



Make it Matter  
76<sup>th</sup> Annual Meeting  
September 21-24, 2022  
Mirage Las Vegas | Las Vegas, Nevada



AACPD

FINAL PROGRAM







THERAPEUTICS

**MERZ THERAPEUTICS**  
IS PROUD TO BE A SPONSOR  
OF **AACPDM 2022**



## NEUTRALIZING ANTIBODIES AND IMMUNOGENICITY

**XEOMIN, a uniquely purified neuromodulator without unnecessary proteins, has a low protein load and demonstrated no lack of effect in clinical studies due to neutralizing antibodies.\***



**SCAN  
TO SEE  
THE SCIENCE**

Please see booth representative for  
additional Important Safety Information

\*The direct impact of the non-therapeutic proteins on long term safety or efficacy has not been established. Information about the unique XEOMIN manufacturing process and the properties of incobotulinumtoxinA is not intended to imply superiority over other botulinum toxin type A products. As with all neuromodulators, including XEOMIN, there is a potential for immunogenicity.

### IMPORTANT SAFETY INFORMATION

#### INDICATIONS

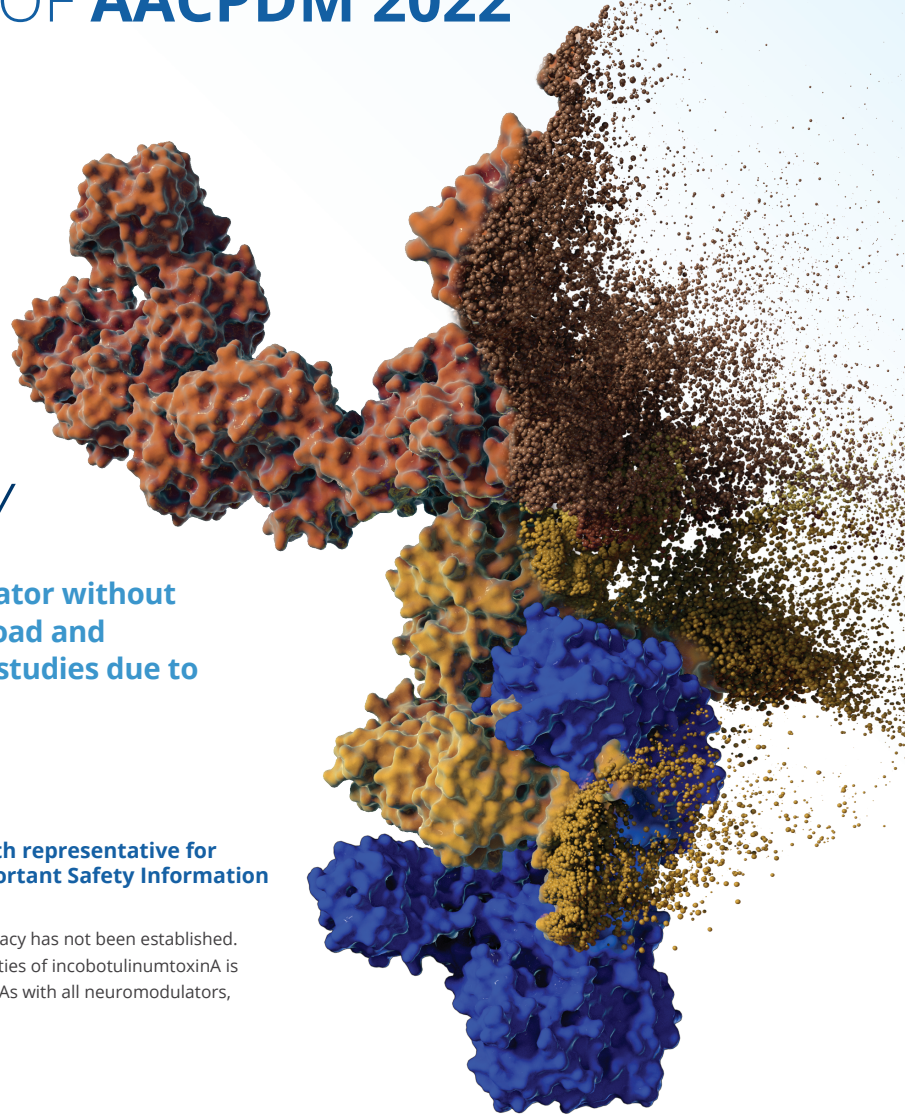
**XEOMIN® (incobotulinumtoxinA)** for injection is indicated for the treatment of:

- Chronic sialorrhea in patients 2 years of age and older
- Upper limb spasticity in adults
- Upper limb spasticity in pediatric patients 2 years of age and older, excluding spasticity caused by cerebral palsy
- Cervical dystonia in adults
- Blepharospasm in adults

#### WARNING: DISTANT SPREAD OF TOXIN EFFECT

See full prescribing information for complete **BOXED WARNING**.

The effects of XEOMIN and all botulinum toxin products may spread from the area of injection to produce symptoms consistent with botulinum toxin effects. These symptoms have been reported hours to weeks after injection. Swallowing and breathing difficulties can be life threatening and there have been reports of death. The risk of symptoms is probably greatest in children treated for spasticity but symptoms can also occur in adults, particularly in those patients who have underlying conditions that would predispose them to these symptoms.







## Offering no-charge genetic testing to aid in a differential diagnosis

Not knowing the underlying cause of a child's signs and symptoms can be challenging for families. The PTC Pinpoint™ testing program is designed to help by offering:



**No-charge testing for neurotransmitter disorders and cerebral palsy (CP) of unknown etiology**



**Genetic counseling post testing**



**Family follow-up testing**

PTC Therapeutics and Invitae have partnered to provide no-charge genetic testing, genetic counseling, and family screening programs for individuals with a suspected neurotransmitter disorder, such as Aromatic L-amino Acid Decarboxylase (AADC) deficiency or CP of unknown etiology.

**For more information, please visit  
[PTCPinpoint.com](https://PTCPinpoint.com).**



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Portland, OR

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Holland Bloorview Kids Rehabilitation Hospital  
Toronto, ON

Theresa Sukal Moulton, DPT, PhD  
Northwestern University  
Chicago, IL

The resilience of the AACPDm was apparent over the last two years with two very successful online meetings as well as continued engagement of our membership. Now, we are thrilled to welcome you to the 76th Annual Meeting of the American Academy for Cerebral Palsy and Developmental Medicine (AACPDm) at the Mirage Hotel in Las Vegas, Nevada, September 21-24. The last two years have presented all of us with many challenges while also creating opportunities for reflection and progress. The meeting theme this year, Make it Matter, represents an opportunity to reflect on how we move forward, together and stronger, from the COVID-19 Pandemic. I believe that our keynote speakers will inspire us all to reflect on meaningful outcomes and approaches to clinical care and research. We hope that the social opportunities, including the Welcome Reception, will provide you all with long-awaited opportunities to reconnect with your friends and colleagues. We are excited to announce that Jerron Herman, professional dancer and one of our keynote speakers, will be performing at the Welcome Reception.

The Friday evening networking dinner and celebration will take place at the breathtaking Keep Memory Alive Event Center. Take in Frank Gehry's stunning architecture as you enjoy dinner catered by Wolfgang Puck's culinary team. This innovative event center supports research and clinical care at Cleveland Clinic Nevada and the Lou Ruvo Center for Brain Health. We know this will be a fun evening and a wonderful opportunity to celebrate being together again. We hope to see you there!

The AACPDm encourages and values member engagement and therefore this year we have planned a Meet and Greet with AACPDm Committee Leadership and Board of Directors. If you are a new member and are considering joining a committee, you would like to be more engaged or if you are not a member and are considering membership, please consider attending this informal Meet and Greet Reception in the Exhibit Main Hall prior to the Welcome Reception.

Included in your registration are the Welcome Reception, Morning Seminars, Poster and Exhibit Review, Mini Symposia, and Free Paper Sessions. We are excited about the options that will be available at the meeting, including 120 podium presentations, 99 scientific posters, 32 demonstration posters, 16 clinical observation/single case study posters, 25 morning seminars and 36 mini-symposia. We were impressed by the quality of the submissions and inspired by the diversity of the content and we hope that you will be too. Throughout the meeting, the Adapted Sports and Recreation Committee will also keep you energized with their 'Let's Move' sessions.

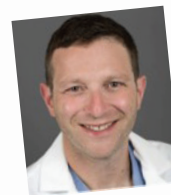
We look forward to seeing you in Las Vegas!



1st Vice President  
Lesley Pritchard, PT, PhD  
University of Alberta  
Edmonton, AB



Scientific Program  
Committee Co-Chairs  
Laurie J. Glader, MD  
Nationwide Children's  
Columbus, OH



Scientific Program  
Committee Co-Chairs  
Benjamin J. Shore, MD, MPH, FRCS  
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## Meeting at a Glance

### WEDNESDAY, SEPTEMBER 21, 2022

8:30 am - 11:30 am	AACPDM Committee Meetings
8:00 am - 12:00 pm	<b>Pre-Conference Sessions</b> <b>PC1:</b> Establishing a Research Program Focused on Cerebral Palsy or Other Child-Onset Developmental Disabilities: Transitioning from an Early-Stage to an Independent Investigator <small>(TICKET)</small> <b>PC2:</b> Schools as Members of the Complex Care Team <small>(TICKET)</small> <b>PC3:</b> From Evidence to Implementation: Resistance Training Programs for Children with Cerebral Palsy and Other Neuromotor Conditions <small>(TICKET)</small>
1:00 pm - 5:00 pm	<b>Pre-Conference Sessions</b> <b>PC4:</b> Hammersmith Infant Neurological Examination Clinical Workshop <small>(TICKET)</small> <b>PC6:</b> Using Gait Analysis to Guide Your Treatment: A Flipped Classroom Exercise <small>(TICKET)</small>
1:00 pm - 5:00 pm	Board of Directors Meeting
5:30 pm - 6:00 pm	Meet and Greet
6:00 pm - 7:00 pm	Welcome Reception <small>(TICKET)</small>

### THURSDAY, SEPTEMBER 22, 2022

7:00 am - 8:00 am	Continental Breakfast in the Exhibit Hall
8:00 am - 9:30 am	<b>General Session</b> <ul style="list-style-type: none"> <li>Open Business Meeting</li> <li>Opening Address and Gavel Exchange</li> <li>Gayle G. Arnold Lecture</li> <li>Presidential Guest Lecture</li> </ul>
9:30 am - 9:45 am	Let's Move! Aerobics
9:45 am - 11:30 am	<b>Free Paper Sessions A-D</b> <b>A:</b> Early Intervention and Development I <b>B:</b> Medical Complexity <b>C:</b> Pathophysiology and Neuroplasticity <b>D:</b> Orthopedics: Hip
9:45 am - 11:30 am	Adult and Aging SIG Meeting
11:45 am - 12:45 pm	Product Theater Lunch - Ipsen: The Utility of BoNT-A Therapy for Children 2yrs and older with Spasticity caused by Cerebral Palsy and Other Developmental Disorders: Spotlight Story on Treatment to Haitian Children <small>(TICKET)</small>
1:00 pm - 2:30 pm	<b>General Session</b> <ul style="list-style-type: none"> <li>Corbett Ryan Pathways Pioneer Award Presentation</li> <li>Presidential Guest Lecture</li> <li>Presidential Guest Lecture</li> </ul>
2:30 pm - 4:00 pm	Poster and Exhibit Review in the Exhibit Hall
4:00 pm - 6:00 pm	Mini Symposia 1-12

### FRIDAY, SEPTEMBER 23, 2022

7:00 am - 8:00 am	Continental Breakfast in the Exhibit Hall
8:00 am - 9:00 am	Morning Seminars 1-13
9:00 am - 9:30 am	Let's Move! Adaptive Cycling
9:00 am - 9:30 am	Coffee Break in the Exhibit Hall
9:00 am - 9:30 am	International Scholar Highlight
9:30 am - 11:30 am	<b>General Session</b> <ul style="list-style-type: none"> <li>Duncan Wyeth Award Presentation</li> <li>Gayle G. Arnold Award Presentation</li> <li>Mac Keith Press Basic Science Lecture</li> <li>Mentorship Award Presentation</li> <li>Lifetime Achievement Award</li> </ul>
12:15 pm - 1:15 pm	Product Theater Lunch - PTC Therapeutics: Real- World Experience With a Cerebral Palsy Genetic Testing Program <small>(TICKET)</small>
1:45 pm - 3:30 pm	<b>Free Paper Sessions E-H</b> <b>E:</b> Gait <b>F:</b> Mental Health/Pain <b>G:</b> Tone Management <b>H:</b> Therapy
3:30 pm - 4:00 pm	Coffee Break in the Exhibit Hall Let's Move! Meditation with Movement
4:00 pm - 6:00 pm	Mini Symposia 13-24
7:00 pm - 12:00 am	Networking Dinner and Celebration <small>(TICKET)</small>

### SATURDAY, SEPTEMBER 24, 2022

7:00 am - 8:00 am	Continental Breakfast in the Exhibit Hall
8:00 am - 9:00 am	Morning Seminars 14-25
9:00 am - 9:30 am	Coffee Break in the Exhibit Hall Let's Move! Wheelchair Rugby
9:00 am - 9:30 am	International Affairs Committee Meet and Greet
9:30 am - 11:15 am	<b>Free Paper Sessions I-L</b> <b>I:</b> Early Intervention and Development II <b>J:</b> Orthopedics <b>K:</b> Lifespan Issues/Nutrition <b>L:</b> Epidemiology/Health Services
9:45 am - 11:15 am	Complex Care SIG Meeting
11:15 am - 12:15 pm	Lunch Break (Lunch on Own)
12:15 pm - 1:45 pm	<b>General Session</b> <ul style="list-style-type: none"> <li>Chambers Family Lifespan Lecture</li> <li>Closing Remarks</li> <li>2023 Annual Meeting Introduction</li> <li>AusACPDM Update</li> <li>EACD Update</li> <li>Best Poster Award Presentation</li> <li>Promising Career Award Presentation</li> </ul>
2:00 pm - 4:00 pm	Mini Symposia 25-36
3:00 pm - 7:00 pm	Board of Directors Meeting



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## American Academy for Cerebral Palsy and Developmental Medicine

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Website: [www.aacpdm.org](http://www.aacpdm.org)

### Office Staff

Tamara Wagester – Executive Director  
Erin Freimark, CMP, DES – Senior Meetings Manager  
Mckenzie Morgan – Meetings Coordinator  
Amanda Prendergast – Communications Manager

### Future Annual Meetings

#### 77TH ANNUAL MEETING SEPTEMBER 10-13, 2023

Chicago Marriott Magnificent Mile  
Chicago, Illinois

#### 78TH ANNUAL MEETING OCTOBER 23-26, 2024

Québec City Convention Centre  
Québec City, Canada

#### 79TH ANNUAL MEETING OCTOBER 15-18, 2025

New Orleans Marriott  
New Orleans, Louisiana



## 2021-2022 AACPDM Board of Directors

Tom F. Novacheck, MD – President  
 Lesley Pritchard, PT, PhD – First Vice President  
 M. Wade Shrader, MD – Second Vice President  
 Francisco Valencia, MD – Treasurer  
 Joline Brandenburg, MD – Treasurer-Elect  
 Joshua Hyman, MD – Secretary  
 Golda Milo-Manson, MHSc, MD, FRCPC – S – Secretary-Elect  
 Susan Sienko, PhD – Past President  
 Mauricio R. Delgado, MD – Past President  
 Kristie Bjornson, PT, PhD, MS – Director  
 Paige Church, MD – Director  
 Mary Jo Cooley Hidecker, PhD, CCC-A/SLP – Director  
 Lisa Letzkus, PhD, RN, CPNP-AC – Director  
 Nancy Murphy, MD – Director  
 Verónica Schiariti, MD MHSc PhD – Director  
 Benjamin J. Shore MD MPH FRCSC – Director  
 Sruthi P. Thomas, MD, PhD – Director

## Ex-Officio Board Members

William L. Oppenheim, MD – Historian  
 Julieanne Sees, DO – Webmaster  
 Lynne Fogel – Community Council Chair  
 Bernard Dan, MD, PhD – Editor, DMCN  
 Tamara Wagester – Executive Director

## 2022 Scientific Program Committee

Amanda Sarafian, EdD, OTR/L  
 Amanda T. Whitaker, MD  
 Andrew G. Georgiadis, MD  
 Benjamin J. Shore, MD, MPH, FRCSC  
 Bhooma Aravamuthan, MD  
 Caitlin Cassidy, MD  
 Christopher Modlesky, PhD  
 Dana Anaby PhD  
 Danielle E. Levac, PhD  
 David M. Scher, MD  
 Edward A. Hurvitz, MD  
 Eugenio Monasterio, MD  
 Ginny Paleg, DScPT  
 Jill E. Larson, MD  
 Jill Heathcock, MPT, PhD  
 Kate L. Willoughby, BPhysio, DPhysio  
 Laura A. Prosser, PT, PhD  
 Laura K. Brunton, PT, PhD  
 Laurie J. Glader, MD  
 Lesley Pritchard, PT, PhD  
 M. Wade Shrader, MD  
 Mark Peterson, MD  
 Michael C. Kruer, MD  
 Rachel L. DiFazio, PhD, RN, PNP  
 Rishi K. Agrawal, MD, MPH  
 Seth Warschausky, PhD  
 Sylvia Ounpuu, MSc

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*life without limits.*

United Cerebral Palsy is a proud sponsor of the AACDPM 76th Annual Meeting.

EDUCATION

RESEARCH

ADVOCACY

HABILITATION

EARLY INTERVENTION

THERAPY

ASSISTIVE TECH

ADULT SERVICES



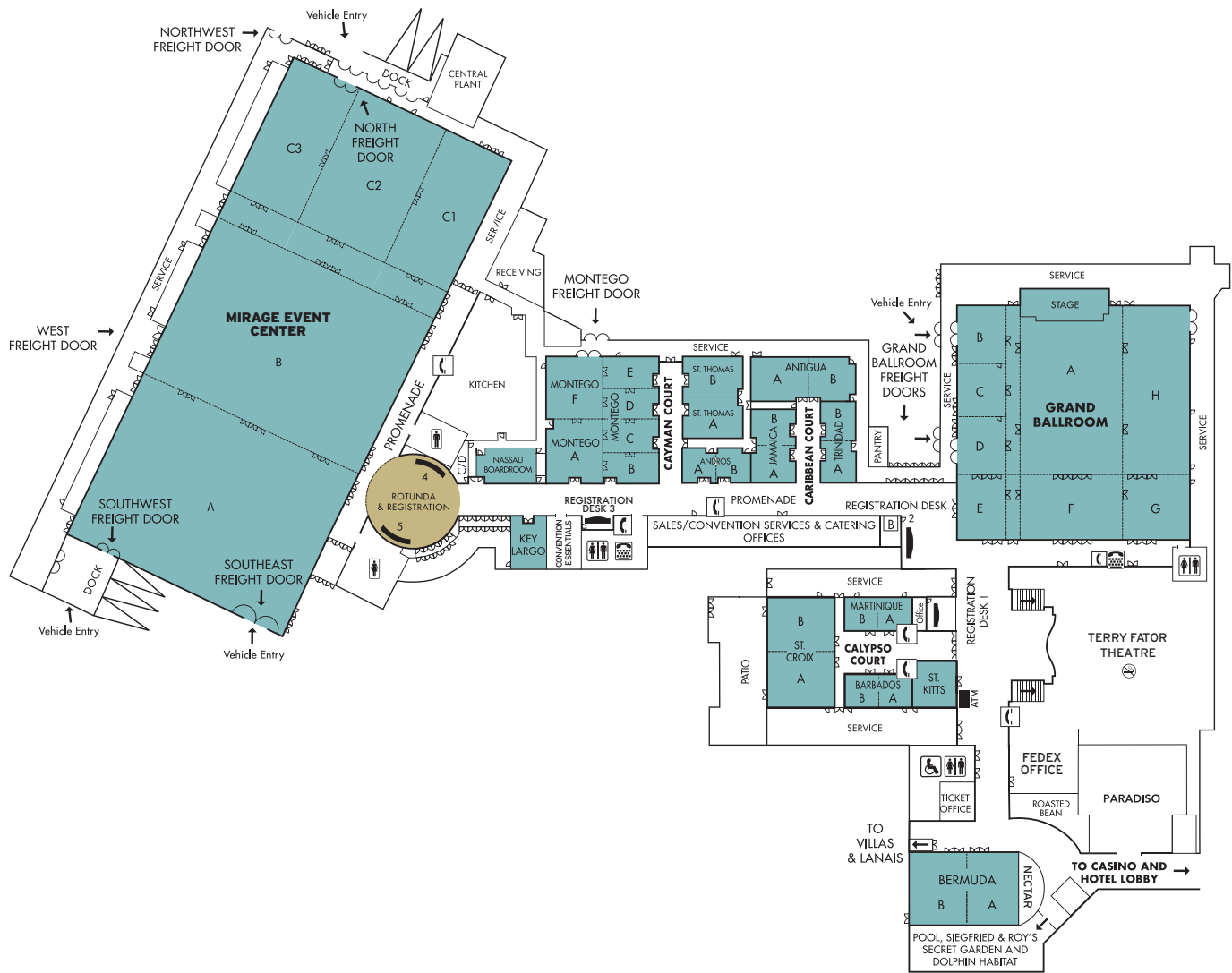
[www.UCP.org](http://www.UCP.org)

## AACPDM Presidential History

Winthrop Phelps, MD	1948	Alfred L. Scherzer, MD	1986
George G. Deaver, MD	1949	Robert P. Christopher, MD	1987
Earl R. Carlson, MD	1950	Leon Root, MD	1988
Bronson Crothers, MD	1951	Alfred Healy, MD	1989
Leslie B. Hohman, MD	1952	Gayle G. Arnold, MD	1990
Arnold Gesell, MD	1953	James R. Gage, MD	1991
Meyer A. Perlstein, MD	1954	John F. McLaughlin, MD	1992
Lenox D. Baker, MD	1955	Michael A. Alexander, MD	1993
Margaret H. Jones Kanaar, MD	1956	Helen M. Horstmann, MD	1994
Nicholson J. Eastman, MD	1957	Charlene Butler, EdD	1995
William T. Green, MD	1958	Robert K. Rosenthal, MD	1996
Alvin J. Ingram, MD	1959	Peter L. Rosenbaum, MD	1997/1998
Raymond R. Rembolt, MD	1960	Dennis C. Harper, PhD	1999
G.W.R. Eggers, MD	1961	John F. Mantovani, MD	2000
Jessie Wright, MD	1962	Michael D. Sussman, MD	2001/2002
Russell Meyers, MD	1963	James A. Blackman, MD	2003
Eric Denhoff, MD	1964	Robert W. Armstrong, MD	2004
Chester A. Swinyard, MD	1965	Luciano S. Dias, MD	2005
Samuel B. Thompson, MD	1966	Barry S. Russman, MD	2006
Sedgwick Mead, MD	1967	William L. Oppenheim, MD	2007
William Berenberg, MD	1968	Diane L. Damiano, PhD PT	2008
William J. Hillman, MD	1969	Hank G. Chambers, MD	2009
Harriet E. Gillette, MD	1970	Deborah J. Gaebler-Spira, MD	2010
Henry H. Banks, MD	1971	Scott A. Hoffinger, MD	2011
Lawrence T. Taft, MD	1972	Joseph P. Dutkowsky, MD	2012
Robert L. Samilson, MD	1973	Maureen E. O'Donnell, MD MSc FRCP (C)	2013
Elliott D. O'Reilly, MD	1974	Richard D. Stevenson, MD	2014
Hans U. Zellweger, MD	1975	Darcy Fehlings, MD MSc FRCP (C)	2015
Eugene E. Bleck, MD	1976	Eileen Fowler, PhD PT	2016
Leon Greenspan, MD	1977	Unni Narayanan, MBBS MSc FRCP (C)	2017
Gerald Solomons, MD	1978	Sarah Winter, MD	2018
Hyman H. Soboloff, MD	1979	Jilda Vargus-Adams, MD, MPH	2019
Leonard F. Bender, MD	1980	Mauricio Delgado, MD	2020
Fred P. Sage, MD	1981	Susan Sienko, PhD	2021
Paul H. Pearson, MD	1982	Tom F. Novacheck, MD	2022
Harold B. Levy, MD	1983	Lesley E. Pritchard, PhD, PT	2023
David H. Sutherland, MD	1984	M. Wade Shrader, MD	2024
Robert V. Groover, MD	1985		



The Mirage Floor Plans



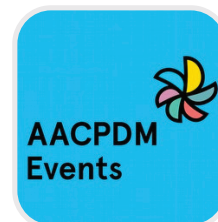
# Make the Most of Your Conference Experience with the **AACPDM Events Mobile App!**

Take Notes | Create & Share Schedules | Personal Summary | Social Features

## 1. Download the AACPDM Events App



**Scan** the QR Code or go to the Apple App Store or Google Play and search for **AACPDM Events**.



App Icon

**Install** and **open** the event app.

**Find** your event in the Upcoming Events (bottom row).

**Tap** the event icon to launch your event's app.



Event Icon

## 2. Login to the App

To start using your event app, select **"Create Account"** and enter the event code **AACPDM22**. Then, type your name and email address.

If you already have an account, select **"Login"** and enter your username (your email) and password.



## 3. App Tips

**Download** the app before you go! Wi-Fi connection on-site can affect the functionality of the app.

**Browse** the event information and create a personal schedule by tapping on the star next to presentations titles.



## Purpose

The educational program of the American Academy for Cerebral Palsy and Developmental Medicine (AACPDM) is designed to provide targeted learning opportunities in the basic sciences, prevention, diagnosis, treatment, and technical advances related to interventions, services and supports for people with childhood-onset disabilities. The program provides a forum for discussing scientific developments and clinical advances by fostering communication and interchange among researchers, health care professionals and people with lived experience with disability. This purpose of the annual scientific meeting is to ensure that health professionals who serve people with childhood onset disabilities have access to the most recent scientific evidence to inform clinical practice. The annual meeting also serves as a forum for developing collaborations between individuals and institutions resulting in collegial support for both clinical practice and multi-site research.

## Objectives

To disseminate information on new developments in applied and translational sciences, prevention, diagnosis, treatment, and technology for individuals with cerebral palsy and other childhood onset disabilities. Specifically:

- Participants will increase awareness of new and emerging treatments for individuals with cerebral palsy and other childhood onset disabilities.
- Participants will be able to identify new modalities for the diagnosis of cerebral palsy and childhood onset disabilities.
- Participants will increase interprofessional collaboration to coordinate and improve services across the continuum of care for individuals with cerebral palsy and other childhood onset disabilities across the lifespan.



## Real-world experience with a cerebral palsy genetic testing program

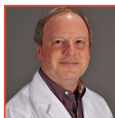
Please join our expert faculty for an educational satellite symposium

**Friday, September 23, 2022**  
12:15 PM–1:15 PM PT

**The Mirage Hotel | Event Center B**  
Lunch will be provided

### The symposium will cover the following objectives:

- **Provide** an update and overview of the PTC Pinpoint™ CP Spectrum Program
- **Explore** case studies of patients who had an underlying genetic etiology identified using the PTC Pinpoint™ CP Spectrum Program gene panel and discuss their outcomes
- **Present** initial real-world data from the PTC Pinpoint™ CP Spectrum Program



**Warren Marks, MD**  
Medical Director,  
Movement Disorders  
Medical Director,  
Motion Analysis Laboratory  
Cook Children's Medical Center  
Fort Worth, TX



**Edward Dabrowski, MD**  
Pediatric Physical Medicine  
and Rehabilitation  
Beaumont Hospital  
Grosse Pointe, MI



**Michelle Fox, MS, LCGC**  
Adjunct Associate Professor of Pediatrics  
UCLA David Geffen School of Medicine  
Los Angeles, CA  
Genetic Counselor & Consultant  
Invitae

This event is sponsored and organized by PTC Therapeutics GT, Inc. Participation is limited to healthcare practitioners only. PTC Therapeutics, Inc., is committed to complying with state laws related to our interactions with healthcare practitioners. If you are a healthcare practitioner licensed in Vermont, we may not be able to provide you with the meal offered at this reception.  
MED-US-AADC-2200064 | July 2022



## Target Audience

All health care professionals, clinicians, researchers and health administrators who service people with cerebral palsy and other childhood-onset disabilities, including: developmental and other pediatricians, neurologists, physiatrists, orthopedic and neurosurgeons, physical and occupational therapists, speech and language pathologists, orthotists, dietitians, rehabilitation engineers, kinesiologists, nurses, psychologists, special education teachers and educators. All levels of experience and skill will be addressed in the program.

## AACPDM Vision

To advance the health and well-being of all individuals with cerebral palsy and other childhood-onset disabilities.

## AACPDM Mission

Empowering and supporting a collaborative multidisciplinary community that

- provides accessible and robust scientific education for health professionals and researchers
- fosters innovative research as well as its dissemination and implementation
- advocates for equitable access to evidence based and patient centered care

## Online Self-Reporting System Information for CME/CEU/CE Credits

After the AACPDM 76th Annual Meeting, all registrants will receive an instructional email about reporting and printing out their own continuing education certificates. The online self-reporting will be open by no later than November 2022. To verify your correct email address, please visit the registration desk before you leave the meeting. Please note: In self-reporting, if you miss more than 15 minutes of a session/course, it is not considered full attendance, and cannot be claimed.

## CERTIFICATE OF ATTENDANCE

All attendees may claim a Certificate of Attendance.

## ACCREDITATION STATEMENT

In support of improving patient care, this activity has been planned and implemented by Amedco LLC and American Academy for Cerebral Palsy and Developmental Medicine. Amedco LLC is jointly accredited by the Accreditation Council for Continuing Medical Education (ACCME), the Accreditation Council for Pharmacy Education (ACPE), and the American Nurses Credentialing Center (ANCC), to provide continuing education for the healthcare team.



JOINTLY ACCREDITED PROVIDER™  
INTERPROFESSIONAL CONTINUING EDUCATION

## PHYSICIANS (ACCME) CREDIT DESIGNATION

Amedco LLC designates this live activity for a maximum of 26.75 AMA PRA Category 1 Credits™. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

## TEXAS PHYSICAL THERAPY ASSOCIATION

Before Approval: This activity has been submitted for review.

*States with reciprocity with Texas Physical Therapy*

*Association: AL, AK, AZ, CT, DE, GA, HI, ID, IN, IA, KS, KY, LA, ME, MA, MI, MN, MO, MS, NE, NH, NC, ND, OR, PA, RI, SC, SD, TN, UT, VT, VA, WA, WI, WY*

## OCCUPATIONAL THERAPISTS / OCCUPATIONAL THERAPY ASSISTANTS

The American Academy for Cerebral Palsy and Developmental Medicine is an Approved Provider of Continuing Education of the American Occupational Therapy Association (AOTA) #6379. Occupational Therapists and Occupational Therapy Assistants will be able to claim AOTA CEU's. All sessions during the AACPDM 76th Annual Meeting are available for credit. Note: The assignment of AOTA CEUs does not imply endorsement of specific course content, products, or clinical procedures by AOTA.

## NURSING CREDITS

The American Academy for Cerebral Palsy and Developmental Medicine (AACPDM) is a Provider approved by the California Board of Registered Nursing, Provider # CEP 14720. AACPDM provides contact hours. Please register the number of hours you spent in total in the AACPDM 2022 Annual Meeting courses. If you participate in 20 hours worth of course material you will earn 20 contact hours.



# Join Today!

## How can you benefit from membership in the American Academy for Cerebral Palsy and Developmental Medicine?

### Annual Meeting

An international forum for the dissemination and exchange of new knowledge, ideas and educational information between participants from all disciplines.

Each year, the Academy offers International Scholarships and Student Scholarships to members to assist with the cost of attending the Annual Meeting. Financial support for the creation of new international meetings that are related to cerebral palsy and developmental medicine is also available through the Development Grant.

### Advisor Support Program

The AACPDM Membership Committee launched an Advisor Support Program to match veteran AACPDM members with new members to ensure they get everything they can out of their membership. Advisor areas include networking, committee involvement, research and grants, international experience and more!

### eCourses

The AACPDM Education Committee launched AACPDM eCourses which are 3-4 week online, self-paced educational opportunities to earn continuing education credits (CEUs).

### Networking

Membership in AACPDM facilitates contacts between medical professionals and researchers with similar interests. This diverse group of professionals is bound together by a unified interest in improving the lives of people with cerebral palsy and childhood onset disabilities.

### Publications

Developmental Medicine and Child Neurology (DMCN) is the official journal of the AACPDM. This peer reviewed journal is recognized internationally as the leader in the field. Fellow Members receive a FREE subscription to DMCN, or they may choose to select from a list of Clinics in Developmental Medicine series books in place of the DMCN Journal.

AACPDM creates a quarterly newsletter and periodic broadcast emails about various events and activities in the industry. Members assist in developing informational materials to keep the public informed about advances in treating cerebral palsy and other developmental disabilities.

### Research

AACPDM offers the opportunity for members to apply for a Research Planning Grant. The purpose of this grant is to provide financial support to bring together investigators from geographically disparate locations, obtain statistical consultation and develop a multi-center research study plan. The goal is to provide the forum and initial planning to develop a successful grant submission for full funding through some larger agency (e.g., NIH, UCP, NIDRR, CDC, CIHR etc). The grant should focus on an important clinical question relevant to the membership of AACPDM and the involvement of a multidisciplinary team is expected.

### Website

Members can visit the Members Only section of the AACPDM website for a wide variety of information not available to non-members including Sage Award Videos, membership contact information and other educational opportunities.

### Committees

The heart of the Academy is our committees. These committees offer networking and opportunities to explore areas of deep interest with a wide range of professionals from the membership.

- Adapted Sports and Recreation
- Advocacy
- Awards
- Care Pathways
- Communications
- Complex Care
- Education
- International Affairs
- Life Span Care
- Membership
- Nominating
- Publications
- Research
- Scientific Program

## 2022 MEMBERSHIP BUSINESS MEETING AGENDA

Date: September 6, 2022

Offered virtually in the AACPD Member's Only Section of the website.

### WELCOME

Tom F. Novacheck, MD - President

Lesley Pritchard, PT, PhD - First Vice President

### COMMITTEE UPDATES

M. Wade Shrader, MD - Second Vice President

COMMITTEE	CHAIR
Adapted Sports & Recreation Chair:	Stephanie Tow, MD
Advocacy Chair:	Jason M. Edinger, DO
Awards Chair:	Eugenio A. Monasterio, MD
Care Pathways Chair:	Lynne Romeiser-Logan, PT, PhD Anna M. McCormick, MD, FRCP(C)
Communications Chair:	Ginny S. Paleg, DScPT
Complex Care Chair:	Kurtis T. Sobush, MD
Education Chair:	Amanda Sarafian, EdD, OTR/L
International Affairs Chair:	Sandra J. Hollung, PhD
Lifespan Care Chair:	Caitlin Cassidy, MD
Membership Chair:	Michele M. Tourne, PT DPT PCS
Publications Chair:	Unni G. Narayanan, MBBS, MSc, FRCS(C)
Research Chair:	Christopher M. Modlesky, PhD

### TREASURER'S REPORT

Francisco Valencia, MD - Treasurer

### QUESTIONS FROM MEMBERS

Based on survey response, in 2022 the AACPD Board voted to move the updates to a virtual setting to allow greater member participation.



American Academy  
for Cerebral Palsy and  
Developmental Medicine



## E-Poster

An E-Poster is an electronic version of the traditional paper poster in PowerPoint format, and is displayed on a monitor. In addition to traditional paper posters on bulletin boards, Scientific, Demonstration and Clinical Observation/Single Case Study Poster Presenters were also required to submit their poster as an E-Poster. There will be computer kiosks throughout the Mirage Las Vegas dedicated to E-Posters. Thank you to all the Poster Presenters who took on the extra work to participate in the Poster Preview and/or to submit an E-Poster!

## No Smoking

Smoking is prohibited at all Annual Meeting sessions and events.

## Attire

Attire for the educational sessions of the meeting is business casual. Please bring a jacket or sweater, as room temperatures may vary.

## Camera/Recording Policy

It is the policy of AACPDM that photography is not permitted in the meeting sessions, exhibit hall, or poster sessions. Please refrain from taking any photos in those locations. Audio or videotaping is strictly prohibited.

## FDA Disclaimer

Some medical devices or pharmaceuticals not cleared by the FDA or cleared by the FDA for a specific use only may be used "off-label" (i.e., a use not described on the product's label) if, in the judgment of the treating physician, such use is medically indicated to treat a patient's condition. "Off label" uses of a device or pharmaceutical may be described in AACPDM educational programs or publications so long as the lack of FDA clearance for such uses is also disclosed. Results from scientific studies known to the author or presenter relating to the described intended use should be discussed, if so doing will not adversely affect the study or violate some other regulatory requirement. Some drugs or medical devices described or demonstrated in Academy educational materials or programs have not been cleared by the FDA or have been cleared by the FDA for specific use only. The FDA has stated that it is the responsibility of the physician to determine the FDA clearance status of each drug or device he or she wishes to use in practice.

## Americans with Disabilities Act

The AACPDM wishes to ensure that no individual with a disability is excluded, denied services, or otherwise treated differently than other individuals because of the absence of auxiliary aides and services. If you need any auxiliary aids or services identified in the Americans with Disabilities Act please notify AACPDM at least 14 working days prior to the program to allow time to acquire the support needed.

### SESSION EVALUATIONS

We need your feedback! As a dedicated learner during the AACPDM 76th Annual Meeting we truly value your feedback on the individual sessions, general sessions as well as the overall meeting experience. The future leadership of the AACPDM uses this information to improve on the future educational offerings and to make your experience the most productive and realistic in bringing back practical information to your practice.

Please take a moment to provide your feedback on the AACPDM 76th Annual Meeting in the following ways:

- The Annual Meeting website will include access to the online survey tool to complete various session evaluations.
- Participants will be asked to provide input on the educational program of the AACPDM 76th Annual Meeting through the online CME / CEU Claim System when claiming credit for participation.

## Insurance/Liabilities and Disclaimer

The AACPDM will not be held responsible for injuries or for loss or damage to property incurred by participants or guests at the Annual Meeting, including those participating in social and fitness events. Participants and guests are encouraged to take out insurance to cover loss incurred in the event of cancellation, medical expenses, or damage to or loss of personal effects when traveling outside of their own country. The AACPDM cannot be held liable for any hindrance or disruption of Annual Meeting proceedings arising from natural, political, social or economic events, or other unforeseen incidents beyond its control. Registration of a participant implies acceptance of this condition. The material presented at this continuing medical education activity is made available for education purposes only. The material is not intended to represent the only, nor necessarily the best, methods or procedures appropriate for the medical situations discussed, but rather is intended to present an approach, view, statement, or opinion of the faculty that may be helpful to others who face similar situations.



## Disclosure

The presenting authors on the Free Papers and Posters are underlined. All corresponding authors were responsible for querying the co-authors regarding the disclosure of their work. The AACPDm does not view the existence of these disclosed interests or commitments as necessarily implying bias or decreasing the value of the author's contributions in the course. To follow ACCME guidelines the Academy has identified the options to disclose as follows:

- a. Research or institutional support has been received
- b. Miscellaneous, non-income support (e.g., equipment or services), commercially derived honoraria, or other non-research related funding (e.g., paid travel) has been received
- c. Royalties have been received
- d. Stock or stock options held
- e. Consultant or employee
- f. Received nothing of value
- g. Did not respond or unable to contact

One or more of these letters appears by each author's name indicating their disclosure. Please see the Disclosure Index at the back of the program.

## Registration Desk and Speaker Ready Room Hours

Tuesday, September 20	5:00 pm – 7:00 pm
Wednesday, September 21	7:00 am – 7:00 pm
Thursday, September 22	6:30 am - 6:00 pm
Friday, September 23	6:30 am – 6:00 pm
Saturday, September 24	6:45 am – 2:00 pm

Registration will be located at Registration Desks 4 and 5 in the Rotunda.

The Speaker Ready Room is located in Andros A — there will be a technician available during the designated hours to assist.



## 2022 Scientific Program Overview

This year's program was developed from a submission total of 402 abstracts. All electronically submitted abstracts were independently rated by the multidisciplinary scientific program committee of 27 members. The committee met in March 2022 to review the abstract ratings and finalize the program. Scientific posters and free papers were masked to authors and rated on research question/objectives, design, methodology, conclusions and relative impact, relevance and importance to the care and treatment of children with childhood onset disabilities. Mini Symposia were rated (unmasked) on course objectives, content, presenters and level of impact, relevance and importance to conference attendees and the AACPDM membership at large. The feedback from the previous year's evaluations were utilized in the process of creating the program with the aim of meeting the needs of meeting attendees.

### The 2022 program includes:

- 5 Pre-Conference Sessions
- 25 Morning Seminars
- 36 Mini Symposia
- 120 Scientific Papers
- 99 Scientific Posters
- 32 Demonstration Posters
- 16 Clinical Observation/Single Case Study Posters

### SCIENTIFIC REVIEW PROCESS

- Masked abstracts submitted electronically
- Abstracts are scored independently by the program committee with scores submitted electronically and then tallied/averaged
- Highest scored abstracts are selected
- Program Committee meets in March to make final decisions re: scientific program planning and to ensure that the program is balanced in content.

### Free Papers and Posters are rated on:

- Research Question/Objectives
- Research Design, Methodology
- Impact, Relevance & Importance

### Mini Symposia are rated on:

- Course Objective
- Content/Presenters
- Impact, Relevance & Importance

### Morning Seminars are rated on:

- Course Objective
- Content/Presenters
- Impact, Relevance & Importance

## Scholarships

The American Academy for Cerebral Palsy and Developmental Medicine Scholarship Program supports the mission of the AACPDM to improve the health and general status of children and adults with cerebral palsy, developmental disorders and childhood acquired disabilities. The Academy seeks international applicants who are highly motivated, currently in clinical practice, and who are in a position which will enable them to disseminate knowledge acquired at the meeting to others in their home country once they return. Particular emphasis is placed on assisting those from areas with under supported medical systems and limited financial resources. The AACPDM also awards scholarships to students each year so that they may attend the Annual Meeting.

### Grant Awards

A key mission of the Academy is to promote excellence in research for the benefit of persons with cerebral palsy and childhood-onset disabilities. One way in which the Academy promotes research is through the annual Research Grants. Historically, the AACPDM has partnered with the Pedal with Pete Foundation, the Center for Progress, and the Cerebral Palsy Alliance Research Foundation to fund multiple grants, up to \$25,000 USD each! Areas of research should focus on topics related to cerebral palsy.

Research grant funding supports high-quality, clinical research projects/programs. The award may be used to fund planning for a project or to complete a small research project of high impact in any area relevant to the AACPDM's mission. The successful applicant will have a solid track record in childhood-onset disability research.

The Principal Investigator on the grant must be an AACPDM member in good standing. Only one grant application per member will be considered in a given budget year.



## General Session Speakers

### **Gayle G. Arnold Lecture: Brain Health in the Neonate: From Connectome to Home**

Gayle G. Arnold Lecture supported in part by an unrestricted grant from Children's Hospital Foundation

#### **Steven Miller, MDCM, MAS, FRCPC**



Dr. Steven Miller, MDCM, MAS, FRCPC, is Head and Professor of the UBC Department of Pediatrics and the Chief of Pediatric Medicine at BC's Children Hospital & Sunny Hill Health Centre in the Provincial Health Services Authority. He holds the Hudson Family Hospital Chair in Pediatric Medicine and James & Annabel McCreary Chair in

Pediatrics, and was previously a Canada Research Chair in Neonatal Neuroscience.

Leading a multidisciplinary team, his research program focuses on better understanding of how intensive care impacts brain development and injury in the newborn. He and his team use advanced brain imaging and detailed long term follow-up to help children who were born early or with conditions that put them at risk of neurological and developmental deficits. He has contributed to our understanding of brain abnormalities caused directly by preterm birth, perinatal asphyxia or indirectly by congenital heart disease. The ultimate goal of his team's work is to promote strategies to prevent brain injury and to promote recovery from brain injury with the ultimate goal of improving the lifelong health of children and their families. He is passionate about supporting the career development of early-career child health researchers and served as President of the Society for Pediatric Research.

### **Presidential Guest Lecture: Life Reimagined: One Journey as a Patient and Physician**

#### **Paige T. Church, MD**



Dr. Church has been an associate professor in the Department of Paediatrics at the University of Toronto and on staff at Holland Bloorview Kids Rehabilitation Hospital and Sunnybrook Health Sciences Centre and is shifting this fall to Harvard Medical School, the Beth Israel Deaconess Medical Center and Children's Hospital.

She is a graduate of the University of Vermont College of Medicine. Her pediatrics training was completed at the University of Chicago, focusing on inner city medicine and complex care. She then completed a combined fellowship in Neonatal-Perinatal Medicine and Developmental Behavioral Paediatrics at Tufts University School of Medicine in Boston. She is board certified through the American Board of Pediatrics in both Neonatal-Perinatal Medicine and

Developmental Behavioral Pediatrics and focuses on the care of infants born with brain or spinal cord injuries.

### **Presidential Guest Lecture: Advancing Equity and Resilience in the Recovery from the COVID-19 Pandemic**

#### **Monica Schoch-Spana, PhD**



Dr. Monica Schoch-Spana, a medical anthropologist, is Senior Scholar with the Johns Hopkins Center for Health Security and Senior Scientist with the Department of Environmental Health and Engineering at the Johns Hopkins University Bloomberg School of Public Health. For over 20 years, she has conducted research on public

health emergency management, focusing on community resilience, behaviorally realistic emergency plans, public engagement in disaster planning, post-epidemic recovery, and crisis and emergency risk communication. She has also worked diligently to translate scholarly research into actionable recommendations for policymakers and practitioners, including most recently as co-Principal Investigator for CommuniVax – a national ethnographic research coalition whose expert advisory group and 6 local teams are partnering with communities of color to tackle COVID-19 vaccine access and acceptance issues and to put equity at the center of the pandemic recovery process. National advisory roles include the Homeland Security Subcommittee of the Board of Scientific Counselors for the US Environmental Protection Agency and the Resilient America Roundtable of the National Academies of Sciences, Engineering and Medicine, which she formerly co-chaired. From 2003-2017, Dr. Schoch-Spana worked at the UPMC Center for Health Security; prior to that, at the Johns Hopkins University Center for Civilian Biodefense Strategies, starting in 1998. She received her PhD in cultural anthropology from Johns Hopkins University.

### **Presidential Guest Lecture: Exploring Beautiful Asymmetry: A Dancer with CP Speaks**

#### **Jerron Herman**



Jerron Herman (Guest Speaker, Dancer) is a disabled dancer and writer who creates works to facilitate welcoming. He has premiered pieces at Danspace Project, Performance Space New York, The Kennedy Center, and The Whitney Museum. Jerron's most recent work VITRUVIAN premiered live at Abrons Arts Center in May with a digital

release in July. He curated the speaking series Access Check 2.0: Mapping Accessibility for the Shelley & Donald Rubin Foundation from 2019-2020 and Discourse: Disabled Artists at The Joyce for The Joyce Theater in 2021. Jerron has also

## General Session Speakers - Continued

served on the Board of Trustees at Dance/USA since 2017, most recently as Vice Chair. His writings on arts and culture have been published in the US and internationally and most recently his play, *3 Bodies*, was published in Theater Magazine's May/June 2022 issue. During the Spring 2022 semester Jerron was also the Artist/Scholar in Residence at Georgetown University, facilitating student engagement with Art and Disability. As a model and advocate, Jerron has worked with Chromat, Tommy Hilfiger, Cerebral Palsy Foundation, and Nike. Other accolades include a 2021 Grants to Artists Award from the Foundation for Contemporary Arts and a 2021-2022 Jerome Hill Artist Fellowship in Dance from the Jerome Foundation. The 2021 PETRONIO Award and residency as well as a 2020 Disability Futures Fellowship by the Ford Foundation and the Andrew W. Mellon Foundation. [Jerronherman.com](http://Jerronherman.com).

### **Chambers Family Lifespan Lecture: Participation - Make It Matter!**

**Terri Hancharick**



Terri Hancharick lives in Delaware and is the mother of a woman, 35 years old, with cerebral palsy. The birth of her daughter altered Terri's world view and since that time she has devoted her life to service delivery and advocacy for people with disabilities. She is currently the Chairperson of the State Council for Persons with Disabilities in Delaware

and also serves on the Executive Board of the Delaware Developmental Disabilities Council as the Chair of the Outreach and Advocacy Committee. Terri is also the current chairperson of the Advisory Council for the Delaware Division of Developmental Disabilities Services. She is co-founder of C.E.R.T.S. Adult Action Centers, which support adults with multiple severe disabilities as they transition from school to adult life in Delaware. She also is co-founder and President of the Board of Directors of Endless Possibilities in the Community (EPIC) in Delaware, an inclusive program which specializes in personalized health and wellness activities and self-determined community participation by persons with intellectual/developmental disabilities, as well as people with physical disabilities. Prior to these responsibilities, Terri worked as a research associate in the Center for Disabilities Studies at the University of Delaware. Terri Hancharick is the immediate past Chairperson of the Governor's Advisory Council for Exceptional Citizens. She also has served as past Co-Chair of the State Transition Task Force for Emerging Adults with Disabilities and Special Healthcare Needs and on the Executive Boards of United Cerebral Palsy of Delaware and Art Therapy Express Program. She is also a past recipient of the "Custie award", which recognizes major achievements arising from sustained and significant effort than can be shown to have manifestly improved the lives or prospects of one or more classes of Delaware citizens with disabilities or families of such individuals. She is married with 6 children, ages 21-46.

### **Jen Lyman, MS**



Jen Lyman has a background as a recreational therapist and case manager serving children and adults with developmental, acquired, and psychiatric disabilities. She holds an M.S. from University of Florida's College of Health and Human Performance in Therapeutic Recreation, has a post-graduate certificate in Conductive Education,

and is a certified yoga instructor with a specialty in yoga for brain injury. She is the parent of 17-year-old, Bower, who has complex, quadriplegic cerebral palsy, including visual and communication impairments.

Jen is currently the Resource Content Manager for Cerebral Palsy Resource website, a product of the Cerebral Palsy Foundation, has a podcast called Cerebral Palsy Health, and might be recognized as the voice behind the AACPDM Past President and Trailblazer interviews. She is a current member and past chair of the AACPDM Community Council. She lives in New Orleans with her husband, Chris, Bower, and their golden retriever Everest.

### **Mac Keith Press Basic Science Lecture: Precision Medicine Therapeutics and Rehabilitation Engineering Approaches for Functional Restoration of Duchenne Muscular Dystrophy Across the Lifespan** **Craig McDonald, MD**



Craig McDonald, M.D. is a Professor of Pediatrics and Physical Medicine and Rehabilitation, and Chair of the Department of Physical Medicine & Rehabilitation at UC Davis. He is an internationally recognized expert in the clinical management, rehabilitation, and precision therapeutics for children and adults with muscle diseases. He has been a

pioneer in the development of novel outcome measures for clinical trials focused on disabled populations. He is widely known for his expertise in the treatment and evaluation of children and young adults with Duchenne muscular dystrophy (DMD). Dr. McDonald serves as Director and Principal Investigator of the UC Davis NINDS-funded site in the NeuroNEXT Neurosciences Clinical Trials National Consortium (one of two NeuroNEXT sites on the West Coast). Dr. McDonald's research has focused on novel clinical endpoint development in neuromuscular diseases, and he has conducted natural history studies in muscular dystrophies using novel outcomes measures developed for clinical trials. His work has led to the identification of genetic polymorphisms and biomarkers predictive of clinical disease progression. He leads the international Cooperative International Neuromuscular Research Group (CINRG) Duchenne Natural History Study which has made seminal



## General Session Speakers - Continued

contributions to the elucidation of the natural history of DMD, and validation of the clinical endpoints now used in clinical trials of DMD throughout the world. He is involved in gene therapy and cell-based therapy trials in DMD across the lifespan. Dr. McDonald was the 2019 recipient of the Association of Academic Physiatrists Carolyn Braddom Ritzler Research Award for the research that has had a profound impact on the science and practice of PM&R in terms of clinical care, policy, and/or research direction. In addition, in 2019 he received the Distinguished Researcher Award by American Association of Neuromuscular and Electrodiagnostic Medicine (AANEM). Dr. McDonald has over 200 peer-reviewed publications and he has been a recipient of over \$30 million in federal grant and industry support over the past 15 years. He is board-certified in the subspecialties of pediatric rehabilitation medicine and neuromuscular medicine.



## 2022 Virtual Community Forum

Released September 15-18, 2022

### ON-DEMAND

Offered by the American Academy for Cerebral Palsy and Developmental Medicine (AAPDM), the 2022 Virtual Community Forum is a FREE educational event for individuals with cerebral palsy, other childhood disabilities, and their families or caregivers.

The AAPDM Community Forum provides an opportunity to hear from clinicians and researchers on a variety of important topics that affect both children and adults; and to exchange ideas and questions about new cerebral palsy research and medical advances.

Please register for the forum by visiting here:  
<http://www.aacpdm.org/get-involved/community-forum>

You can also scan this code:



## EDUCATING STUDENTS with CEREBRAL PALSY: A COMPREHENSIVE GUIDE FOR EDUCATORS and PARENTS

ADINE RAY USHER, EdD

Foreword by  
Richard Ellenson

**Why are many educators and parents confounded by the multiple and often interrelated conditions of cerebral palsy, the most common physically disabling condition affecting school-age students?**

There is a pressing need to *demystify* and *carefully explain* those neurologically-based elements that make up a diagnosis of cerebral palsy.

Using *easy-to-follow language*, this book details how the physical, health, sensory, cognitive and social-emotional elements of cerebral palsy often impacts teaching and learning. The book, that also includes *the voices of students and parents*, emphasizes the need for *full school team collaboration* in educating students with cerebral palsy.

Dr. Usher and her seasoned, contributing writers, offer research and experience-based recommendations for modified, adaptive and customized interventions that *aim to reduce or circumvent cerebral palsy-related barriers to learning*. Furthermore, these interventions foster improved *student progress*, promote greater *student independence* and enhance the *quality of a student's life*.

**Small Batch Books, Amherst, MA**  
**Available, Fall 2022 on Amazon**

### From Those Who Educate and Raise Students With Cerebral Palsy...

"Your book is beyond needed and anticipated by teachers, parents and students" *Verna Hart, MA*, deceased, Wilmington, Delaware: Acclaimed artist, college instructor and the parent of two children with cerebral palsy

"Teachers need information about cerebral palsy and must understand and develop the ability to relate observed behavior or lack of anticipated behavior, to a damaged but still developing brain. I suspect that Dr. Usher's book will go a very long way to addressing this need." *Mary E. Lane, M.D.*, Retired, Family Medicine, Tarrytown, NY and Director of Women and Youth Services, Department of Health, Westchester County, NY

"My son Brandon has cerebral palsy. Educators and administrators at all levels need to understand this condition, its unique complexities, its impact on him both educationally and socially in order to plan an appropriate educational program. I wish that we had had access to a resource like this when Brandon started his educational career." *Sue Adams*, Family Nurse Practitioner, and parent. Scarsdale, NY

## AACPDM Awards

### FRED P. SAGE AWARD

#### 2022 RECIPIENT: TRACY PICKAR

**ADAPT Community Network for the project entitled, "Start Here"**

The Sage Award is given to the best audio/visual submission presenting clinical, research, or educational material on CDROM, DVD or in a digital format. The award is named after Fred Sage, MD, Past President (1981) and Chairman of the A/V Committee of the AACPDm. Dr. Sage envisioned the great potential of audiovisual use in the Academy. He advocated for ways to popularize this method of teaching, and this interest eventually lead to the Fred P. Sage Award for the best program submitted each year.

#### MAC KEITH PRESS PROMISING CAREER AWARD RECIPIENT 2022 RECIPIENT: TO BE ANNOUNCED

Mac Keith Press sponsors this award for the best Free Paper or Scientific Poster by an author who is within four years of completion of training and commencement of current career. The award recipient must be a member of the AACPDm or have an application pending. The recipient is selected by the Awards Committee on site and awarded after the Annual Meeting.

#### 2022 GAYLE G. ARNOLD AWARD FOR THE BEST SCIENTIFIC PAPER

Karl L. Jancart, M.S.Ed.; Iryna Babik, PhD; Andrea Baraldi Cunha, PhD; Natalie Koziol, PhD; DONGHO CHOI, BA; Regina T. Harbourne, PT, PhD; Michele A. Lobo, PT, PhD; Sarah Westcott McCoy, MPT, PhD; Sandy L. Willett, PhD; Stacey C. Dusing, PhD, PT; James Bovaird, PhD

Early versus late reaching mastery's effect on object permanence in infants with motor delays receiving START-Play and usual care-early intervention

The 2022 Gayle G. Arnold Award is selected from a set of abstracts by the Awards Committee. Then the authors are invited to submit a manuscript for final judging. The award of \$2,000 is provided by the Children's Hospital in Richmond, Virginia. The editors of Developmental Medicine and Child Neurology Journal request to have first option on publication of this winning paper, as long as the authors comply with the publishing requirements of Mac Keith Press.

#### BEST SCIENTIFIC POSTER AWARD RECIPIENT 2022 RECIPIENT: TO BE ANNOUNCED

Each year, AACPDm awards the Best Scientific Poster Award. The award recipient is selected as the highest rated poster from all committee member ratings.

#### BEST DEMONSTRATION POSTER AWARD RECIPIENTS 2022 RECIPIENT: TO BE ANNOUNCED

The AACPDm awards the Best Demonstration Poster Award. The award recipient is selected by popular vote during the Annual Meeting.

#### 2022 MENTORSHIP AWARD

Stacey C. Dusing, PT, PhD, FAPTA  
University of Southern California

### 2022 CORBETT RYAN PATHWAYS PIONEER AWARD

Jerron Herman

### 2022 DUNCAN WYETH AWARD

Sarah Albus

Co-founder and Executive Director, Open Door Sports Inc.

### 2022 LIFETIME ACHIEVEMENT AWARD

Johanna Darrah, PT, PhD

### SCHOLARSHIP WINNERS

Through the generosity of the American Academy for Cerebral Palsy and Developmental Medicine, our donors, partners and corporate sponsors, the AACPDm is proud to offer Annual Meeting Scholarships to AACPDm members in good standing. Three types of scholarships are offered for each year's Annual Meeting: International, Student, and OrthoPediatrics®.

#### International Travel Scholarship Winners

Buddhika J. Senevirathne, PT

Dr. M. De Las Mercedes Ruiz Brunner

Vikas Trivedi, MBBS, MS,DNB,FACS

#### OrthoPediatrics Scholarship Winners

Rohan Parwani

Paula Silva De Carvalho Chagas, PhD

Christa M. Diot, MSc, PKin

Ginny S. Paleg, DScPT

Gaela Marie Kilgour, MHSC, BPhEd, BPhy

#### Student Scholarship Winners

Sarah Creveling

Manjula Manikandan

Beatriz H. Brugnaro

Rose U. Elekanachi, MSc, PhD(c)

Hannah R. Bergwell, BS, BA

Dalina M. Delfing, MSc

Morgan Busboom, PT, DPT

Ross P. Wohlgemuth, MS

Saihari S. Dukkpati, MSc

Cara Nania, BA (hons)

Siobhan M. McCormack, MB MCh BAO MRCPI MSc

Ellen Sutter, PT, DPT

Radhika Attal

Aanchal R. Sarawgi, Post-graduate

Shailesh Satyanarayana Gardas

Jessica Youngblood

Rebecca M. Molinini, DPT

Paul Y. Yoo, MSc, OT

Ketaki Inamdar, Doctoral Candidate



## AACPDM Awards

### 2022 GRANT RECIPIENTS

A key mission of the Academy is to promote excellence in research for the benefit of persons with cerebral palsy and childhood-onset disabilities. One way in which the Academy promotes research is through the annual Research Grants. Historically, the AACPDm has partnered with the [Pedal with Pete Foundation](#), the [Center for Progress](#), and the [Cerebral Palsy Alliance Research Foundation](#) to fund multiple grants, up to \$25,000 USD each! Areas of research should focus on topics related to cerebral palsy.

Research grant funding supports high-quality, clinical research projects/programs. The award may be used to fund planning for a project or to complete a small research project of high impact in any area relevant to the AACPDm's mission. The successful applicant will have a solid track record in childhood-onset disability research.

The Principal Investigator on the grant must be an AACPDm member in good standing. Only one grant application per member will be considered in a given budget year.



#### CPARF Funded

Zeyan Liew, PhD at the Yale School of Public Health  
*Environmental and Biologic Markers for Cerebral Palsy*

#### Pedal with Pete Funded

Rachel L. DiFazio, PhD, RN, PNP at Boston Children's Hospital  
*Development of a Clinical Prediction Model for Predicting Post-operative Complications in Children with Cerebral Palsy*

Elizabeth R. Boyer, PhD, Gillette Children's Specialty Healthcare  
*Baseline muscle properties of individuals with cerebral palsy*

#### C - PROGRESS Funded

Samuel T. Nemanich, PhD, MSCI at Marquette University  
*Corticospinal organization and bimanual coordination in children with hemiparesis*

Sudha Madhav Srinivasan, PhD at the University of Connecticut  
*Effects of a novel, child-friendly, home-based training program using joystick-operated ride-on-toys on affected arm function and spontaneous use in children with hemiplegic Cerebral Palsy (CP): A pilot study.*

Kathleen Friel, PhD, Burke Neurological Institute  
*Spinal Reflex Conditioning to Decrease Spasticity and Improve Motor Function in Adults with Spastic Cerebral Palsy*

Rachel L. Bican, PT, DPT, PhD at Ohio University  
*Feasibility of clinical recommendations for post-operative physical therapy and functional outcomes after selective dorsal rhizotomy*

## Program & Events — Wednesday, September 21, 2022

WEDNESDAY

8:30 am - 11:30 am PDT

### AACPDM Committee Meetings

8:00 am - 12:00 pm PDT

#### Pre-Conference Sessions

##### PC1: Establishing a Research Program Focused on Cerebral Palsy or Other Child-Onset Developmental Disabilities: Transitioning from an Early-Stage to an Independent Investigator

*Christopher M. Modlesky, PhD, Kristie F. Bjornson, PT, PhD, MS, Rachel Byrne, PT, Michael C. Kruer, MD, Nathalie L. Maitre, MD, PhD, Noelle G. Moreau, PT, PhD*  
Member: \$100 Non-Member \$125

Location: Event Center C1

##### PC2: Schools as Members of the Complex Care Team

*Irene Dietz, MD, Claire Wallace, PhD, Kurtis T. Sobush, MD, Rajashree Srinivasan, MD, Laura Owens, MD, Karen Stoiber, PhD*

Member: \$100 Non-Member \$125

Location: Event Center C2

##### PC3: From Evidence to Implementation: Resistance Training Programs for Children with Cerebral Palsy and Other Neuromotor Conditions

*Nicole Harris, MPT, PCS, BOCO, James B. Hedgecock, PT, DPT, PCS*

Member: \$100 Non-Member \$125

Location: Event Center C3

1:00 pm - 5:00 pm PDT

#### Pre-Conference Sessions

##### PC4: Hammersmith Infant Neurological Examination for Telehealth: A Developmental Surveillance Tool

*Nathalie Maitre MD, PhD, Sarah L. Winter, MD, Lauren Ayala, DPT*

Member: \$100 Non-Member \$125

Location: Event Center C1

##### PC6: Using Gait Analysis to Guide Your Treatment: A Flipped Classroom Exercise

*Robert Kay MD, Jon R. Davids MD, Amanda T. Whitaker MD, Kirsten Tulchin-Francis PhD, Amy Barbuto DPT, Ryan Hartman DPT, Kathryn A. Keeler MD, Carole A. Tucker PT, PhD, Karen Kruger PhD, Lane L. Wimberly MD, Sylvia Ounpuu MSc, Susan Rethlefsen PT, DPT, Christina Bickley PT, PhD, BOCO, Vedant Kulkarni MD, Jason Rhodes MD, Kristan Pierz MD*  
Member: \$100 Non-Member \$125

Location: Event Center C2

1:00 pm - 5:00 pm PDT

#### Board of Directors Meeting

5:30 pm - 6:00 pm PDT

##### Scholarship Recipient and New Member Meet and Greet

Location: Event Center A

First ever opportunity to mingle with committee leadership and learn more about their work, expand your AACPDN network, and explore increased engagement with the Academy. Each committee will be represented.

6:00 pm - 7:00 pm PDT

#### Welcome Reception

Location: Event Center A

Join us in the Poster/Exhibit Hall to kick off the meeting in style with a dance performance from Jerron Herman!



7:00 am - 8:00 am PDT

### Continental Breakfast in the Exhibit Hall

Location: Event Center A

8:00 am - 9:30 am PDT

### General Session

Location: Event Center B

#### Open Business Meeting

#### Opening Address and Gavel Exchange

*Tom F. Novacheck, MD to Lesley Pritchard, PhD, PT*

#### Gayle G. Arnold Lecture: Brain Health in the Neonate: From Connectome to Home

Gayle G. Arnold Lecture supported in part by an unrestricted grant from Children's Hospital Foundation  
*Steven Miller MDCM, MAS, FRCPC*

#### Presidential Guest Lecture: Life Reimagined: One Journey as a Patient and Physician

*Paige T. Church MD*

9:30 am - 9:45 am PDT

### Let's Move! - Aerobics

*Hassan Farah*

Location: Registration Foyer

Take a quick energizing break by joining us for a bit of aerobic exercise!

9:45 am - 11:30 am PDT

### Free Paper Session A: Early Intervention and Development I

Location: Event Center C1

9:45 am - 9:52 am PDT

#### A1: Keypoint Detection to Analyze Infant General Movements

*J. Vince Pulido PhD, Anvesh Mylavarapu BS, Santina Zanelli MD, Lisa Letzkus PhD*

9:53 am - 10:00 am PDT

#### A2: Measuring Problem-Solving in Infants Two to Nine Months Adjusted Age

*Rebecca M. Molinini DPT, Kayla Bowler BA, Ketaki Inamdar MS, PT, Emily C. Marcinowski PhD, Claire Rhee, Tanya Tripathi PhD, Arya P. Salgaonkar MPT, Stacey C. Dusing, PhD, PT*

10:01 am - 10:08 am PDT

#### A3: Early Detection of Cerebral Palsy Among a High-Risk Cohort in Low Resource Settings

*Tasneem Karim MBBS, MPH, Anna te Velde B.App.Sci (Physio), Saifuddin Ahmed, Mohammad Shafiu Islam, Catherine Morgan B.App.Sci (Physio), PhD, Iona Novak BAppSc, MSc Hons, PhD, Gulam Khandaker MBBS, MPH, DCH, PhD, FAFPHM, Nadia Badawi MBBCh (Hons I), DCH, MSc, PhD, FRCPI, FRACP*

10:09 am - 10:16 am PDT

#### A4: Optimizing Early Identification of Cerebral Palsy Using the General Movements Assessment: A Quality Improvement Initiative

*Gretchen Mueller DPT, Karen Harpster PhD, Elizabeth Rick OTR/L, Cari Oakes OTR/L, Kelly McHugh DPT, Elizabeth Manford OTR/L, Ashley Pinger DPT*

10:17 am - 10:24 am PDT

#### A5: Performance of The General Movement Assessment and Hammersmith Infant Neurological Evaluation in Tandem to Identify Early Asymmetries and Provide More Comprehensive Guide for Intervention

*Christa Weigel PT, DPT, PCS, Alison Goetzeluck PT, DPT, PCS, Lynn Boswell PT, MS, Jordan Avery BA, Mary Kay Santella PT, Raye-Ann DeRegnier MD*

10:35 am - 10:42 am PDT

#### A6: Using the Center of Pressure Movement Analysis in Evaluating Spontaneous Movements in Infants: A Comparative Study with General Movements Assessment

*Halil Celik PhD, Ayse Yildiz MSc, Ramazan Yildiz MSc, Akmer Mutlu PhD, Abdullah Ruhi Soyulu PhD, Kerem Gullu BA, Kivilcim Gucuyener PhD, Aysu Duyan Camurdan PhD, Esin Koc PhD, Eray Esra Onal PhD, Bulent Elbasan PhD*

10:43 am - 10:50 am PDT

#### A7: The BRIGHT Coaching Program for Caregivers of Children with Emerging Developmental Delays: Perspectives, Satisfaction with, and Reported Impacts of the Program

*Tatiana Ogourtsova PhD OT, Annette Majnemer PhD, Maureen O'Donnell MD MSc, Jillian Filliter PhD, Kristy Wittmeier PhD PT*

10:51 am - 10:58 am PDT

#### A8: Developmental Characteristics of Under-5 Children in Southwestern Nigeria: A Pointer to the Need for Early Detection and Intervention

*Oluwatosin Olorunmoteni MBBS, Adeleye Adeomi MBBS, Patricia Nwoku MBBS*

10:59 am - 11:06 am PDT

#### A9: Early Versus Late Reaching Mastery's Effect on Object Permanence in Infants with Motor Delays Receiving START-Play and Usual Care-Early Intervention

*Karl Jancart MEd, Iryna Babik PhD, Andrea Baraldi Cunha PhD, Natalie Koziol PhD, Dongho Choi BA, Regina Harbourne PT, PhD, Michele Lobo PT, PhD, Sarah Westcott McCoy MPT, PhD, Sandy Willett PhD, Stacey Dusing PhD, PT, James Bovaird PhD*

11:07 am - 11:14 am PDT

#### A10: Bayley Trajectories Predict School Readiness Better Than Single Assessments in 4-5 Year-Old Children Born Very Preterm

*Mary Lauren Neel MD, MSCI, Sara Conroy PhD, Rachelle Srinivas BS, Hudson (Gerry) Taylor PhD, Aryanne De Silva PhD, Tyler Busch BA, Nathalie Maitre MD, PhD*



## Free Paper Session B: Medical Complexity

Location: Event Center C2

9:45 am - 9:52 am PDT

### B1: Cardiometabolic Disease Risk in Children with Cerebral Palsy

*Trevor Batson MS, Junsoo Lee BS, Joseph Kindler PhD, Norman Pollock PhD, Mary Barbe PhD, Christopher Modlesky PhD*

9:53 am - 10:00 am PDT

### B2: Developing a Common Dataset for Children with Severe Neurological Impairment – A Scoping Review of Relevant Variables

*Siobhan McCormack MB, BCh, BAO, MRCPI, MSc, Aedin Collins MB, BCh, BAO, MRCPI, MSc, Aoife Mahony MB, BCh, BAO, MRCPI, Nicholas Allen MB, BCh, BAO, FRCPI, PhD, Joanne Balfe MB, BCh, BAO, FRCPI, MSc, Denise McDonald MB, BCh, BAO, FRCPI, MD*

10:01 am - 10:08 am PDT

### B3: Examining the Role of Sublingual Atropine for the Treatment of Sialorrhea in Patients with Neurodevelopmental Disabilities: A Retrospective Review

*Kayla Petkus PharmD, BCACP, Ashleigh Groves, Laurie Glader MD, FAAP*

10:09 am - 10:16 am PDT

### B4: Gastroesophageal Reflux Disease in Children with Neurological Impairment: A Population-Based Retrospective Cohort Study

*Tammie Dewan MD, MSc, David Johnson MD, Brendan Lethebe MSc, Justine Turner MD, PhD*

10:17 am - 10:24 am PDT

### B5: Identifying Factors of Family Psychosocial Risk in Cerebral Palsy

*Elizabeth Gilleooly BS, Michele Scialla MSN, Alison Taggi Pinto MEd, Carrie Sewell-Roberts MSW, Anne Kazak PhD, Melissa Alderfer PhD, M. Wade Shrader MD*

10:35 am - 10:42 am PDT

### B6: Impact of Comorbidities on the Health-Related Quality of Life of Children with Severe Cerebral Palsy

*Unni Narayanan MBBS, MSc, FRCS(C), Veronica Grad HBSc, Darcy Fehlins MD, Ashley Ferkul BSc, Kerr Graham MD*

10:43 am - 10:50 am PDT

### B7: Medication Use and Polypharmacy Trajectories Among Children with Cerebral Palsy

*Jessica Prunte MD, Daunter Alecia MD, Daniel Whitney PhD*

10:51 am - 10:58 am PDT

### B8: Parent and Nurse Perspectives on Promoting Successful Partnerships for Children with Ventilator Dependence

*Sarah Sobotka MD, MSCP, Emma Lynch MPH, Danielle Hoffman BS, Kim Whitmore PhD*

10:59 am - 11:06 am PDT

### B9: Reduction of Emergency Room Utilization for Children with Medical Complexity and Dehydration-Related Illness - Use of "Interventions for Complex Kids You Can Do at Home" (ICKY) Plans

*Erin Hooper APRN, Juanita Allmon RN, Kathleen Carter MS, RD, CSP, Kurtis Sobush MD*

11:07 am - 11:14 am PDT

### B10: The Development and Sensibility Evaluation of the CPCHECKList© – A Comorbidity Index for Severe Cerebral Palsy

*Unni Narayanan MBBS, MSc, FRCS(C), Veronica Grad HBSc, Laurie Glader MD, FAAP, Darcy Fehlins MD, Paul Gross BA, Ashley Ferkul BSc*

## Free Paper Session C: Pathophysiology and Neuroplasticity

Location: Event Center C3

9:45 am - 9:52 am PDT

### C1: Persons with Cerebral Palsy with Less Sensorimotor Cortical Flexibility Might Be More Susceptible to Distracting Visual Stimuli

*Morgan Busboom DPT, Rashelle Hoffman DPT, PhD, Rachel Spooner PhD, Brittany Taylor PhD, Sarah Baker MA, Michael Trevarrow PhD, Tony Wilson PhD, Max Kurz PhD*

9:53 am - 10:00 am PDT

### C2: Altered Cortical Oscillations During Visuomotor Integration in Children with Hemiplegic Cerebral Palsy

*Yanlong Song PhD, Emily Brock BA, Shannon Conrad MS, Sameer Allahabadi BS, Stephanie Acord MD, Yvette Johnson MD, Warren Marks MD, Christos Papadelis PhD*

10:01 am - 10:08 am PDT

### C3: Visual Attention in Cerebral Visual Impairment: Relationship with Visual Attention Neural Networks

*Corinna Bauer PhD, Zahide Pamir PhD, Claire Manley BA, Marie Drott MS, Peter Bex PhD, Lotfi Merabet PhD, OD*

10:09 am - 10:16 am PDT

### C4: Somatosensory Functional Network Abnormalities in Children with Hemiplegic Cerebral Palsy

*Yanlong Song PhD, Shannon Conrad MS, Emily Brock BA, Angela Shierk PhD, OTR, Stephanie Acord MD, Yvette Johnson MD, Warren Marks MD, Christos Papadelis PhD*

10:17 am - 10:24 am PDT

### C5: Motor Practice Related Change in the Cortices of Persons with Cerebral Palsy

*Max Kurz PhD, Sarah Baker MA, Brittany Taylor PhD, Brad Corr DPT, Tony Wilson PhD*

10:35 am - 10:42 am PDT

### **C6: Neuroimmunomodulation in Infant Rats Restores Gait in a Model of Cerebral Palsy**

Lauren Jantzie PhD, Joseph Scafidi DO, Alexander Hoon MD, Eric Chin MD, Vera Burton MD PhD, Gwyn Gerner PsychD, Shenandoah Robinson MD

10:43 am - 10:50 am PDT

### **C7: Cerebral Palsy Phenotypes Associated with Genetic Forms of Epilepsy**

Siddharth Srivastava MD, Hyunyong Koh MD PHD, Lacey Smith MS CGC, Annapurna Poduri MD MPH

10:51 am - 10:58 am PDT

### **C8: Clinical Actionability of Genetic Findings in Cerebral Palsy**

Sara Lewis PhD, Maya Chopra MD, FRACP, Bhooma Aravamathan MD, DPhil, Nahla Haque, Halie May MS, Jennifer Bain MD, PhD, Julie Cohen ScM, CGC, Michael Zech MD, Darcy Fehlings MD, Richard Wintle PhD, Reeve Segel MD, Jason Carmel MD, PhD, Siddharth Srivastava MD, Michael Fahey MD, Michael Kruer MD

10:59 am - 11:06 am PDT

### **C9: Gait Deficits Secondary to Prenatal Opioid Exposure Can Be Repaired With Erythropoietin and Melatonin: Implications for Cerebral Palsy and Neurorepair**

Nethra Madurai MD, Yuma Kitase MD PhD, Shenandoah Robinson MD, Lauren Jantzie PhD

11:07 am - 11:14 am PDT

### **C10: MRI Findings of Children with Cerebral Palsy: Findings From a Hospital-Based Surveillance in Vietnam**

Tasneem Karim MBBS, MPH, Nguyen Huong Giang, Trinh Quang Dung, Nguyen Van Anh, Rachael Dossetor, Nguyen Van Bang, Nadia Badawi MBCh (Hons I), DCH, MSc, PhD, FRCPI, FRACP, Gulam Khandaker MBBS, MPH, DCH, PhD, FAFPHM, Shekeeb S Mohammad, Elizabeth Elliott

## **Free Paper Session D: Orthopedics: Hip**

Location: Montego AF

9:45 am - 9:52 am PDT

### **D1: Can the Physiological Vulnerability Score Predict Outcomes of Hip Reconstruction in Children with Severe Neuromuscular Disability?**

Caroline Edwards MBChB MRCS Tr &Orth, Alistair Bevan, Stephanie Buchanan MBBS

9:53 am - 10:00 am PDT

### **D2: Race is Associated with Risk of Salvage Procedures and Post-Operative Complications after Hip Procedures in Children with Cerebral Palsy**

Lauryn Brown BA, Kevin Cho BS, Omar Tarawneh BS, Sean Tabaie MD

10:01 am - 10:08 am PDT

### **D3: The Efficacy of a Hip Brace for Hip Dislocation in Patients with Cerebral Palsy: A Prospective, Double-Blinded Randomized Control Trial**

Ju Seok Ryu MD, PhD, Bo Ryun Kim MD, PhD, Jin A Yoon Professor, Hyun Jung Han PhD, Young Il Yoon PhD, Jiwoon Lim MD, Seungeun Lee MSc, Seon Cho BA, Yong Beom Shin MD, PhD, Hyun Jung Lee MD, Joonyoung Jang MD, Jaewon Beom MD, PhD, Jee Hyun Suh MD, PhD

10:09 am - 10:16 am PDT

### **D4: Is Standing and Transfer Function Improved after Orthopedic Surgery in Youth with CP at GMFCS Levels III/IV?**

Nancy Lennon DPT, Chris Church MPT, Theresa Chua BS, Jose Salazar-Torres PhD, John Henley PhD, Elizabeth Gillooly BS, Faith Kalisperis DPT, M. Wade Shrader MD, Freeman Miller MD, Jason Howard MD

10:17 am - 10:24 am PDT

### **D5: The Incidence of Avascular Necrosis After Hip Containment Surgery in Children with Cerebral Palsy**

Jeremy Bauer MD, Ellen Raney MD, Susan Sienko PhD

10:35 am - 10:42 am PDT

### **D6: Long-Term Results of Hip Reconstruction Into Adulthood in Patients with Cerebral Palsy**

Patrick Curran MD, Stefano Stallone MD, James Bomar MPH, Vidyadhar Upasani MD, Henry Chambers MD

10:35 am - 10:42 am PDT

### **D7: The MMC Hip - To Reduce or Not to Reduce?**

Michal Frankl MD, Fred Carroll MD, Sharon Eylon MD

10:51 am - 10:58 am PDT

### **D8: Hip Displacement in Spinal Muscular Atrophy: The Influence of Genetic Severity and Functional Level**

Armagan Can Ulusaloglu MD, Ali Asma MD, M. Wade Shrader MD, Mena Scavina DO, William Mackenzie, BS MD, Amanda Erb DPT, Jason Howard MD

10:59 am - 11:06 am PDT

### **D9: Hip Displacement in Children with Leukodystrophies**

Maria Juricic BSc(PT), MRSc, Jennifer Farr BBA, Kishore Mulpuri MHSc, MSc, MBBS, FRCSC

11:07 am - 11:14 am PDT

### **D10: A Core Outcome Set for Lower Limb Orthopaedic Surgery for Children with Cerebral Palsy: An International Multi-Stakeholder Consensus Study**

Hajar Almoajil MSc, Sally Hopewell PhD, Helen Dawes PhD, Francine Toye PhD, Tim Theologis MSc, PhD, FRCSC

## Program & Events — Thursday, September 22, 2022

9:45 am - 11:30 am PDT

### Adult and Aging SIG Meeting

Location: Antigua A

11:45 am - 12:45 pm PDT

### Product Theater Lunch- Ipsen: The Utility of BoNT-A Therapy for Children 2yrs and older with Spasticity caused by Cerebral Palsy and Other Developmental Disorders: Spotlight Story on Treatment to Haitian Children

Location: Event Center C2

1:00 pm - 2:30 pm PDT

### General Session

Location: Event Center B

#### Corbett Ryan Pathways Pioneer Award Presentation to Jerron Herman

#### Presidential Guest Lecture: Exploring Beautiful Asymmetry: A Dancer with CP Speaks

Jerron Herman

#### Presidential Guest Lecture: Advancing Equity and Resilience in the Recovery from the Covid-19 Pandemic

Monica Schoch-Spana PhD

2:30 pm - 4:00 pm PDT

### Poster and Exhibit Review in the Exhibit Hall

Location: Event Center A

*Take the opportunity to meet the exhibitors and discuss the posters with poster presenters during this break in the exhibit hall!*

4:00 pm - 6:00 pm PDT

### MINISYMP01: Advocating for and with Children with Disabilities: A Brief History and Strategies for Real World Application

Kelly Pham MD, Jason Edinger DO, Verónica Schiariti PhD, Naomi Lorch PhD, PT, Lauren Fetsko DO, Rishi Agrawal MD

Location: Montego D

Learning Objectives:

1. Upon completion, participant will be able to summarize a brief history of advocacy and rights of individuals with disabilities.
2. Upon completion, participant will be familiar with processes for advocating at the state/province and federal level for change in the realm of disability rights.
3. Upon completion, participant will be able to advocate directly for their patients for necessary equipment, services, educational supports, access, etc.
4. Upon completion, participant will be well versed in the most active advocacy issues from the last two years.

### MINISYMP02: Setting Goals and Charting the LifeCourse: Tools, Strategies and Interventions to Support Individuals with Developmental Disabilities and Families in Setting Self-Directed, Family-Centered Goals

Carrie Sewell-Roberts MSW, Jody Roberts PhD, Jennifer Turner MSW, Kathleen Miller-Skomorucha OTR/L

Location: Montego B

Learning Objectives:

1. To understand how to engage patients and families in conversation about setting (and re-setting) goals.
2. To learn strategies for supporting individuals with developmental disabilities and their families in setting self-directed goals in the therapeutic setting.
3. To gain knowledge of the adult-based ID Medicaid Waiver system and how to assist individuals and families obtain the supports for successful transitions to (and through) adulthood.
4. To review the goal setting tool Charting the LifeCourse, a nationally-recognized framework utilized by individuals with disabilities, families and professionals to set goals throughout the lifespan.

### MINISYMP03: Baby Stars: A Bright Beginning for Infants at High Risk or Diagnosed with Cerebral Palsy. A Call for a More Responsive Integrated Approach to Early Intervention.

Katherine Clark MOT, OTR/L, ATP, Hillary Prather MSW, Doug Nunn DPT, Lindsay Stutz MA

Location: Antigua A

Learning Objectives:

1. Identify at least 3 benefits of an integrated occupational, physical, and speech therapy approach to early intervention.
2. Explain the importance of supporting parents/caregivers following an unexpected diagnosis of CP.
3. Discuss strategies for navigating medical care and resources required, for parents/caregivers of patients newly diagnosed with or at high risk for CP.
4. Describe at least three favorable outcomes that result from an integrated early intervention program.

THURSDAY



### **MINISYMP04: Designing Systems of Childhood Disability Care: Exploring A Family-Centred, Community-Oriented, Strengths and Functional Needs-Based Approach**

*Olaf Kraus de Camargo MD, Rachel Teplicky MSc, Marilyn Wright MSc, PT, MEd, Kim Hesketh PT, Peter Rosenbaum MD*

Location: Jamaica B

Learning Objectives:

1. Understand the conceptual basis for modern service delivery in the field of childhood disability.
2. Be introduced to a framework for designing childhood disability services that are strengths-based and functional-needs driven.
3. Consider approaches to intake and evaluation that fit within this framework.
4. Participate in discussions designed to illustrate a family's journey through a system using this redefined, novel framework.

### **MINISYMP05: Roles of Distal Femoral Extension Osteotomy and Patellar Tendon Advancement in the Treatment of Severe Persistent Crouch Gait in Adolescents and Young Adults with Cerebral Palsy.**

*Jean Stout PT, MS, Andrew Georgiadis MD, Kathryn Walt DPT, Jackie Norling MPT, Michael Healy MD, Tom Novacheck MD*

Location: Jamaica A

Learning Objectives:

1. Discuss the indications for DFEO+PTA surgery for severe crouch gait in adolescents & young adults with cerebral palsy.
2. Identify one or more operative- or post-operative care insights and the common pitfalls they are designed to avoid.
3. Explain the components of post-surgical rehabilitation.
4. Discuss DFEO+PTA in the skeletally immature patient and possible surgical alternatives.

### **MINISYMP06: That looks like it hurts! Assessment and Management of the Pediatric and Adolescent Foot in Cerebral Palsy**

*Robert Wimberly MD, Rachel Thompson MD, Jason Rhodes MD*

Location: St. Thomas B

Learning Objectives:

1. Understand the pathophysiology that creates specific foot deformities in cerebral palsy.
2. Understand the role of nonoperative management in spastic foot deformity.
3. Understand the spectrum of surgical management for foot deformity in spastic cerebral palsy.
4. Appreciate the role gait analysis and pedobarographic data may have in assessment of foot pathology in patients with spasticity.

### **MINISYMP07: Inspiring and Supporting Women in AACPDM to Become Leaders**

*Joline Brandenburg MD, Diane Damiano PhD, FAPTA, Deborah Gaebler-Spira FAAPM&R, Maureen O'Donnell MD MSc, Darcy Fehlings MD, Eileen Fowler PhD, PT, Sarah Winter MD, Jilda Vargus-Adams MD MSc, Susan Sienko PhD*

Location: Trinidad A

Learning Objectives:

1. Understand more about the history of women leadership in AACPDM as well as in related academic and medical/allied medical careers.
2. Describe successes and challenges for women in achieving leadership in our multidisciplinary field – based on current evidence as well as from personal experiences.
3. Glean effective strategies on how to enhance progress towards leadership roles as well as to support others.
4. Formulate one actionable item to advance their leadership interests or support others in advancing in leadership.

### **MINISYMP08: Pediatric Rehabilitation Trials: Expect the Unexpected, Seek Maximal Benefits, Measure What Matters Most**

*Stephanie DeLuca PhD, Richard Stevenson MD, Mark Conaway PhD, Amy Darragh PhD, OTR/L, Warren Lo MD, Jennifer Murray BA, Mara Yale PhD, Sharon Ramey PhD*

Location: Antigua B

Learning Objectives:

1. Define key components for scientific rigor in pediatric rehabilitation clinical trials.
2. Discuss operationalization of study protocols for multi-site clinical trials, including defining measure for treatment and assessment fidelity of implementation for the study protocol across sites.
3. Discuss why outcomes from clinical trials need to consider what comprises a 'meaningful' outcome with realizations that a trial may need to go beyond a single primary outcome measurement.
4. Discuss strategies to maximize scientific rigor across variations in sample size and high-levels of subject heterogeneity.

**MINISYMP09: Management of Difficult Clinical Presentations of Hypertonia and Complex Movement Disorders in Children with Disabilities**

*Mark Gormley MD, Tim Feyma MD, Patrick Graupman MD*

Location: St. Thomas A

Learning Objectives:

1. Upon completion, participants will be able to better understand difficult hypertonic and complex movement disorders and possible treatment options, including the importance of a team approach in patient management.
2. Upon completion, participants will be able to understand when a deep brain stimulator can be useful in managing severe dystonic and dyskinetic conditions.
3. Upon completion, participants will be able understand which patients may be successfully treated with a ventral-dorsal rhizotomy or a selective dorsal rhizotomy.
4. Upon completion, participants will be able to understand when intrathecal baclofen, phenol neurolysis, and botulinum toxin injections may be useful in treating hypertonic conditions.

**MINISYMP10: Let's Do a Hip Osteotomy! A Hands-on Laboratory Introduction to the Surgical Skills of a Varus Derotational Osteotomy and Distal Femoral Extension Osteotomy**

*M. Wade Shrader MD, James McCarthy MD, MHCM, David Scher MD, Jon Davids MD, Robert Kay MD, Michael Healy MD, Benjamin Shore MD, MPH*

Location: Trinidad B

Learning Objectives:

1. Discuss the prevalence of neuromuscular hip dysplasia and knee flexion contracture in patients with CP.
2. Understand the surgical indications for hip reconstruction and extension osteotomy in the context of children with CP.
3. List the technical steps involved in the surgical technique of a VDRO and DFEO.
4. Perform a simplified VDRO/DFEO surgical procedure on a saw-bones simulation model.

**MINISYMP11: Top Ten Articles in Developmental Disabilities**

*Nancy Murphy MD, Garey Noritz MD, Richard Adams MD*

Location: Montego C

Learning Objectives:

1. Upon completion, participant will be able to describe recent publications and updates related to the care of children with CP and related disabilities.
2. Upon completion, participant will be able to discuss what is known and future directions of investigation related to current topics in the care of children with CP and related disabilities.
3. Upon completion, participant will be able to critically review scientific literature and apply relevant advances to the care of children with CP and related disabilities in their local settings.
4. Upon completion, participant will disseminate advances in the care of children with CP and related disorders with their local stakeholders (trainees, children with disabilities and their families, communities and others).

**MINISYMP12: Orthopedic Surgery for Adults with Cerebral Palsy**

*Garey Noritz MD, Henry Chambers MD, M. Wade Shrader MD, Kevin Murphy MD*

Location: Montego E

Learning Objectives:

1. To describe details of orthopedic surgical procedures that are performed on adults with cerebral palsy.
2. To conduct shared decision making regarding orthopedics surgeries with adults with CP and their families.
3. To discuss the complex issues requiring medical management of adults with CP undergoing surgery, including preoperative assessment, hospital management, and management of postoperative complications.
4. To discuss how postoperative care and rehabilitation differs for adults with CP undergoing orthopedic surgery.

7:00 am - 8:00 am PDT

### Continental Breakfast in the Exhibit Hall

Location: Event Center A

8:00 am - 9:00 am PDT

### MORNSEM01: How to Participate in Multi-center Clinical Research and Quality Improvement (QI) with the CP Research Network

*Paul Gross BA, Garey Noritz MD, Michael Kruer MD, Kristie Bjornson PT, PhD*

Location: Antigua B

Learning Objectives:

1. Upon completion, participants will understand the purpose of the Cerebral Palsy Research Network (CPRN), how it is configured, what it has to offer to accelerate collaborative research in CP.
2. Upon completion, participants will understand how they can contribute to the CPRN Registry and national research efforts through standard clinical care through the use of CPRN electronic medical record forms.
3. Upon completion, participants will understand the current and planned research projects that are active in CPRN and how the network and registry can be used to study cerebral palsy.
4. Upon completion, participants will understand the tools that CPRN offers to easily consent patients remotely and link additional study datasets such as genomics to the registry data.

### MORNSEM02: Defining and Measuring Treatment Goals: Developing Child and Family First Goals and the Metric Analysis of Goal Attainment

*Jessie Mann PhD, Stephanie DeLuca PhD, Dory Wallace OTR/L, Mary Rebekah Trucks MS, OTR/L*

Location: Montego B

Learning Objectives:

1. Select and define child-first goals.
2. Determine appropriate measurement specifications for those goals.
3. Analyze treatment videos for the assessment of goal attainment.
4. Reflect on measurement needs, habits, and alternative methods.

### MORNSEM03: The Advance Care Planning Postcard: A New Resource to Help Support Conversations About Advance Care Planning for Children with Chronic Medical and Developmental Conditions.

*Andrea Hoffman MD, FRCPC, Joanna Humphreys MD, FRCPC*

Location: Trinidad B

Learning Objectives:

1. List the principles of ACP and the perceived barriers.
2. Understand why conversations related to ACP are critical in all individuals with chronic medical and developmental conditions.
3. Describe the different components of the ACP postcard and understand how they build upon existing frameworks to facilitate communication with families about a variety of future-focused topics.
4. Apply the ACP Postcard in a wide variety of clinical scenarios to help initiate conversations related to ACP or future care planning using language that is strength-based and empowering.

### MORNSEM04: No Bones About it: Management of Skeletal Fragility in Medically Complex Children

*Laura Owens MD, Heidi Kecskemethy MEd, RDN, CSP, CBDT, Halley Wasserman MD*

Location: Montego D

Learning Objectives:

1. Recognize risk factors in children at risk for low bone mineral density (BMD) and fragility fractures.
2. Describe mechanisms to evaluate BMD and preventative measures to decrease risk for low BMD in these populations.
3. Describe current interventions to treat low BMD in medically complex children.
4. Discuss challenges in transitioning bone health care as children age into adulthood.

### MORNSEM05: Integration and Translation of Precision Medicine into Clinical Practice for Children with Cerebral Palsy

*Alannah Yoder PharmD, Emily Goodwin MD, Matthew Mclaughlin MD, MS, Christopher Sweeney MD*

Location: Montego E

Learning Objectives:

1. Describe the impact of polypharmacy and complex medication regimens on children with cerebral palsy and their families.
2. Define precision medicine and translation into clinical care for children with cerebral palsy receiving multiple medications including baclofen.
3. Identify practical ways to optimize medication regimens and individualize care plans to limit polypharmacy and improve adherence and quality of life.
4. Apply learned strategies including using interactive case examples.



### **MORNSEM06: Idiopathic Toe Walking: An Evidence-Based Approach to Diagnosis and Treatment**

*Jeremy Bauer MD, Amanda Stoltz PT, DPT, PCS, Jenny Wilson MD, Jon Davids MD*

Location: St. Thomas A

Learning Objectives:

1. Better understand and describe the natural history of ITW.
2. Formulate a treatment plan for children with ITW.
3. Utilize QGA to diagnose ITW and differentiate ITW from other disorders.
4. Describe the indications for serial casting for children with ITW.

### **MORNSEM07: Starting at Birth: An Integrative, State-of-the-Science Framework for Optimizing Infant Neuromotor Health**

*Theresa Sukal Moulton PT, DPT, PhD, Colleen Peyton DPT, Alexandra Brozek DPT*

Location: St. Thomas B

Learning Objectives:

1. Describe the team science effort to develop a transdiagnostic approach to neuromotor health interventions designed to leverage the heightened neuroplasticity of the first year of life.
2. Explain four principles of intervention: (a) active learning, (b) environmental enrichment, (c) caregiver engagement, and (d) strength-based approaches.
3. Discuss applications of principles to clinical care and research.
4. Demonstrate implementation strategies to incorporate principles into clinical care.

### **MORNSEM08: Integrating Experiences to Provide Excellence in Transition for Pediatric Patients with Disabilities**

*Jensine Clark MD, Lauren Wang MD, Lauren Niehaus DPT*

Location: Jamaica A

Learning Objectives:

1. Describe and discuss the evolving population of transition age patients with neurodevelopmental disabilities.
2. Describe the health inequities and disparities that exist when patients and families transition from pediatric to adult care.
3. Discuss how an interdisciplinary clinic can address health inequity and provide evidence-based care for patients with neurodevelopmental disabilities.
4. Review case examples of intervention-based approaches to increasing participation and inclusion of transition age patients.

### **MORNSEM09: Transforming Health through Relationships Via In-Person and Virtual Environments (THRIVE)**

*Thomas Moran PhD, CAPE, Juntack Oh PhD*

Location: Andros B

Learning Objectives:

1. Upon completion, participants will be able to share the impact of our THRIVE intervention on the physical and emotional health of participants with disabilities.
2. Upon completion, participants will be able to demonstrate how THRIVE turns a person's room into their personal physical activity space.
3. Upon completion, participants will be able to illustrate how THRIVE creates social connection to improve one's emotional health and well-being.
4. Upon Completion, participants will be able to define the spectrum of modalities that exist within THRIVE to reach participants with disabilities in all communities (rural or urban).

### **MORNSEM10: Non-Invasive Brain Stimulation and Rehabilitation in Cerebral Palsy**

*Ellen Sutter PT, DPT, Bernadette Gillick PhD, MSPT, PT, Veronika Mak MSc, Catarina Saiote PhD, Annette Xenopoulos-Oddsson MS*

Location: Montego C

Learning Objectives:

1. Identify the current state of the science for non-invasive brain stimulation applications in cerebral palsy.
2. Describe the outcomes of studies investigating applications of non-invasive brain stimulation for cerebral palsy diagnosis and rehabilitation.
3. Recognize the challenges and opportunities surrounding implementation of current research findings.
4. Determine potential clinical applications of non-invasive brain stimulation in rehabilitation.

### **MORNSEM11: A Practical Guide to Genetic Testing in Neurodevelopmental Disabilities: Cerebral Palsy as a Model**

*Steven Lazar MD, Shannon DiCarlo MD, Aloysia Schwabe MD, Kathryn Ostermaier MD*

Location: Antigua A

Learning Objectives:

1. Name and describe indications for and the importance of common genetic and metabolic testing options.
2. Select appropriate genetic and/or metabolic testing options for patients with neurodevelopmental disabilities in a stepwise fashion.
3. Identify barriers to genetic testing in neurodevelopmental disabilities and propose at least two solutions.
4. Identify patients with a diagnosis of cerebral palsy that would warrant genetic and/or metabolic testing.

## Program & Events — Friday, September 23, 2022

### **MORNSEM12: Involvement: Moving beyond enjoyment when considering participation experiences**

*Gaela Kilgour MHSc, BPhy, BPhEd, Christine Imms Fellow, Occupational Therapy Australia Research Academy*

Location: Jamaica B

Learning Objectives:

1. Use the Family of Participation-Related Constructs (fPRC) to understand the importance of what, how and when to measure involvement (beyond enjoyment) using goal setting and other novel methods.
2. Link the importance of involvement to preferences, sense of self and activity competence using the fPRC.
3. Apply the fPRC to clinical practice and case examples.
4. To explore potential facilitators and barriers to 'being involved.'

### **MORNSEM13: Communication is a Gateway to Participation: State of the Science and Future Directions**

*Helen Long PhD, CCC-SLP, Marianne Elmquist PhD, Kristen Allison PhD, Katherine Hustad PhD*

Location: Trinidad A

Learning Objectives:

1. Understand facets of communication as they relate to participation.
2. Recognize the prevalence of communication disorders in CP.
3. Identify communication risk factors to trigger speech, language, and communication referrals.
4. Understand the impact of communication disorders on participation for children and adolescents with CP.

### **9:00 am - 9:30 am PDT**

#### **Coffee Break in the Exhibit Hall**

Location: Event Center A

#### **Let's Move! - Adaptive Cycling**

*Lindsey Walters*

Location: Event Center A, back left corner

Take a quick energizing break by joining us for a bit of aerobic exercise!

#### **International Scholar Highlight**

Location: Andros B

Join us for a celebration of international scholarship recipients!

### **9:30 am - 11:30 am PDT**

#### **General Session**

Location: Event Center B

#### **Duncan Wyeth Award Presentation**

*Sarah Albus*

#### **Gayle G. Arnold Award Presentation**

*Karl Jancart MEd*

#### **Mac Keith Press Basic Science Lecture - Precision Medicine Therapeutics and Rehabilitation Engineering Approaches for Functional Restoration of Duchenne Muscular Dystrophy Across the Lifespan**

*Craig McDonald MD*

#### **Mentorship Award Presentation**

*Stacey Dusing PhD, PT, PCS, FAPTA*

#### **Lifetime Achievement Award Presentation**

*Johanna Darrah PT, PhD*

### **12:15 pm - 1:15 pm PDT**

#### **Product Theater Lunch - PTC Therapeutics: Real-World Experience With a Cerebral Palsy Genetic Testing Program**

Location: Event Center B

### **1:45 pm - 3:30 pm PDT**

#### **Free Paper Session E: Gait**

Location: Event Center C1

### **1:45 pm - 1:52 pm PDT**

#### **E1: Classifying Sagittal Plane Gait Deviations of Children with Cerebral Palsy into Clinically Meaningful Biomechanical Phenotypes: A Novel Algorithm Used on Data Across Multiple Sites**

*Karen Kruger PhD, Adam Graf MS, Joseph Krzak PT, PhD, Ryan Smith BS, Brandon Steinlein BS, Judi Linton PT, MS, Ross Chafetz PT, DPT, PhD, MPH, Jon Davids MD, Anita Bagley PhD*

### **1:53 pm - 2:00 pm PDT**

#### **E2: Impact of a Machine Learning Decision-Support Tool on Psoas Lengthening Decision-Making and Outcomes in Cerebral Palsy**

*Jacob Schaefer BS, Tom Novacheck MD, Elizabeth Boyer PhD*

### **2:01 pm - 2:08 pm PDT**

#### **E3: Evaluating Family Priorities by Age using the Gait Outcomes Assessment List (GOAL) Questionnaire**

*Andrew Georgiadis MD, Kathryn Walt D.P.T, Steven Koop MD, Elizabeth Boyer PhD*

### **2:09 pm - 2:16 pm PDT**

#### **E4: The Impact of Robotic Assisted Gait Training on Self-Reported Physical Activity and Related Outcomes**

*Jessica Youngblood MSc, Christa Diot MSc, P.Kin, Anya Friesen BS, Kelly Larkin-Kaiser PhD, Elizabeth Condliffe PhD, MD*

## Program & Events – Friday, September 23, 2022

2:17 pm - 2:24 pm PDT

### **E5: Cost Analysis Supports the Use of Computerized Gait Analysis for Surgical Planning in Children with Cerebral Palsy**

Sylvia Ounpuu MSc, Kristan Pierz MD, Susan Rethlefsen PT, DPT, Tishya Wren PhD

2:35 pm - 2:42 pm PDT

### **E6: Long-Term Evolution of Walking in Unilateral Cerebral Palsy: A 12-Years Follow-Up of 40 Children**

Alice Bonnefoy-Mazure PhD, Geraldo De Coulon MD, Pierre Lascombes MD, Aline Bregou MD, Stephane Armand PhD

2:43 pm - 2:50 pm PDT

### **E7: Does Posterior Tibialis Split Tendon Routing Impact Postoperative Coronal Plane Ankle Kinematics?**

Frances Scheepers BSc, Karen Davies MSc, Tim Bhatnagar PhD, Diane Wickenheiser BSc, Alec Black MS, Christine Alvarez BSc, MD, FRCSC, MSc, Kishore Mulpuri MHSc, MSc, MBBS, FRCSC, Lise Leveille MD

2:51 pm - 2:58 pm PDT

### **E8: Reliability and Utility of a Novel Classification Scheme for Gait Deviations in Children with Persistent Idiopathic Toe Walking**

Sancy Childers BA, Jon Davids MD, Sean Brown MA, Vedant Kulkarni MD, Anita Bagley PhD

2:59 pm - 3:06 pm PDT

### **E9: Efficacy of Serial Casting Protocols in Idiopathic Toe Walking**

Tyler Shirel MD, Linda Krach MD, Tonye Sylvanus MBBS, Kelly Cho MD, Amy Authement MD

3:07 pm - 3:14 pm PDT

### **E10: Surgical Management of Severe Equinus Deformity in Ambulatory Children with Cerebral Palsy**

Jon Davids MD, Khadija Soufi BS, David Westberry MD, Prabhav Saraswat PhD, Anita Bagley PhD

### **Free Paper Session F: Mental Health/Pain**

Location: Event Center C2

1:45 pm - 1:52 pm PDT

### **F1: Altered Pain Network Functional Connectivity in Children with Bilateral Cerebral Palsy**

Nicole Gorny MS, Diane Damiano PhD, FAPTA, Alexander Hoon MD, Martin Lindquist PhD, James Pekar PhD, BS, Lauren Jantzie PhD, Andreia Vaconcellos Faria MD, PhD, Eric Chin MD

1:53 pm - 2:00 pm PDT

### **F2: Characteristics of Cognitive Behavioral Therapies for Individuals with Cerebral Palsy: A Scoping Review**

Tamar Silberg PhD, Isabelle Caven MA, Danielle Levac PhD, Darcy Fehlings MD

2:01 pm - 2:08 pm PDT

### **F3: Cognitive Behavioral Pain Management Program for Children with Cerebral Palsy and Chronic Pain: A Feasibility Pilot Study**

Tamar Silberg PhD, Rachel Willis BS, Sabrina Aimola MA, Darcy Fehlings MD

2:09 pm - 2:16 pm PDT

### **F4: Dose of Gabapentin as Part of a Multimodal Pain Protocol for Selective Dorsal Rhizotomy Does Not Impact Percentage of Rootlets Transected**

Mary Lynch MD, Joline Brandenburg MD

2:17 pm - 2:24 pm PDT

### **F5: The Association Between Pain Intensity and Sleep Disturbance in Children and Youth with Cerebral Palsy: A Cohort Study**

Heather Shearer MSc, Pierre Côté PhD, Sheilah Hogg-Johnson PhD, MMATH, Patricia McKeever PhD, Darcy Fehlings MD

2:35 pm - 2:42 pm PDT

### **F6: Frequency of General Practitioner Consultations and Pain as a Reason for Encounter in Children with Cerebral Palsy; A Norwegian National Registry Linkage Study**

Selma Mujezinovic Larsen MD, Torunn Bjerve Eide PhD, Cathrine Brunborg MSc, Kjersti Ramstad PhD

2:43 pm - 2:50 pm PDT

### **F7: Altered Spontaneous Cortical Activity Predicts Pain Perception in Individuals with Cerebral Palsy**

Michael Trevarrow PhD, Anna Reelfs BS, Lauren Ott BS, Samantha Penhale BS, Brandon Lew PhD, Tony Wilson PhD, Max Kurz PhD

2:51 pm - 2:58 pm PDT

### **F8: Health-Related Quality of Life in Adolescents with Cerebral Palsy; A Cross-Sectional and Longitudinal Population-Based Study**

Selma Mujezinovic Larsen MD, Terje Terjesen PhD, Reidun Jahnsen PhD, Trond H Diseth PhD, Kjersti Ramstad PhD

2:59 pm - 3:06 pm PDT

### **F9: Mental Health Disorders, Receipt of Mental Health Care, and the Relationship to Physical Activity and Sport Among Children with Cerebral Palsy**

Mario Keko MPH, Cory Cribb BS, Sarah Creveling BS, Haresh Rochani DrPH, MPH, MBBS, Christopher Modlesky PhD, Gavin Colquitt EdD

3:07 pm - 3:14 pm PDT

### **F10: Parent-Delivered Infant Massage as a Stress Management Technique for Parents of Extremely Preterm Infants**

Dana McCarty DPT, Stacey Dusing PhD, PT, Rachel Silver BS, Alana Gilbert BA, T. Michael O'Shea MD, MPH

FRIDAY



### Free Paper Session G: Tone Management

Location: Event Center C3

1:45 pm - 1:52 pm PDT

#### G1: Collagenase Clostridium Histolyticum Decreases Muscle Stiffness in Cerebral Palsy: An Ex-Vivo Biomechanical Analysis of Hip Adductor Muscle Fiber Bundles

*Venus Joumaa PhD, Walter Herzog PhD, Timothy Leonard PhD, Karyn Robinson MS, Robert Akins PhD, Ali Asma MD, James Huntley MB BChir MA Phil FRCSEd, M. Wade Shrader MD, Kerr Graham MD, Jason Howard MD*

1:53 pm - 2:00 pm PDT

#### G2: Ultrasound Elastography of Muscles in Cerebral Palsy: Systematic Review

*Siddhi R. Shrivastav PT, MS, Charlotte Caskey BS, Kristie F. Bjornson PT, PhD, Katherine M. Steele PhD, Chet T. Moritz PhD, Desiree Roge MD*

2:01 pm - 2:08 pm PDT

#### G3: Muscle Extracellular Matrix Architecture in Children With CP: Dynamic Stiffness is Associated with Lower Collagen Alignment and Impaired Knee Kinematics

*Ross Wohlgemuth MS, Marie Villalba BS, Vedant Kulkarni MD, Jon Davids MD, Lucas Smith PhD*

2:09 pm - 2:16 pm PDT

#### G4: Effects of Repeated Botulinum Toxin Injections in Lower Extremity Muscles on Muscle Morphology and Functionality in Ambulatory Children with Spastic Cerebral Palsy: A Preliminary Study

*Kamile Uzun Akkaya PhD, Habip Eser Akkaya MD, Sabiha Bezgin PhD, Pelin Atalan EFKERE MSc, Tüzün Fırat PhD, Cemil Yildiz MD, Bulent Elbasan PhD*

2:17 pm - 2:24 pm PDT

#### G5: Treatment-Emergent Adverse Event Profile and Tolerability of Repeated Doses of OnabotulinumtoxinA for Spasticity in Children with Cerebral Palsy: Pooled Results of Two Open-Label Extension Studies

*Mark Gormley MD, Darcy Fehlings MD, Heakyung Kim MD, Marcin Bonikowski MD, Marta Banach MD, Fatma Gul MD, Jill Meilahn DO, Brad Racette MD, Nuo-Yu Huang MD, PhD, MPH, Xiaomeng Niu PhD, Lynn James MPH, Rozalina Dimitrova MD, MPH*

2:35 pm - 2:42 pm PDT

#### G6: Contracted Muscle in Children With CP Has Increased Fibrosis-Producing Progenitor Cells: A Novel Finding from Single-Cell RNA Sequencing Technology

*Linya Hu BS, Marie Villalba BS, Jon Davids MD, Vedant Kulkarni MD, Lucas Smith PhD*

2:43 pm - 2:50 pm PDT

#### G7: Does Intrathecal Baclofen Therapy Decrease the Progression of Hip Dysplasia in Young Patients with Cerebral Palsy?

*Ali Asma MD, Armagan Can Ulusaloglu MD, Kenneth Rogers PhD, Jason Howard MD, Freeman Miller MD, M. Wade Shrader MD*

2:51 pm - 2:58 pm PDT

#### G8: Improving Outcomes: Development of a Pediatric Intrathecal Baclofen Database

*Christina Hardesty MD, Kristin Buxton MS, Michelle Janas MSN RN, Emily Meyer CNP, Eduardo Del Rosario PhD candidate*

2:59 pm - 3:06 pm PDT

#### G9: Development of a Self-Assessment Questionnaire to Identify Dystonia in People with Cerebral Palsy

*Fayza Jaleel, Alyssa Rust BS, Shirley Cheung PhD, Toni Pearson MBBS, Keisuke Ueda MD, Amy Viehoever MD, PhD, Katie Leger CNP, Jenny Wilson MD, Danielle Guez-Barber MD PhD, Michele Shusterman BA, Bhooma Aravamuthan MD, DPhil*

3:07 pm - 3:14 pm PDT

#### G10: Effect of Single Event Multi Level Chemoneurolysis with AbobotulinumtoxinA on Energy Expenditure and Walking Efficiency in Children with Cerebral Palsy

*Heakyung Kim MD, Hiroko Matsumoto PhD*

### Free Paper Session H: Therapy

Location: Montego AF

1:45 pm - 1:52 pm PDT

#### H1: An Accelerometry Based Approach to Quantify Intensity of Hand Arm Bimanual Intensive Therapy (HABIT) and Performance Gains In Children with Unilateral Cerebral Palsy

*Shailesh Gardas PT, Christine Lysaght PT, DPT, Amy Gross McMillan PT, PhD, Shailesh Kantak PT, PhD, John Willson PT, PhD, Swati Surkar PT, PhD*

1:53 pm - 2:00 pm PDT

#### H2: The Effect of Dual-Task Training on Gait Performance in Children with Cerebral Palsy.

*Sema Büğüşan Oruç, Bulent Elbasan PhD*

2:01 pm - 2:08 pm PDT

#### H3: Efficacy of Neurodevelopmental Therapy in Cerebral Palsy: Systematic Review and Meta-Analysis

*Cathy Morgan PhD, Catherine Morgan B.App.Sci (Physio), PhD, Megan Finch-Edmondson BSc (Hons), PhD, Lynda McNamara BPhy Hons, Maria McNamara BAppPsych, MPsych, PhD, Madison Paton BSc (Hons), PhD, Emma Stanton BHLthSc/MOT, Annabel Webb MRes (Stat), Nadia Badawi MBBSch (Hons I), DCH, MSc, PhD, FRCPI, FRACP, Iona Novak BAppSc, MSc Hons, PhD*

## Program & Events – Friday, September 23, 2022

2:09 pm - 2:16 pm PDT

### H4: Efficacy of Ride-On Toys Interventions in Promoting Upper Extremity Active Control and Independent Use In Children with Hemiplegic Cerebral Palsy

*Sudha Srinivasan PT, PhD, Nidhi Amonkar BPT, Kathleen Souza Student, Patharapa Promprasert Student, Dev Patel Student, Amal Ahmed Student, Patrick Kumavor PhD, Kristin Morgan PhD, Deborah Bubela PT, PhD*

2:17 pm - 2:24 pm PDT

### H5: On the Move! Caregiver Perspectives on Power Mobility Devices & Participation for Children with Cerebral Palsy, Gross Motor Function Classification Scale Level V

*Bethany Sloane PT, DPT, Heather Feldner BS, MPT, PhD, Lisa Kenyon PT, DPT, PhD, PCS, Sam Logan PhD*

2:35 pm - 2:42 pm PDT

### H6: Qualitative Experiences of Physical Activity in Children with Cerebral Palsy: The Journey to Sustained Participation

*Gaela Kilgour MHSc, BPhy, BPhEd, Brooke Adair PhD, Susan Stott MBChB, PhD, Michael Steele PhD, Amy Hogan BA, Christine Imms Fellow, Occupational Therapy Australia Research Academy*

2:43 pm - 2:50 pm PDT

### H7: "He's a Little Bit Different, but He's Still the Same": Perspectives of How Autism Knowledge Influenced Peer Engagement and Inclusion at Mainstream Summer Camps

*Sandy Thompson-Hodgetts PhD, Ashley McKillop PhD, Mélanie Couture PhD*

2:51 pm - 2:58 pm PDT

### H8: Effects of Dance Interventions on Functioning of Children and Adolescents with Neuromotor Dysfunction: A Systematic Review

*Elisangela Lima PT, Beatriz Brugnaro PT, Silvia Pavão PhD, Nelci Adriana Cicuto Rocha PhD*

2:59 pm - 3:06 pm PDT

### H9: Using Prompting to Assess Engagement in Rehabilitation Settings

*Dalina Delfing MS, Karen Chin MA, Jaya Rachwani PT, MS, PhD, Victor Santamaria PT, Christine Imms Fellow, Occupational Therapy Australia Research Academy, Andrew Gordon MS, PhD*

3:07 pm - 3:14 pm PDT

### H10: Reliability, Validity and Minimal Detectable Change of a Novel Power Leg Press Test in Individuals with Cerebral Palsy

*Mattie Pontiff DPT, Noelle Moreau PhD, PT*

3:30 pm - 4:00 pm PDT

### Coffee Break in the Exhibit Hall

Location: Event Center A

### Let's Move!- Meditation with Movement

*Joselle Staana & Kyle Walbroehl*

Location: Registration Foyer

Take time to move & set your mind at ease

4:00 pm - 6:00 pm PDT

### MINISYMP13: Controversy in the Utility of Gait Analysis: Consistency & Competency of Gait Interpretation and Treatment Recommendations

*Jean Stout PT, MS, Andrew Georgiadis MD, Kathryn Walt DPT, Michael Healy MD, Tom Novacheck MD*

Location: St. Thomas B

Learning Objectives:

1. Discuss the controversy related to gait interpretation consistency and its influence on the utility of gait analysis as a clinical tool.
2. Explain the sources of variability that may contribute to lack of consistency of interpretation and the benefits of a structured, on-going consistency assessment program.
3. Identify challenges associated with achieving consistency of problem identification and treatment recommendations among course participants.
4. Discuss the impact of consistency, competency, and consensus of gait data interpretation on providing quality patient care.

### MINISYMP14: Building a Center of Excellence in Cerebral Palsy: Care Delivery Models Across Cerebral Palsy Research Network Sites

*Laurie Glader MD, FAAP, Michael Kruer MD, Paul Gross BA, M. Wade Shrader MD, Jilda Vargus-Adams MD MSc, Jason Carmel MD, PhD, Kristin Buxton MS*

Location: Antigua A

Learning Objectives:

1. Characterize common themes among CP programs in North America.
2. Identify a range of program designs to meet the needs of individuals with CP.
3. Recognize opportunity for engaging families in program design.
4. Generate at least one idea relating to program enhancement or development at their home institution.

### **MINISYMP15: Learning about Lever Arms: Expert Consensus Informed by the Delphi Process for Surgeries Performed about the Long Bones, Ankle, and Foot in Ambulatory Children and Adolescents with Cerebral Palsy**

*Kristan Pierz MD, Unni Narayanan MBBS, MSc, FRCS(C), M. Wade Shrader MD, Jason Rhodes MD, Jeffrey Shilt MD, Robert Kay MD*

Location: Trinidad A

Learning Objectives:

1. Upon completion, participant will be able to describe the Delphi process.
2. Upon completion, participant will be able to discuss where consensus does/does not exist for common procedures performed for ambulatory children with cerebral palsy.
3. Upon completion, participant will be able to demonstrate confidence in making surgical recommendations.
4. Upon completion, participant will be able to identify where additional work is needed to justify surgical recommendations.

### **MINISYMP16: Early Orthotic Management for Standing and Mobility in Children with Movement Limitations: Empowering Families**

*Kristie Bjornson PT, PhD, Mary Rahlin PT, DHS, Board-Certified Clinical Specialist in Pediatric Physical Therapy, Kyra Kane BscPT, MSc, PhD*

Location: Montego E

Learning Objectives:

1. Explore benefits of early lower extremity weight bearing related to bone and joint health in children with movement limitations.
2. Explain typical and atypical lower limb segment and joint alignments and principles of their optimization for acquisition of upright posture and walking.
3. Apply evidence and principles of motor learning, to support the development of mobility programs for young children.
4. Recognize benefits of early family education and collaborative orthotic goal setting for young children across the International Classification of Functioning, Disability, and Health using a novel Pictorial Tool.

### **MINISYMP17: Selective Motor Control of the Lower Extremities in Infants and Children with Spastic Cerebral Palsy: Innovations in Assessment and Intervention**

*Barbara Sargent PhD, PT, Loretta Staudt PT, MS, Eileen Fowler PhD, PT*

Location: Antigua B

Learning Objectives:

1. Define selective motor control of the lower extremities and describe its impact on the function and participation of children with spastic cerebral palsy.
2. Describe the development of selective motor control of the lower extremities for infants with or at high risk of cerebral palsy, compared to infants with typical development.
3. Describe the Selective Control Assessment of the Lower Extremity (SCALE) for children over 4 years and the Mini-SCALE for infants and toddlers from 3 months to 4 years.
4. Summarize the evidence on intervention to promote selective motor control of the lower extremities for children with CP and infants with or at high risk of cerebral palsy.

### **MINISYMP18: Pain Matters! NINDS Cerebral Palsy Common Data Elements, International Classification of Functioning, and Measures of Pain in Children with Cerebral Palsy**

*Joline Brandenburg MD, Angela Shierk PhD, Theresa Sukal Moulton PT, DPT, PhD, Elaine Stashinko PhD, Veronica Schiariti PhD, Carolina Mendoza-Puccini MD, Robin Feldman BS*

Location: Jamaica B

Learning Objectives:

1. Describe the history and purpose of the CP CDEs.
2. Describe the process for selecting measures added to the CP CDEs for assessment of chronic pain in children with CP.
3. Define the relationship of the ICF framework to the CP CDE pain measures.
4. Develop skills in using CP CDEs and case report forms in research and clinical practice.



### **MINISYMP19: Partnering with Patients: Engaging Patients with Childhood-Onset Disabilities and Their Families in Research, Education, and Systems-Level Clinical Decisions.**

*Kristie Malik MD, Kilby Mann MD, Emily Goodwin MD, Kathleen Huth MD, MMSc, Catherine Diskin MD, Francine (Rabbito) Buchanan MLIS, PhD, Brenda Agnew*

Location: Montego C

Learning Objectives:

1. Discuss methods to identify, enlist, and ensure meaningful engagement from patients and families from diverse backgrounds.
2. Identify current tools available to develop a framework for patient and family engagement throughout their project process.
3. Develop a framework for patient and family engagement in their active research.
4. Understand ethics and compensation standards around meaningful patient and family engagement.

### **MINISYMP20: Bringing the “F-Words for Child Development” to Life: Lessons Learned from Global Implementation Efforts**

*Rachel Teplicky MSc, Kim Hesketh PT, Lucy Charles OT, Marina Junqueira Airolidi MS, Beatriz Viera MSc, Arul Hamill OT, Danijela Grahovac MSc, IT Engineer, Peter Rosenbaum MD*

Location: Montego B

Learning Objectives:

1. Upon completion participants will have an understanding of the F-Words for Child Development and the World Health Organization's International Classification of Functioning, Disability and Health (ICF) framework.
2. Upon completion, participants will have an understanding of the Knowledge to Action Cycle for implementation practice.
3. Upon completion participants will know how the F-words have been successfully implemented in three different countries by organizations, service providers and parents.
4. Upon completion participants will have practical strategies to implement the F-Words of Child Development.

### **MINISYMP21: Neuro-orthopaedic Journal Club: Top 10 Articles in the Last Year Relating to the Orthopaedic Management of Children with Neuromuscular Disorders**

*Amanda Whitaker MD, Vedant Kulkarni MD, Benjamin Shore MD, MPH, Jon Davids MD*

Location: Jamaica A

Learning Objectives:

1. Introduction to a standardized format for the critical analysis of scientific articles from the medical literature.
2. Be familiar with the most significant recent advances in the orthopedic management of children with neuromuscular disorders.
3. Incorporate new techniques and technologies into clinical practice.
4. Appreciate current research trends in this area and be inspired to make a contribution to the body of knowledge!

### **MINISYMP22: The State of Tone Management in Children with CP in North America: What Can We Learn from Each Other?**

*Sruthi Thomas MD, PhD, Paul Gross BA, Jeffrey Leonard MD, David Frumberg MD, Bhooma Aravamuthan MD, DPhil, Darcy Fehlings MD*

Location: St. Thomas A

Learning Objectives:

1. Understand the breadth of practice variation that exists in tone management of children with CP.
2. Understand the use of focal tone management in children with diparetic CP and how you can tailor your personal practice.
3. Understand the use of SDR and ITB in children with diparetic CP and how you can tailor your personal practice.
4. Understand current practices and gaps in knowledge in tone management in non-ambulatory children with CP.

### **MINISYMP23: Early Intervention Ingredients for Children with Cerebral Palsy at GMFCS Levels IV/V**

*Ana Carolina de Campos PT, PhD, Ginny Paleg DScPT, Egmar Longo PhD, Álvaro Hidalgo-Robles PT, Claire Shrader MSOT*

Location: Montego D

Learning Objectives:

1. Upon completion, participant will be able to describe how to identify infants at high risk for non-ambulatory CP.
2. Upon completion, participant will be able to identify the ingredients of early interventions using the F-words (Function, Family, Fun, Fitness, Friends, Future), based on the results of a scoping review.
3. Upon completion, participant will learn how to apply participation- focused interventions applied to different contexts, including low-resource settings.
4. Upon completion, participant will be able to describe how interventions can be delivered in the natural environment by family members based on case presentations and lived experience.

## Program & Events — Friday, September 23, 2022

### **MINISYMP24: Oral Hygiene Intervention for Adults with Intellectual/Developmental Disability**

*Robin Leinwand MOT, OTR/L, Demarre Sanchez MS, CCC-SLP*

Location: Trinidad B

Learning Objectives:

1. Define their professional role in facilitating effective oral hygiene for individuals with IDD and their caregivers.
2. Demonstrate at least 2 safe positioning options for completion of oral hygiene tasks.
3. Identify possible adaptive equipment or modifications to support increased independence or ease during oral hygiene tasks.
4. Develop individualized oral hygiene strategies for individuals with IDD and their caregivers.

7:00 pm - 12:00 am PDT

### **Networking Gala**

*Join us for an evening of dinner and dancing with AACPDM colleagues at Keep Memory Alive!*



FRIDAY

7:00 am - 8:00 am PDT

### Continental Breakfast in the Exhibit Hall

Location: Event Center A

8:00 am -9:00 am PDT

### MORNSEM14: Aligning Theory and Practice: Using the Family of Participation Related Constructs to Guide Intervention Planning and Fidelity

Gaela Kilgour MHS, BPhy, BPhEd, Christine Imms, PhD

Location: Montego B

Learning Objectives:

1. Map your clinical and community practices to the Family of Participation-Related Constructs (fPRC).
2. Guide the focus of rehabilitation towards prioritizing a participation-focused approach.
3. Define the transactional nature of participation in context
4. Describe and apply the importance of participation attendance and involvement to person, context and environmental outcomes.

### MORNSEM15: Trends in Adaptive Clothing and Inclusive Fashion

Mackenzie Brown DO

Location: Montego D

Learning Objectives:

1. Identify challenges and limitations related to clothing and dressing for children with special needs.
2. Describe current features of and options for adaptive clothing.
3. Discuss trends in adaptive clothing and inclusive fashion.
4. Provide resources to patients related to adaptive clothing.

### MORNSEM16: AT Village: Quality Improvement and Community Solutions for Adaptive Technology

Christine Pelis PT, DPT, Mary Locastro BS, MPH, Peyton Sefick BA, Nienke Dosa MD, MPH

Location: Jamaica B

Learning Objectives:

1. Provide an overview of the social constructs that impact access to Assistive Technologies for children with disabilities.
2. Gain a practical understanding of the 12 most commonly prescribed pieces of Durable Medical equipment for this population and learn how to effectively engage with the DME process.
3. Learn how to use Epic's Slicer/Dicer functionality and a "run chart" to generate real-time reports that can be shared with the community.
4. List policy implications of the AT Village project.

### MORNSEM17: From Theory to Practice: Contextualizing Diagnostic Care Pathways for Early Diagnosis of CP

Ram Mishaal MD, Stacey Miller BSc(PT), MRSc, Mor Cohen-Eilig MD

Location: Antigua A

Learning Objectives:

1. Upon completion, participants will be able to describe the medical and developmental risk factors for CP used.
2. Upon completion, participants will be able to describe a two-stream plan to ensure diagnostic services for high risk infants and the general pediatric population.
3. Upon completion, participants will be able to plan an early diagnosis pathway for high risk infants at tertiary-level centres.
4. Upon completion, participants will be able to identify barriers and potential solutions to implementing early diagnosis pathways with limited resources.

### MORNSEM18: Neuromodulation for Cerebral Palsy

Jason Carmel MD, PhD, Michelle Corkrum MD, PhD, Bhooma Aravamuthan MD, DPhil

Location: St. Thomas A

Learning Objectives:

1. Define neuromodulation and the techniques involved, including electrical stimulation.
2. Understand how brain changes in dystonia can be targeted with deep brain stimulation.
3. Define the nervous system connections important for hemiplegia and neuromodulation techniques to manipulate them.
4. Understand how spinal cord stimulation can be used to treat spasticity and improve walking.

### MORNSEM19: Menstrual Management in Adolescent Females with Disabilities

Emily Goodwin MD, Alannah Yoder PharmD, Kerry Prout PhD, Laurie Hornberger MD, MPH

Location: Jamaica A

Learning Objectives:

1. Describe potential impact of menstruation on females with disabilities and their family.
2. List available methods for menstrual management in women with disabilities including indications and contraindications.
3. Describe impact of polypharmacy and adverse effects on shared decision making for menstrual management.
4. Apply potential strategies to address patient and parent concerns regarding menarche in females with disabilities using interactive case examples.



### **MORNSEM20: Recent Practice Changing Publications for the Pediatric Complex Care Provider 2022**

*Kristie Malik MD, Emily Goodwin MD, Kilby Mann MD, Kathleen Huth MD, MMSc*

Location: Antigua B

Learning Objectives:

1. Discuss current topics and advances in the care of children with medical complexity.
2. Understand the multidisciplinary implications for each recent publication.
3. Identify methods to integrate findings into clinical practice.
4. Learn ways to meaningfully engage patients and families in research outcomes.

### **MORNSEM21: School's Out for Surgery: Making the Roles of Schools, Families, and Medical Teams Matter in Perisurgical Care**

*Marianne Gellert-Jones MA, CCC-SLP, Laura Owens MD, Laura Boyd MSW*

Location: Trinidad A

Learning Objectives:

1. Participants will describe the ways in which stressful hospitalizations may be mitigated by engaging in a robust assessment to optimize and improve client and familial support, before, during and after hospitalization.
2. Participants will demonstrate the ways in which the child's social/emotional, physical and communicative needs during hospitalizations can be improved with the engagement of community partners.
3. Participants will articulate the importance of preparation and support of the child and family in fostering improved outcomes following hospitalization and re-integration into community settings.
4. Participants will identify ways in which they can engage stakeholders across their own communities to optimize care for children with complex medical needs and their families surrounding hospitalizations.

### **MORNSEM22: Developing a Prehab Approach for SDR and SEMLS Surgeries**

*Jordan Sheriko MD, Luke Gauthier MD, Crystal Lowe-Pearce PhD*

Location: St. Thomas B

Learning Objectives:

1. Describe key processes involved in developing a psychosocial and physical prehab approach when planning for surgical options associated with intensive rehabilitation.
2. Understand the roles of the interdisciplinary team within a prehab approach.
3. Identify opportunities in existing pathways where implementing a prehab approach may improve outcomes.
4. Discuss preliminary outcome data and next steps in optimizing a prehab approach.

### **MORNSEM23: Interpreting Hip Surveillance X-Rays with the HipScreen App: A Primer for the Radiology Novice**

*Vedant Kulkarni MD, Jon Davids MD, Amanda Whitaker MD, Suzanne Bratkovich MSPT*

Location: Trinidad B

Learning Objectives:

1. Upon completion, participants will be able to use the HipScreen App to measure a hip's migration percentage.
2. Upon completion, participants will be able to identify important landmarks on a hip surveillance radiograph used for quantifying hip displacement.
3. Upon completion, participants will be able to recognize features of poor patient positioning for radiographs that could cause inaccuracy of the migration percentage measurement.
4. Upon completion, participants will be able to understand protocols for proper positioning of children to obtain accurate hip surveillance radiographs.

### **MORNSEM24: Designing and Implementing an Evidence-Informed Parent Coaching CIMT program for Young Children with Cerebral Palsy**

*Nancy Batterson OT/L, SCFES, CLC, Kelly Tanner PhD, OTR/L, BCP, Sara O'Rourke MOT, OTR/L, BCP*

Location: Montego C

Learning Objectives:

1. Describe how the Institute for Healthcare Improvement (IHI) model can be utilized to implement a program change.
2. Identify the components of a parent coaching focused CIMT program based on using the Healthcare Improvement (IHI) model of quality improvement.
3. Identify access challenges to current CIMT models and how this impacts equity and patient access.
4. Identify how to overcome these challenges and create a parent coaching model in participants facility.

### **MORNSEM25: NINDS Cerebral Palsy Common Data Elements for Lower Extremity Orthopedic Interventions**

*Joline Brandenburg MD, M. Wade Shrader MD, Susan Sienko PhD, Paul Gross BA*

Location: Montego E

Learning Objectives:

1. Describe the process for determining the CP CDE recommended for orthopedic interventions.
2. Demonstrate the case report forms and CP CDE for orthopedic interventions.
3. Describe the collaboration between CPRN and NINDS CP CDEs in developing the orthopedic CP CDE.
4. Identify how to find and use case report forms and CP CDE for orthopedic interventions.

## Program & Events — Saturday, September 24, 2022

9:00 am - 9:30 am PDT

### Coffee Break in the Exhibit Hall

#### Let's Move!- Wheelchair Rugby

Location: Event Center A

High Rollers Adaptive Sports Foundation

Watch a demo of Wheelchair Rugby or try to ride this tailored chair! A competitive, fun sport!

9:30 am - 11:15 am PDT

### Free Paper Session I: Early Intervention and Development II

Location: Event Center C1

9:30 am - 9:37 am PDT

#### I1: A Systematic Review of Barriers and Facilitators Experienced by Parents of Typically Developing and Preterm Children During the Transition to School

*Alina Morawska PhD, Amy Mitchell PhD, Evren Etel PhD, Tianyi Ma BA, Tomomi McAuliffe PhD, Rebecca Armstrong PhD, Cathy McBryde PhD, Leanne Johnston PhD*

9:38 am - 9:45 am PDT

#### I2: iMOVE (Intensive MObility with Variability and Error) Trial for Toddlers with Cerebral Palsy

*Laura Prosser PT, PhD, Samuel Pierce PT, PhD, Julie Skorup DPT, Athylia Paremski BA, Morgan Alcott DPT, Abbas Jawad PhD*

9:46 am - 9:54 am PDT

#### I3: Investigation of the Effectiveness of Family Collaborative Physiotherapy Programs Applied to High-Risk Infants

*Hatice Adiguzel Ass. Prof., Yusuf Unal Sarikabadayi MD, Bulent Elbasan PhD*

9:55 am - 10:01 am PDT

#### I4: Neuroplastic Changes in Response to Therapy Intervention for Preterm Infants in the First Months of Life: A Pilot Study

*Christiana Butera EdM, PhD, Claire Rhee, Shaaron Brown PT, DPT, Claire Kelly BS, Thijs Dhollander PhD, Deanne Thompson PhD, Natasha Lepore PhD, Natalie Koziol PhD, Barbara Sargent PhD, PT, Jennifer Burns MD, MS, Mary Shall BA, MS, PhD, SPEEDI Research Team PhD, Stacey Dusing PhD, PT*

10:02 am - 10:09 am PDT

#### I5: Stability of the Motor Optimality Score (Revised) in a Cohort of At-Risk Infants

*Colleen Peyton DPT, Ryan Millman BA, Sarah Rodriguez MD, MPH, Vanessa Barbosa OT, PhD, Lynn Boswell PT, MS, Raye-Ann de Regnier MD, Alicia Spittle PhD, PT, Theresa Sukal Moulton PT, DPT, PhD*

10:25 am - 10:32 am PDT

#### I6: Clinical and Social Characteristics of Physical (PT) and Occupational (OT) Therapy Service Receipt and Dose Among Infants With Confirmed Motor Delays

*Beth McManus PT, MPH, ScD, Stacey Dusing PhD, PT, Natalie Koziol PhD, Lin-Ya Hsu PT, PhD*

10:33 am - 10:40 am PDT

#### I7: Variation in Developmental Measures Following Abusive Head Trauma in Infancy: A Systematic Review

*Cristina Sarmiento MD, Jordan Wyrwa DO, Amy Chambliss MD, Kelly Stearns-Yoder MA, Adam Hoffberg MHS, Amanda Appel MD, MPH, Benjamin Brenner, Lisa Brenner PhD*

10:41 am - 10:48 am PDT

#### I8: Assessment of an In-Clinic Quantitative Measure of Functional Upper Extremity Reach in Children with Brachial Plexus Birth Palsy

*Patrick Curran MD, Kemble Wang MBBS, FRACS, Daniel Wilks MBChB, FRCS, Eliane Rioux-Trottier MD, FRCS, Nicole Alexander BPhysio, David McCombe MBChB, FRCS*

10:49 am - 10:56 am PDT

#### I9: Heart Rate Time Series Analysis for Infants in the Neonatal Intensive Care Unit and Risk for Cerebral Palsy

*Lisa Letzkus PhD, Jackson Brandberg MSDS, Genevieve Lyons MSPH, Karen Fairchild MD, Doug Lake PhD*

10:57 am - 11:04 am PDT

#### I10: Motor Optimality Scores are Significantly Lower in a Population of High-Risk Infants Than in Infants Born Moderate-Late Preterm

*Colleen Peyton DPT, Ryan Millman BA, Sarah Rodriguez MD, MPH, Vanessa Barbosa OT, PhD, Lynn Boswell PT, MS, Raye-Ann de Regnier MD, Alicia Spittle PhD, PT, Theresa Sukal Moulton PT, DPT, PhD*

### Free Paper Session J: Orthopedics

Location: Event Center C2

9:30 am - 9:37 am PDT

#### J1: Identification and Treatment of Hip Instability in Down Syndrome: A Scoping Review

*Rikki Koehler MD, Daniel Gregory MS, Mary Gannotti PT, PhD, James Mooney MD, Rubini Pathy MD*

9:38 am - 9:45 am PDT

#### J2: Automated Measurement of Migration Percentage in Hip Surveillance Radiographs: Development and Testing of a Deep-Learning "Artificial Intelligence" Algorithm

*Chun-Hsiao Yeh MS, Justin Krogue MD, Patrick Donahue BS, Marie Villalba BS, Sangryul Jeon PhD, Stella Yu PhD, Vedant Kulkarni MD*

## Program & Events — Saturday, September 24, 2022

9:46 am - 9:54 am PDT

**J3: Evaluation of Alternate X-rays to Reduce Hip Surveillance Imaging in Children with Cerebral Palsy**  
*Stacey Miller BSc(PT), MRSc, Ceilidh Matthews BHSc (Honours), Jeffrey Bone MSc, Jennifer Farr BBA, Kishore Mulpuri MHSc, MSc, MBBS, FRCSC*

9:55 am - 10:01 am PDT

**J4: Association of Race with Risk of Revision and Post-operative Complications after Spinal Instrumentation in Children with Cerebral Palsy**  
*Lauryn Brown BA, Sean Tabaie MD*

10:02 am - 10:09 am PDT

**J5: Pre-operative Psychosocial Assessment in Pediatric Patients with Cerebral Palsy Decreases Length of Stay After Spine Fusion**  
*Carrie Sewell-Roberts MSW, Elizabeth Gillooly B.S., Nancy Lennon DPT, M. Wade Shrader MD, Denver Kraft MD, Tolulope Banjo BA, Jose Salazar-Torres PhD*

10:25 am - 10:32 am PDT

**J6: The Effect of Dual-Attending Surgeons on Resource Utilization and Post-operative Outcomes in Single Event Multilevel Surgery (SEMLS) in Children with Cerebral Palsy (CP)**  
*Michelle Mo MD, PhD, Patricia Miller MS, Sachin Pathangey BA, Brian Snyder MD, PhD, Colyn Watkins MD, Benjamin Shore MD, MPH*

10:33 am - 10:40 am PDT

**J7: Anterior Distal Femoral Hemiepiphyseodesis in Children with Fixed Knee Flexion Deformities: Does Screw Location Matter?**  
*Shay Seth MD, Patricia Miller MS, Colyn Watkins MD, Benjamin Shore MD, MPH*

10:41 am - 10:48 am PDT

**J8: The First North American Hip Surveillance Program: Enrollment after 5 Years**  
*Stacey Miller BSc(PT), MRSc, Jennifer Farr BBA, Kishore Mulpuri MHSc, MSc, MBBS, FRCSC*

10:49 am - 10:56 am PDT

**J9: Foot Drop After Surgery for Equinus Deformity in Ambulant Children with Cerebral Palsy**  
*Nicholas Sclavos B Pty (Hons), MCR, Pam Thomason MPT, Elyse Passmore PhD, Kerr Graham MD, Erich Rutz MD, PhD*

10:57 am - 11:04 am PDT

**J10: Double Calcaneal Osteotomy in Treatment of Severe Planovalgus Foot Deformity in Ambulatory Cerebral Palsy. A case series study**  
*Ahmad Aly MD, Shady Abdelghaffar PhD*

## Free Paper Session K: Lifespan Issues/Nutrition

Location: Event Center C3

9:30 am - 9:37 am PDT

**K1: Weight Status, Parental Concern about Weight, and the Relationship to Physical Activity and Sport among Children with Cerebral Palsy**  
*Sarah Creveling BS, Mario Keko MPH, Cory Cribb BS, Christopher Modlesky PhD, Haresh Rochani DrPH, MPH, MBBS, Gavin Colquitt EdD*

9:38 am - 9:45 am PDT

**K2: Describing Healthcare Concerns of Adolescents and Adults with Cerebral Palsy**  
*Cassidy MD, FRCP(C), Laura K. Brunton PT, PhD, Jessica Starowicz, BHSc, MSc*

9:46 am - 9:54 am PDT

**K3: A Systematic Review of the Benefits and Complications of the Blended Diet for Enteral Tube Feeding in Young People**  
*Siobhan McCormack MB BCh BAO MRCPI MSc, Kamal Patel MBBS MRCPCH MRCP, Trevor Welland PhD, Chris Smith SRD BSc MBDA*

9:55 am - 10:01 am PDT

**K4: Dietary Intake of Children and Adolescents with Cerebral Palsy According to Motor Impairment and the Presence of Dysphagia**  
*Maria de las Mercedes Ruiz Brunner PhD, M Elisabeth Cieri BS, Ana Laura Condinanzi BS, L Johana Escobar Zuluaga PT, Eduardo Cuestas PhD*

10:02 am - 10:09 am PDT

**K5: Examining the Development and Utilization of Infection Control Policies to Safely Support Adults with Neurodevelopmental Disabilities in Congregate Living Settings During COVID-19**  
*Briano Di Rezze PhD, Matt Freeman PhD, Alainna Crawford MSc, Michelle Rianto BHSc, Emily FitzGerald MS*

10:25 am - 10:32 am PDT

**K6: Providing Anticipatory Guidance for Children with Gastrostomy Tubes: Feasibility and Impact of an Online Curriculum for Residents**  
*Emily J. Goodwin MD, Robert Riss FAAP, Evan Weber MD, Elizabeth Rhyne MD, Elena Huang MD, Jeffrey Colvin MD*

10:33 am - 10:40 am PDT

**K7: Post-Fracture Pneumonia Risk and its Consequential Effects on Health and Survival is Not Just a Geriatric Problem for Adults with Cerebral Palsy**  
*Daniel Whitney PhD, Maryam Berri MD, Tao Xu PhD*



## Program & Events — Saturday, September 24, 2022

10:41 am - 10:48 am PDT

### **K8: Progression of Hip Displacement After Triradiate Cartilage Closure in Non-Ambulatory Cerebral Palsy (CP): Who Needs Continued Radiographic Surveillance?**

*Ali Asma MD, Armagan Can Ulusoglu MD, M. Wade Shrader MD, Kenneth Rogers PhD, Freeman Miller MD, Jason Howard MD*

10:49 am - 10:56 am PDT

### **K9: Reduced Wrist Flexor H-Reflex Excitability is Linked with Increased Wrist Proprioceptive Error in Adults with Cerebral Palsy**

*Saihari Dukkupati MS, Sarah Walker BS, Michael Trevarrow PhD, Sarah Baker MA, Max Kurz PhD*

10:57 am - 11:04 am PDT

### **K10: The Role and Use of Assistive Technology in Adults with Cerebral Palsy: A Scoping Review**

*Katherine Dimitropoulou PhD, MSPOR, OTR/L, Rochelle Mendonca PhD, OTR/L, Haley Congdon BS, Cori Barger BS, Sabrina Zhang BS, Kelly Donnellan BS, Michelle Johnson PhD*

## **Free Paper Session L: Epidemiology Health Services**

Location: Montego AF

9:38 am - 9:45 am PDT

### **L2: Socio-Demographics and their Effect on Access to Care in Children with Cerebral Palsy**

*Mayuri Reddy, Hannah Aura Shoval MD, JenFu Cheng MD*

9:46 am - 9:54 am PDT

### **L3: Impact of Socioeconomic Status, Maternal Education, and Gestational age on Medical, Developmental, and Functional Outcomes among Children with Cerebral Palsy**

*Theresa Moulton PT, DPT, PhD, Michael Msall MD, Sarah Safdar DO, Deborah Gaebler-Spira MD*

9:55 am - 10:01 am PDT

### **L4: Immigrant Children with Cerebral Palsy, How Different are They from the Native Population Born in The 21st Century? Data from the SCPE-Affiliated Portuguese Surveillance Programme**

*Ana Cadete MD, Teresa Folha MSc, Daniel Virella MD, Joaquim Alvarelhão PhD, Eulalia Calado MD*

10:02 am - 10:09 am PDT

### **L5: Barriers to Access Faced by Non-English-Speaking Families of Children with Cerebral Palsy**

*Christina Herrero MD, David Bloom MD, Mara Karamitopoulos MD, Nikolas Bletnitsky BS, Eduardo Del Rosario PhD candidate*

10:25 am - 10:32 am PDT

### **L6: Ethnicity and Household Impact on GMFCS and PODCI Performance Status**

*Philip Gates MD, Marnita Siglar Thomas, Joseph Andary PhD*

10:33 am - 10:40 am PDT

### **L7: Barriers to Implementation of Assessment Protocol by Speech-Language Pathologists: A Systematic Review**

*Annaliese Norris MS, Camille Skubik-Peplaski OTR/L*

10:41 am - 10:48 am PDT

### **L8: Cerebral Palsy in the Western Province of Sri Lanka: A Hospital Based Observational Study from a Low Middle Income Setting**

*Tasneem Karim MBBS, MPH, Thilini Madushika BSC, Romaniya Fernando BSC, Dimuthu S. Wijesekara MBBS, MD (PAEDIATRICS), DCH, MRCPCH, Nimisha Muttiah BS, MS, PhD, Jayathri Jagoda MBBS, MD, Pyara Rathnayaka MBBS, MD, Jithangi Wanigasinghe MBBS, MD, Gopi Kitnasamy BSc, Gulam Khandaker MBBS, MSc, PhD, Hayley J. Smithers-Sheedy BApspSc, MPH, PhD, Samanmali P. Sumanasena MBBS, MD, MSc*

10:49 am - 10:56 am PDT

### **L9: Improving After Visit Communication in a Pediatric Multidisciplinary Neuromuscular Program**

*Elaine Lin MD, Kristin Shadman MD, Skylar Hess BA, Liam Butler BS, Sheena Ranade MD, Cordelia Elaiho MPH, Robert Fields MD, Brijen Shah MD*

10:57 am - 11:04 am PDT

### **L10: Myelomeningocele Functional Classification (MMFC): correlation with other myelomeningocele classifications**

*Ana Tedesco MD, Renata Nicolini-Panisson PhD*

9:30 am - 11:15 am PDT

## **Complex Care SIG Meeting**

Location: Antigua A

11:15 am - 12:15 pm PDT

## **Lunch Break**

12:15 pm - 1:45 pm PDT

### General Session

Location: Event Center B

AusACPD Update

EACD Update

Best Poster Award Presentation

Promising Career Award Presentation

**Chambers Family Lifespan Lecture: Participation - Make It Matter!**

*Terri Hancharick and Jen Lyman, MS*

**Closing Remarks**

*Lesley E. Pritchard PhD, PT*

**2023 Introduction**

*M. Wade Shrader MD*

2:00 pm - 4:00 pm PDT

### **MINISYMP25: Gait Case Conundrums: Utilizing 3D Motion Analysis to Assess Gait Impairments in Children with Cerebral Palsy with Unusual Presentations - The PT/PM&R Perspective**

*Alison Hanson MS, PT, Susan Rethlefsen PT, DPT, Eva Ciccodicola PT, DPT, Amy Barbuto DPT, Ryan Hartmann PT, DPT, Edward Wright MD*

Location: St. Thomas A

Learning Objectives:

1. Understand how gait analysis data are collected, and how to interpret the data.
2. Identify areas in which computerized 3D gait analysis provides clinical/movement information that cannot be obtained with standard assessment techniques.
3. Be able to use gait analysis data to understand causes of complex gait problems.
4. Use biomechanical knowledge gained using 3D gait analysis to modify clinical evaluation procedures.

### **MINISYMP26: Casting a Wider “Baby” Net: Lessons Learned in Implementing an Infant Motor Evaluation Clinic (IMEC) for early CP detection in a US Clinical Setting**

*Paola Mendoza-Sengco MD, Jilda Vargus-Adams MD MSc, Cameron Thomas MD, MS, Gretchen Mueller DPT, Hillary Prather MSW*

Location: St. Thomas B

Learning Objectives:

1. List unique barriers in their setting to early CP detection and intervention in infants without obvious risk factors.
2. Identify important stakeholders and champions in their own setting to collaborate with in advancing early CP detection.
3. Demonstrate increased ease and sensitivity in sharing a diagnosis of CP to families and learn how better to support them.
4. Plan initial steps in setting up an early detection clinic for infants without obvious CP risk factors in their own setting/institution.

### **MINISYMP27: Gross Motor Function Family Report for Children and Adolescents with Cerebral Palsy - Development, Validation and Application**

*Paula Chagas PhD, PT, Hércules Leite PhD, PT, Peter Rosenbaum MD, Marilyn Wright MSc, PT, MEd*

Location: Jamaica A

Learning Objectives:

1. Participants will be able to understand the reasons for the development of a new measure for use in telehealth and context related settings.
2. Participants will learn about the steps used to develop the GMF-FR with input from parents and children.
3. Participants will understand instrument validation conducted to date and future plans for psychometric evaluation of the tool.
4. Participants will have an opportunity to access the GMF-FR through our group after the course as part of an international pilot test release.

### **MINISYMP28: Using Quality Improvement to Change Systems and Improve Care in Cerebral Palsy**

*Amy Bailes PT PhD, Garey Noritz MD, Bhooma Aravamuthan MD, DPhil, Angeline Bowman MD, Duncan Wyeth BS, MA*

Location: Montego C

Learning Objectives:

1. Understand the theoretical foundations of quality improvement methods and describe how they differ from research.
2. Describe the tools used in quality improvement activities.
3. Discuss current examples of quality improvement work happening across multiple centers and disciplines in cerebral palsy.
4. Develop a plan to engage consumers in improvement work.

### **MINISYMP29: Cultivating Professional Fulfillment and Reigniting Joy in the Work Environment.**

*Mohan Belthur MD, FRCSC, Daniel Drane EdD, Guadalupe Federico-Martinez PhD, Jennifer Hartmark-Hill MD*

Location: Trinidad B

Learning Objectives:

1. Upon completion, participants will be able to define "professional fulfillment" and describe the different domains that contribute to achieving professional fulfillment at work.
2. Upon completion, participants will be able to describe 2 models to understand the concept of "professional fulfillment".
3. Upon completion, participants will be able to list facilitators and barriers to cultivating professional fulfillment at work, and describe tools to measure it.
4. Upon completion, participants will be able to describe some strategies to cultivate joy and meaning at work.

### **MINISYMP30: Navigating Knowledge about the Knee: Expert Consensus Informed by the Delphi Process for Surgeries Performed about the Knee in Ambulatory Children and Adolescents with Cerebral Palsy**

*Kristan Pierz MD, James McCarthy MD, MHCM, Henry Chambers MD, Tom Novacheck MD, Benjamin Shore MD, MPH*

Location: Montego B

Learning Objectives:

1. Upon completion, participant will be able to describe the Delphi process.
2. Upon completion, participant will be able to discuss where consensus does/does not exist for common procedures performed about the knee for ambulatory children with cerebral palsy.
3. Upon completion, participant will be able to demonstrate confidence in making surgical recommendations.
4. Upon completion, participant will be able to identify where additional work is needed to justify surgical recommendations.

### **MINISYMP31: Making a Difference with the GOAL Questionnaire: Incorporating Family Priorities into Practice**

*Jean Stout PT, MS, Elizabeth Boyer PhD, Andrew Georgiadis MD, Pam Thomason MPT, Kathryn Walt DPT, Unni Narayanan MBBS, MSc, FRCS(C)*

Location: Antigua A

Learning Objectives:

1. Describe the unique nature of the GOAL Questionnaire and what it adds to functional outcome assessment.
2. Explain the validity, reliability, scoring and interpretation across patients with different motor abilities.
3. Identify one or more pearls and pitfalls regarding incorporation of the GOAL Questionnaire into clinical practice.
4. Discuss how direct knowledge of family priorities related to functional tasks can augment and direct treatment planning.

### **MINISYMP32: Personalized Medicine Approach in Children with Unilateral Cerebral Palsy: The CATCH-HEMI Project**

*Giuseppina Sgandurra MD, PhD, Elena Beani PhD, Tarek Omar Doctorate of Pediatrics, Lena Krumlinde Prof., Tamim Asfour Prof., Francesca Fedeli DPT*

Location: Jamaica B

Learning Objectives:

1. Upon completion, participant will be able to learn the personalized medicine approach.
2. Upon completion, participant will be able to learn the use of personalized medicine approach in child neurology.
3. Upon completion, participant will be able to learn the crucial domains in the evaluation of children with unilateral cerebral palsy.
4. Upon completion, participant will be able to learn how to involve the families from the beginning for a personalized medicine approach.



### **MINISYMP33: Mobile Device Applications for Care of Individuals with Developmental Disabilities: When is the App Appropriate?**

*Anna McCormick MD FRCPC, Hana Alazem MD, MSc PT, FRCPC(C), Colleen Peyton DPT, Vedant Kulkarni MD, Deborah Gaebler-Spira FAAPM&R, Alicia Spittle PT, PhD*

Location: Trinidad A

Learning Objectives:

1. Define a mobile application and appreciate how they are developed and assessed.
2. Appreciate the utility of applications to enable innovative assessment, early intervention and remote service delivery through video based movement assessment, audio-analysis of infant speech and x-ray analysis for hip surveillance.
3. Participate in hands-on small group learning sessions with expert guided use of apps applicable to care of children with or at risk of neurodevelopmental disability (Baby Moves, Babbly, HipScreen).
4. Participate in a facilitated academic discussion regarding the user experience to date, other APPs of interest, new application opportunities, perceived benefits and challenges and collaboration to enable innovation.

### **MINISYMP34: Utility of Eye Tracking to Evaluate Functional Vision in Individuals with Cerebral Visual Impairments**

*Corinna Bauer PhD, Linda Lawrence MD, Glen Prusky PhD, Lotfi Merabet PhD, OD, Melinda Chang MD*

Location: Montego E

Learning Objectives:

1. Understand the critical need for robust quantitative assessments of vision that eye tracker technology can provide, enabling a better understanding of how CVI presents in an individual patient.
2. Consider how eye tracking can help determine how a child with CVI sees and how this impacts the patient, including their access to education, medical care, and other services.
3. Consider priorities and approaches for future optimization of the evaluation of vision in children with or at increased risk for brain-based visual impairments, including CVI.
4. Understand how eye tracking may in future facilitate an individualized approach to evidence-based interventions in CVI.

### **MINISYMP35: Difficult Discussions: A New Resource to Help Support Conversations About Advance Care Planning for Children with Chronic Medical and Developmental Conditions.**

*Andrea Hoffman MD, FRCPC, Joanna Humphreys MD, FRCPC, Erin Brandon MN, NP Paediatrics, Carolyn Wilson RN, BScN, MN*

Location: Montego D

Learning Objectives:

1. List the principles of ACP and the perceived barriers.
2. Understand why conversations related to ACP are critical when caring for individuals with chronic medical and developmental conditions.
3. Describe the different components of the ACP Postcard and understand how they build upon existing frameworks to facilitate communication with families about a variety of future-focused topics.
4. Apply the ACP Postcard in a wide variety of clinical scenarios to help initiate conversations related to ACP or future care planning using language that is strength-based and empowering.

### **MINISYMP36: Let's Get Everyone Moving and Keep Them Moving Throughout the Lifespan**

*Gaela Kilgour MHSc, BPhy, BPhEd, Sarah Creveling BS, Karen Romer RN, Marianne Mousigian MD, Stephanie Tow MD, Cynthia Frisina MA, Gavin Colquitt EdD*

Location: Antigua B

Learning Objectives:

1. Demonstrate an understanding of the latest evidence regarding the potential benefits of physical activity for people with CP.
2. Demonstrate an understanding of how to adapt physical activity in exercise, sport, recreation, and leisure for children with cerebral palsy (CP) or other childhood-onset disabilities (COD) throughout the lifespan.
3. Describe resources and equipment needed to assist with making physical activity accessible to individuals with CP or other COD.
4. Demonstrate an understanding of methods to overcome barriers to physical activity through community-based and virtual programs.

**3:00 pm - 7:00 pm PDT**

### **Board of Directors Meeting**

## Posters

### Clinical Observation/Single Case Study Posters

**CO01: Objective Evaluation of Gait Changes over Time: a Case Study for a Child with Cerebral Palsy**

*Sylvia Ounpuu MSc, Kristan Pierz MD*

**CO04: Utilization of Activity Monitoring and the Gait Assessment Outcomes List (GOAL) Questionnaire to Supplement Recommendations Following Clinical Gait Analysis: A Case Study**

*Kathryn Walt D.PT, Jean Stout PT, MS*

**CO06: Quadriciser's Impact on Walking Efficiency of Adolescents with Cerebral Palsy**

*Thomas Moran Ph.D., CAPE, Meghan Skelley DPT*

**CO09: Measuring Physical Activity in Non-ambulatory Children with Cerebral Palsy: An Exploratory Case Series**

*Nia Mensah DPT, Margaret O'Neil PhD, PT, MPH, Lori Quinn EdD, PT*

**CO13: Segmental Intensive Trunk Training (SITT) in Children with Cerebral Palsy GMFCS V: A Case Study**

*Bhavini Surana PT, EDD, Victor Santamaria PT, Tatiana Luna MS, Jaya Rachwani PT, MS, PhD, Andrew Gordon MS, PhD, Sunil Agrawal MS, PhD*

**CO15: Neuromuscular Control Changes Related to Muscle Fatigue After an Intense Motor Task in a Child with Cerebral Palsy: A Pilot Study**

*Jean Stout PT, MS, Tom Novacheck MD*

**CO33: Capacity vs. Performance: How Cognition and Motivation Affect Surgical Outcomes**

*Jennifer Brashears DPT, Anne Brockmeyer DPT, Brittany Hornby DPT*

**CO59: Case Report: Efficacy of Botulinum Toxin for Leg Spasms in Spina Bifida with Paraplegia**

*Poonam Bhatia MD*

**CO61: A Case Mimicking Acute Intrathecal Baclofen Withdrawal in the Setting of Severe Constipation Exacerbating Underlying Chronic Adhesive Arachnoiditis: Troubleshooting by Using Best Practice Algorithm**

*Deborah Cassidy DO, PGY-5, Heakyung Kim MD, Elisabeth Bellissimo CPNP BSN, MSN*

**CO63: Tapering Baclofen Pumps in the Young Adult Population: A One Year Quality Analysis Project**

*Marcie Baldwin MS, APRN, CPNP, Erin Davis MS, APRN, CPNP, Warren Marks MD, John Honeycutt MD, Fernando Acosta MD, Stephanie Acord MD*

**CO65: Goal Attainment Following Treatment with AbobotulinumtoxinA and a Tailored Home Therapy Program in Children with Upper-limb Spasticity**

*Angela Shierk PhD, Nigar Dursun MD, Cigdem Cekmece PhD, Marcin Bonikowski MD, Weronika Pyrzanowska PhD, Simon Page PhD, Mauricio Delgado MD*

**CO67: Upper-limb Pedaling as a Model to Study Bilateral Coordination in Children with and Without Hemiparetic Cerebral Palsy: A Case Report**

*Samuel Nemanich PhD, Sophia Bertrand B.S., Meaghan Murray BS, Taylor Drost BS, Sheila Schindler-Ivens PhD, PT, Karin Goodfriend MD*

**CO76: Virtual Musical Activity Experience in 2020**

*Beril Melina Dursun BS, Tugba Gokbel Assistant Professor*

**CO88: Implementation of Early Detection of Cerebral Palsy in an Outpatient Clinic**

*Valerie Pieraccini MS OTR, Melissa Coronado OTD*

**CO80: Allergic Colitis: A Side Effect of Trihexyphenidyl**

*Mackenzie Brown DO*

**CO104: Arthrogryposis with Epileptic Syndrome in a 6-month-Old Patient with a De novo SCN1A Variant**

*Noémi Dahan-Oliel PhD, OT, Sena Tavukcu BS, Philip Giampietro MD, PhD, Frank Rauch MD, Reggie Hamdy MD, MSc*

### Demonstration Posters

**DP01: Remotely Monitored Transcranial Direct Current Stimulation in Children with Cerebral Palsy**

*Emma Simpson BS, Catarina Saiote PhD, Preston Christopher BS, Ellen Sutter PT, DPT, Daniel Lench PhD, Bernadette Gillick PhD, MSPT, PT*

**DP02: Post-operative Physical Therapy Telehealth Visits in Children with Cerebral Palsy Who Undergo Lower Extremity Orthopaedic Surgery**

*Kelly Greve PT, DPT, PhD, Caroline Colvin DPT*

**DP03: STEPS 2HOME Planning Grant: The Process and Products of Interdisciplinary Research Planning**

*Stacey Dusing PhD, PT, Dana McCarty DPT, Sandy Willett PhD, Kerry Miller PhD, Lisa Chiarello PT, PhD, FAPTA, Lorey Wheeler PhD*

**DP04: Children's Health Ireland Complex Care Programme (CHICC-P) - Opportunities for Improved Care for Children with Neurodisability and Their Families**

*Siobhan McCormack MB BCh BAO MRCPI MSc, Aedin Collins MB BCh BAO MRCPI MSc, Aoife Mahony MB BCh BAO MRCPI, Emma Curtis MB BCh BAO FRCPI, Stephanie Kelly BSc MSc, Maeve Ledden BSc, Denise McDonald MB BCh BAO FRCPI MD, Joanne Balfe MB BCh BAO FRCPI MSc*

**DP05: Severe Neurological Impairment in Ireland (SPIRE) - A New Paediatric Research Network Focused on Severe Neurological Impairment**

*Siobhan McCormack MB BCh BAO MRCPI MSc, Aedin Collins MB BCh BAO MRCPI MSc, Aoife Mahony MB BCh BAO MRCPI, Suzanne Kelleher LRCP & SI MB BCh FRCPI, Louise Baker MB MCh BAO FRCPI, Nicholas Allen MB BCh BAO FRCPI PhD, Joanne Balfe MB BCh BAO FRCPI MSc, Denise McDonald MB BCh BAO FRCPI MD*

## Posters

### DP06: Being, Finding, and Sharing the Best: Integrated Pillars of Practice for a Contemporary Community Service Provider

Shaun Cannon

### DP07: Advancing the Inclusion of Individuals with Disabilities in Healthcare, Government, and Community Participation

Andrea Stoesz MPH, Barbara Joers MHA

### DP08: Using the F-words in Childhood Disability for Physical Therapy Goal Setting Post-selective Dorsal Rhizotomy

Jessica Lewis PT, DPT, Kristen Blatt PT, DPT, Rachel Bican PT, DPT, PhD

### DP09: Developing Sustainable Physical Activity Programs for Youths with Cerebral Palsy Through Community and Academic Collaborative Efforts: Lessons Learnt

Jacqueline Chen BS, Ashley Hammond BS, Katherine Dimitropoulou Ph.D., MSPOR, OTR/L

### DP10: Digital Healthcare Tool for Patients and Caregivers-ditching the Binders

Brenda Agnew BA DP11: Using a Telephone Screening Tool to Identify Bone Health Risk in Children with Cerebral Palsy  
Karen Romer RN, Leslie Rhodes DNP, Alicia Diaz-Thomas MD, William Warner MD, David Spence MD

### DP12: Project INITIATE: A Protocol for Developing Community Collaborations to Improve Developmental Outcomes Through Prompt and Equitable Transition to Community Therapy Service in High-risk Newborns

Jessica Trenkle PT, DPT, PCS, Alison Liddle PT, MPP, PCS, Lynn Boswell PT, MS, Raye-Ann DeRegnier MD

### DP13: Use of a Running Frame to Augment Participation in Physical Education Class

Larke Johnson, Tara Egan PT, DPT, Megan McGlynn PT, DPT, Theresa Moulton PT, DPT, PhD

### DP14: Building Capacity on Telerehabilitation for Early Intervention in Preterm Infants in Brazil: gaps and Opportunities

Silvana Pereira PhD, Stacey Dusing PhD, PT

### DP15: Remote Tracking of Tummy Time in Term and Preterm Infants Using Wearable Sensors: A Real-world Validation Study

Ketaki Inamdar MS, PT, Kayla Bowler BA, Dhriti Thakur BS, Jessica Manning, Stacey Dusing PhD, PT, Virginia Chu PhD, OTR/L

### DP16: Exploration of Space and Self: Tracking Early Motor Experiences to Characterize Typical and Atypical Trajectories of Motor Development

Marie Kelly MPH, Noelle Guan, Olivia Frey OT, Isabelle Everett BS, Claudio Ferre PhD

### DP17: Measuring Somatosensory Processing in Early Childhood in Children Who Were Born Preterm

Megan Pesci BS, Mahira Ali BS, Virginia Chu PhD, OTR/L

### DP18: How Does Experience Contribute to Brain Development? Interrelation Between Sensorimotor Function and Brain Activation in Infants at Risk of Developing Cerebral Palsy

Xiwen Su MS, Marie Kelly MPH, HyunJoon Kim MS, Claudio Ferre PhD

### DP19: Knowledge, Perception and Practices of Parents and Healthcare Professionals About Behavioural and Physiological Cues of Preterm Infants: A Mixed Methods Study

Radhika Attal BPT (Pursuing Masters in Physiotherapy), Sonia Khurana PhD, Manasa Kolibylu MPT, Selvam Ramachandran PhD, MPT, Leslie Lewis DNB Pediatrics, Bhamini Krishna Rao PhD

### DP20: Do Infant and Toddler Occupational, Physical, and Speech Therapy Interventions Alter Parent-child Relationships? a Protocol for a Systematic Review

Corri Stuyvenberg PT, DPT, MA, Rebecca Molinari DPT, Shaaron Brown PT, DPT, Stacey Dusing PhD, PT

### DP21: Multimodal Measurement of Corticomotor Function in Children with Unilateral Cerebral Palsy

HyunJoon Kim MS, Marie Kelly MPH, Xiwen Su MS, Claudio Ferre PhD

### DP22: The Babbly App; Working with Families to Study the Usability and Impact of This Innovative Approach for Early Detection and Intervention of Infants at Risk of Speech and Language Delay

Hana Alazem MD, MSc PT, FRCP(C), Anna McCormick MD FRCP(C), Sarah Zaidi, Miriam Maarse MB BCh BAO FRCP(C), Christopher Fennell PhD

### DP23: Physician-to-physician Consult Service: Supporting Cerebral Palsy Diagnosis and Tone Management in the Community

Mia Francl MD, FRCP(C), Carol Lai MPH, Ram Mishaal MD

### DP24: From Theory to Practice: Contextualizing Diagnostic Care Pathways for Early Diagnosis of CP

Ram Mishaal MD Subspecialist affiliate RCPC, Mor Cohen-Eilig MD, Tanja Mayson MSc, BScPT, Stacey Miller BSc(PT), MRSc, Kathryn Selby MBChB, MRCP, LMCC, MCCEE, FRCP(C), Anne Synnes MDCM. MHSc, Vivian Wong

### DP25: Single-site Implementation of an Evidence-based CP Diagnostic Care Pathway

Mor Cohen-Eilig MD, Carolyn Chowne RN, MScN, Carol Lai MPH, Vivian Wong, Ram Mishaal MD

### DP26: The positive Impact of Team Power Mobility Activities on Mental Health in Adolescents/adults with Cerebral Palsy

Kelli Croll MSPT, Victoria Polega

### DP27: Impact of a Comprehensive Early Care Model on Children of the Association for People with Cerebral Palsy (APAC, lap)

Montserrat Elizondo Freire, Juana Hernández Gómez



## Posters

### DP28: An Abilities-oriented Approach in Spain: Towards a Positive Change in Attitudes in Disabilities Services

*Rocío Palomo-Carrión PhD, Rita-Pilar Romero-Galisteo PhD, Elena Pinero-Pinto PhD, Verónica Robles-García PhD, Egmar Longo PhD, Verónica Schiariti PhD*

### DP29: Adoption of "MY Abilities First" in Poland: Novel Initiative from a Parent Association to a National Level

*Katarzyna Świeczkowska, Verónica Schiariti PhD*

### DP31: ADEPT-CARE: A Framework for Assessing a Patient's Disability-related Healthcare Needs

*Sandra Carpenter, Christopher Lunsford MD, Lauren Benedetto BS, Lydia Smeltz BA, Nora Newcomb BA, Dana Rubenstein BA*

### DP32: Understanding How Children with Hemiplegic Cerebral Palsy Anticipate Gait

*Hassan-Galaydh Farah Bachelor's in Health Sciences, Stephanie DeLuca PhD, Robin Queen PhD*

## Scientific Posters

### SP02: Gait Profile Score and Quality of Life in Children with Cerebral Palsy

*Jessica Lewis PT, DPT, Mallory Rowan BS, Amanda Whitaker MD*

### SP03: Gait Changes over Time in Children with Charcot-marie-tooth Disease

*Sylvia Ounpuu MSc, Kristan Pierz MD, Gyula Acsadi MD, PhD, Tishya Wren PhD*

### SP05: The Effect of Robotic Assisted Gait Training for Children with Neuromotor Disorders in a Clinical Setting: A Case Series

*Ann Flanagan PT, PCS, Shubhra Mukherjee MD, Michelle Urban PT, MHS, WCC, Kathleen Sweeney PT, DPT, PCS, Brittany Prero PT, DPT, Nicole Viverito PT, DPT*

### SP07: Quality Improvement of Serial Casting for Idiopathic Toe Walking

*Karina Zapata PT, DPT, PhD, Megan Trevino PT, DPT, Fabiola Reyes MD, Chan-Hee Jo PhD, Charu Sharma MHA, MS, CLSSBB, CPHQ*

### SP08: GAME on : A Community Based Participatory Physical Activity Program for Children with Cerebral Palsy

*Katherine Dimitropoulou Ph.D., MSPOR, OTR/L, Jacqueline Chen BS, Heakyung Kim MD*

### SP10: A Pilot Comparative Time-motion Analysis of Swimming Training Sessions for Swimmers with and Without High Support Needs Cerebral Palsy

*Iain Dutia PhD, Sean Tweedy PhD, Declan Curran BS, Adam Donohoe BS*

### SP11: Moving Together Is Better: A Systematic Review with Meta-analysis of Sports-focused Interventions Aiming to Improve Physical Activity Participation in Children and Adolescents with Cerebral Palsy

*RICARDO SOUSA MSc, PT, Deisiane Souto PhD, PT, Ana Cristina Camargos PhD, Georgina Clutterbuck PhD, Hércules Leite PhD, PT*

### SP12: Six Minute Walk Test in Ambulatory Children with Spina Bifida

*Karina Zapata PT, DPT, PhD, Richard Adams MD, Veronica Meneses MD, MSHS, Rosa Cooksey PT, MPT, Sarah Parenti BA, Alys Saucedo BA, Yuhua Ma BS, PhD*

### SP14: Safety and Feasibility of 1-repetition Maximum Testing in Children and Adolescents with Cerebral Palsy

*Mattie Pontiff DPT, Noelle Moreau PhD, PT*

### SP16: Motor Based Problem Solving Intervention Is Effective in Improving Motor Skills in a 3 Year Old with Cerebral Palsy

*Shaaron Brown PT, DPT, Ketaki Inamdar MS, PT, Rebecca Molinari DPT, Meagan Miller CCRC, Christiana Butera EdM, PhD, Stacey Dusing PhD, PT*

### SP17: "watch Where I am Going": A Geospatial Investigation of Adapted Ride-on Car Usage

*Mia Hoffman, Katherine Steele PhD, Kyle Winfree PhD, Heather Feldner BS, MPT, PhD*

### SP18: Therapist and Parent Interviews to Guide the Development of an Open Access Home Program Website

*Angela Shierk PhD, OTR, Heather Roberts PhD, OT, Youstina Habeeb BS, Nancy Clegg PhD, Mauricio Delgado MD*

### SP19: Linking Occupational and Physical Therapy Intervention Goals to the International Classification of Functioning, Disability and Health (ICF) for Children with Cerebral Visual Impairment

*Karen Harpster PhD, Ana Livecchi BA, Claire Middlecamp BA, Blake Berry, Terry Schwartz MD, Jenny Dorich OTR/L*

### SP20: Feasibility of Early Childhood Neurodevelopmental assessment Using the Nih Toolbox® in Healthy Preschool Age Children

*Allaa Fadl-Alla BS, Erin Smith BS, Casey Rand BS, Lynn Boswell PT, MS, Jamie Vogl BS, Debra Weese-Mayer MD, Raye-Ann de Regnier MD*

### SP21: Robot Assisted Gait Training for Children with Impaired Mobility: Who Is Using It and How Much?

*Christa Diot MSc, P.Kin, Anya Friesen BS, Benjamin Norman MS, Kelly Larkin-Kaiser PhD, Elizabeth Condliffe PhD, MD*

### SP22: Perceived Fatigue Is Associated with 6-minute Walking Distance, but Not Fatigability, in Youth with Cerebral Palsy and Youth with Typical Development

*James Wrightson PhD, Sarrah Husain, Laura Brunton PT, PhD, Elizabeth Condliffe PhD, MD*

## Posters

**SP23: Fatigue Is Associated with Self-reported Walking Frequency and Effort in People with Cerebral Palsy**  
*Sarrah Husain, James Wrightson PhD, Laura Brunton PT, PhD, Elizabeth Condliffe PhD, MD*

**SP24: Development of a Functional Outcome Measure to Quantify Incremental Change in Performance for Children with Brain Injury**

*Ka Lai Kelly Au MA., OTR/L, C/NDT, Diana Ryan BS, MS, OTL/R, Sarah Bergstein Teixeira MS, OTR/L, Julie Knitter BS, Susan Morrow-McGinty OTR, Talita Campos MSN, RN, Kathleen Friel PhD*

**SP25: Establishing a PODCI Cerebral Palsy Database for Comparative Use**

*Philip Gates MD, Marnita Siglar Thomas, Joseph Andary PhD, Chauna Weyermuller DNP*

**SP26: Computer Game Technologies for Patients with Ataxia Due to Post-traumatic Head Injury: Randomized Controlled Trial**

*Taras Voloshyn MD*

**SP27: Concurrent Validity of Visuo-motor Integration Assessment Using Immersive Virtual Reality for Children and Youth with Cerebral Palsy**

*Minxin Cheng MA, Alexa Craig MD, MS, MSc, Danielle Levac PhD*

**SP28: The Effects of Cerebral Palsy on Orofacial Musculoskeletal Structure and Function -A Scoping Review**

*Akanksha Cambala, Tuan Khang Nguyen Doctor of Dental Surgery, Elizabeth Zimmermann PhD, Martin Morris MSc.,*

**SP29: Low Radiation Dose Radiographs Are Reliable for Hip Surveillance for Children with Cerebral Palsy**

*David Frumberg MD, Maxwell Modrak MD, Khalid Al-Dasuqi MD, Cicero Silva MD, Matthew Hoerner PhD*

**SP30: Prevalence of Appropriate Hip Surveillance for Children with Cerebral Palsy (CP): impact of Published Hip Surveillance Guidelines**

*Susan Sienko PhD, Anita Bagley PhD, Carole Tucker PT, PhD, Jon Davids MD*

**SP31: Can We Accurately Assess for Neuromuscular Acetabular Dysplasia Using Plain Radiography? A Comparison Between Xray and 3D Computed Tomography**

*Pratik Pradhan B.S., Benjamin Shore MD, MPH, Ata Kiapour PhD, MMSc*

**SP32: Hip Dysplasia in Patients with Kernicterus**

*Mark Gormley, III BS, Jennifer Laine MD, Mark Gormley MD, Supreet Deshpande MD*

**SP34: Patients and Parents' Satisfaction and Self-reported Evaluation After Single-event Multilevel Surgery in Cerebral Palsy**

*Mauro Morais Filho MD, Marcelo Fujino MD, Francesco Blumetti MD, MSc, PhD, José Augusto Lopes MSc, Cátia Kawamura PT, Daniela Benavides MD*

**SP35: Pediatric Perioperative Blood Recovery**

*Francisco Valencia MD, Thomas Cahir MPH, Peter Lichtenthal MD*

**SP36: Long-term Outcome of Hamstring Lengthening or Transfer for Treatment of Knee-flexion Gait in Patients with Spastic Cerebral Palsy**

*Patrick Do BS, Jing Feng PhD, Michael Sussman*

**SP37: Does the Presence of Programmable Implanted Devices in Patients with Early Onset Scoliosis Alter Typical Operative and Postoperative Practices? A Survey of Spine Surgeons**

*Ryan McMahon B.S., Walter Truong MD, Sara Morgan PhD, Patrick Cahill MD, Jaysson Brooks MD, Ryan Fitzgerald MD, Ying Li MD*

**SP38: Classifying Transverse Plane Gait Deviations of Children with Cerebral Palsy into Clinically Meaningful Biomechanical Phenotypes: A Novel Algorithm Used on Data Across Multiple Sites**

*Karen Kruger PhD, Adam Graf MS, Joseph Krzak PT, PhD, Ryan Smith BS, Brandon Steinlein BS, Judi Linton PT, MS, Ross Chafetz PT, DPT, PhD, MPH, Jon Davids MD, Anita Bagley PhD*

**SP39: Long-term Changes in Pelvic Tilt After Hamstring Lengthening During Single Event Multilevel Surgery in Children with Cerebral Palsy**

*Alison Hanson MS, PT, Tishya Wren PhD, Robert Kay MD*

**SP40: Triple Innominate Osteotomy in Management of Residual Acetabular Dysplasia in Young Adolescent Patients (Systematic Review and Meta-analysis)**

*Ahmad Aly MD, Andrew Osama PhD*

**SP41: Sagittal Spinopelvic Alignment and Multilevel Surgery in Cerebral Palsy**

*Stephen Plachta MD, Paulo Selber MD, Sonya Levine BS, Kirsten Carlberg MPH, Benjamin Roye MD, Michael Vitale MD, Lawrence Lenke MD*

**SP42: Lower Extremity Contractures in Children with Bilateral Cerebral Palsy Without Invasive Intervention**

*Cole Hagen, Tom Novacheck MD, Elizabeth Boyer PhD*

**SP43: Enhanced Recovery After Surgery vs Traditional Care in Pediatric Cerebral Palsy Patients Undergoing Bilateral Lower Extremity Surgery: A Pilot Study**

*Kathryn Keeler MD, Nichole Doyle MD, Todd Glenski MD, Ezra Goodrich BA, Marisha Madhira BS*

**SP45: Patient-reported Outcome Measurement Information System (PROMIS) Scores in Pediatric Idiopathic Toe Walkers**

*Jeremy Bauer MD, Daniel Bouton MD, Patrick Do BS, Susan Sienko PhD, Carly Woodmark MSc, Ellen Raney MD*

**SP46: Parent Perspectives on Ankle-foot Orthoses for Their Young Children with Cerebral Palsy: A Qualitative Study**

*Pegah Firouzeh MSc, Christopher Morris MSc DPhil, Lyn Sonnenberg MD, Patricia Manns PhD, Lesley Pritchard PT, PhD*

## Posters

### **SP47: Risk Factors for 90-day Readmission and Prolonged Length of Stay After Hip Surgery in Children with Cerebral Palsy**

Liam Butler BS, Calista Dominy BS, Thomas Li BA, Abigail Allen MD, Sheena Ranade MD

### **SP48: The Outcome of Soft Tissue Surgery for Spastic Equinovarus, in Relation to Age at Surgery and the Musculoskeletal Pathology Stage**

Peter Wong MBBS MPhysio, Kerr Graham MD, Shaneil Fransch MD, Pam Thomason MPT, Erich Rutz MD, PhD, Kate Francis MSC, PGD

### **SP49: Gastrocnemius Histology After Various Tone Management Approaches in Individuals with Cerebral Palsy - Case Series**

Elizabeth Boyer PhD, Christiana Raymond-Pope PhD, Daniel Hoffman MS, Tom Novacheck MD, Sarah Greising PhD

### **SP50: Populations of Skeletal Muscle Stem Cells from Individuals with Spastic CP Include Multiple Subtypes with Different Cell Proliferative Activities**

Stephanie Lee MS, Karyn Robinson MS, Robert Akins PhD

### **SP51: Satellite Cells from Individuals with Spastic CP Exhibit Altered DNA Methylation Patterns**

Karyn Robinson MS, Adam Marsh PhD, Stephanie Lee MS, Jonathan Hicks BS, Robert Akins PhD

### **SP52: Muscle Stem Cell Characteristics Across Contractured, Non-contractured Muscles and Across Functional Levels in Children with Cerebral Palsy**

Ryan Kahn BS, Timothy Krater DO, Jill Larson MD, Neeraj Patel MD, MPH, Vineeta Swaroop MD, Sudarshan Dayanidhi PT, PhD

### **SP53: The Gait Outcomes Assessment List (GOAL) Questionnaire Demonstrates Responsiveness to Change Post Selective Dorsal Rhizotomy in Children with Cerebral Palsy**

Jean Stout PT, MS, Kathryn Walt D.PT, Andrew Georgiadis MD, Steven Koop MD, Elizabeth Boyer PhD

### **SP54: Assessing the Safety and Efficacy of Alcohol Nerve Block Injections with and Without Onabotulinumtoxin in the Management of Pediatric Spasticity**

Jessica Ace MD, Aura Shoval MD, Mayuri Reddy, Emily Grew BS, Vishal Dhruva BS, JenFu Cheng MD

### **SP55: The Effects of Physiotherapy After Onabotulinum Toxin-a Injection and Serial Casting on Muscle Morphology of Children with Cerebral Palsy: A Preliminary Study**

Pelin Atalan EFKERE MSc, Habip Eser Akkaya MD, Kamile Uzun Akkaya PhD, Cemil Yildiz MD, Bulent Elbasan PhD

### **SP56: Stereotaxic EEG Assisted Targeting for Deep Brain Stimulation in Complex Movement Disorders**

Warren Marks MD, Stephanie Acord MD, Yanlong Song PhD, Christos Papadelis PhD, John Honeycutt MD

### **SP57: Risk Factors and Incidence of Urinary Retention After Ventral Dorsal Rhizotomy**

Supreet Deshpande M.D, Alexander Tin HS, Mark Gormley MD, Patrick Graupman MD, Peter Kim MD, Debbie Song MD

### **SP58: The Feasibility and Impact of Using Virtual Reality Paired with Nitrous Oxide During Botulinum Toxin Injections with Individuals with Cerebral Palsy**

Maykala Owens BS, Chantel Burkitt PhD, Lisa Lykken BS, Abigail Raiter BS, Cole Hagen BS, Frank Symons PhD, Todd Dalberg DO

### **SP60: A Phase IV, Prospective, Observational, Multicenter Study Evaluating the Effectiveness and Safety of Abobotulinumtoxin in Pediatric Lower Limb Spasticity**

Mark Gormley MD, Edward Dabrowski MD, Mauricio Delgado MD, Ann Tilton MD, Asare Christian MD, MPH, Sarah Helen Evans MD, Francoise Calvi-Gries, Jumaah Goldberg DPT

### **SP62: Selective Dorsal Rhizotomy Patient Demographics Compared to Regional Cerebral Palsy Community**

Kristen Blatt PT, DPT, Jessica Lewis PT, DPT, PCS, Rachel Bican PT, DPT, PhD, Jeffrey Leonard MD

### **SP64: Update from the Cerebral Palsy Research Network Registry- 2022**

Garey Noritz MD, Brian Arand, Kristie Bjornson PT, PhD, Laurie Glader MD, FAAP, Jacob Kean PhD, Brandon Rocque MD, MS, Benjamin Shore MD, MPH, Paul Gross BA

### **SP66: Abobotulinumtoxin Efficacy and Safety in Children with Upper Limb Spasticity Previously Treated with Botulinum Toxin**

Edward Dabrowski MD, Mauricio Delgado MD, Joyce Oleszek MD, Nigar Dursun MD, Jorge Carranza del-Rio MD, Marcin Bonikowski MD, Benjamin Regnault, Simon Page PhD, Ann Tilton MD

### **SP68: White Matter Changes in Children with Hemiplegia Following Constraint-induced Movement Therapy**

Kelly Greve PT, DPT, PhD, Brad Kurowski MD, MS, Weihong Yuan PhD, Jonathan Dudley PhD, Amy Bailes PT PhD, Jilda Vargus-Adams MD MSc, Karen Harpster PhD, Marry McMahon MD, Bruce Aronow PhD, Alexis Mitelpunkt

### **SP69: Caregiver Perceptions and Ability to Implement an Intensive Upper Limb Therapy Program in the Home Environment**

Angela Shierk PhD, OTR, Heather Roberts PhD, OT, Briana Arellano BS, Marcus Fagan PhD, Nancy Clegg PhD, Deborah Baldwin BS, Fabiola Reyes MD, Mauricio Delgado MD

### **SP70: Performance-based Outcome Measures for Upper Extremity Function: Scoping Review and Mapping to the ICF-CY**

Caroline Elfassy MSc, OT, Sarah Cachecho MSc, OT, Rose Elekanachi MSc, PT, Johanne Higgins PhD, OT, Laurie Snider PhD, OT, Noémi Dahan-Oliel PhD, OT



## Posters

### **SP71: Joystick-operated Ride-on-toys as Playful Tools to Improve Upper Extremity Activity and Function in Children with Hemiplegic Cerebral Palsy: Results of a Pilot Feasibility Study**

*Sudha Srinivasan PT, PhD, Nidhi Amonkar BPT, Sarah Sullivan, Patrick Kumavor PhD, Kristin Morgan PhD, Deborah Bubela PT, PhD*

### **SP72: Effects of a Joystick-operated Ride-on-toy Training Program on Motor Control and Spontaneous Functional Use of the Affected Arm in Children with Hemiplegic Cerebral Palsy**

*Sudha Srinivasan PT, PhD, Hanna Rakhang BPT, Nidhi Amonkar BPT, Justina Courgi, Lauren Granato, Patrick Kumavor PhD, Kristin Morgan PhD, Deborah Bubela PT, PhD*

### **SP73: Pediatric Therapists Telehealth Experiences**

*Brittany Hornby DPT, Lori Tolen OTR/L, Wendy Jennejohn MS, CCC-SLP, Deanna Johnson MS, PT, Christopher Joseph DPT, Janice Laux PT, DOMP, Stephanie Tabrisky MPT, T. Andrew Zabel PhD, Jennifer Keller MS, PT*

### **SP74: Optimizing the Developmental Follow-up of Children and Adolescents Born with a Congenital Heart Defect: A Service-user Perspective**

*Marie-Eve Bolduc OT, Janet E. Rennick PhD, Isabelle Gagnon PhD, Annette Majnemer PhD, Marie Brossard-Racine PhD*

### **SP75: Efficacy of Musical Activities on Happiness, Activity and Participation in Children with Cerebral Palsy**

*Tugba Gokbel Assistant Professor, Beril Melina Dursun BS*

### **SP77: "Our Bphf" (Best Physiotherapist Friend): Children and Parents' Perceptions and Expectations of Their School-based Physical Therapist**

*Nilly Waiserberg MScPT, Paula Feder-Bubis PhD*

### **SP78: Machine Based Examination of Receipt of Optimal Care in Persons with Cerebral Palsy**

*Alexis Mitelpunkt, Jilda Vargus-Adams MD MSc, Megan Wieber, Kelly Greve PT, DPT, PhD, Brad Kurowski MD, MS, Karen Harpster PhD, Marry McMahon MD, Bruce Aronow PhD, Amy Bailes PT PhD*

### **SP79: Measuring Physiological Responses Using Heart Rate Variability at Baseline and Across Sensory Systems in Children with Medical Complexity**

*Cindy Dodds PhD, Brooke Mulrenin MS*

### **SP82: Home Health Nurses' Perspectives on Gaps and Opportunities for Recruiting into the Workforce to Care for Children with Invasive Mechanical Ventilation (IMV)**

*Sarah Sobotka MD, MSCP, Sarah Laudon BS, Emma Lynch MPH, Kim Whitmore PhD*

### **SP83: The Characterization of Pain in Children and Youth with Cerebral Palsy: A Micro-longitudinal Analysis**

*Cara Nania BA (hons), Melanie Noel PhD, Laura Brunton PT, PhD, Elizabeth Condliffe PhD, MD, Daniel Kopala-Sibley PhD, Sandra Mish PhD, Brianne Redquest PhD, Carly McMorris PhD*

### **SP84: Alterations in the Cortical Activity as Youth with Cerebral Palsy Transition into Adulthood**

*Hannah Bergwell BS, BA, Michael Trevarrow BS, PhD, Anna Reelfs BS, Lauren Ott BS, Lauren Ott BS, Samantha Penhale BS, Brandon Lew PhD, Tony Wilson PhD, Max Kurz PhD*

### **SP85: Interventions for Children with Cortical Visual Impairment: A Systematic Review**

*Ariana DeLay OTD, Elsie Bush MSOT, Karen Harpster PhD, Melissa Rice OD*

### **SP86: Assessing Dorsal and Ventral Visual Processing in Cerebral Visual Impairment (CVI) with Psychophysical Testing and Functional Brain Connectivity**

*Zahide Pamir Ph.D., Corinna Bauer PhD, Claire Manley BA, Jan Skerswetat PhD, Daniel Dilks PhD, Peter Bex PhD, Lotfi Merabet PhD, OD*

### **SP87: Parenting Characteristics and Social Factors Contribute to Sensory Adaptation of Children Born Preterm**

*Mary Lauren Neel MD, MSCI, Sara Conroy PhD, Rachelle Srinivas BS, Nathalie Maitre MD, PhD*

### **SP90: Occupational Performance Outcome for Children in PICU: Feasibility of the Canadian Occupational Performance Measure**

*Youngsub Hwang MS, Jeong-Yi Kwon PhD*

### **SP91: Sitting Capacity and Performance in Typically Developing Infants and Infants with Motor Delay**

*Kari Kretch PT, DPT, PhD, Natalie Koziol PhD, DONGHO CHOI BA, Emily Marcinowski PhD, Lin-Ya Hsu PT, PhD, Sarah Westcott McCoy MPT, PhD, Regina Harbourne PT, PhD, Michele Lobo PT, PhD, Sandy Willett PhD, Stacey Dusing PhD, PT*

### **SP92: Development of Deep Learning-based Automatic Methods to Quantify Spontaneous Movements in Preterm Infants**

*Woo Hyung Lee MD, PhD, Hyun lee Shin M.D., Hyung-Ik Shin MD, PhD, Moon Suk Bang MD, PhD, Don-Kyu Kim MD, PhD, Hye Min Ji PhD, Sung Eun Hyun MS*

### **SP94: Remote Assessment of Physical Function in Adults with Cerebral Palsy: A Feasibility Study**

*Larken Marra MS, Min-Hui Huang PhD, Mark Peterson PhD, Edward Hurvitz MD, Dale Ulrich PhD, Susan Brown PhD*

### **SP95: Effect of Social Distancing Time on the Functioning of Children with Developmental Disorders During the COVID-19 Pandemic: Longitudinal Study**

*Beatriz Brugnaro PT, Fabiana Vieira PT, Gesica Fernandes PT, Silvia Pavão PhD, Nelci Adriana Cicuto Rocha PhD*

### **SP96: Reported Effects of the sars-cov2 Pandemic on Daily Life of the Household Families of People with Cerebral Palsy in Portugal**

*Ana Cadete MD, Daniel Virella MD, Teresa Folha MSc, Joaquim Alvarelhão PhD, Ana Santos PhD, Paula Bras MSc, Carlos Dias PhD*

## Posters

### **SP98: Barriers and Facilitators to Participation in Intervention for High-risk Infants Enrolled in a Clinical Trial During the COVID-19 Pandemic**

Ketaki Inamdar MS, PT, Shaaron Brown PT, DPT, Arya Salgaonkar MPT, Meagan Miller CCRC, Jodi Darring BS, Jennifer Burnsed MD, MS, Richard Stevenson MD, Mary Shall BA, MS, PhD, Amy Harper MD, Karen Hendricks-Munoz MD, MPH, Stacey Dusing PhD, PT

### **SP99: Barriers and Facilitators in Clinical Trial Enrollment and Assessments of Infants Born Extremely Preterm During the COVID-19 Pandemic**

Arya Salgaonkar MPT, Shaaron Brown PT, DPT, Ketaki Inamdar MS, PT, Meagan Miller CCRC, Jodi Darring BS, Jennifer Burnsed MD, MS, Mary Shall BA, MS, PhD, SPEEDI Research Team PhD, Stacey Dusing PhD, PT

### **SP100: The Effects of a Global Pandemic on Families Who Have a Child with a Disability**

Erika Mejia, Alondra Calva, Jake Sarmiento DPT, Naveen Jonathan PhD, LMFT, Christina McCauley DPT, Marybeth Grant-Beuttler PhD, DPT, PCS

### **SP101: Utilization of Telehealth in the Developmental Behavioral Clinics at the University of Nebraska Medical Center**

Beatrice Egboh MBBS, FAAP, Howard Needelman MD

### **SP102: Participation in Leisure Through Inclusive Online Activities in the Time of a Pandemic**

Mehrnoosh Movahed PhD, Ishana Rue MSc, Paul Yoo OT, Tamara Sogomonian BS, Annette Majnemer PhD, Keiko Shikako PhD

### **SP103: Diagnostic Yield of Genetic Testing and Prevalence of Motor Abnormalities in Children with Motor Speech Disorders**

Irene Cho B.A., Scott Myers MD, Marissa Mitchel MS, CCC-SLP

### **SP105: DNA Methylation Patterns in Blood Cells of Children with Cerebral Palsy and Epilepsy Show Conserved and Identifiable Patterns with Potential Diagnostic Capability**

Jonathan Hicks BS, Robert Akins PhD, Karyn Robinson MS, Stephanie Lee MS

### **SP106: PTC Pinpoint CP Spectrum: A Sponsored No-charge to Patients 265-gene Panel for Patients with Symptoms Suggestive of CP and Absence of Risk Factors for an Acquired Brain Injury**

Ryan Miller MS, CGC, Jeff Kopesky MS, CGC, Heather McLaughlin PhD, FACMG

### **SP107: Identification and Characterization of the Role of Non-coding Rnas in Spastic Cerebral Palsy**

Brigette Romero Carpio MS, Karyn Robinson MS, Stephanie Lee MS, Jonathan Hicks BS, Robert Akins PhD, Mona Batish PhD

### **SP108: Validating the Content and Estimating the Feasibility of the Child Community Health Inclusion Index: An Evaluation Tool for Measuring Health Inclusion of Children with Disabilities in the Community**

Paul Yoo OT, Annette Majnemer PhD, Robert Wilton PhD, Sara Ahmed PhD, Keiko Shikako PhD

### **SP109: Participa Brazil: Contribution of Parents to the Development of the Gross Motor Function Family Report – GMF-FR**

Paula Chagas PhD, PT, Elton Magalhães PT, Aline Toledo PhD, PT, Kêneia Ayupe PhD, PT, Amanda Lima PT, Ana Carolina de Campos PhD, PT, Camila Santana MSc, PT, Rayane Monteiro PT, Rafaela Moreira PhD, PT, Marilyn Wright MSc, PT, MEd, F Virginia Wright PhD, PT, Lesley Pritchard PhD, PT, Peter Rosenbaum MD

### **SP110: MEASUREMENT PROPERTIES OF THE PORTUGUESE-BRAZIL VERSION OF THE EARLY ACTIVITY SCALE FOR ENDURANCE (EASE)- Ease-br**

Angélica Romeros PT, RICARDO SOUSA MSc, PT, Deisiane Souto PhD, PT, Paula Chagas PhD, PT, Alyssa Fiss PhD, Robert Palisano PhD, PT, Ana Cristina Camargos PhD, PT, Acsa Santos, Kêneia Ayupe PhD, PT, Hércules Leite PhD, PT

### **SP111: The Epidemiology of Cerebral Palsy in a Middle Income Country**

Ruby Chin A Fat MSc, Fenna Walhain PhD, Marlies Declerck MSc

### **SP112: Patterns and Predictors of Participation in Leisure Activities of Brazilian Children and Adolescents with Physical Disabilities**

Hércules Leite PhD, PT, Deisiane Souto PhD, PT, Rafaela Ferreira PT, Mariane Souza PT, Flaviana Maciel MSc, Cristina Cardoso de Sá PhD, PT, Paula Chagas PhD, PT

### **SP113: Profile of Functioning of Children and Adolescents with Cerebral Palsy in Argentina: Pilot Test and Preliminary Results**

L Johana Escobar Zuluaga PT, Maria de las Mercedes Ruiz Brunner PhD, M Elisabeth Cieri BS, Ana Laura Condinanzi BS, Eduardo Cuestas PhD, Veronica Schiariti PhD

### **SP114: Exploring the Musculoskeletal Health of Caregivers of Children with Cerebral Palsy in South India: A Qualitative Study**

Radhika Attal BPT, Sinimol Shaji BPT, Shubha Nayak BPT, Deepalaxmi Poojari MPT, Bhamini Krishna Rao PhD, Marie Brien PT MSc

### **SP115: Growth Charts for Children with Arthrogryposis Multiplex Congenita**

Lauren Hyer MD, Emily Shull PhD, David Westberry MD

## Exhibitor Listing

### Booth 100- PTC Therapeutics

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At PTC, we are committed to a single purpose: Extending life's moments for patients with rare diseases and their loved ones.

Our mission is to provide access to best-in-class treatments for rare disease patients who have little to no treatment options. Whether our therapies grant hours, days, months or years, every small moment is an enormous win – so our greatest accomplishments are “measured by moments.”

This mission underpins our focus on the discovery, development and global commercialization of clinically differentiated medicines that provide benefits to patients with rare disorders.

<https://www.ptcbio.com/>

### Booth 101- Ideomotion LLC

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#### Booth 103- Cook Children's Health Care System

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Cook Children's Medical Center is one of the largest Children's hospitals in the nation with 430 licensed beds. Our professional staff of nurses, technologists, therapists and other clinicians work alongside more than 500 physician who provide primary, secondary, tertiary and quaternary levels of pediatric care. They, along with our Child Life staff, chaplains, teachers, social services coordinators and translators work to help our patients and families cope with the stress that accompanies a child's hospitalization. Our award-winning medical center uses state-of-the-art technology in more than 30 specialties and subspecialties to provide the best care available for every child.

[www.cookchildrens.org](http://www.cookchildrens.org)

### Booth 105- Phoenix Children's

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Nationally recognized as a premier destination for pediatric medical care, research, and medical education, Phoenix Children's provides care to the fourth largest pediatric market in the 5th largest city in the United States, serving the Phoenix/Scottsdale/Tempe metropolis. The healthcare system is rapidly growing to facilitate patient access including multiple ambulatory buildings, and scheduled opening of satellite hospitals throughout the county. Phoenix Children's main hospital campus, located in the heart of Phoenix, is a full-service, freestanding, tertiary medical center, offering 433 licensed beds, 72 of which are dedicated to pediatric and cardiac intensive care and 33 of which are NICU.

[www.phoenixchildrens.org/](http://www.phoenixchildrens.org/)

### Booth 107- OSF Healthcare

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OSF HealthCare is an integrated health system owned and operated by The Sisters of the Third Order of St. Francis in Peoria, Illinois. Recognized as one of the top health care employers in the United States, we employ more than 22,000 Mission Partners in 156 locations throughout Illinois and Michigan, including nine systemwide service lines and two colleges of nursing.

[www.osfcareers.org/](http://www.osfcareers.org/)

### Booth 108- Pathways.org

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Pathways.org empowers parents and health professionals to work as a team to understand and encourage baby's development to keep them on track or catch potential delays early. All milestones are supported by American Academy of Pediatric findings and

Pathways.org FREE resources are developed with and approved by expert pediatric physical and occupational therapists and speech-language pathologists. Pathways.org provides videos with milestones and over 350+ activities to encourage meeting milestones.

<https://pathways.org/>

### Booth 109- Medical University of South Carolina

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The Medical Rehabilitation Research Resource (MR3) Network comprises six Rehabilitation Research Resource Centers that provide infrastructure and access to expertise, technologies, and resources to foster clinical and translational research in medical rehabilitation. MR3 Network centers offer expertise from the cell to whole body across the lifespan to implementation into practice with expertise in regenerative rehabilitation, neuromodulation, pediatric rehabilitation, technology for real-world assessment, and translation/dissemination research.

[ncmrr.org](http://ncmrr.org)

### Booth 200- Aretech

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Aretech is an advanced rehabilitation technologies leader with a strong commitment to quality and innovation. Aretech's ZeroG Gait and Balance System is a robotic body-weight support system that safely allows functional activities in a 'reduced gravity' environment. ZeroG is used in leading pediatric rehabilitation centers with patients with a wide range of conditions including cerebral palsy and other childhood-onset disabilities.

[www.aretechllc.com/](http://www.aretechllc.com/)



## Exhibitor Listing

### Booth 205- Physiotherapists Without Borders - Acts of Life Tanzania

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#### Booth 206- United Cerebral Palsy

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United Cerebral Palsy is the indispensable resource for people with cerebral palsy, Down syndrome, autism spectrum disorder, and other neurodevelopmental disabilities. Founded in 1949, UCP has 56 affiliates (54 in the U.S. and two in Canada) that provide resources and referrals, educational instruction, home and community based services, housing assistance, workforce training, assistive technology, rehabilitative therapy, early intervention and cerebral palsy research. We serve more than 150,000 children and adults annually and believe people with disabilities deserve to be treated as equal members of an inclusive society so they can reach their fullest potential and "live life without limits."

[www.ucp.org](http://www.ucp.org)

#### Booth 207- Trexo Robotics

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Trexo Robotics Gait Training System Helps Children With Disabilities Walk. The Trexo is robotic legs, attached to a Rifton Dynamic Pacer. The Rifton provides postural alignment and will help support the user in a weight bearing position. The Trexo robotic legs walk for the child, helping to train and build muscle memory in a proper gait pattern. As the child becomes stronger, they can take over for the robot and initiate their own steps and we can turn down the robot's efforts.

[www.trexorobotics.com](http://www.trexorobotics.com)

#### Booth 208- Gillette Children's

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Gillette Children's was founded 125 years ago as the first hospital in the U.S to treat children with disabilities. Since then, Gillette Children's has built on that foundation to become a nonprofit health care organization that treats complex brain, bone, and movement conditions that start in childhood.

[gillettechildrens.org](http://gillettechildrens.org)

#### Booth 209- Pediatric Complex Care Association

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The Pediatric Complex Care Association (PCCA), is a specialized community of post-acute and long-term care organizations, all sharing a common commitment to providing exceptional care for children with medical complexities. Our goal is to provide a greater national voice to children with medical complexity and their families.

We offer our member organizations educational programs and access to research, as well as shared information, resources, and ideas as we work together to advance care for children with medical complexities. Additionally, PCCA provides its members with networking, and collaborative opportunities to achieve our collective vision and goals.

[pediatriccomplexcare.org](http://pediatriccomplexcare.org)

### Booth 300- Tyromotion

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TYROTHERAPY – GET BETTER. EVERY DAY.

Tyromotion is one of the world's leading manufacturers and suppliers of technology-based therapeutic devices with the goal to sustainably improve people's independence and quality of life.

To accomplish this mission, Tyromotion has developed a pioneering therapy concept for the whole body, upper and lower extremities, during all phases of rehabilitation. Powerful new technologies, including robotics, sensor systems, virtual reality, and gamification, lead the patient through the continuum of care more intensively and motivationally.

The company, with headquarters in Graz/Austria, has offices in Germany, the US and works with a global network of distribution partners.

[tyromotion.com/en/](http://tyromotion.com/en/)

### Booth 302- Neurocrine Biosciences Inc

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#### Booth 303- Shriners Children's

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Shriners Children's is changing lives every day by providing innovative pediatric specialty care, conducting research to improve the quality of lives, and of care, and offering outstanding educational programs for medical professionals. We provide patient-centered care in several areas. All care and services are provided regardless of the families' ability to pay or insurance status.

Shriners Children's is a nonprofit organization and relies on the generosity of donors. All donations are tax deductible to the fullest extent permitted by law.

[shrinerschildrens.org](http://shrinerschildrens.org)

### Booth 304- Amneal Pharmaceuticals

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#### Booth 306- Pharmacy Alternatives by PharMerica

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Pharmacy Alternatives is a national pharmacy focused on serving individuals with cognitive, intellectual and developmental disabilities. Our state-of-the-art approach includes packaging technology specially designed for the population we serve and electronic medication management that helps people live their best life.

[pharmacyalternatives.com](http://pharmacyalternatives.com)

## Exhibitor Listing

### Booth 308- Stasism

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Stasism is a revolutionary new social online platform with therapeutic physical video games made exclusively for people with Cerebral Palsy.

The platform will help millions of people around the world play and move, improve their coordination, movement, balance and posture in a fun way. It is the result of 5 years of research and is now in pilot testing in centers around Europe.

We are changing up, day by day, the routine of kids and people with CP, giving them a fun & social way to improve their wellbeing and quality of life.

[stasism.com](http://stasism.com)

### Booth 309- Bionic Power Inc

---

Bionic Power Inc. is a Canadian, early stage, medical device company that addresses the large and rapidly growing markets for pediatric and adult mobility assistance. Its proprietary technology has been developed through partnerships with the National Institutes of Health (NIH, Bethesda, USA), the Motion Lab at BC Children's Hospital and research grants from US, Israeli and Canadian militaries. The Agilik is a smart orthosis: a gait state driven, knee-based, powered, pediatric gait rehabilitation device designed to improve crouch gait.

[www.bionic-power.com](http://www.bionic-power.com)

### Booth 400- Orthopediatrics

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Founded in 2006, OrthoPediatics is an orthopedic company focused exclusively on advancing the field of pediatric orthopedics. As such it has developed the most comprehensive product offering to the pediatric orthopedic market to improve the lives of children with orthopedic conditions. OrthoPediatics currently markets 36 surgical systems that serve three of the largest categories within the pediatric orthopedic market. This product offering spans trauma and deformity, scoliosis, & sports medicine/ other. OrthoPediatics' global sales organization is focused exclusively on pediatric orthopedics and distributes its products in the United States and 45 countries outside the United States.

[orthopediatrics.com](http://orthopediatrics.com)

### Booth 403- OIC Advance

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### Booth 406- Turnto

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### Booth 407- Nemours Children's Health

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Nemours Children's is leading important pediatric research and clinical trials. We're preventing and reversing the course of childhood diseases, improving health care delivery and keeping children safe and healthy for generations to come. We partner with renowned medical schools and organizations to find answers to the most pressing questions in kids' health. Our discoveries help children in your community and all over the world.

[www.nemours.org/](http://www.nemours.org/)

### Booth 408- Hanger Clinic

---

Hanger Clinic specializes in the orthotic and prosthetic (O&P) management of more than 50 different pediatric conditions, including cerebral palsy, spina bifida, plagiocephaly, scoliosis, limb loss, and more. With over 300 board-certified clinicians nationwide who specialize in working with children, our approach centers on communicating with families, partnering with broader healthcare teams, incorporating age-appropriate treatment plans, and applying new and innovative O&P technologies throughout the continuum of care.

[HangerClinic.com/Pediatrics](http://HangerClinic.com/Pediatrics)

### Booth 500- DIH-Hocoma

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DIH is a global solution provider of robotic and sensor-based rehabilitation devices for functional movement therapy. We blend innovative robotic & AR/VR technologies with clinical integration and insights.

The DIH brands, which include Hocoma, Motek, G-EO, and SafeGait®, are applied successfully in renowned clinics and research institutes worldwide.

Our therapy solutions support the treatment of patients across the continuum of care and include those with movement disorders caused by cerebral palsy, multiple sclerosis, or other neurological diseases as well as stroke, spinal cord injury, traumatic brain injury or other injuries.

DIH, Deliver Inspiration and Health.

[www.dih.com](http://www.dih.com)

### Booth 501- GeneDx

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GeneDx, Inc., is an industry leader in genomics and genetic testing. For over 20 years, GeneDx has been at the forefront of genetic innovation, pioneering new technologies and gene discovery, enabling greater diagnostic accuracy for patients and families.

When experience matters, GeneDx is your answer.

[www.genedx.com/](http://www.genedx.com/)



## Exhibitor Listing

### Booth 502- Abbvie

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#### Booth 505: Ipsen Biopharmaceuticals, Inc.

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Ipsen is a global biopharmaceutical company focused on innovation and specialty care. At Ipsen, we focus our resources, investments and energy on discovering, developing and commercializing medicines in three key therapeutic areas –Oncology, Rare Disease and Neuroscience. Our North American operations are located in Cambridge, Massachusetts, one of the company's three global hubs. Based in the heart of Kendall Square, our fully integrated biopharmaceutical business includes Commercial, Research & Development, Manufacturing, and Business Development. Combined with our Canadian headquarters in Mississauga, Ontario, and other locations, we employ approximately 600 people in North America.

[www.ipsenus.com](http://www.ipsenus.com).

### Booth 508- Piramal Critical Care

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With nearly 20 years in the healthcare industry, Piramal Critical Care, (PCC) is committed to delivering critical care solutions to patients and healthcare providers. PCC is leading the way in intrathecal medicine with offerings for pain (MITIGO) and spasticity management (Gablofen) while representing a culture built on innovation and service.

[piramalcriticalcare.com](http://piramalcriticalcare.com)

### Booth 509- Basic Home Infusion

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Basic Home Infusion specializes in providing pharmacy and nursing services for intrathecal pumps nationwide for chronic pain and spasticity. Over 30 years of unmatched experience and reputation providing patient specific medications, at-home pump refills, dose titrations and MRI support, with excellence in safety, quality, service and access to optimize therapeutic outcomes and improve quality of life.

[basichomeinfusion.com](http://basichomeinfusion.com)





Exhibitor / Poster Hall

EXHIBIT HALL HOURS

Wednesday, September 21:

6:00 pm - 7:00 pm: Welcome Reception in the Exhibit and Poster Hall

Thursday, September 22:

7:00 am - 8:00 am: Continental Breakfast in the Exhibit Hall

2:30 pm - 4:00 pm: Poster and Exhibit Review

Friday, September 23:

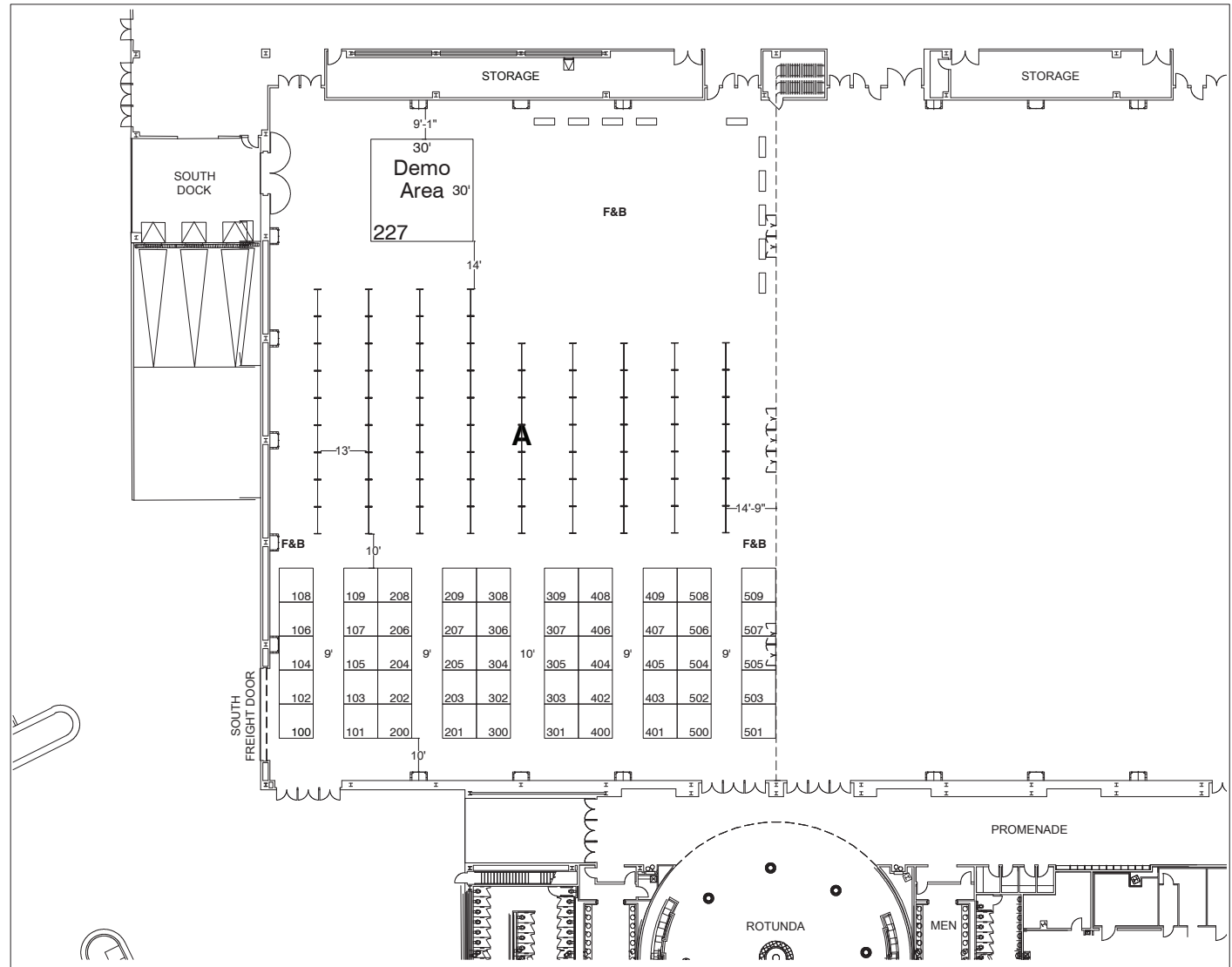
7:00 am - 8:00 am: Continental Breakfast in the Exhibit Hall

9:00 am - 9:30 am: Coffee Break in the Exhibit Hall

Saturday, September 24:

7:00 am - 8:00 am: Continental Breakfast in the Exhibit Hall

9:00 am - 9:30 am: Coffee Break in the Exhibit Hall



## Sponsor Listing

### PLATINUM:

#### PTC Therapeutics

At PTC, we are committed to a single purpose: Extending life's moments for patients with rare diseases and their loved ones.

Our mission is to provide access to best-in-class treatments for rare disease patients who have little to no treatment options. Whether our therapies grant hours, days, months or years, every small moment is an enormous win – so our greatest accomplishments are “measured by moments.”

This mission underpins our focus on the discovery, development and global commercialization of clinically differentiated medicines that provide benefits to patients with rare disorders.

<https://www.ptcbio.com/>

#### OrthoPediatics

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[orthopediatrics.com](http://orthopediatrics.com)

### GOLD:

#### Gillette Children's

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[gillettechildrens.org](http://gillettechildrens.org)

#### Ipsen Biopharmaceuticals, Inc.

Ipsen Biopharmaceuticals is a global biopharmaceutical company focused on innovation and specialty care. The company develops and commercializes innovative medicines in three key therapeutic areas - Oncology, Neuroscience and Rare Diseases. At Ipsen, we focus our resources, investments and energy on discovering, developing and commercializing new therapeutic options to provide hope for patients whose lives are challenged by difficult-to-treat diseases.

[ipsenus.com](http://ipsenus.com)

### SILVER:

#### Mac Keith Press

Mac Keith Press aims to improve the care of children with neurodevelopmental disability by extending the knowledge and understanding of developmental medicine and paediatric neurology. We publish the field-leading journal, Developmental Medicine & Child Neurology, and books and courses in related subject areas. Our publications are of interest to researchers, clinicians, therapists, parents and all involved in the care of children and young people with neurodevelopmental conditions.

[mackeith.co.uk/](http://mackeith.co.uk/)

#### Merz Therapeutics

At Merz Therapeutics, we seek to address the unique needs of people who suffer from movement disorders, neurological conditions, and other health conditions that severely impact patients' quality of life. With our patient-centric approach, cutting-edge research and development efforts, highly-scientific medical affairs resources and dedicated commercial teams, we continue the advancement of new and individualized treatment standards, including botulinum toxin.

[www.merzusa.com/therapeutics/](http://www.merzusa.com/therapeutics/)

#### Children's Hospital Foundation

Children's Hospital Foundation funds and advocates for the programs and initiatives of Children's Hospital of Richmond at VCU. The Foundation is dedicated to improving the status of health care and the quality of life for the more than 70,000 children and families the hospital serves each year.

[chfrichmond.org](http://chfrichmond.org)

## Sponsor Listing

### BRONZE:

#### Weinburg CP Center

We are dedicated to improving the lives of people with cerebral palsy of all ages through comprehensive care, research, and education of medical professional, patients, and caregivers.

[weinberg.cuimc.columbia.edu/](http://weinberg.cuimc.columbia.edu/)

#### Tyromotion

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Our therapy solutions support the treatment of patients across the continuum of care and include those with movement disorders caused by cerebral palsy, multiple sclerosis, or other neurological diseases as well as stroke, spinal cord injury, traumatic brain injury or other injuries.

DIH, Deliver Inspiration and Health.

[www.dih.com](http://www.dih.com)

#### Holland Bloorview Kid's Rehabilitation Hospital

At Holland Bloorview Kids Rehabilitation Hospital, we care for kids with disabilities, kids needing rehabilitation after illness or trauma and kids whose medical complexity requires a kind of care they can't get elsewhere. Every day, Holland Bloorview's frontline staff embrace kids with boundless potential and their families. With a mix of services not offered anywhere else in Ontario, we partner to provide the best interprofessional care within our walls and to prepare families for life beyond them. Through teaching and research, we expand how the best care is defined and take those new insights around the globe.

[hollandbloorview.ca/](http://hollandbloorview.ca/)

#### Hanger Clinic

Hanger Clinic specializes in the orthotic and prosthetic (O&P) management of more than 50 different pediatric conditions, including cerebral palsy, spina bifida, plagiocephaly, scoliosis, limb loss, and more. With over 300 board-certified clinicians nationwide who specialize in working with children, our approach centers on communicating with families, partnering with broader healthcare teams, incorporating age-appropriate treatment plans, and applying new and innovative O&P technologies throughout the continuum of care.

[HangerClinic.com/Pediatrics](http://HangerClinic.com/Pediatrics)



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[bionic-power.com](http://bionic-power.com)

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[cookchildrens.org](http://cookchildrens.org)

### Chambers Family

### Amneal Pharmaceuticals

### GeneDx

GeneDx | Sema4 is an industry leader in genomics and genetic testing. For over 20 years, GeneDx has been at the forefront of genetic innovation, pioneering new technologies and gene discovery, enabling greater diagnostic accuracy for patients and families. |

When experience matters, GeneDx is your answer.

<http://www.genedx.com/>

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[www.pathways.org](http://www.pathways.org)

### Rady Children's Hospital

Rady Children's Hospital-San Diego is dedicated to improving the lives of children and families — in our community, throughout the nation and around the world.

We are proud to be the region's pediatric medical center serving San Diego, Imperial and southern Riverside counties. Our hospital treats children from birth to 18 years old as well as a small number of adults with certain conditions for which we have specialized services.

Rady Children's is:

- The largest children's hospital on the West Coast (based on licensed beds and admissions)

- The only hospital in the San Diego area dedicated exclusively to pediatric health care

- The region's only designated pediatric trauma center

- Provider of care to 91 percent of the region's children

- Provider of care to 281,924 children

Our outstanding team includes nearly 1,000 physicians and nearly 1,500 nurses on staff, more than 5,100 employees, about 500 active volunteers and more than 1,200 Auxiliary members.

[www.rchsd.org/](http://www.rchsd.org/)

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## Notes

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