
- How to Make Friends and Influence People with Clinical Research in Rehab
- The Basics of Wheelchair Maintenance
- Calgary IPM Protocol for Sitting
- Wheelchair Seating and Mobility: Advanced Applications
- Pick Which Switch Fits the Niche: Activating Power Mobility Functions with Switches
- Fabrication of Seating Systems

### Westin Bayshore Resort & Marina

1601 Bayshore Drive

Vancouver, BC Canada

SPONSORED BY:

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



**Interprofessional Continuing  
Education**  
The University of British Columbia  
*A Team Approach to Learning*



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



### 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.

### Symposium Description

This international symposium addresses current and future developments in the areas of seating, positioning and mobility. Topic areas include service delivery, product development, research and evaluation. The format for the symposium will include plenary, poster, instructional and paper sessions. Extensive opportunities are provided for networking with colleagues.

### 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. 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.

**Rate:** CAD \$149 single

A block of rooms has been booked and will be held at the conference rate until **February 27<sup>th</sup>, 2006**.

### 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 or go online:

#### 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. online at [www.interprofessional.ubc.ca](http://www.interprofessional.ubc.ca)
2. telephone or fax with credit card
3. or by mail with a cheque or credit card.

Please see registration form for details. Pre-registration prior to **February 10<sup>th</sup>, 2006** is strongly recommended to ensure you receive your course selections. You may register for either the pre-symposium courses and/or single days and/or full program (2½ 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 2<sup>nd</sup>, 2006**.

### 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](http://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.

### Charge-by-phone

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

### Refunds

Will be made (less a CAD\$50.00 processing fee) if written notice of withdrawal is received by **February 10<sup>th</sup>, 2006**. No refunds will be granted for withdrawal after that date.

### Cancellation

The Division of Interprofessional Continuing Education reserves the right to cancel Pre-Symposium or main Symposium programs. In the event of cancellation, a full refund less a \$50 CDN handling charge, will be returned. The University of British Columbia is not responsible for any other costs, including but not limited to airline or hotel penalties.

### Study Credits and Certificate of Attendance

**A Certificate of Attendance** will be issued to all participants listing pre-approved continuing education credits. For updates in regards to credits see our website: [www.interprofessional.ubc.ca](http://www.interprofessional.ubc.ca)

### EXHIBITORS

Ability Healthcare Group Inc.  
Action Products  
Adaptive Engineering Lab, Inc  
Advanced Health Care  
A.R.T. Group  
Altimate Medical, Inc.  
Amysystems  
Bendragon limited  
Bodypoint, Inc.  
CAMP Healthcare/Trulife  
Convaid, Inc.  
Degage US, LLC  
Falcon / LaBac  
Freedom Concepts Inc.  
Froglegs, Inc.  
Future Mobility Healthcare Inc.  
Innovation In Motion  
Invacare Corporation  
KI Mobility  
Les Équipements adaptés Physipro Inc.  
Levo USA  
Magic Wheels Inc  
Marken International Inc.  
Motion Concepts  
Moving People.Net/Optiway Technology  
Otto Bock

Parsons ADL Inc.  
PDG Product Design Group  
Performance Health Care Products  
Permobil, Inc.  
Practical Things, LLC.  
PRM (Precision Rehab Manufacturing)  
Q'Straint  
Quantum Rehab, *A Div of Pride Mobility Prod Corp.*  
Rehab Management  
Sammons Preston Rolyan  
Snug Seat  
SOS Rehab  
Specmat Technologies  
Stealth Products, Inc.  
Sunrise Medical  
Supracor, Inc  
Symmetric Designs  
Tekscan, Inc.  
The ROHO Group  
Three Rivers/Out-Front  
US Rehab  
Varilite  
Vista Medical  
XSENSOR Technology Corp.



Wednesday March 1<sup>th</sup>, 2006

## Pre-Symposium Workshops

**Registration for the Pre-Symposium workshops and the regular Symposium are on one form. Please fill out the registration form on the last page of this brochure and indicate which workshop(s) and instructional sessions you will be attending.**

### FULL DAY SESSIONS

#### **PS 1: First Steps - Fundamental Skills of a Seating Assessment**

Maureen Story Elaine Antoniuk Lynore McLean

Full Day Session: 9:00 am - 4:00 pm

Held at: Westin Bayshore Resort and Marina

The purpose of this workshop is to enhance the knowledge and expertise in the area of wheelchair seating assessment. This workshop is designed for individuals who wish to develop their fundamental assessment skills for seating and positioning. The areas of focus will include principles of seating, general goals, pre-mat assessment, body land-marking, terminology, mat assessment, and common problems and possible solutions. It will include a 'hands-on' assessment component.

**(PS1) Cost : \$150 (\$135 if Symposium registrant)**

#### **PS 2: Calgary IPM Protocol for Sitting**

Jillian Swaine Michael Stacey Dan Bader Stephen Sprigle  
Linda E Janzen Cheryl Oga

Full Day Session: 9:00 am - 4:00 pm

Held at: Westin Bayshore Resort and Marina

Dr. Bader and Dr. Sprigle share the research relevant to interface pressure mapping and preventing sitting acquired pressure ulcers (SAPUs). Their research includes: the four processes that contribute to tissue injury; deep tissue injury; types of shear; and friction. Dr. Stacey introduces the Calgary Interface Pressure Mapping Protocol and its relevance to sitting acquired pressure ulcer prevention and management from an international perspective. Participants will have an opportunity to practice the administration protocol and apply its interpretation to case studies.

**(PS2) Cost : \$150 (\$135 if Symposium registrant)**

#### **PS 3: Fabrication of Seating Systems**

Robert Stickney Gordon Broughton David Cooper  
Limited Enrollment (20)

Full Day Session: 9:00 am - 4:00 pm

Held at: **Sunny Hill Health Centre for Children**

(bus transportation will be provided)

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.

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

#### **PS4: Seating and Mobility: Advanced Applications**

Jo-Anne Chisholm Joanne Yip Ian Denison

Full Day Session: 9:00 am - 4:00 pm

Held at: Westin Bayshore Resort and Marina

A hands-on, intensive 1-day workshop for occupational therapists, physical therapists and seating technicians who have seating experience. Designed for therapists who have taken introductory seating workshops, and are familiar with the mat assessment and seating theory in general, 'Advanced Applications' engages the participant in in-depth clinical problem solving in positioning and mobility. The practical emphasis in this workshop is on wheelchair and seating setup and manipulation of equipment. Within the context of solving specific seating and mobility problems, participants will have the chance to tinker with a range of equipment.

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

### MORNING SESSIONS

#### **PS 5: The Basics of wheelchair Maintenance**

Mark Dilabio Wendi Harder

Morning Session: 9:00 am - 12:00 noon

Held at: Westin Bayshore Resort and Marina

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.

**(PS5) Cost : \$80  
(\$70 if Symposium registrant)**

#### **PS 6: How to Make Friends and Influence People with Clinical Research in Rehab**

Bonita Sawatzky Ian Denison

Morning Session: 9:00 am - 12:00 noon

Held at: Westin Bayshore Resort and Marina

This workshop will explore how to take a clinical question from conception to answering a well thought out clinical research question that can be investigated by the clinicians on the frontline. We will illustrate the process using a study recently completed that investigated the minimal abilities required to use a Segway Human Transporter

**(PS6) Cost : \$80  
(\$70 if Symposium registrant)**

### AFTERNOON SESSION

#### **PS 7: Pick Which Switch Fits the Niche: Activating Power Mobility Functions with Switches**

Deborah Pucci Jessica Presperin Pedersen

Morning Session: 1:30 pm - 4:30 pm

Held at: Westin Bayshore Resort and Marina

Providing an individual with the appropriate switch technology can create functional opportunities that may not have previously existed. Workshop participants will be presented with a framework for the evaluation, selection, and integration of various switch technologies with power mobility devices. Case studies, discussion, and demonstration will allow for hands-on experience with various switch applications.

**(PS7) Cost : \$80  
(\$70 if Symposium registrant)**



8:00 **Registration:** Exhibit Hall Open & Continental Breakfast

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

8:40 **Keynote Address**  
**Martha C. Piper**

9:25 **Plenary** Preclinical Studies Towards Treatments for Spinal Cord Injury  
**Wolfram Tetzlaff**

9:50 **Plenary** Seating, Is There Anything More Important to Life?  
**Walter Lawrence**

10:15 **Plenary** Spinal Cord Injury Rehabilitation: What's the Evidence Telling Us?  
**Janice Eng**

10:40 *Refreshment Break & Exhibits*

## 11:30 Instructional Sessions – Group A (11:30 -12:30)

**A1** Designing for Function and Independence  
**Manufacturer Jane Fontein**

**Intermediate**

Case studies will be used to demonstrate how certain properties can assist clients to become more independent or how they may interfere with independence. Although case studies presented will have an emphasis on the elderly, clients requiring tilt and recline and/or the bariatric population, properties discussed can be applied to all situations.

**A2** Early Intervention - Why Bother?

**Ginny Paleg**

**Intermediate**

Early Intervention (age 0-3 years) is an evidence-based practice. We will review the research that shows how early positioning and mobility enhances brain development and cognition. Case studies will be used to demonstrate the consequences of poor and/or unsupported posture during these early months and years.

**A3** The Rear Wheel Big Deal - Manual Chair Considerations for Fit and Function

**Kendra Betz**

**Intermediate**

The rear wheel deserves critical consideration for manual chair configuration, performance, and skills training. This session includes a review of the many options available for rear wheel selection and orientation with incorporation of relevant research findings. Strategies for clinical problem solving and client education will be presented via case examples.

**A4** Therapeutic Seating and Positioning for Individuals with Dysphagia

**Karen Hardwick**

**Beginner/Intermediate/Advanced**

This presentation discusses therapeutic seating and positioning for individuals with dysphagia, a term that refers to dysfunction in eating and swallowing. Seating and positioning provide a conservative approach to management of dysphagia through use of contouring for stabilization and support, tilt-in-space technology to reduce reflux and improve gastric emptying, and automation.

**A5** Independence versus Dependence...Making the Tough Seating and Mobility Choices for Persons with C5-6 Spinal Cord Injury  
**Manufacturer Joan Padgitt**

**Beginner**

For the person with C5-6 spinal cord injury (SCI), there is a fine line between independence and dependence. Focus will be made on how to select key information from your client interview and physical and functional evaluation to determine seating and mobility objectives. Case studies will be shown to demonstrate how even minute changes to the person's wheelchair and seating system can either promote or hinder functional independence.

**A6** International Standard for Postural Measures of a Wheelchair Seated Person

**Barbara Crane**

**Douglas Hobson**

**Intermediate/Advanced**

An international standard defining measures used in wheelchair seating has now been completed. The concepts and definitions contained in this standard will be reviewed in this session. Attendees will have an opportunity to give input for the development of related clinical guidelines and will learn how they might be more involved in this process if desired.

12:30 *Lunch (provided) & Exhibits*



Thursday March 2<sup>nd</sup>, 2006

**Simultaneous Paper Sessions: I**

**(14:00 - 15:15)** Each Paper Presentation will be 10 minutes in length with a 5 minute Q & A

<b>Room 1</b>	<b>Room 2</b>	<b>Room 3</b>
14:00 Measuring the Effect of Seating Devices on Families of Children with Cerebral Palsy <b>Stephen Ryan</b>	Impact of Spinal Fusion in Spina Bifida on Weight Distribution in Sitting <b>Mary Rabzel</b>	Postural Management and Early Intervention in Seating: What's the Evidence? <b>Claire Wright</b>
14:15 Development of the Calgary Interface Pressure Mapping Protocol for Sitting <b>Jillian Swaine, Michael Stacey</b>	Wheelchair Seating Discomfort: Comparison of Standard Powered Seating with a Prototype User Adjustable Seating Interface <b>Barbara Crane</b>	Technology Assisted Adventure Play/Learning <b>Martin C. Langner</b>
14:30 Effectiveness of Formal Training using the Calgary IPM Protocol for Sitting <b>Linda Janzen, Cheryl Oga</b>	Quantitative Assessment of the Functional Adaptation of Bone and Cartilage at the Glenohumeral Joint of Manual Wheelchair Users <b>Amy LaFrance</b>	Development of Night Positioning within a Framework of 24 Hour Postural Management <b>Amanda O'Sullivan</b>
14:45 The WhOM: A Client Specific Outcome Measure of Wheelchair Intervention <b>William B. Mortenson, William C. Miller, Jennifer Garden</b>	The Effects of Spinergy Wheels on Pain and Spasticity <b>Bonita Sawatzky</b>	The Effects of Supportive Seating on Hand Function on Primary School Children with Disability <b>Mary McCormick, Rachel Glennane</b>
15:00 Tele-Rehabilitation: A Web-Based Tool for Clinicians <b>Linda van Roosmalen, Michael Pramuka</b>	Pain Perception in Parapalegic Wheelchair Users <b>Bonita Sawatzky</b>	Toward Understanding the Opinions of School-Aged Students about Adaptive School Chair Designs <b>Stephen Ryan</b>
15:15 Refreshment Break (held in the exhibit hall)		

**16:00 Instructional Sessions – Group B (16:00 - 17:00)**

- B1** Calgary IPM Protocol for Alternating Pressure Air Surfaces  
**Jillian Swaine Michael Stacey Don Bader Advanced**  
Alternating pressure air cushion (APAC) and alternating pressure air mattresses (APAM) are widely used for wound prevention and treatment. Dr. Bader will present the recent research at the cellular and tissue level that are relevant to this support surface technology. This research provides the background for the *Calgary Interface Pressure Mapping (IPM) Protocol for Alternating Pressure Air Surface* which will be presented.
- B2** What's Happening These Days out in "Therapy Land" and Why it Matters to AT Folks  
**Cathy Bazata Beginner**  
This session will introduce participants to a variety of therapy treatment modalities & programs and discuss their interface into the world of seating & mobility. Areas will include: nutritional management, therapeutic listening, sensory processing/sensory integration, MFR/CSR (myofascial/cranialsacral release) and communication. This will be a quick romp through "therapy land."
- B3** Custom Sleep Systems: A New Approach to an Old Problem  
**Bryan Malone Deborah Poirier Intermediate/Advanced**  
The importance of appropriate night time positioning can not be overestimated, especially for those with reflux, excessive movement disorders, or severe contractures. In this course, we will discuss and demonstrate the evaluation, design, and fabrication of a custom sleep system. Data to demonstrate the efficacy of sleep systems will also be presented.
- B4** Classifying Pain in Relation to Seating Intervention  
**Jessica Presperin Pedersen Annie O'Connor Intermediate**  
This instructional course will focus on the classification of pain types delineating the peripheral nervous system pain from central nervous system pain. Annie O'Connor and Jessica Presperin Pedersen will combine their years of experience on pain and seating to discuss patients referred to the seating clinic based on concerns regarding pain.
- B5** Powered Mobility Training for Young Children, and/or Individuals with Cognitive Deficits  
**Karen Kangas Intermediate/Advanced**  
Powered mobility training for individuals who have never experienced independent mobility cannot continue to utilize strategies used in the past. How chairs are configured, the electronics programmed, the seating developed and the environment planned are all critical to successful use. These strategies will be shared with real case studies.
- B6** The Science of Seating Materials - Why Do We Care From a Clinical Perspective?  
**Sharon Pratt Stephen Sprigle Evan W. Call Intermediate**  
This program will provide attendees with a detailed critical analysis of the properties of the most common materials used in seating. The information provided will be invaluable when doing seating selection and prescription.

**17:00 Reception & Exhibits**



Friday, March 3<sup>rd</sup>, 2006

8:00 **Registration & Exhibits**

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

8:40 **Keynote** These Feet Were Made for Walking  
**Ginny Paleg**

9:05 **Plenary** 1976 - 2006: Retrospective or Prospective? From Pillows to Pillows or To Lateral Tilt and Back  
**Karen Hardwick**

9:30 **Plenary** Pulling it all Together: Wheelchair Distribution in Kenya  
**Cathy Mulholland**

9:55 *Refreshment Break & Exhibits*

**Simultaneous Paper Sessions: 2 (10:40 - 12:00)** Each Paper Presentation will be 10 minutes in length with a 5 minute Q & A

	<b>Room 1</b>	<b>Room 2</b>	<b>Room 3</b>
10:40	Physiological Responses of the Rocking in a Rocking Chair to Elderly People with Physical Disabilities <b>Ilkka Väänänen</b>	Customer Satisfaction Improvements through Work Flow Process Analysis and Staffing Redesign <b>Micheal Barner</b>	How do Wheelchairs Really Hold Up? <b>Shirley Fitzgerald</b>
10:55	Head-Righting with Lateral Tilt and Seating. Are there Pressure Management Consequences? <b>Michael Banks, Eva Ma</b>	Seating and Mobility for Children with Special Needs in Israel <b>Naomi Gefen</b>	Performance of Electronics that Improve Power Wheelchair Tracking for Proportional and Switch Users <b>Anjali Weber, James Fuller</b>
11:10	SCAD Assistive Mobility System <b>Martin C. Langner</b>	The Hub and Spoke Approach to the Provision of Seating and Mobility Services in Ireland <b>Simon Hall</b>	Upper Body Exercise Merged with Videogames: Applications in Spinal Cord Injury and Neurological Rehabilitation <b>Ron Boninger, Jim Davis</b>
11:25	Orthotic Seating: A Case Study for Optimal Outcome in Spinal Cord Injury <b>Kendra Betz</b>	Developing a Sustainable Model for the Management of Seating Services in South Africa <b>Elsje Scheffler, Shona McDonald</b>	The Transitional Ortho-Therapeutic Walker; A new type of Mobility Device <b>Richard Escobar</b>
11:40	Review of the Evidence on Pressure Sores and Elderly Wheelchair Users <b>Ana Allegretti</b>	Is the AT you issue Collecting Dust in the Garage? <b>Shirley Fitzgerald, Patrice Kennedy</b>	How to Design for an Accessible Universe <b>Linda van Roosmalen, Hisaichi Ohnabe</b>

12:00 *Lunch (provided) & Posters*

### Poster Presentations

Poster Presenters are available for questions during the poster session on Friday at 12:00 - 13:30. Posters are available for viewing on all three days of the Symposium.

The Influence of Adjustable Care Goods on Nursing Care and the Degree of Independence of Elderly People  
**Yoshinori Saito**

A Cost Effective Modular Seating System for Severely Disabled Children in South Africa  
**Shona McDonald, Elsje Scheffler**

Positioning for Comfort: When Seating Becomes Too Painful  
**Mikel J Wheeler**

Wheelchair Seating Intervention: A Study to Compare Telehealth and In-Person Service  
**Ingrid Barlow**

A Long Time Interface Pressure Measurement on a Wheelchair and the Pressure Ulcer Risk in Nursing Home Wheelchair Users  
**Hideyuki Hirose, Makoto Kobayashi**

Pressure Hydration System for Wheelchair Racing  
**Anna Vouladakis**

Seating and Positioning Considerations After Hemipelvectomy Surgery  
**Tamara L Vos, Jeff Lamb**

Mobile Crawler and Dynamic Seating for a Ventilator Dependent Child  
**Jennifer Sawrenko**

Profound Effects a System's Continuum of Care can have as seen by an Out Patient Seating and Mobility Clinic: Patient Functional Outcomes  
**Patricia E Tully**



Friday, March 3<sup>rd</sup>, 2006

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### **13:30 Instructional Sessions – Group C (13:30-14:30)**

- C1** Pressure Ulcer Management for the 21st Century Seating and Mobility Specialist  
**Manufacturer Patrick Meeker Intermediate**  
Every seating and mobility professional should be well-versed in the latest woundcare strategies. Because all wheelchair users are susceptible to seating-acquired pressure ulcers, clinicians should understand the latest guidelines for maximizing healthy tissue. Are you relying on woundcare ritual, or are you up on the latest research for successful wound management? This program will refresh, renew and revitalize your woundcare knowledge so that you can help keep your clients from becoming "a statistic"!
- C2** Assessment and Provision of Wheeled Mobility & Seating Using Best Practice, Evidence Based Practice and Understanding Coverage Policy  
**Mark R. Schmeler Chris Chovan Intermediate**  
There is a shift towards the application of evidence in the justification for wheeled mobility and seating interventions. Best practices are also becoming more defined in this field with outcome measures emerging. There has also been a significant change in coverage policies for these interventions in the United States. This session will discuss how evidence and best practice can be applied within these coverage policies for optimal outcomes. The session will also review the use of a newly developed outcome measurement tool that can be used to support best practices.
- C3** It's Time to Stand on Your Feet and Move!  
**Christine Wright-Ott Richard Escobar Beginner**  
Explore the world of supported walkers and alternative mobility devices. Learn why a client should consider dynamic standing over static standing. Understand strategies for maximizing a client's performance and which mobility devices work better than others. Case studies will be included through slides and videos.
- C4** The Seating Assessment - Establishing Priorities in Long Term Care  
**Sheila Buck Beginner**  
This program is intended for individuals involved in recommending seating and positioning equipment to clients in long term care settings. The session will review client needs, related diagnosis, environmental and lifestyle barriers, along with ways to prioritize these needs in order to make optimal product choices. Attendees will gain insight into seating product design criteria and how to best match product features and benefits to the elderly client's needs and desires
- C5** Mouse Emulation (for computer access) with Head Array Drivers; for both children (with high tone or weakness) and adults (with ALS)  
**Lisa Rotelli Karen M. Kangas Intermediate/Advanced**  
We will share the physical configurations, how to manage set ups and how to use mouse emulation on powered chairs with 3 switch head arrays. These will include both Invacare and Penny + Giles electronics. Providing ease of mouse access can dramatically alter and increase the use of the computer for students and adults alike.
- C6** Understanding and Caring for the Anterior and Posterior Pelvic Tilt  
**Manufacturer Thomas Hetzel Beginner**  
Many postures described as "fixed" are actually very flexible. Unfortunately they are flexible in the direction of further deterioration, not towards improvement. This presentation will show strategies to control tendencies towards posterior and anterior pelvic tilts and ensure long term improvement in postural alignment, balance, and control.

*14:30 Five minutes allocated for Room Change*

### **14:35 Instructional Sessions – Group D (14:35-15:35)**

- D1** Lower Leg Edema for Wheelchair Users: Assessment and Intervention  
**Michael Stacey Karen Lagden Beginner**  
Lower leg edema is a common problem for individuals who use a wheelchair full time, since they have reduced or absent calf muscle function and therefore a reduced calf muscle pump for venous return of blood from the leg. This workshop will present assessment and treatment options and case studies of this problem.
- D2** Simulation and Molding: Understanding the Differences and Honing the Skills  
**Cathy Bazata C. Kerry Jones Advanced**  
This session will help practitioners develop and fine tune their skills in the methods of seating simulation and body molding. A combination of lecture, demonstration and hands-on teaching will be combined to help differentiate the processes and improve methods. This session will include an exploration of the differences between simulation and molding, as well as a variety of techniques, tips, and applications



Friday, March 3<sup>rd</sup>, 2006

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**D3** Practical Mobility Solutions for Clients with Multiple Sclerosis  
**Brenda Canning Garret Sanchez Intermediate**

This presentation will focus on the clinical information involved with choosing a mobility base for clients with Multiple Sclerosis. Various physical, cognitive/perceptual, and psychological issues can complicate the decision making process for this population. Different types of manual and power wheelchair bases as well as their advantages and disadvantages as they relate to persons with MS will be presented.

**D4** The New Power and Seating Codes - What Do They All Mean?  
**Manufacturer Elizabeth Cole Beginner**

We have gone from a handful of very non-specific codes for wheelchair seating and for power wheelchairs to multiple codes with very specific definitions and criteria. What do they mean and what are the product and client criteria for code assignment and for clinical justification? This course will attempt to answer these questions by identifying each code according to definition, seating characteristics and appropriate client based qualifying medical criteria. An overview of testing criteria will delineate how a specific product is assigned to a code.

**D5** Mobility Options where Wheelchairs are Out of Reach  
**Joy Wee Beginner/Intermediate/Advanced**

The experiences of six spinal cord injury Nepali patients who would usually benefit from wheelchairs are presented. Challenges and solutions for the individuals discussed, and a discussion regarding our global responsibilities will ensue. Suggestions from the discussion will be summarized, including next steps to explore.

**D6** Understanding and Caring for the Anterior and Posterior Pelvic Tilt  
**Manufacturer Thomas Hetzel Beginner**

Many postures described as "fixed" are actually very flexible. Unfortunately they are flexible in the direction of further deterioration, not towards improvement. This presentation will show strategies to control tendencies towards posterior and anterior pelvic tilts and ensure long term improvement in postural alignment, balance, and control.

15:35 Refreshment Break & Exhibits

16:20 **The 6th Chris Bar Research Forum:** *This house believes that client choice takes precedence over professional judgment*

17:20 Adjourn

## Symposium Planning Committee

**Maureen Story** (Co-Chair)

BSR (PT/OT), Sunny Hill Health Centre for Children, Vancouver, BC

**David Cooper** (Co-Chair)

MSc. (Kinesiology), Rehabilitation Technologist, Sunny Hill Health Centre for Children, Vancouver, BC

**Margaret Francis**

Administrative Assistant, Therapy Department, Sunny Hill Health Centre for Children, Vancouver, BC

**Elaine Liao**

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

**Lori Roxborough**

MSc., OT/PT, Associate Director of Therapy Department, Sunny Hill Health Centre for Children, Vancouver, BC

**Bonita Sawatzky**

Assistant Professor, Department of Orthopaedics, BC Children's Hospital; Faculty of Medicine, University of British Columbia, Vancouver, BC





Saturday, March 4<sup>th</sup>, 2006

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8:30 **Registration**

9:00 **Opening Remarks** **Maureen O'Donnell**

9:10 **Panel Session:** Putting the "Dynamic" Back In Seating  
**Susan Johnson-Taylor, David Cooper, Allen Seikman**

10:10 **Plenary** The Search for Beauty: The Role of Aesthetics in Seating and Mobility  
**C.Kerry Jones**

10:35 *Refreshment Break*

### **10:50 Instructional Sessions – Group E (10:50 - 11:50)**

**E1** Managing Pressure: Three Choices Now!

**Linda Norton Jillian Swaine Intermediate**

Until recently, the goal for preventing or managing a sitting acquired pressure ulcer (SAPU) has been met with cushions that distribute the pressure over the loaded contact area. Now there are three frameworks for managing pressure: (1) pressure/load redistribution; (2) alternating air pressure; and (3) pressure/load offloading or force isolation. Case studies will be presented along with a clinical pathway.

**E2** Keep Pushing!

**Brenlee Mogul-Rotman Kathryn Fisher Intermediate**

Before deciding that power is the way to go, a variety of issues should be evaluated. We must ensure that wheelchair set up and positioning allow the client pain free, ergonomic, comfortable and functional mobility. Our goal is to allow our clients to complete their daily tasks with low strain, low energy use and ease of mobility. The manual wheelchair very often is the optimal device to achieve this goal. Not all of our clients are appropriate for power mobility for numerous reasons. Sometimes we have to let the client "keep pushing!"

**E3** Emerging Measures of Participation in Assistive Technology

**Frances Harris Stephen Sprigle Intermediate**

This session introduces two complementary methods of activity and participation measurement: 1) growing number of self-report instruments, and 2) the recent technical advances (e.g., GPS) that make it possible to quantify subject activity. Key criteria in selecting measurement tools and the challenges posed by data interpretation and analysis will be examined.

**E4** Assessing a Seating System for the Long Haul in Special Populations: Cerebral Palsy and Spina Bifida

**Manufacturer Dan Eilerman Intermediate**

As the life expectancy of people with cerebral palsy and spina bifida is ever increasing, new problem areas of aging while using a wheelchair are emerging. This presentation discusses the issues in prescribing a seating system to ensure it addresses the long term needs of the seated individual.

**E5** Application of Advanced Electronics for Powered Mobility: New Technology, Assessment and Prescription Strategies

**Manufacturer Amy Bjornson Intermediate**

This instructional session will cover new technologies for power wheelchair driving controls; introducing new concepts and products. Determination of client need, assessment strategies for proper selection, and appropriate configuration of devices will be addressed. This course will facilitate critical thinking: assisting therapists and suppliers in confident assessment for power wheelchair drive controls including joysticks, alternate controls and electronics.

## **RELATED ACTIVITIES**

14:00 **RESNA ATP and ATS exams** (4hrs, exams are simultaneous), **followed by RET Exams** 18:00-19:30 (1.5 hrs)

14:00 **ISO Group Meeting** (from Saturday at 14:00 - Monday Noon)



## Symposium Presenters 2006

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**Ana Allegretti**, MS, OT, Ph.D. Candidate, Department of Occupational Therapy, University of Pittsburgh, Pittsburgh, PA

**Elaine Antoniuk**, BSc, PT, Sunny Hill Health Centre for Children, Vancouver, BC

**Dan Bader**, Ph.D., Associate Director of IRC in Biomedical Materials, Professor of Medical Engineering, Queen Mary University of London, London, United Kingdom

**Michael Banks**, M.A., CRTS, ATS, Director, Walla Walla Homemedical, Inc., Walla Walla, WA

**Ingrid Barlow**, M.Sc., OT(c), Wheelchair Seating Service, Glenrose Rehabilitation Hospital, Edmonton, AB

**Michael K. Barner**, CRTS, Manager, Wheelchair Seating Service, University of Michigan Health System, Ann Arbor, MI

**Cathy Bazata**, OTR-L, ATP, "Within and Without", Edwardsburg, MI

**Kendra L. Betz**, MSPT, Physical Therapist, VA Puget Sound Health Care System; Clinical Faculty, University of Washington, Seattle, WA

**Amy Bjornson**, PT, ATP, Clinical Education Specialist, Sunrise Medical, Denver, CO

**Ron Boninger**, BSME, MBA, President, Three Rivers Holdings LLC, Mesa, AZ

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

**Sheila Buck**, BSc, (OT), Reg.(Ont), ATP, Occupational Therapist, TherapyNOW! Inc., Milton, ON

**Evan W. Call**, Lab Director, EC Service Inc, Salt Lake City, UT

**Brenda Canning**, OTR/L, Occupational Therapist, Wheelchair and Seating Center, Rehabilitation Institute of Chicago, Chicago, IL

**Jo-Anne Chisholm**, MSc., Occupational Therapist, Access Community Therapists Ltd., Vancouver, BC

**Chris Chovan**, MOT, ATP, Director of Clinical Services, Rehab Mobility Specialists, Inc., Belle Vernon, PA

**Elizabeth Cole**, MSPT, Director of Education, Sunrise Medical, Longmont, CO

**David Cooper**, MSc, Rehabilitation Technologist, Sunny Hill Health Centre for Children, Vancouver, BC

**Barbara A. Crane**, PhD, PT, ATP, Assistant Professor, Physical Therapy, University of Hartford, West Hartford, CT

**James E. Davis**, MS, OTR/L, Neuro Clinical Director, Rehab Arizona, Mesa, AZ

**Ian Denison**, Equipment Specialist, GF Strong Rehab Centre, Vancouver, BC

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

**Dan M. Eilerman**, PT, Clinical Education Specialist, Varilite, Seattle, WA

**Janice Eng**, PhD, PT/OT, Associate Professor, School of Rehabilitation Sciences, University of British Columbia, Scientist, GF Strong Rehab Centre and International Collaboration on Repair Discoveries, Vancouver, BC

**Richard J. Escobar**, BS, Assistive Technology Consultant, RGE Designs, Mobility for Discovery, San Jose, CA

**Kathryn Fisher**, BSc, OT, ATS, OT REG (ONT.), Occupational Therapist, Therapy Supplies & Rental Ltd., Toronto, ON

**Shirley G. Fitzgerald**, PhD, Associate Director of Research, Human Engineering Research Laboratories, VA Pittsburgh Healthcare System; Assistant Professor, Rehabilitation Science & Technology, University of Pittsburgh, Pittsburgh, PA

**Jane Fontein**, OT, Occupational Therapist, Product Design Group, Vancouver, BC

**James Fuller**, Electronics Specialist, Permobil Inc., Lebanon, TN

**Jennifer Garden**, BHK, MCISC (OT), MSc(Candidate), Instructor, Rehabilitation Assistant Diploma Program, Capilano College, North Vancouver, BC

**Naomi Gefen**, M/Sc, OT, Head of Occupational Therapy, Alyn Hospital, Jerusalem, Israel

**Rachel Glenanne**, Occupational Therapist, Occupational Therapy Department, Central Remedial Clinic, Dublin, Ireland

**Simon Hall**, Seating and Mobility Department, Central Remedial Clinic, Dublin, Ireland

**Wendi Harder**, BSc Kinesiology, ATS, Motion Specialties, Vancouver, BC

**Karen Hardwick**, PhD, OTR, FAOTA, Coordinator Habilitation Therapy Services, Texas Department of Aging and Disability, Austin, TX

**Frances Harris**, Researcher, Center for Assistive Technology & Environmental Access, Georgia Institute of Technology, Atlanta, GA

**Thomas R. Hetzel**, PT, ATP, Owner/CEO, Aspen Seating and Ride Designs, Sheridan, CO

**Hideyuki Hirose**, PT, Eng, Mechanical Engineer, Research Institute, National Rehabilitation Center for Persons with Disabilities, Tokorozawa, Saitama, Japan

**Douglas Hobson**, PhD, Associate Professor Emeritus, University of Pittsburgh, Pittsburgh, PA

**Linda Janzen**, BScPT, Physical Therapist, Spinal Cord Injury Rehabilitation Program & Interface Pressure Mapping Service, Foothills Medical Centre, Calgary, AB

**Susan Johnson Taylor**, OTR/L, Rehab Institute of Chicago, Chicago, IL

**C. Kerry Jones**, ATP, Rehabilitation Designer, "the Space Between", Edwardsburg, MI

**Karen M. Kangas**, OTR/L, Seating and Positioning Specialist, Assistive Technology Specialist, Clinical Educator, Consultant, In Private Practice, Shamokin, PA

**Patrice Kennedy**, MPT, Physical Therapist, Denver VA Medical Center, Denver, CO

**Makoto Kobayashi**, OT, Shise Kitos Home, Tachikawa, Tokyo, Japan

**Amy E. LaFrance**, BAsC, M.A.Sc Candidate in Mechanical (Orthopaedic) Engineering, The University of British Columbia, Vancouver, BC

**Karen Lagden**, RN, BN, ET, Wound Care Consultant, Calgary, AB

**Jeff Lamb**, PT, Staff Occupational Therapist, Mayo Clinic, Rochester, MN

**Martin C. Langner**, MPhil, IEng, MIEE, Chailey Heritage School, East Sussex, United Kingdom

**Walter Lawrence**, Peer Counselor, GF Strong Rehab Centre; Board of Directors, BC Rehab and BC Paraplegic Association, Vancouver, BC

**Eva Ma**, OTR, ATP, ABDA, Portland, OR

**Bryan Malone**, PT, MS, Lead Therapist, Assistive Technology Clinic, Clover Bottom Developmental Center, Nashville, TN



## Symposium Presenters 2006

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**Mary McCormick**, Occupational Therapist, Seating and Mobility Department, Central Remedial Clinic, Dublin, Ireland

**Shona McDonald**, Seating and Design Manufacturer, Shonaquip, Capetown, Western Cape, South Africa

**Lynore McLean**, BSc, PT, Sunny Hill Health Centre for Children, Vancouver, BC

**Patrick Meeker**, MS, PT, CWS, Clinical Applications Manager, The ROHO Group, Inc., Belleville, IL

**William C. Miller**, BScOT, MSc, PhD OT, Associate Professor, School of Rehabilitation Sciences, The University of British Columbia, Vancouver, BC

**Brenlee Mogul-Rotman**, BSc, OT, OTR, APT, OT REG (ONT.), Occupational Therapist, Toward Independence, Richmond Hill, ON

**Ben Mortenson**, BScOT, MSc, Occupational Therapist, Vancouver Coastal Health, Vancouver, BC

**Cathy Mulholland**, OTR, Pacific Rehab Inc., Scottsdale, AZ

**Linda V. Norton**, OT Reg. (ONT), Rehab Education Coordinator, Shoppers Home Health Care, Etobicoke, ON

**Annie O'Connor**, PT, OCS, Corporate Director, Musculoskeletal Practice, Rehabilitation Institute of Chicago, Chicago, IL

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

**Cheryl Oga**, BSc, OT, Occupational Therapist, Spinal Cord Injury Rehabilitation Program & Interface Pressure Mapping Service, Foothills Medical Centre, Calgary, AB

**Hisaiichi Ohnabe**, MS, Visiting Professor, VA Pittsburgh Healthcare System, Pittsburgh, PA

**Amanda O'Sullivan**, BSc (Physio), Senior Physiotherapist, Eastern Region Postural Management Team, Dublin, Ireland

**Joan Padgett**, ATP, PT, Physical Therapist, Ride Designs, Sheridan, CO

**Ginny Paleg**, PT, Montgomery County Infants and Toddlers, Silver Spring, MD

**Martha C. Piper**, President and Vice-Chancellor, University of British Columbia, Vancouver, BC

**Deborah Poirier**, COTA/L, ATP, Director of Assistive Technology, Assistive Technology Clinic, Clover Bottom Developmental Center, Nashville, TN

**Michael Pramuka**, Assistant Professor, Department of Rehabilitation Science & Technology, University of Pittsburgh, Pittsburgh, PA

**Sharon Pratt**, PT, Director of Education, Sunrise Medical, Longmont, CO

**Jessica Presperin Pedersen**, MBA, OTR/L, ATP, Administrative Director, Specialized Therapy Services, Rehabilitation Institute of Chicago, Chicago, IL

**Deborah L. Pucci**, MPT, Physical Therapist, Rehabilitation Institute of Chicago, Chicago, IL

**Mary Rabzel**, BSc, OT(c), Occupational Therapist, Canadian Unit, Shriners Hospital for Children, Montreal, PQ

**Lisa Rotelli**, Education Consultant and Coordinator, Adaptive Switch Labs, Inc, Spicewood, TX

**Stephen Ryan**, BE Sc., PEng, Rehabilitation Engineer, Bloorview MacMillan Children's Centre, Bloorview Research Institute; Assistant Professor, Department of Occupational Science and Occupational Therapy, University of Toronto, Toronto, ON

**Yoshinori Saito**, PhD, Associate Professor, Department of Universal Design, Kawasaki University of Medical Welfare, Kurasaki, Japan

**Garret Sanchez**, PT, Physical Therapist, TLC Northwestern Home Care, Chicago, IL

**Bonita J. Sawatzky**, PhD, Assistant Professor, Department of Orthopaedics, BC Children's Hospital; Faculty of Medicine, University of British Columbia, Vancouver, BC

**Jennifer Sawrenko**, BSc, OT, Sunny Hill Health Centre for Children, Vancouver, BC

**Elsje Scheffler**, MSc, Chief Physiotherapist, Western Cape Rehabilitation Centre, Capetown, Western Cape, South Africa

**Mark R. Schmeler**, PhD, OTR/L, ATP, Instructor, Department of Rehabilitation Sciences & Technology, University of Pittsburgh, Pittsburgh, PA

**Allen Seikman**, BA, Private Consultant, Ben Lomond, CA

**Stephen Sprigle**, PhD, MSPT, Director, CATEA; Associate Professor, Departments of Industrial Design and Applied Physiology, Georgia Institute of Technology, Atlanta, GA

**Michael Stacey**, MD, Professor of Surgery, Head of School, School of Surgery and Pathology, University of Western Australia, Perth, WA, Australia

**Robert Stickney**, Seating Technologist, Sunny Hill Health Centre for Children, Vancouver, BC

**Maureen Story**, BSR, (PT/OT), Sunny Hill Health Centre for Children, Vancouver, BC

**Jillian Swaine**, OT, Occupational Therapist, Swaine & Associates, Calgary, BC

**Wolfram Tetzlaff**, MD, PhD, Professor, University of British Columbia; Associate Director (Discovery Science) ICORD, Vancouver, BC

**Patricia E. Tully**, OTR, Senior OTR, Brain Injury and Stroke Survivor Program, Out-Patient Seating and Mobility Clinic, The Institute for Rehabilitation and Research (TIERR); Adjunct Faculty, Texas Woman's University, Houston, TX

**Ilkka J. Väänänen**, PhD, Research Director, Lahti Polytechnic, University of Applied Sciences, Innovation Centre, Lahti, Finland

**Linda van Roosmalen**, MSc, PhD, Assistant Professor, Department of Rehabilitation Science & Technology, University of Pittsburgh, Pittsburgh, PA

**Tamara L. Vos**, OTR, Staff Occupational Therapist, Mayo Clinic, Rochester, MN

**Anna Vouladakis**, Vancouver, BC

**Anjali Weber**, MS, ATP, Clinical Education Specialist, Permobil Inc., Lebanon, TN

**Joy Wee**, MD, FRCPC, Assistant Professor, Dept. of Physical Medicine & Rehabilitation, Queen's University, Kingston, ON

**Mikel J. Wheeler**, COTA, Occupational Therapist, Mayo Foundation, Rochester, MN

**Claire Wright**, BSc(Hons), OT, Clinical Research Occupational Therapist, James Leckey Design Ltd, Belfast, Northern Ireland

**Christine A. Wright-Ott**, MPA, OTR/L, Occupational Therapy Consultant, Bridge School, Mobility for Discovery, San Jose, CA

**Joanne Yip**, BSR, Occupational Therapist, Access Community Therapists Ltd.; GF Strong Rehab Centre, Vancouver, BC

