



the 36th

INTERNATIONAL

SEATING SYMPOSIUM

Across the life

MARCH 3 - 6, 2020



PRESENTED BY



Interprofessional Continuing Education

www.seatingsymposium.com

GENERAL INFORMATION

This international symposium addresses current and emerging developments in seating, positioning, and mobility. Topic areas include service delivery, product development, research, and outcomes. The format for the symposium includes pre-symposium, plenary, instructional, paper and poster sessions. Extensive opportunities will be provided for networking with colleagues.



SYMPOSIUM OBJECTIVES

- Identify and compare new and existing positioning and mobility equipment
- 2. Discuss the emerging research evidence supporting seating and mobility practices
- 3. Identify resources for seating and mobility practice
- 4. Compare and discuss seating and mobility techniques and interventions
- 5. Explain the advantages and disadvantages of a number of innovative service delivery models

LOCATION & ACCOMMODATION

The Westin Bayshore

1601 Bayshore Drive (parallel to West Georgia Street) Vancouver, BC, Canada V6G 2V4

A block of rooms has been set aside at a special rate of CDN \$182.00 (plus tax) for a standard guest room (single/double) available for conference delegates, and will be held based on availability. The cut off date for this rate will be **February 3, 2020**.

Delegates are encouraged to get on the hotel's waitlist if there are no rooms left in this room block, as there may be cancellations from other delegates. For more information, please visit www.seatingsymposium.com/venue

CREDITS

A certificate of attendance listing approved continuing education credits will be issued to all participants. For more information on credits, please visit www.seatingsymposium.com

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A limited number of partial registration bursaries, sponsored by Broda Seating are available to professionals who would otherwise be unable to attend the conference. Bursaries will not cover travel, accommodation, or other associated costs. Please visit our website to apply: http://seatingsymposium.com/bursary.php

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ONLINE: Secure, fast, online registration is available for Visa and

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FAX: Fax completed registration form to: 1-604-822-4835

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Toll free within North America: 1-855-827-3112;

Other callers: 1-604-827-3112

MAIL: Send the registration form with cheque (payable to

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IN 9541 Registration

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

Participants paying by credit card outside of North America: Please inform your credit card company of the transaction as some banks put a block on credit card payments made outside of your country.

TUITION & SYLLABUS

Please see registration form (on the back of this brochure) for details. To receive the reduced early-bird rates, you must register by Friday, **January 17, 2020**. The tuition fee includes coffee breaks, reception, certificate of attendance and lunches (provided Tuesday for pre-symposium registrants, and Wednesday and Thursday for symposium registrants). The symposium syllabus will be available online one week prior to the symposium. If you wish to purchase a print copy of the syllabus (to be received on-site), there is an additional \$30 fee (including tax).

REFUND, TRANSFER & CANCELLATION

There will be a \$50 cancellation fee until the end of the Early Bird deadline (January 17, 2020). After that there will be a \$100 charge for cancellation up to two weeks prior to the conference (all fees incl. taxes). No refunds will be made for cancellation after **February 3, 2020.**

If you are unable to attend the conference, you are welcome to send a colleague in your place. There will be no fee to make this change up to **February 3, 2020**, provided you notify us via phone or email. Substitution requests must come from the original registrant (or the administrator who arranged for the registration) and include the original registrant's name, the amount paid, plus the substitute attendee's email, full name, city and affiliation. Substitution requests received after this date will incur a \$75 processing fee.

For the full terms and conditions, please refer to: http://seatingsymposium.com/registration/index.php

By registering to the symposium, you are agreeing to the terms and conditions listed on this page.

PROGRAM COMMITTEE

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MARCH 3

PRE-SYMPOSIUM // Schedule at-a-glance

There will be a morning break from 10:30–10:45 and an afternoon break from 14:45–15:00 for this day.

08:00-09:00	Registration & Breakfast					
09:00 - 12:15	Pre-symposium Sessions: 2 full day, 3 half day morning sessions					
	PS1	PS2	PS3		PS4	PS5
12:15 - 13:15	Lunch (provided for pre-symposium registrants)					
13:15 - 16:30	Pre-symposium Sessions: 2 full day, 3 half day afternoon sessions					
	PS1 (cont.)	PS2 (c	ont.)	PS6	PS7	PS8
13:15 - 18:00	Viewing of the exhibits is complimentary for the public for this day only . The exhibits will open at 13:15 and will close at 18:00.					

FULL DAY SESSIONS PS1, PS2 | 09:00-16:30

(1-hour lunch and two 15-minute breaks will be provided)

PS1 INTERMEDIATE-ADVANCED

6-hour Pre-symposium Workshop

Body, Seating and Frame Measurements from Assessment to Delivery

Kelly Waugh, Stephanie Tanguay

This course aims to improve the quality and efficiency of the wheelchair service delivery process through the accurate use and application of standardized linear and angular measures of the body, seating system and wheelchair frame. Common vocabulary of terms and measures will reduce errors, improve outcomes, and promote consistency of practice globally.

- Translate range of motion measurements from a mat exam into corresponding relative angles of the seated person as part of a Postural Alignment Plan
- Identify two absolute body segment angles that can be used as outcome measures to objectively measure a change in sitting posture
- Translate angular and linear dimensions of a seated person into the corresponding angular and linear dimensions of the seating support system
- 4. Identify and prescribe key wheelchair frame features, components and dimensions that are required to support the desired body posture and configuration of seating support system components
- Understand which angular and linear measurements are critical to determine at each stage of the wheelchair service delivery process

PS2 INTERMEDIATE-ADVANCED

6-hour Pre-symposium Workshop

Baby Power: Facilitating Early Power Mobility Use for Infants and Toddlers

Jessica Presperin Pedersen, Lisbeth Nilsson, Lisa Kenyon, Heather Feldner

Despite growing evidence focused on early power mobility, a toddler's access to power mobility may not occur. This interactive workshop explores advantages, barriers, and ideas for implementation of clinical and community opportunities using power mobility for infants and toddlers. It includes physician, therapist, family, and the child's perspectives and experiences.

- Provide at least three potential benefits of and evidence-based rationale for early power mobility use with parents, professionals and gatekeepers
- Demonstrate two ways to introduce early powered mobility to parents/caregivers using arguments enhancing acceptance
- Compare and contrast the various phases/stages of learning to use a power mobility device
- Explain how to develop a power mobility program for a specific young child that includes the following components: the power mobility device, positioning considerations, access method, outcome measures, training methods, and environments of use

HALF DAY MORNING SESSIONS PS3, PS4, PS5 | 09:00-12:15

(a 15-minute break will be provided)

PS3 INTERMEDIATE-ADVANCED

3-hour Morning Pre-symposium Workshop

Durable Medical Equipment (DME) Repair Technician Training

Matt MacPherson

Session 1: Manual Equipment session - There will be 4 different stations set up with 3 manufacturers and FIOS DME providing skills training on the technical adjustments for manual equipment ranging from axle and center of gravity considerations to tilt-in-space rotation set up and adjustments.

- Troubleshoot systematically through manual equipment (high-end and tilt-in-space) and identify the areas needing repair or adjustments.
- 2. Describe the main components of a high-end manual wheelchair
- 3. Describe the best process to troubleshoot manual wheelchairs
- 4. Discuss the key items to identify on a high-end manual wheelchair before making any adjustments
- 5. Describe the main components of a tilt-in-space wheelchair



PS4 BEGINNER-INTERMEDIATE

3-hour Morning Pre-symposium Workshop

Seating and Mobility Solutions for Older Adults: Practical Strategies and Considerations in Evaluation and Training

Emma Smith, Ginger Walls, Brenlee Mogul-Rotman

Changes related to aging may impact an older adults seating and mobility needs. This pre-symposium workshop will review considerations for seating older adults, including techniques for training, and a discussion of the role of power add-on devices. Case studies and hands-on experiences will be used to illustrate key points.

- 1. Identify three clinical considerations for utilization of power assist technology to benefit mobility and safety for older adults; and
- 2. Describe three power seat functions that can assist older adults with independence and safety with mobility and activities of daily living
- Discuss three potential training techniques for successful use of seating and mobility equipment for older adults

PS5 BEGINNER-INTERMEDIATE

3-hour Morning Pre-symposium Workshop

From Preschool to High School: Access to Recess, School Activities, Learning and Peers Through Support Walker Mobility

Christine Wright-Ott, Rachel Okazaki

We will describe support walkers (ie: components, prone/supine, wheel configuration) and a feature-matching approach for walker selection based on abilities, goals and the environment. Adaptations, tips and activities that promote learning, exercise and peer interactions will be shared through videos including longitudinal observations of a student's preschool-middle school walker experiences.

- 1. Identify three features of walkers and three adaptations that allow children to have greater maneuverability across environments
- 2. Write a goal for a preschool and a high school student utilizing support walker mobility
- 3. Describe at least three activities a student in preschool, elementary and high school can participate in while standing and moving in a hands-free support walker
- 4. Describe two questions one should ask before choosing a support walker for a client

12:15 LUNCH

(provided for pre-symposium registrants)

13:15 EXHIBITS BEGIN

Exhibits will be open from 13:15 - 18:00



HALF DAY AFTERNOON SESSIONS PS6, PS7, PS8 | 13:15 - 16:30

(a 15-minute break will be provided)

PS6 INTERMEDIATE-ADVANCED

3-hour Afternoon Pre-symposium Workshop

Durable Medical Equipment (DME) Repair Technician Training

Matt MacPherson

Session 2: Power Equipment session - There will be 4 different stations set up with 3 manufacturers and FIOS DME providing skills training on the technical hardware and programming for group 3 powerchairs.

- Troubleshoot systematically through power wheelchair programming and hardware needed for complex seating/power positioning and switch control drive systems
- Discuss the major electronics used on the particular manufacturers hase
- Discuss the major factors when setting up switch controls over proportional controls
- 4. Discuss the components needed when replacing or adding seating system/power positioning to a power wheelchair base.

PS7 BEGINNER-INTERMEDIATE

3-hour Afternoon Pre-symposium Workshop

Power Your Ride: Extending The Capacity of a Manual Wheelchair

Jo-Anne Chisholm, Joanne Yip

With the explosion of power add-on technology it is now possible for people with spinal cord injury to use their manual wheelchair over their lifetime. This workshop will introduce power add-on options for manual wheelchairs through the use of case studies, interactions with users and handling of equipment.

- Describe two health conditions associated with longtime manual wheelchair use
- Give three reasons for using power add-on technology rather than shifting to power wheelchair use
- 3. Name/identify four types of power add-on technology

PS8 INTERMEDIATE-ADVANCED

3-hour Afternoon Pre-symposium Workshop

Posture Care Management Around the Clock: A Toolkit to Get Started

Tamara Kittelson-Aldred, Lee Ann Hoffman

Supporting healthy postural alignment in sitting and standing is given a primary focus in North America. While lying is the earliest human orientation developmentally and impacts sitting and standing, postural support in this position is often overlooked. This workshop provides theory and practical resources to get started with appropriate interventions.

- Compare and contrast three elements of destructive and preventative/corrective supported lying, sitting and standing postures
- 2. Identify two simple interventions that can be used in lying to help create postural stability in sitting and standing
- 3. Describe two attributes of common household objects/materials that can be used for therapeutic posture support in lying

16:30 EXHIBITS CONTINUE

The exhibits will adjourn at 18:00.

MARCH 4

07:45 REGISTRATION

Exhibits, Continental Breakfast & Posters

08:30 OPENING REMARKS
Maureen Story (chair)

08:50 KEYNOTE

Technology to Overcome the Big Problems of Aging

Geoff Fernie

- Recognize the biggest challenges to people's safety and to describe examples of how technology can reduce those challenges
- Analyze important reasons why technology is currently failing to support the dream of living all of our lives in our own homes and how this can be fixed
- Discuss the need to focus on solving common big risks to individuals
 and society and to avoid wasting time on technology for its own
 sake i.e. appreciate the need to fall in love with the problem and to
 avoid falling in love with the technology

09:35 PLENARY

Whose Voice? When What Matters to Patients and Families Drives Care

Isabel Jordan

- Understand the lived experience brings knowledge unique to the individual
- 2. Integrate the lived experience into decision making models in care, both in clinic and in policy
- 3. Assess appropriate strategies for overcoming barriers to patient partnership

10:00 PLENARY

Promoting Quality Care for Clients with Bariatric Care Needs: Key Issues to Address

Mary Forhan

- 1. Define the concept of bariatric care needs
- 2. Identify bariatric care needs with your clients
- Build a toolbox of resources to address personal, environmental and occupational factors restricting participation with clients

10:25 POSTER HIGHLIGHTS

Each poster presenter will give a 1-minute & 1-slide presentation

10:40 BREAK

Refreshments & Exhibits

11:30 INSTRUCTIONAL SESSION A

A1 BEGINNER-INTERMEDIATE

Manual Wheelchair Propulsion - An Update on The Literature, and the Application in Clinical Practice

Theresa Berner, Carmen DiGiovine

Manual wheelchair propulsion has been utilized for many years. The dissemination began with the Clinical Practice Guidelines in 2005 and follow-up literature reviews from 2009-2015. This session will provide an up to date analysis of the literature with current evidence on manual wheelchair propulsion and examples of application in the clinical setting.

- Understand the impact of past and current research on rehabilitation practice
- 2. Learn the importance of outcome measures for clients and practitioners
- Identify current research trends that relate to your current practice in seating and wheeled mobility
- 4. List at least two on-line resources for accessing research

A2 BEGINNER-INTERMEDIATE // MANUFACTURER

IT DEPENDS - The Answer to Most Wheelchair Seating and Positioning Questions: Breaking Down the Guidelines for Measuring Wheelchairs and Seating. Is There Only One Answer?

Jane Fontein

What width wheelchair should be prescribed for someone measured at 18" wide? IT DEPENDS. We will review and discuss what the evidence and guidelines are suggesting as how we are inconsistent in measuring and interpreting the results for wheelchair prescription and seating.

- 1. List at least three critical bony prominences for measuring width and depth for a wheelchair
- 2. List three clinical pros and cons of a wheelchair prescribed too wide or too narrow
- 3. List the bony prominences and or body areas to measure for cushion and back supports and the possible connection to the product

A3 BEGINNER-INTERMEDIATE

Flash Forward: A Lifespan Approach to Cerebral Palsy

Andrina Sabet, Diane Thomson

Individuals with Cerebral Palsy and their families are often unprepared for transitions in service provision as well as health changes that both the individuals as well as their caregivers may experience. This session will focus on improving continuity of care and technology provision for all ages along the spectrum.

- Describe the evolution of three common seating and mobility issues from pediatrics through adulthood
- Identify three ways to prepare the client and family for future changes in needs and resources
- Describe two solutions in seating and mobility to address aging caregiver needs

A4 BEGINNER-INTERMEDIATE

Beyond a Single Switch: Modifying Ride-on Toy Cars for Home and Clinical Use

John Farris, Lisa Kenyon

Many studies involving modified ride-on toy cars use a single switch. This may help to introduce mobility but moving in more than one direction may be advantageous. This session introduces a straightforward method of modifying ride-on toy cars for use in clinical or home settings.

- Explain the basic electrical functions behind commercially available ride-on toy cars
- 2. Assemble a basic modification kit containing the necessary parts to convert the access system of a commercially available ride-on toy car from steering wheel/gas pedal to 1-4 switches representing forward/right/left/reverse
- 3. List the steps required to convert the access system of a commercially available toy car using the basic modification kit

A5 BEGINNER-INTERMEDIATE // MANUFACTURER

Confessions of an Outcome Measures Convert: How They Advance Seating and Wheeled Mobility Practice

Cathy Flaman, Sheilagh Sherman

This session will present a review and discussion of outcome measures used in general rehabilitation practice and measures specific to Seating and Wheeled Mobility (SWM): their clinical benefits in actual practice and promotion of Best Practice in assessment and prescription of SWM for the various populations that require these devices.

- Identify at least six outcome measures that are relevant in seating and wheeled mobility (SWM) assessment and prescription
- Determine the utility and effectiveness of outcome measures used across the heterogeneous populations which use SWM devices
- Develop potential strategies for integrating outcome measures into their SWM practice

A6 BEGINNER-INTERMEDIATE

Huntin', Fishin' and Lovin' Every Day: All Terrain Outdoor Power Wheelchairs Enhance Meaning and Function

Sarah Timleck, Sheila Buck

When considering mobility across the lifespan, it is important to look not only at daily essential mobility often based only on funding structures, but to also consider leisure mobility activities. Attendees will be provided with a practical experience using client experiences with various all terrain outdoor wheelchairs and seating considerations.

- 1. List three types of power all terrain outdoor wheelchairs
- Discuss at least five features and accessories that are offered in all terrain outdoor power wheelchairs
- List three factors important to consider in seating systems for all terrain power chairs
- Describe the "lived experience" of using all terrain outdoor power wheelchairs

12:30 LUNCH (PROVIDED)

EXHIBITS & POSTERS

Posters are located in the second floor foyer and in the Coquitlam and Cowichan rooms.

14:00 SIMULTANEOUS PAPER SESSIONS #1 // Each paper will be 10 minutes in length with 5 minutes of Q & A

	SALON 1	SALON 2	SALON 3		
14:00	Components of Pediatric Power Mobility Intervention for Different Power Mobility Learner Groups: A Systematic Review	Adaptations to Support Independent Use of Commercially Available Rowing Ergometers by People with Spinal Cord Injuries	Personal Autonomy and Wheeled Mobility Assistive Device Use		
	Lisa Kenyon, John Farris	Johanne Mattie	Mahsa Khalili		
14:15	Beginning Power Mobility: Exploring Associations Between Child Profile, Parent Choice and Child Use of Different Early Power Mobility Devices	Stakeholder Feedback and Preliminary Testing of The AAPLEwalk Sit-to-Stand Exercise Machine for Cardiovascular Fitness and Rehabilitation	User Perceptions and Qualitative Feedback on Wheelchair Power-Assist Systems		
14:30	Roslyn Livingstone, Debbie Field	Johanne Mattie	Garrett Kryt		
	Beginning Power Mobility: Exploring Change in Power Mobility Skill Following a 6-Month Loan of an Early Power Mobility Device	Evaluating Common Approaches to Improve Visibility of Wheelchair Users	Effect of Personalized Wheelchair Configuration on Upper Extremity Mechanics During Manual Wheelchair Propulsion		
	Roslyn Livingstone, Debbie Field	Ben Mortenson	Jan Furumasu, Jill McNitt-Gray		
14:45	Explorer Mini: Young Children's First Driving Experience	Development of a Peer Support Program for Adults with a Spinal Cord Injury: An Okanagan Perspective	Impact of Toe In/Out Due to Rolling Resistance Losses in Manual Wheelchair Propulsion		
15:00	Sam Logan, Teresa Plummer, Claire Morress	Shannon Rockall, James Hektner	Joseph Ott		
	Explorer Mini: Moving, Mouthing & Motivated - Early Joystick Experiences of Young Children with Mobility Limitations	Breast Cancer Treatments and The Impact of wheelchair Seating and Mobility on Women with Spinal Cord Injury	Interprofessional Mini-Course on Manual Wheelchair Skills for Health-Profession Students: A Case Study		
	Sam Logan, Teresa Plummer, Claire Morress	Bonita Sawatzky	R. Lee Kirby		

15:15 BREAK

Refreshments & Exhibits

16:00 INSTRUCTIONAL SESSION B

B1 BEGINNER-INTERMEDIATE // MANUFACTURER

Entering the World of Power Assist for Manual Wheelchairs - Who? Why? When

Christie Hamstra, Darren Hammond, Olivia Tefera

A variety of manufactures produce power add-on devices for manual wheelchairs, but they are not all the same. In this presentation we will review power assist devices on the market today, comparing and contrasting advantages and disadvantages, as well as how to assess for functional and environmental demands.

- Describe how power assist can prevent upper extremity dysfunction and enhance client goals
- Compare and contrast different types of power assisted mobility devices
- List formal or informal assessments to determine a clients' eligibility for a power assist device

B2 INTERMEDIATE-ADVANCED // MANUFACTURER

BACK IT UP! Back Supports' Impact on Body Systems and Scapular Function

Elaina Halkiotis, Brenlee Mogul-Rotman

This session will discuss how back support contour, materials, and mounting angles impact occupational performance. We will explain how variations in use of back support components and equipment placement impact body function systems. An outline of scapular kinematics as related to propulsion and reach for participation Mobility Related Activity of Daily Living (MRADL) will be reviewed.

- Describe the anatomy and kinesiology of the scapulae in relation to propulsion and reach for MRADL performance
- List 2-3 body function systems affected by optimal use of a wheelchair back support
- 3. Identify four features of back supports and summarize how proper application can positively affect body functions

B3 INTERMEDIATE-ADVANCED

Upright Mobility is FUNdamental

Ginny Paleg

Mobility as a facilitator of cognition, language and spatial awareness is well established and recognized. Research shows us that we have done a good job of providing augmentative mobility for children who are non-ambulatory and school-aged (GMFCS Level IV) but we are failing the younger children who are marginal ambulators as well as those with complex medical needs. This course will review the evidence for upright mobility (incl. gait trainers) with an emphasis on identifying the 9-12 month old infants that can benefit from this intervention. Children at GMFCS Levels II and III are not gaining independent community mobility until they are 6-8 years old. Could access to augmented mobility change this? Learn how a little bit of support can mean more activity, participation and independence.

- 1. Describe three evidence based outcomes of upright mobility training
- 2. List three different types of upright mobility devices
- Identify four strategies for encouraging forward independent mobility in a device

B4 BEGINNER-INTERMEDIATE

What About Leisure? Seating and Positioning for Skiing and Cycling

Evan MacKenzie, Emma Smith

Providing equipment for leisure related goals can be an exciting opportunity for rehabilitation clinicians, however, most receive little training in this area. In this session we will discuss the assessment process and seating and positioning considerations when using a sit ski or hand cycle.

- List three seating principals to consider when setting up a hand cycle or sit ski
- 2. Differentiate between the two styles of sit skis and match client characteristics to each style
- 3. List three modifications that can be made in a sit ski to make it more appropriate for the user
- Differentiate between an add on handcycle and a traditional hand cycle

B5 BEGINNER-INTERMEDIATE

International Topics Related to Wheelchair Service and Provision

Jon Pearlman, Perry Loh, Mary Goldberg

In this interactive session, participants will be introduced to the global development activities in the wheelchair sector including those from the World Health Organization (WHO), the International Society of Wheelchair Professionals (ISWP), and the Rehabilitation Engineering and Assistive Technology Society of North America (RESNA) International Special Interest Groups (SIGs). In addition, select participants will be invited to present/share activities and announcements of his/her own organization.

- 1. Identify three issues impacting wheelchair users worldwide
- 2. Demonstrate at least three uses for ISWP toolkits and assessments for professional and organizational development purposes to help overcome these challenges
- Identify three international partners with whom your organizations can collaborate worldwide

B6 BEGINNER-INTERMEDIATE

What About the Trunk? A Review of Strategies to Provide Postural Control Over the Lifespan for the Trunk while Maintaining Function

Cheryl Hon, Lindsay Alford

The management of spinal deformities over the lifespan and their impact on function is a challenge. The purpose of this session is to review how to assess the spine and determine equipment parameters. Case studies with innovative powered and non-powered equipment solutions will show how to manage posture without compromising function.

- Review trunk and spinal deformities and describe strategies on how to appropriately assess the spine during the mat assessment for the purpose of equipment prescription
- 2. Identify the issues that arise when providing postural control at the level of the spine/trunk on functional performance
- Name three equipment related strategies that can be used to control the trunk without compromising function

17:00 WELCOME RECEPTION & EXHIBITS

Hors d'oeuvre and a beverage ticket will be provided to all registered delegates.

MARCH 5.

08:00 REGISTRATION

Exhibits, Continental Breakfast & Posters

08:30 OPENING REMARKS

Catherine Ellens

08:40 PLENARY

New & Emerging Technologies: How to Ask the Right Questions When Evaluating Mobility Devices

Kendra Betz

- Review three critical considerations for evaluating new and emerging wheeled mobility devices
- Discuss two reasons that objective results from standardized test protocols provide meaningful information about mobility device performance
- 3. Describe three common wheeled mobility device failure modes that result in challenges for wheelchair users

09:05 PLENARY

I Can Drive! Exploring Self-Controlled Powered Mobility

Tim Adlam, Lisbeth Nilsson

- 1. Explain why powered mobility is enabling for children and adults with cognitive and physical disabilities
- List at least three potential outcomes of self-controlled powered mobility
- 3. Discuss how self-controlled driving can provide a challenging occupation for individuals with profound cognitive limitations



9:30 BREAK

Refreshments & Exhibits

10:20 SIMULTANEOUS PAPER SESSIONS #2 // Each paper will be 10 minutes in length with 5 minutes of Q & A

		SALON 1	SALON 2	SALON 3	
10:20		From Supine to Sitting: The Seating Journey of a Syrian Refugee	The Effect of Seating Setup on Shear Forces Experienced at the Seating Interface	Using Shared Control for Powered Wheelchair Skills Training: Feasibility of a Randomized Controlled Trial	
10:35	Kim Magnus	Jacob Redwood-Thomas	Emma Smith		
	10:35	Equipment Distribution to Underserved Populations: The Kids Equipment Network (TKEN) Timothy Caruso, Mary Angelico	Assessing Pressure Ulcer Risk in Persons with Disabilities Using a Large Dataset Stephen Sprigle	DAISYexplore: Investigating the Feasibility of Future Powered Mobility for Preschool Children in Low and Middle Income Environments	
				Tim Adlam	
	10:50	Changes in Residents' Seating Needs and Perception of Stakeholders Following Implementation of a Provincial Wheelchair Funding Program D. Ross McEachern	Montana Postural Care Project: Pilot Program in a Frontier State Tamara Kittelson-Aldred	User Centred Design of Virtual Reality for Rehabilitation - What Do We Learn From Designing Technology With the End User? Rachael McDonald	
	Pressure Management - Innovation and Service Delivery in Wales		Supported Lying	An Online Educational Resource for Learning How to Use the Level of Sitting Scale to Classify the Sitting Ability of Children and Youth	
	Mark Bowtell	Atli Ágústsson	Debbie Field		
11:20		The Every Person's Guide to Creating a New Seating Clinic	Why Sit When You Can Stand? A Systematic Review of the Evidence Related to Sit to Stand Wheelchairs	Peer-Led Approaches for Improving Satisfaction With Participation, Wheelchair Skills and Self- Efficacy Among Children Who Use Manual and Power Wheelchairs	
		Genevieve Jamin	Emer Gunning, Jackie Bowler	Deb Wilson, Krista Best, William Miller	

11:35 LUNCH (PROVIDED) & EXHIBITS

12:00 POSTER SESSION

Poster presenters will be available during this time to answer questions.

Posters are located in the second floor foyer and in the Coquitlam and Cowichan rooms.

13:00 INSTRUCTIONAL SESSION C

C1 INTERMEDIATE-ADVANCED

Why Focusing on Wheelchair Mass Can Hinder Proper Manual Wheelchair Evaluation and Prescription

Stephen Sprigle, Chris Maurer

The common belief that wheelchair mass is an important influence on propulsion effort has never been corroborated in research studies. The risk of focusing on mass is that one can neglect factors which impact propulsion effort. This workshop will discuss factors that have been shown to impact effort.

- Describe the key types of inertia and energy loss during manual wheelchair propulsion
- Summarize the results of prior research that evaluated wheelchair mass
- 3. Relate the important aspects of wheelchair configuration to their impact on inertia and energy loss
- 4. Identify the inherent tradeoffs in balancing the influences of inertia and energy loss within wheelchair configurations

C2 INTERMEDIATE-ADVANCED // MANUFACTURER

Custom Molded Seating that Provides Position, Pressure Relief and Function Requires a Hands on Approach!

Lisa Passarelli, Todd Dinner

A hands on molding approach to complete the assessment and simulation phase is critical to the quality of a custom molded seating system. Using a combination of materials could be the best solution to meet the needs in molding to achieve a desired fit will be reviewed. Participants will understand how the assessment and simulation phase are critical to the ability to begin and complete a successful molded shape.

- Discuss the effects of the different materials used for pressure relief cushions on a custom molded system (foams, gel, air cells)
- Recognize how to determine who requires custom seating based on presentation and feel comfortable with a hands-on molding approach
- Identify forces required for correction or accommodation of seated postures



C3 BEGINNER-INTERMEDIATE

Innovate to Participate: Beyond Body Structures and Function (Using Sit-to-Stand Power Wheelchairs to Increase Activity and Participation)

Kim Magnus, Lynore McLean

The presenters will draw on clinical experience through case studies to explore the use of sit-to-stand power wheelchairs in children and youth with a variety of disabilities in order to explore the integration of standing and independent mobility and the associated benefits that extend beyond body structures and function. We propose a fundamental shift in program and funding priorities to support children as active participants in their daily lives.

- State clinical and research evidence in support of standing for children with physical & developmental disabilities.
- Identify three or more ways to support a shift in rationale for standing prescription to emphasize benefits related to Activity and Participation with Body Structure and Function as "side benefits"
- Name three outcome measures for evaluating change in Activity & Participation to support changes in funding paradigms

C4 INTERMEDIATE-ADVANCED

Palliative Care and Complex Rehab Technology

Jean Minkel

This session will review the outcome of a Consensus Statement developed by the Consortium of Multiple Sclerosis Centers, CMSC, on the Comprehensive Palliative Care in MS. Participants will learn where Palliative Care and CRT can fill unmet needs being experienced by teams and patients who think. 'there is nothing more we can do'.

- 1. Name the differences between palliative care and hospice care
- List the four domains of inquiry when following the principles of palliative care
- 3. Experience the importance 'Ask before Teaching"

C5 BEGINNER-INTERMEDIATE

Assessing and Facilitating the Tool Use Learning Process - In Powered Mobility and Other Activities

Lisbeth Nilsson

The Assessment of Learning Powered mobility use (ALP) is based on the understanding of tool use learning as a process with eight phases and three stages. In version 3.0 concepts associated with powered mobility or specific tools are omitted, which makes it applicable for any kind of tool use performance.

- 1. Discuss the eight phases and three stages in the tool use learning process
- Compare and contrast the difference between process and task based assessment
- 3. Apply the short ALP tool, version 3.0 to assess one new tool use performance

C6 INTERMEDIATE-ADVANCED

Accessibility Through Technology: Unlocking Universal Design, Switch Control, and Home Automation

Cory Cooper

Explore how universal design, switch control and home automation are enabling people to access communication, home environment, work, and play. Receive hands on instruction on linking devices to power chair electronics, set up switch control, and set up various devices in a hands on lab.

- . Learn four key technologies that increase function and independence
- Understand and apply three different apps that could be beneficial for different diagnoses
- Set up, program, and run three different switch control strategies on iPhone/Android

14:00 ROOM CHANGE

14:10 INSTRUCTIONAL SESSION D

D1 INTERMEDIATE-ADVANCED

Manual Wheelchair Skills: A Practical Instructional Session on Popping the Casters Over Obstacles

R. Lee Kirby, Cher Smith, Amira Tawashy

The instructional session will focus on providing participants with an opportunity to experience the set of skills that involve popping the casters over obstacles. These skills include popping the casters over a threshold, over a gap and to ascend a small curb.

- Perform wheelchair skills that require the user to pop the casters over obstacles
- 2. Spot, assess and train people performing popping skills
- Describe how to implement such assessment and training procedures in their own settings

D2 INTERMEDIATE-ADVANCED

Seated Anatomy and Its Impact on Pressure Ulcer Risk

Sharon Sonenblum

This workshop will present the seated anatomy of more than 40 individuals of varying levels of biomechanical risk and the relationships between anatomy, tissue shape, skeletal morphology and pressure ulcer risk. It will also explore clinical measurements that may help to predict differences in biomechanical risk across individuals.

- Report the percent of individuals with gluteus maximus coverage underneath their ischium
- 2. Identify two aspects of anatomy or skeletal morphology that are associated with pressure ulcer risk
- Describe one clinical measurement that might have value in predicting biomechanical risk

D3 INTERMEDIATE-ADVANCED

Beginning Power Mobility With Exploratory, Operational and Functional Learners

Roslyn Livingstone, Debbie Field

Power mobility can be used as an intervention to promote developmental change in children with a wide range of abilities. Video case examples will illustrate three types of power mobility learners and encourage therapists to consider augmenting power mobility interventions for non-traditional as well as traditional power mobility candidates.

- 1. Describe at least three profiles of children benefitting from power mobility interventions in early childhood
- 2. Contrast driving skill progression among the three different learner groups
- 3. Discuss at least three child and environmental factors that may influence power mobility use in early childhood settings

D4 INTERMEDIATE-ADVANCED

What Large Data is Showing in Relation to Seating and Mobility Interventions

Mark Schmeler

The Functional Mobility Assessment/Uniform Dataset (FMA/UDS) Outcomes Registry has grown to 4000+ cases of people who use Mobility Assistive Equipment (MAE). This session will present global trends of the dataset. Discrete analyses will discuss outcomes based on types of equipment provided under various service delivery models for various populations.

- Identify three issues in providing wheelchair repairs from the point of view of a supplier
- Identify three differences in MAE being provided depending on ATP involvement
- 3. Identify two sub-populations that experience a higher rate of falls when compared to the overall population

D5 BEGINNER-INTERMEDIATE

The Importance of Cultural Competency in the Delivery of Wheeled Mobility

Esmeralda Vázquez, Deborah L. Pucci

Healthcare providers are more likely than ever to encounter individuals of diverse ethnic, cultural, and socioeconomic backgrounds. Providers must understand, appreciate, and interact with persons from cultures and beliefs systems different from their own. This presentation will identify the knowledge and skills to manage cross-cultural relationships for effective wheelchair interventions.

- Identify two personal factors that can bias interactions when working with individuals from different cultural, ethnic, and socioeconomic backgrounds
- Describe two adjustments to communication style that consider the cultural, health literacy, and language needs of their patients
- Discuss two modifications to wheelchair service delivery structure that facilitate cultural competence

D6 INTERMEDIATE-ADVANCED

Why Sit When You Can Stand? A Systematic Review of the Evidence Related to Sit to Stand Wheelchairs

Emer Gunning, Jackie Bowler

This session will present the findings of a review of literature related to sit to stand wheelchairs. Gaps in literature will be identified along with potential areas for further research. The application to practice will be considered in light of the findings. The development of a national clinic to assess and supply sit to stand chairs will be presented.

- 1. Gain an understanding of the practical applications of sit to stand wheelchairs in a variety of setting e.g. school, home, work
- 2. Be familiar with physical and physiological effects of standing and changing position
- 3. Identify the contraindications of sit to stand wheelchairs
- Recognise the impact of sit to stand wheelchairs on the quality of life of service users



15:10 BREAK WITH REFRESHMENTS & EXHIBITS 16:00 PANEL PRESENTATION

Celebrating Life on Wheels: Across the Lifespan

Lee Ann Hoffman, Todd Hargroder, Doug Garven, Mark Schmitt

We invite you on a user-inspired journey celebrating life on wheels, presented by some of our industry experts who are all long-term, active and accomplished wheelchair users. Trains, planes and automobiles: these guys have probably seen it, experienced it and lived through it. This will be a firsthand, light-hearted account of Life On Wheels.

- Compare and contrast two elements of evidence-based practice and evidence-informed practice
- 2. Describe two contextual factors that can be influencers in evidenceinformed decision-making, using the International Classification of Functioning, Disability, and Health (ICF) as a framework
- Understanding and dispelling two myths which pertain to a "Day in the Life of" with regard to environment / access
- 4. Understanding and dispelling two myths which pertain to a "Day in the Life of" with regard to activity and participation
- Listing as many alternative, non-traditional funding sources and resources to help with the acquisition of equipment for posture, mobility, leisure and quality of life

17:00 ADJOURN

19:00 EVENING AT STANLEY PARK PAVILION

(\$36) // 610 Pipeline Rd, Vancouver, BC

Join us in the celebration of 36 years of ISS at an evening with dinner and live music, co-sponsored by Ki Mobility, Motion Composites, and Raz Design! It is encouraged that you reserve early; this evening is anticipated to sell out quickly.







MARCH 6

08:00 REGISTRATION

Continental Breakfast & Posters

08:30 INSTRUCTIONAL SESSION E

E1 BEGINNER-INTERMEDIATE

A New RESNA Position Paper on Dynamic Seating

Michelle Lange, Barbara Crane

This session will provide information on the development and content of a new RESNA Position Paper on Dynamic Seating. The participants will be provided with an opportunity to respond with comments and questions.

- 1. Describe the development process of a RESNA Position Paper
- 2. List three goals of a position paper
- 3. Provide feedback on the position paper structure and content

E2 BEGINNER-INTERMEDIATE

Seating Hacks: Tips, Tricks and Techniques for Therapists with Limited Funding, Equipment, and Time

Danielle Rae, Jen Gellis

Arm yourself with a toolkit full of hacks for common seating issues applicable in any setting and across the lifespan. Assessment tools and tips, common low-cost materials, and seating tune-up techniques will be shared. A hive-mind sharing of seating hacks will take place, so bring your best ideas.

- Relate the importance of a seating assessment to deciphering the right seating hack
- Identify three low-cost materials that can be used for seating modifications or adaptations
- 3. Describe three tools used to hack seating

E3 BEGINNER-INTERMEDIATE

Managing Fall Risk Among Wheelchair and Scooter Users: Best Practices and Lessons Learned

Laura Rice

This session draws from best-available evidence and the presenter's intervention research experiences to provide an overview of the diverse nature of fall risk factors for wheelchair and scooter users, as well as techniques to manage fall risk in this population that can be easily incorporated into clinical settings.

- Describe the multifactorial nature of falls among wheelchair and scooter users
- 2. Describe techniques to manage fall risk among wheelchair and scooter users
- 3. Describe practical strategies to implement fall education for wheelchair and scooter users in clinical settings
- Identify challenges and barriers in the delivery of falls prevention education for wheelchair and scooter users, as well as strategies to address these challenges



E4 INTERMEDIATE-ADVANCED

Pushing the Envelope: Providing Powered Mobility to Infants with Motor Limitations

Carole Dennis

This presentation will review evidence of driving proficiency for infants with mobility limitations. Participants will consider the importance of characteristics of powered mobility devices on infant participation in activities such as mobility, object interaction, socialization, and communication. Features of the WeeBot, a robotic mobility device, will be explored by participants.

- Apply existing evidence about infant and toddler ability to use controls to operate powered mobility devices
- 2. Evaluate aspects of existing powered mobility options for infants and toddlers that may facilitate or limit participation
- Analyze the potential of a novel mobility device, the WeeBot, to increase infant and toddler participation in object exploration, socialization, and communication

E5 INTERMEDIATE-ADVANCED // MANUFACTURER

Adventures in Adolescence: Considerations for Wheeled Mobility for Tweens and Teens

Angie Kiger

As a pediatric client ages through the phases of adolescence it is likely that they will experience various changes in areas such as physical growth, appearance, cognition, emotional, and psychosocial development. All of these changes can have a significant impact on the seating and mobility equipment recommended for a pediatric client.

- Articulate three aspects (physical or emotional) of puberty and how each may impact the wheelchair service provision process for clients with mobility impairments ages 11-21 years old
- Propose three critical components to include in the interview portion of the seating and wheeled mobility evaluation for an adolescent as compared to the evaluation of a young child (under 8 years old) and an adult client
- Propose three ways in which growth can be accommodated in a wheeled mobility device (dependent or independent) for adolescents with mobility impairments secondary diagnoses such as neuromuscular disorders

09:30 ROOM CHANGE



09:40 INSTRUCTIONAL SESSION F

F1 INTERMEDIATE-ADVANCED

The Impact of Wheelchair Seating and Mobility on Cardiopulmonary Function

Theresa Crytzer

This course will provide (a) a review of cardiopulmonary impairments associated with people with neurological conditions and potential secondary conditions, (b) review of outcome measures of cardiopulmonary function, from complex (graded maximal exercise stress test) to simple (heart rate, oxygen saturation, rating of perceived exertion) and ways that cardiopulmonary outcome measures can support clinical judgment and be applied to our letters of medical necessity for assistive technology (c) overview of the impact of positioning and seating on cardiopulmonary function, and d) options for improving cardiopulmonary fitness in wheelchair users.

- Discuss impairments associated with people with neurological conditions and potential secondary conditions that can impact morbidity and mortality
- 2. Review five cardiopulmonary outcome measures and ways that they can support clinical decision-making in wheelchair prescription
- 3. Examine the impact of wheelchair positioning and seating cardiopulmonary function
- Examine the impact of physical activity on cardiopulmonary function and options for improving cardiopulmonary fitness in wheelchair users

F2 INTERMEDIATE-ADVANCED

Fact vs. Fiction: What Do We Know About Standing Programs?

Ginny Paleg

Let's have fun as we evaluate fake vs. real evidence about standing programs for adults and children. Don't be scared of the evidence, learn the red flags and how to spot the pearls. Bring your cell phone and save your data plan!

- 1. Describe the Centre for Evidence-Based Medicine levels of evidence
- 2. Describe McMaster Quality Rating System
- 3. List three qualities of poor studies

F3 INTERMEDIATE-ADVANCED // MANUFACTURER

A 3D Printing Primer for Seating, Positioning & Wheeled Mobility Modifications

Richard Pasillas, Jeremy Cantu

3D Printing technology can be acquired or accessed by any and every member of our industry. This course will detail numerous aspects in which the technology is currently used to augment a wide range of seating and positioning aids, as well as create highly effective wheeled mobility modification and accessories.

- Describe the nature and mechanism of 3D printing technologies as applicable to the seating and mobility industry.
- Spell out which tools or assets are most accessible for expediting 3D printing services.
- Actuate a plan to integrate 3D printing technologies into one's own workplace.

F4 BEGINNER-INTERMEDIATE

Restraints and Restrictive Practice: The Formation of Best-Practice Protocols

Simon Hall

People with intellectual disabilities or cognitive impairments are subject to practices such as physical restraint or restrictive practices. This workshop will address these issues related to disability services. The focus will be on the multidisciplinary team approach in developing application process and review pathway. The importance of appropriate assessment, informed consent, appropriate monitoring and review of restraints and restrictive practices will be discussed.

- List the steps and rationale to an appropriate pathway that should be followed in a restraint protocol
- 2. List three procedures professionals should follow when implementing a restraint protocol
- List three stakeholders and their responsibility in the implementation of a restraint protocol

F5 BEGINNER-INTERMEDIATE

Why, Why, Why - The Fine Art of Linking Clinical Need with Written Justification

Stefanie Laurence, Linda Norton

You took your best shot at writing for funding, and were shocked when it was declined. But, did you actually link your prescription to your assessment, or just gave your opinion? This session will delve into the importance of linking assessments to product parameters, the art of features and benefits, question the statement "client has changed", and reinforce understanding of funding sources before asking for money. Join us to self-reflect on your prescription practices.

- Describe the components of a client assessment for determining key features of durable medical equipment
- 2. Differentiate between objective data versus thoughtful opinion
- Link the concept of features of a device with the benefits it offers to the client

F6 INTERMEDIATE-ADVANCED

The Importance of Early Self-Initiated Mobility on the Visual Development of Infants

Teresa Plummer, Claire Morress, Sam Logan

This instructional session will present the theoretical and developmental importance of self-initiated mobility for infants and young children from a visual development perspective.

- Articulate the developmental milestones that are influenced by selfinitiated mobility
- Describe the importance of early pediatric mobility to advocate for early intervention
- 6. Discuss the visual implications of early pediatric mobility

10:40 BREAK

Refreshments & Poster Viewing

Posters are located in the second floor foyer and in the Coquitlam and Cowichan rooms.

Moderated by: Roslyn Livingstone

11:20 PLENARY

Why Should I Let Big Brother Monitor My Wheelchair Usage? Let's Discuss

Sharon Sonenblum, Chris Maurer

- 1. Identify the challenges and potential solutions to providing wheelchair usage data to the wheelchair user
- 2. Identify the potential benefits of wheelchair usage data to the wheelchair user
- Identify the potential benefits of wheelchair usage data to the clinician

11:45 PLENARY

A Wheelchair Spot on Airplanes

Michele Erwin

- Discuss whether wheelchair and seating companies know that a bill was signed that would change wheelchair manufacturing forever; if a person wants to fly using a wheelchair spot on planes, the wheelchair will need to be FAA approved
- 2. Describe what modifications need to be documented in order to meet this requirement
- 3. Test results of a wheelchair at an FAA testing facility

12:00 PLENARY

Not All Who Wish to Wander Are Able

Rupa Valdez, Christopher Lunsford

- 1. Articulate a range of obstacles to travel for those with disabilities from a medical, cultural, and social perspective
- 2. Explain how digital tools and social media can be used to address these obstacles to travel for those with disabilities
- 3. Understand how the lived experience of those with obstacles to travel can be captured as data and leveraged to effect societal change for the better

12:15 CLOSING PLENARY

Mobility 101: A Modern Primer (or... What Would Cole Do?)

Heather Feldner

- 1. Compare and contrast two similarities and two differences between clinical and community mobility programs.
- 2. Analyze three contributions of several foundational fields that support community mobility initiatives.
- 3. Discuss three principles that inform the design and study of community mobility programs.

12:40 CLOSING REMARKS & EVALUATION Maureen Story (chair)

13:00 ADJOURN

POSTER PRESENTERS

Influence of Cognitive Functions on Powered Mobility Device Use: A Systematic Review

Krista Best, Alice Pellichero

Developing and Evaluating Competence as a Seating Therapist: A Clinician's Experience of the Positioning and Mobility OT/PT CAPE Tool Nicole Bruce

New Postural Seats for SCLUSerEDom the Idea to Product Rosaria Caforio CANCELLEDOM The Idea to Product

Adapted Bicycling for Children with Cerebral Palsy Aashka Desai

The Impact of Manual Wheelchair Propulsion: From the Pediatric to Adult Shoulder

Rachel Fabiniak

Kids, Start Your Engines! Driving Community-Based Early Powered Mobility Tracking with a Custom Data Logger

Heather Feldner, Sam Logan

The Benefits of Being Certified in the Canadian Rehab Industry Jason Kelln

Power Mobility Days: Empowering Children and Families to Explore Roslyn Livingstone, Debbie Field

The Impact of Custom Seating to Improve Occupational Performance of an Individual with Multiple Sclerosis: A Case Report Deva Mukkilla Essential Technology Access Throughout the Continuum of Care Cherry Nixdorf

Activities of Seating Technology Transfer in Thailand by Asian Seating Assistance Project

Takeshi Shigenari, Kazushi Matsumoto

Teamwork Makes the Dream Work: How Engineer and Therapist Partnerships Can Help Solve Everyday Mobility Challenges Kate Stribling, John Parmagiani

Hammie: Using 3D Printing to Build a Practical Teaching Tool Thelma Wakefield, Tamara Kittelson-Aldred

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