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MEETING HIGHLIGHTS

Wednesday, September 11

Specialty Day

1:30 pm to 5:30 pm

Once again AACPDm is offering this popular half-day program of specialty-specific sessions. There will be three (3) concurrent sessions, one for orthopaedic surgeons, one on physical therapy, and one for pediatrics. The orthopaedic session will be followed by two "Breakfast with the Experts," one on Thursday morning and one on Friday morning.

President's Welcoming Reception

6:00 pm to 8:00 pm

Come, greet old friends, meet new ones at the Wednesday night reception in the French Market of the Hyatt Regency New Orleans. Registrants will receive a free drink ticket and light hors d'oeuvres will be served. Afterward, enjoy having dinner at one of the many famous restaurants in New Orleans.

Thursday, September 12

3:00 pm to 5:25 pm

A not-to-be-missed symposium "Surgical Options in CP: Point Counter-Point." This session promises to be a lively debate of the pros and cons of the three most prevalent surgical options in CP. Each speaker will present his case, and be given the opportunity for rebuttal. Speaker times will be strictly enforced.

Eugene Bleck, MD, and Barry Russman, MD, on the merits of orthopaedic surgery

T. S. Park, MD, and John McLaughlin, MD, on selective dorsal rhizotomy

Leland Albright, MD, and Robert Armstrong, MD, discuss intrathecal baclofen

Annual Membership Meeting

5:30 pm to 6:30 pm

Welcome James A. Blackman, MD

Financial Report Henry G. Chambers, MD

Election of Officers Helen M. Horstmann, MD

Committee Reports

Michaul's Cajun Mardi Gras Gala

7:00 pm to 11:00 pm

Imagine an evening beginning with your very own Mardi Gras Parade. The group will assemble in the lobby of the Hyatt Hotel where they will be greeted by costumed revelers. The group will be led by motorcycle police

escorts down closed streets, followed by a high school marching band and costumed revelers. Each attendee will be furnished with beads to throw to on-lookers as they wind their way down the streets to Michaul's Live Cajun Music Restaurant. Performing will be Michaul's very own Cajun and Zydeco band. You will be invited to perform with the band by playing the "wash board". During band breaks, Michaul's dance instructors will teach popular Cajun dance steps such as the "Cajun Two-Step," "Cajun Jitterbug," and "Cajun Line Dances." Dinner includes local dishes such as Jambalaya, catfish, shrimp and bread pudding. Laissez le bon temps rouler! Bus transportation will be available to take you back to the hotel after dinner. \$60 per person.

Benefits you will receive by participating:

- 1. Choose from 36 Instructional Courses, 51 Free Papers, and 8 "Breakfast with the Experts":** select topics and speakers to fit your educational needs.
- 2. Take Away Resource Materials:** handouts are available from each instructional course you attend; abstracts of free papers are compiled and given to each registrant; tapes are available for purchase.
- 3. International Participation:** learn what research and technical advances are taking place outside North America.
- 4. Learn from Experts:** speakers who have written the textbooks and journal articles and are doing the research.
- 5. Reduced-Rate Accommodations:** a block of reduced-rate accommodations has been reserved at the Hyatt Regency New Orleans.
- 6. Special Networking Opportunities:** join your colleagues at the Opening Reception Wednesday night, meet at the complimentary breakfasts each day.
- 7. Access to others in your field:** possibly the one time so many different disciplines will be available; an opportunity to hear what your peers and teachers are doing.
- 8. Internet Discussion Group:** continue the conference learning experience by participating in post-conference discussions. Visit the web page booth in the exhibit area and learn how to register. www.aacpdm.org
- 9. Hear the latest in research:** results of the first clinical study on Hyperbaric Oxygen (HBO) in Cerebral Palsy were presented at a previous annual meeting.
- 10. Continuing Medical Education Credits**

GENERAL INFORMATION

Registration Fees

To advance register for the 2002 Annual Conference, complete the registration form on page 37 and return it along with the total registration fees by August 5, 2002.

Early registration deadline, August 5, 2002. Pre-registration closes August 26, 2002. After August 26, please register onsite.

Those paying with either Visa or MasterCard may fax their registration to **847-823-0536**. Mail the registration

form with your payment to American Academy for Cerebral Palsy and Developmental Medicine, Dept. 77-6632, Chicago, IL 60678-6632. We can accept U.S. dollars only. SEND CHECKS TO THE ABOVE ADDRESS ONLY.

Cancellation Policy

Registration fees are refundable if refund request is received in writing by August 5, 2002; 75 % refund August 6 to September 11, 2002; no refund after September 11, 2002.

Breakfast with the Experts

Thursday 7:00 - 8:15 am

- #1 Scott A Hoffinger, MD; Kevin P Murphy, MD; Laura K Vogtle, OT; Robert Haining, PhD
Orthopaedic Issues in Adults
- #2 Beverly Cusick, PT, MS, Mary Weck, PT and Moira Tobin-Wickes, CO **Serial Casting: Does it "Work?"**
- A brief review of the pathophysiology related to chronic, excessive muscle activation
 - Application of soft tissue adaptation principles to the serial casting process
 - Application of foot biomechanics and posting principles to casting
 - A review of precautions, contraindications, and limitations of serial casting
 - A videotaped case study
 - Questions and discussion
- #3 Gordon Worley, MD and Gregory Liptak, MD
Diagnostic Dilemmas in Developmental Pediatrics: Four Case Presentations
- #4 Eugene Bleck, MD **Perspectives on the Evolution of Medical Care for Persons with Cerebral Palsy**
Experienced or inexperienced and intermediate are encouraged to attend. Although titled "expert, the objective will be mutual listening to participants who share their personal experience with various treatment methods and drew upon published studies that fulfill the evidence-based criteria. From this interaction, it may be possible to develop a synthesis on what is preferred for the particular impairments in cerebral palsy, what works best, what is cost effective, what expends the least time and psychic energy of the child and family, and what is still unknown.

Friday 7:00 - 8:15 am

- #5 L Andrew Koman, MD **Upper Extremity Surgical Cases in Neuromuscular Disorders**
This will be a continuation of the orthopaedic surgery Specialty Day. Registrants are encouraged to bring difficult cases for discussion. Panelists from the Wednesday presentation will be asked to participate.
- #6 Meg Stanger, MS, PT, PCS **Functional Electrical Stimulation in Children with Cerebral Palsy**
- #7 John McLaughlin, MD, Barry Russman, MD and Martin Bax, MD **Etiologic Investigation of Cerebral Palsy: What's Clinically Useful? What's Research?**
- #8 Sponsored by the AACPDMD Advocacy Committee. Elaine Holland Vining, Asst. Dir., Depart. of Government Liaison, AAP, Washington, DC; Liaison and Consultant to the National AAP Committee on Children with Disabilities and Marshalyn Yeargin-Allsopp, MD, Medical Epidemiologist, Division of Birth Defects and Developmental Disabilities, CDC **The Power of One Voice! Advocacy: Hot Topics from "The Hill" Affecting Children with Disabilities; How YOU can make a difference**
- Find out about:
- Congressional Autism Caucus
 - The Family Support Act
 - The Children's Health Act
 - Federal Advocacy Action Network
 - Mental Health Parity Legislation
 - New CDC Division of Developmental Disabilities

Hotel Accommodations

Located just minutes from the historic French Quarter and the scenic riverfront, the Hyatt Regency New Orleans offers a landscaped swimming pool and terrace, and a fully equipped health club. Each room has computer data ports, voicemail services and some even feature in-room faxes. The hotel offers free shuttle service to the French Quarter and Harrah's Casino from 9:00 am to 10:30 pm Sunday-Thursday and 9:00 am-12:30 am Fridays and Saturdays.

Come a day early and enjoy New Orleans birthplace of Jazz, the blues and the po'boy sandwich, a town built on the tradition of having a good time. "Laissez le bon temps rouler," the Zydeco bandleader yells as he starts another set. "Lagniappe," the chef says as he adds "a little more" to a feast of crawfish and jambalaya. Everywhere you go in New Orleans you will find enthusiasm for food, dancing, music, parades and life itself. Influenced by the Creole founders who brought their French sensibility to the Vieux Carre; the American, British and Irish merchants who built mansions in the Garden District; the Cajuns who moved to the surrounding swampland from Nova Scotia; the voodoo still practiced by people in and outside the city, New Orleans overflows with history, interesting people, great food, ghosts, music and color. There are swamp tours, alligator farms, museums, plantations, historic homes and gardens, the Audubon Zoological Gardens, and riverboat rides to enjoy.

Getting There

Airport Shuttle (504/522-3500) runs frequently from the airport to New Orleans Hotels. Reservations are required for transfer from the hotel to the airport. Tickets may be purchased from the concierge.

Wednesday, September 11, 2002 from 8:00 am to 12 noon, the Grupo LatinoAmericano NeruoOrtopedia (GLEANeO) chaired by Dr. Luciano Dias will be meeting. The topic will be neuromuscular foot deformities. For more information contact Dr. Dias at luciano@pol.net.

Who Should Attend

Orthopaedic surgeons, physical and occupational therapists, speech and hearing therapists, neurologists, developmental pediatricians, psychologists, PM & R physicians, nurses, special education teachers,

researchers, educators, administrators, orthotists, rehab engineers, kinesieologists, and others concerned with the care of children with cerebral palsy and other developmental disabilities. All levels of skills will be addressed.

Americans with Disabilities Act

The American Academy for Cerebral Palsy and Developmental Medicine 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 aids 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.

Purpose Statement and Objectives

Purpose

The purpose of this meeting is to identify, discuss and describe advances in basic science, treatment, care and technology as it applies to the management of cerebral palsy and other developmental or neuromuscular disorders.

Objectives

1. To provide a forum to present and evaluate recent scientific advances in the area of developmental health care.
2. To present current research pertaining to the study of cerebral palsy and other developmental disabilities.
3. To foster interdisciplinary communication and interchange that will provide more effective care for individuals with cerebral palsy or neurodevelopmental disabilities.
4. To demonstrate the latest practical applications in a clinical setting of a variety of therapies and assistive devices.
5. To provide tools to become advocates for the patient population.

Continuing Medical Education Information

The American Academy for Cerebral Palsy and Developmental Medicine is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians. The AACPDM takes responsibility for the content, quality, and scientific quality of this CME activity. This activity is designated for 21 hours in Category 1 of the Physician's Recognition Award of the American Medical Association. For credit that may be acceptable to state

GENERAL INFORMATION

medical associations, specialty societies or state boards of medical licensure, please contact those organizations. Those who attend a "breakfast" are eligible for 1.25 credits.

A passport book that can be stamped to indicate events attended will be provided as documentation along with a certificate of attendance with the number of hours credited.

This program has applied for a contract hours through Texas Scottish Rite Hospital for Children, an approved provider through the Texas Nurse Association.

FDA

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 judgement 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 Academy 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 uses 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.

On-Site Registration Hours

The Annual Meeting Registration desk will be open:

Wednesday 10 am - 5 pm
 Thursday 7:00 am - 5 pm
 Friday 7:00 am - 5 pm
 Saturday 7:00 am - 5 pm



Specialty Day

Wednesday, September 11, 2002

1:30 pm to 5:30 pm

The American Academy for Cerebral Palsy and Developmental Medicine is accredited by the Accreditation Council for Continuing Medical Education to sponsor continuing medical education for physicians. This activity is designated for up to 4 hours in Category 1 of the Physician's Recognition Award of the American Medical Association. For credit that may be acceptable to state medical associations, specialty societies or state boards of medical licensure, please contact those organizations.

SD1. Evidence-Based Physical Therapy Management of Children with Cerebral Palsy: An Interactive Case Study Session

Faculty: Roslyn Boyd, M Sc (PT), Pgrad (Biomech); Margaret Barry Michaels, PhD, PT, PCS; Kristie Bjornson, MS, PT, PCS; Diane Damiano, PhD, PT

This session will discuss and demonstrate the incorporation of evidence based practice into the physical therapy management of children with cerebral palsy through short topical presentations and case discussions among the faculty and the course participants. An interactive approach will be used to maximize audience participation in a series of case studies on clinical knowledge, and treatment preferences. Specifically, faculty will discuss current outcome measurement approaches and innovative physical therapy treatment approaches for ambulatory and non-ambulatory children with cerebral palsy. Complementary treatments including orthopaedic surgery, selective dorsal rhizotomy, intrathecal baclofen, electrical stimulation, strength training and botulinum toxin A injections will be considered in relation to each case and their physical therapy management. Most importantly, we hope to make this a fun-filled learning experience for us all!

Course Level: Intermediate

Who should attend: Physical therapists, family practitioners, general orthopaedists, pediatricians, PM&R physicians, nurses

SD2. Nutrition, Growth and Physical Development in Children with Cerebral Palsy: From Research to Practice

Faculty: Richard Stevenson, MD; Ellen Fung PhD; Lisa Samson-Fang, MD; Richard Henderson, MD, PhD; Peter Rosenbaum, MD; and Maureen O'Donnell, MD, MSc

This session will illustrate the current evidence regarding growth, nutrition and physical development in children with cerebral palsy. The most recent research findings will be presented and the implications of these for practice today will be discussed, with audience participation.

Objectives: 1. To review the role of nutritional status in growth and in physical development for children with cerebral palsy. 2. To recognize indicators of nutritional risk and understand the use of nutritional screening and assessment tests. 3. To understand the role and complexity of bone density measurement in children with cerebral palsy. 4. To gain awareness of the prevalence and nature of feeding dysfunction in children with cerebral palsy. 5. To systematically review the evidence regarding the efficacy of G-tube nutrition for children with cerebral palsy. And 6. To consider how and when new research findings can and should be incorporated into practice.

Level: Intermediate

Who should attend: physicians, nurses, dieticians, speech pathologists, occupational therapists, physical therapists

SD3. Orthopaedic Surgery: Neuromuscular Spine Deformities and Treatment

Invited - Faculty: Kenneth J. Guidera, MD, and Robert (Matt) Bernstein, MD

This session will start with an introduction to neuromuscular spine deformities and then discuss the cerebral palsy spine, myelomeningocele, spinal muscular atrophy and muscular dystrophy. There will be case presentations and lots of discussion.

Goals: To present and discuss conditions of the spine as it applies to persons with cerebral palsy and other neuromuscular disorders. To provide a forum for discussion and resolution of difficult cases.

Level: Advanced

Who should attend: nurses, physical therapists, orthopaedic surgeons, general surgeons, PM&R physicians

THURSDAY, SEPTEMBER 12, 2002

- 7:00 am - 8:15 am **Breakfast with the Experts #1 - #4**
- 7:00 am - 8:15 am **Continental Breakfast**
- 8:15 am - 9:45 am **Opening Session**
Welcome: Michael Sussman, MD
- Exchange of Gavel/
Presidential Address**
James A Blackman, MD
- Mac Keith Basic Science
Lecture**
John W McDonald, III, MD
- Assistant Professor of Neurology, Neurological Surgery, and Physical Medicine and Rehabilitation, Washington University School of Medicine, St. Louis, MO. Director, Spinal Cord Injury, Neurorehabilitative Unit, Barnes-Jewish Hospital.
- Research interests: Nervous system injury and repair; currently is Primary Investigator on four NIH grants.
- Honors: Murray Goldstein Award (Neurotrauma Society); NFL Charities Foundation Award; L W Freeman Award (National Spinal Cord Injury Association); and many more.
- 9:45 am - 10:15 am **Break**
- 10:15 am - 11:30 am **Free Papers A, B, C**

**Session A: Motor Performance**

Location: Cabildo A-B

Moderator: Diane Damiano, PhD

- 10:15 am - 10:23 am A New Biomechanical Classification of Sagittal Gait Patterns in Spastic Diplegia: A Cross-sectional and Longitudinal Study
- Jillian Maree Rodda, BAppSc (PT)**; Richard Baker, PhD; Rory Wolfe, PhD; Mary Galea, PhD; H Kerr Graham, MD
- 10:23 am - 10:31 am The Impact of Tone on Resting Energy Expenditure in Children with Cerebral Palsy
- Li-Fen liu, MS; Laurie Moyer-Mileur, PhD; Judy Gooch, MD;
Lisa Samson-Fang, MD
- 10:31 am - 10:39 am An Equation for Estimating the Metabolic Cost of Walking for Children with Cerebral Palsy
- Edward J Quigley, PhD**
- 10:39 am - 10:52 am DISCUSSION
- 10:52 am - 11:00 am Motor Performance Comparison of the Hinged and Dynamic Ankle Foot Orthotics
- Sahar Hassani, MS**; Mohammed Ferdjallah, PhD; Kathryn Reiners; Charlene Johnson; Peter Smith, MD; Gerald Harris, PhD
- 11:00 am - 11:08 am An Evaluation of Pelvic Rotation Pre and Post Unilateral Femoral Derotation Osteotomy in Children with Cerebral Palsy Spastic Hemiplegia
- Sylvia Ounpuu, MSc**; Ronald E Michalak, MD; Mark Romness, MD; Kathy Bell, MS; Peter DeLuca, MD
- 11:08 am - 11:16 am Direct Measurement of Muscle Length in Children with Spastic Diplegia: Preliminary Results
- Nicola R Fry, MSc; Martin Gough, FRCSI;
Adam P Shortland, PhD
- 11:16 am - 11:30 am DISCUSSION

Session B: Botulinum Toxin A

This section discusses "off label" usage. Botulinum Toxin A has not been approved by the FDA for use in children.

Location: Regency Ballroom E-H

Moderator: L Andrew Koman, MD

- 10:15 am - 10:23 am Idiopathic Toe Walking: Treatment With Injection of Botulinum A Toxin
Laura K Jacks, MD; Jeff Shilt, MD; Andy Koman, MD; Roquel Estrada, PT; Beth Smith, PhD; Gloria Hairston
- 10:23 am - 10:31 am The Effect of Botulinum-A Toxin on Functional Sitting and Standing in Children with Cerebral Palsy
Jane W Schneider, PhD, PT; Deborah J Gaebler-Spira, MD
- 10:31 am - 10:39 am A Comparison of the Spread of Biological Activity of Botulinum Toxin Type B (Myobloc) and Botulinum Toxin Type A (Botox) in a Monkey Model
Joseph C Arezzo, PhD; Mona S Litwak, PhD; George M Shopp, PhD; Kathleen E Meyer, PhD
- 10:39 am - 10:52 am DISCUSSION
- 10:52 am - 11:00 am Comparison of Botulinum Toxin A and Casting for the Treatment of Dynamic Equinus during Gait: Preliminary Results
Barry S Russman, MD; Jeffrey Ackman, MD; Susan Sienko Thomas, MA; Cathleen E Buckon, MS; Peter Masso, MD; James Sanders, MD; Jacques D'Astous, MD
- 11:00 am - 11:08 am Botulinum Toxin Type A (BTX-A) for the Management of Equinus Gait- A Meta Analysis of Randomized Clinical Trials
Roslyn Boyd, MSc, PT; Ross Hayes, MD; Tim Bach, PhD; Meg Morris, PhD

- 11:08 am - 11:16 am A Randomised Trial of Botulinum Toxin A (BTX-A) and Upper Limb Training - A Functional MRI Study

Roslyn Boyd, MSc, PT; Tim Bach, PhD; Meg Morris, PhD; Christine Imms, MSc, OT; Lindy Johnson, BAppSc, OT; H Kerr Graham, MD; Ari Syngieniotis, MIT; David F Abbott, PhD; Graeme D Jackson, BSc, MD, FRACP

- 11:16 am - 11:30 am DISCUSSION

Session C: Treatment of Cerebral Palsy

Location: Esplanade A-B

Moderator: Robert Nickel, MD

- 10:15 am - 10:23 am Are Children in the UK Developing Variant CJD? - A National Surveillance Study of Children with Progressive Intellectual and Neurological Deterioration (PIND)
Christopher M Verity, FRCPCH; Gilliam Devereux, MCommH; Lesley Stellitano
- 10:23 am - 10:31 am A Comparison of Clinical and Videofluoroscopic Evaluation of Children with Feeding and Swallowing Difficulties.
Carol DeMatteo, MSc, OT; Diana Matovich, BSc, OT; Aune Hjartarson, BSc, OT; Trish Case, BSc, OT
- 10:31 am - 10:39 am Drooling, Saliva Productions and Frequency of Swallowing in Children with Cerebral Palsy
Jill Ellyn Senner, MS; Jerilyn Logemann, PhD; Steve Zecker, PhD; Deborah Gaebler-Spira, MD
- 10:39 am - 10:52 am DISCUSSION
- 10:52 am - 11:00 am Health Risks ... Do They Change When Adolescents with Physical Disabilities Become Young Adults?
Catherine Steele, PhD; Joseph Bortolussi, MSW; Ilze Kalnins, PhD

THURSDAY, SEPTEMBER 12, 2002

- 11:00 am - 11:08 am Complementary and Alternative Medicine Use in Families of Children with Cerebral Palsy
Edward A Hurvitz, MD; Christina Leonard; Virginia Nelson, MD, MPH; Rita Ayyangar, MD
- 11:08 am - 11:25 am DISCUSSION
- 11:30 am - 1:00 pm **Box Lunch/Exhibits/Posters**
French Market Exhibit Hall
- 1:00 pm - 2:30 pm **Free Papers D, E, F**
- 1:53 pm - 2:01 pm Impact of Intrathecal Baclofen Pump Placement on Care and Comfort Measures in Children and Adults with Cerebral Palsy
Gadi A Revivo, DO; Beverly Tann, RN; Marlene Peng, BS; John Grant, MD; Deborah Gaebler-Spira, MD
- 2:01 pm - 2:09 pm Intrathecal Baclofen Therapy in Children Affected by Spastic Diplegia: A Comparison of Results Among Gait Analysis, Functional and Subjective Patient Evaluation
Francesco Motta, MD; Vincenzo Buonaguro, MD; Emanuela Galli, Eng

Session D: Outcome Scales and Baclofen

Location: Esplanade A/B

Moderator: Robert Armstrong, MD

- 1:00 pm - 1:08 pm Prognosis for Gross Motor Function in Cerebral Palsy: Creation of Motor Development Curves
Peter L Rosenbaum, MD, FRCP(C); Robert Palisano, ScD; Stephen Walter, PhD; Steven Hanna, PhD; Dianne Russell, MSC; Parminder Raina, PhD; Doreen Bartlett, PhD; Ellen Wood, MD, FRCP(C), MSc; Barbara Galuppi, BSc
- 1:08 pm - 1:16 pm Life Span Development of Locomotion in Persons with Cerebral Palsy
Reidun B Jahnsen, PT, PhD; Johan K Stanghelle, PhD; Inger Holm, PhD, PT
- 1:16 pm - 1:24 pm The Reliability and Validity of the Observational Gail Scale in Children who have Spastic Diplegia
Anna H Mackey, MS, PT; Glenis Lobb, BA, PT; Sharon Walt, PhD; N Susan Stott, MD, PhD
- 1:24 pm - 1:45 pm DISCUSSION
- 1:45 pm - 1:53 pm Progression of Scoliosis in Spastic Quadriplegic Patients After the Insertion of an Intrathecal Baclofen Pump
Glen M Ginsburg, MD; Anthony J Lauder, MD
- 2:09 pm - 2:30 pm DISCUSSION

Session E: Orthopaedic Surgery

Location: Regency E-H

Moderator: Kenneth Guidera, MD

- 1:00 pm - 1:08 pm Comparison of Percutaneous Tendo-Achilles Lengthenings to Gastrocnemius Lengthenings to Treat Equinus in Children with Cerebral Palsy
Melany Westwell-O'Connor, PT; Peter DeLuca, MD; Sylvia Ounpuu, MS
- 1:08 pm - 1:16 pm Calcaneal Lengthening for Equinovalgus Foot Deformity in Spastic Cerebral Palsy
Beate Stocker, MD; Ralf Stuecker, MD
- 1:16 pm - 1:24 pm Is Internal Rotation a Compensation for Weak Hip Abductors in Cerebral Palsy?
Ronan McKeown, MBBCh; Aidan Cosgrove; Richard Baker
- 1:24 pm - 1:45 pm DISCUSSION
- 1:45 pm - 1:53 pm Adductor Tenotomy in Cerebral Palsy: Unilateral or Bilateral?
Federico Fernandez-Palazzi, MD; Salvador Rivas, MD; Rafael Viso, MD; Jose Luis Cibeira, MD

1:53 pm - 2:01 pm	Goal Specific Outcomes of Rectus Femoris Transfers in Children with Cerebral Palsy Based on Stance-Phase Characteristics Noelle G Moreau, PT ; Jill Simpson, SPT; Miranda Wilkerson, SPT; Philip Gates, MD	1:45 pm - 1:53 pm	Teens with Spina Bifida (SB): Their Activities Expectations and Perceptions Constance F Buran, DNS,RN ; Kathleen Sawin, DNS, RN, FAAN; Timothy Brei, MD; Philip Fatenau, PhD
2:01 pm - 2:09 pm	Comparison of Primary and Repeated Distal Hamstrings Lengthening in Ambulatory Children with Spasticity Wei-Ning Chang, MD; Athanasios I Tsirikos, MD; Freeman M Miller, MD ; Nancy Lennon, MS, PT; Jill Schuyler, MS; Lauren Kerstetter, MPT	1:53 pm - 2:01 pm	Use of Nighttime Transcutaneous Electrical Stimulation in Children with Myelomeningocele Shelley Ryan, PT; Janet Walker, MD; Rebecca Davis, BA; Tonya Coburn, PA-C
2:09 pm - 2:30 pm	DISCUSSION	2:01 pm - 2:09 pm	The Relationship Between Neurocognitive Impairment in Adolescents with Spina Bifida and Parental Depression: The Influence of Family Functioning Timothy J Brei, MD ; Stacey E Woodrome, MS; Philip S Gastenau, PhD; Kathleen J Sawin, DNS, RN; Constance F Buran, DNS, RN
Session F: Spina Bifida			
Location: Cabilda A/B			
Moderator: Michael Aiona, MD			
1:00 pm - 1:08 pm	Trunk Kinematics in Persons with High Sacral Level Myelomeningocele: The Influence on Valgus Knee Stress Rajan Gupta, BA ; Stephen J Vankosi, MS; Julie A Witka Anderson, MS; Robert A Novak, MS; Luciano S Dias, MD	2:09 pm - 2:30 pm	DISCUSSION
1:08 pm - 1:16 pm	Ambulatory Activity and Oxygen Consumption: Is There a Relationship in Patients with Myelomeningocele Loretta A Prim, BS ; Robert Novak, MS; Julie A Witka, Anderson, MS; Luciano Dias, MD	2:30 pm - 3:00 pm	Break
1:16 pm - 1:24 pm	Prevalence of Osteoporosis Among Institutionalized Adults With Developmental Disabilities Kristin E Lelvis, MD ; Betty Flynn, RN; Kay Christensen, RN	3:00 pm - 5:25 pm	Surgical Options in Cerebral Palsy: Point/Counter-Point This session promises to be a lively discussion of the pros and cons of the three most prevalent surgical options in cerebral palsy. Each speaker will present his case, and be given the opportunity for rebuttal. Orthopaedic Surgery will be discussed by Eugene Bleck, MD and Barry Russman, MD, Selective Dorsal Rhizotomy by T. S. Park, MD and John McLaughlin, MD, Intrathecal Baclofen by Leland Albright, MD and Robert Armstrong, MD
1:24 pm - 1:45 pm	DISCUSSION	5:30 pm - 6:30 pm	Business Meeting
		7:00 pm - 11:00 pm	Optional Event Michaul's Live Cajun Music and Parade

FRIDAY, SEPTEMBER 13, 2002

7:00 am - 8:15 am **Breakfast with the Experts #5 - #8**

7:00 am - 8:15 am **Continental Breakfast**

8:15 am - 9:30 am **Free Papers G, H, I**

Session G: Selective Dorsal Rhizotomy

Location: Regency E-H

Moderator: John McLaughlin, MD

8:15 am - 8:23 am Selective Dorsal Rhizotomy and Orthopaedic Surgery: A Multi-dimensional Assessment of Outcome Efficacy

Cathleen Buckon, OTR/L, MS;

Susan Sienko Thomas, MA; Joseph Piatt, MD; Michael Aiona, MD, Michael D Sussman, MD

8:23 am - 8:31 am Orthopaedic Surgery (OS) and Selective Dorsal Rhizotomy (SDR): Which has Greater Effects on Gait and Energy Efficiency in Children with Spastic Diplegia?

Susan E Sienko Thomas, MA;

Cathleen E Buckon, MS; Joseph H Piatt, MD; Michael D Aiona, MD; Michael D Sussman, MD

8:31 am - 8:45 am DISCUSSION

8:45 am - 8:53 am Relationships of Spasticity to Strength and Motor Function Revisited

Diane L Damiano, PhD, PT;

Mark F Abel, MD

8:53 am - 9:01 am Changes in Gait and Gross Motor Function Measure (GMFM66) at 8 months Post-Selective Dorsal Rhizotomy (SDR)

Sandy A Ross, PT, MHS; Jack R Engsborg, PhD; Joanne Wagner, PT, MS, ATC; Tae Sung Park, MD

9:01 am - 9:09 am A Longitudinal Follow-up of Children with Cerebral Palsy 7 to 8 Years After Selective Dorsal Rhizotomy

Golda Milo-Manson, MHSc, MD, FRCPC; Virginia Wright, MSc, BSc(PT); Jim Drake, MBBCH, FRCSC; John Wedge, MD, FRCSC

9:09 am - 9:30 am DISCUSSION

Session H: Developmental Pediatrics Issues

Location: Esplanade A/B

Moderator: Maureen O'Donnell, MD

8:15 am - 8:23 am Functional Limitations in Young Children with Congenital Heart Defects Following Cardiac Surgery

Catherine Limperopoulos,

PhD, OT; Annette Majnemer, PhD, OT; Michael Shevell, MD, CM; Bernard Rosenblatt, MD, CM; Charles Rohlicek, MD, CM, PhD; Christo Tchervenkov, MD, CM; H Z Darwish, MD

8:23 am - 8:31 am Longitudinal Study of the Progression of Secondary Sexual Characteristics (SSC) in Children with Cerebral Palsy

Christine MHoulihan, MD;

Gordon Worley, MD; Mark Conaway, PhD; James N Roemmich, PhD; Alan D Rogol, MD, PhD; Maureen O'Donnell, MD; Richard D Stevenson, MD

8:31 am - 8:45 am DISCUSSION

8:45 am - 8:53 am Longitudinal Evaluation of the Stability of Fine Motor, Gross Motor and Communication Scores in Typically Developing Infants

Johanna M Darrah, PhD;

Megan Hodge, PhD; Joyce Magill-Evans, PhD

8:53 am - 9:01 am Effect of Illness on Rate of Neuromaturation Prior to Term in Preterm Infants in a NICU

Marilee C Allen, MD; Pamela K Donohue, ScD; Greg R Alexander, ScD

9:01 am - 9:09 am Intrauterine Infection: A Risk Factor for Cerebral Palsy in Low-Birthweight Infants.

Marcia W Swanson, PhD,

MPH, PT; David A Eschenbach, MD; Victoria L Holt, PhD; Noel S Weiss, MD, PhD; Forrest C Bennett, MD

9:09 am - 9:30 am DISCUSSION

Session I: Eclectic

Location: Cabildo A/B

Moderator: James Blackman, MD

8:15 am - 8:23 am Benefits of Deflazacort for Boys with Duchenne Muscular Dystrophy

W Douglas Biggar, MD; Vivien Harris, RN; Benjamin Alman, MD; Catherine Steele, PhD

8:23 am - 8:31 am The Effect of Albuterol on Muscle Strength in Children with Duchenne Muscular Dystrophy

Eileen G Fowler, PhD, PT; Marcia Greenberg, MS, PT; Michael Graves, MD; Terence Padden, BS; Glenn Wetzel, MD, PhD; Frederick Dorey, PhD; Melissa Spencer, PhD

8:31 am - 8:45 am DISCUSSION

8:45 am - 8:53 am Gross Motor Capability and Performance of Mobility in Children with Cerebral Palsy: A Comparison Across Home, School, and Outdoors/Community Settings

Beth L Tieman, MPT; Robert Palisano, PT, ScD; Edward Gracely, PhD; Peter Rosenbaum, MD; Lisa Chiarello, PT, PhD, PCS; Maggie O'Neil, PT, PhD, MPH

8:53 am - 9:01 am Constraint-Induced Movement Therapy vs Traditional Therapeutic Services for Young Children with Cerebral Palsy: A Randomized Controlled Trial

Karen Echols, PT, PhD, PCS; Stephanie C DeLuca, MA; Sharon L Ramey, PhD; Edward Taub, PhD

9:01 am - 9:09 am Kinematic Assessment of Brachial Plexus Birth Palsy (BPBP)

Kyria L Petuskey, MS; Michaelle James, MD; Teresa Mosqueda, BS; Anita Bagley, PhD; George Rab, MD

9:09 am - 9:30 am DISCUSSION

9:30 am - 10:00 am **Break**

10:00 am - 12:00 pm **Presidential Guest Lecture**

A. James Barkovich, MD

Professor in Residence, Department of Radiology, University of California at San Francisco, Chief of Pediatric Neurology

Research interests:

Malformations of the brain and spine; imaging and spectroscopy in epilepsy, inborn errors of metabolism, and normal brain.

Honors: Past President, American Society of Pediatric Neuroradiology; Goldenson Technology Award, United Cerebral Palsy Research and Education Foundation; Author of Pediatric Neuroimaging, the definitive textbook of pediatric neuroradiology.

**Cathleen Lyle Murray Lecture
Children's Hospital Award
for Excellence in the Care of
Children with Cerebral Palsy**

12:00 pm - 1:00 pm **Lunch**

12:00 pm - 1:00 pm **Past Presidents' Lunch**



FRIDAY, SEPTEMBER 13, 2002

Instructional Courses 1-8**Friday, September 13, 2002****1:00 - 3:00 pm**

- 01 Assessment and Management of Common Sleep Disorders in Children with Developmental Disabilities
Deborah C Lin-Dyken, MD; Mark Eric Dyken, MD
- 02 Evaluation and Treatment of Children in Vegetative or Minimally Conscious States Following Acquired Brain Injury
Christine Murray Houlihan, MD; Peter D Patrick, PhD
- 03 Neurogenic Bladder: Medical, Surgical, and Psychosocial Management for Children and Adolescents with Spina Bifid
Robert A Jacobs, MD, MPH; Theresa Schlager, MD; Brian Hardy, MBCHB; Beth V Simon, PsyD
- 04 Evidence-based Botulinum Toxin-A Treatment of Children with Cerebral Palsy: An Integrated Approach
Guy Molenaers, MD; H Kerr Graham, MD, FRACS; Kaat Desloovere, PhD
- 05 Myelomeningocele: Orthopaedic Management and Gait Analysis
Luciano Dias, MD; Claudia Kelp-Lenane, PT; Robert Novak, MS; Loretta Prim, BS; Julie Witka Anderson, MS; Stephen Vankoski, MS
- 06 Introduction to the Internet, WWW Resources, and Digital Media Production for AACPDM Members
William L Oppenheim, MD; Loretta M Knutson, PhD, PT, PCS
- 07 Children with Severe Cerebral Palsy and Complex Medical Problems: Analysis of Needs for Daily Living and Assurance of Optimal Health and Cost of Care
Leslie Rubin, MD; Elizabeth Elliott, RN; Gail Charpentier, MA, LCSW; Karen Carter, MD
- 08 Functional Gait Limitations and Treatment of the Ankle in Patients with Cerebral Palsy
David H Sutherland, MD; Henry G Chambers, MD; Arnel Aquinald, MA, ATC; Marilynn Wyatt, MA, PT
- 09 Diagnosis and Management of Movement Disorders in Cerebral Palsy: Dystonia, Athetosis, Chorea, Tremor and Ataxia
A Leland Albright, MD; Meg Stanger, LPT; Susie Oresic, OT; Susan Ferson, PNP

3:00 pm - 3:30 pm **Break****Instructional Courses 10-18****Friday, September 13, 2002****3:30 - 5:30 pm**

- 10 Rehabilitation Considerations in Spasticity Management
Margaret J Barry, PhD, PT, PCS; Sue Murr, PT; Kristie Bjornson, MS, PT; Charlotte Yates, MS, PT
- 11 Respiratory Assessment and Management of Infants and Children with Cerebral Palsy
Kerstin M Sobus, MD; Sheila M Horan, BS; Robert H Warren, MD
- 12 Integrating Therapy Services into Natural Environments: Advantages and Challenges
Darbi Philibert, MHS, OT; Susan Ducote, LPT, PCS; Patricia Snyder, PhD
- 13 Helping Children with Moderate-Profound Cognitive Disability Achieve Continence
Lisa Samson-Fang, MD; Cindy Meyer, BS; Teresa Such-Neibar, DO
- 14 The Year's Top Ten Articles on Developmental Disabilities
Gregory Liptak, MD, MPH; Gordon Worley, MD
- 15 Optimizing the Quality of Research Data: Strategies to Recruit and Train Research Interviewers and Measure Interviewer Reliability
Marilyn E Swinton, BSc; Patricia A Hurley, BA; Peter L Rosenbaum, MD (FRCP); Dianne J Russell, MSc; Stephen D Walter, PhD; Parminder S Raina, PhD
- 16 Introduction to Alternative/Complementary Therapies in Cerebral Palsy
William L Oppenheim, MD; Scott Hoffinger, MD; Eileen Fowler, PhD, PT; Diane Damiano, PhD, PT
- 17 Orthopaedic Assessment and Management of Children with Cerebral Palsy - A Basic Course
Michael D Aiona, MD
- 18 Intramuscular Pharmacologic Management of Spasticity Associated with Cerebral Palsy with Emphasis on Botulium A Toxin
L Andrew Koman, MD; Jeffrey S Shilt, MD; Laura Jacks, MD; Beth Paterson Smith, PhD

7:00 am - 8:00 am **Continental Breakfast**

8:00 am - 10:00 am **Presidential Guest Lecture**
 Eric Barrington Keverne, ScD
 Director, Sub-Department of Animal Behavior College Lecturer and Fellow, King's College Professor, Behavioral Neuroscience, University of Cambridge
 Research Interests: Brain Development and Behavior
 Honors: Honorary Fellow American Academy of Arts and Sciences; Fellow of the Royal Society

Awards: Sage, Promising Career and Scientific Poster

10:00 am - 10:30 am **Break**

10:30 am - 11:30 am **Symposium**
Constraint-induced (CI) Therapy: Applied to Pediatric Patients with Neuromotor Disorders
 Edward Taub, PhD; Professor Department of Psychology, University of Alabama at Birmingham; Stephanie DeLuca Research Associate & Coordinator of Pediatric (CI) Therapy Project

11:30 am - 1:00 pm **International Affairs Lunch**
Effect of Malnutrition on Cognitive Development: A Worldwide Perspective

Krishna Belbase is currently Advisor, Nutrition Section, PD, UNICEF.
 His responsibilities include coordination of regional nutrition strategy training workshops, technical support of the World Bank/UNICEF Nutrition Assessment, and support for integrated community-based programs particularly for growth monitoring/promotion, nutrition information and surveillance systems and household food security components.

Cost \$35.00. Space is limited.

1:30 pm - 4:30 pm **Family Forum**
 Program is hosted by the Local Host, Ann H Tilton, MD. There will be discussions on Growth and Nutrition in children with cerebral palsy and sports participation for persons with cerebral palsy. Local speakers with a panel discussion will culminate it. Plan on arriving early to visit the exhibits before they close at 10:30 am.



This is a preliminary program and is subject to change

SATURDAY, SEPTEMBER 14, 2002

3:00 pm – 3:30 pm **Break****Instructional Courses 19-27****Saturday, September 14, 2002****1:00 – 3:00 pm**

- 19 After the Operation - So What Happens Now? Rehabilitation and Orthotic Management After Orthopaedic Surgery for Children with Cerebral Palsy
Adrienne Ruth Harvey, PT; H Kerr Graham, MD, FRCS(Ed), FRACS; David Phillips
- 20 Gynecologic Issues in Children and Adolescents with Developmental Disabilities
Patricia A Newhouse, MD
- 21 Guide to Common Statistical Analyses in Clinical Research
Mark R Conaway, PhD; Peter Rosenbaum, MD, FRCP
- 22 Functional Gait Limitations and Treatment of the Knee in Patients with Cerebral Palsy
David H Sutherland, MD; Henry G Chambers, MD; Arnel Aguinaldo, MA, ATC; Marilyn Wyatt, MA, PT
- 23 The Use of Botulinum Toxin-A in the Management of Upper Extremity Spasticity
Darcy L Fehlings, MD; Roslyn Boyd, BSc, PT; Ilona Autti-Ramo, MD; Janet Bernstein, MSc, OT
- 24 The Youth En Route Program: Promoting Self-Determination of Youth with Disabilities During Transition to Adulthood
Jan Evans, MSc; Patricia Baldwin, BSc, OT
- 25 Pediatric Spinal Cord Injuries: Specialty Topics
Lawrence C Vogel, MD; Caroline J Anderson, PhD; Randal R Betz, MD; M J Mulcahey, MS, OTR/L
- 26 Bowel Management in Spina Bifida: Is the ACE Procedure a "Winning Hand"?
William O Walker Jr, MD; Julia Hulsey, RN; Greg Liptak, MD; W Douglas Biggar, MD
- 27 Energy Expenditure in Able-Bodied Children and Children with Spastic Cerebral Palsy
Viswanath B Unnithan, PhD, FACSM; Don W Morgan, PhD, FACSM

Instructional Courses 28-36**Saturday, September 14, 2002****3:30 – 5:30 pm**

- 28 Developmental Concerns in Children with Congenital Heart Defects: An Emerging Agenda for Rehabilitation Specialists
Annette Majnemer, PhD; Catherine Limperopoulos, PhD, OT
- 29 Safe Transportation of Children with Disabilities
Marilyn J Bull, MD; Jean M Zimmerman, RPT
- 30 Hypoxic Ischemic Encephalopathy in Children after Prolonged Submersion
Sally Evans, MD; Christine Aguilar, MD
- 31 Assessment of General Movements: A Powerful Tool for the Early Detection of Cerebral Palsy, DCD and ADHD
Mijna Hadders-Algra MD, PhD; Teija Salokorpi, MD, PhD
- 32 The Gross Motor Function Measure: GMFM-66 or GMFM-88: Which One Should I Use?
Dianne J Russell, MSC; Robert J Palisano, PhD, PT; Peter L Rosenbaum, MD
- 33 Surgical Solutions to Difficult Upper Extremity Problems in Cerebral Palsy: From Assessment to Rehabilitation
Michelle Carlson, MD; Catherine E Brooks, OTR, CHT; Michelle Spirtos, OTR
- 34 Orthopaedic Management of Children with Myelomeningocele: Spine, Lower Extremity, Orthotics
Luciano Dias, MD; John Sarwark, MD; Stephanie Bulter Figlioli, MPT; Claudia Kelp-Lenane, PT
- 35 Saliva Overflow, Sialorrhea, or Drooling: Use of the Intra-oral Device to Control Drooling
Janet H Allaire, MA; Peter A Blasco, MD; Hubert Haberfellner, MD
- 36 A Medical Home for Children with Special Health Care Needs
Robert E Nickel, MD; W Carl Cooley, MD; Lisa Samson-Fang, MD

1 Assessment and Management of Common Sleep Disorders in Children with Developmental Disabilities

Deborah C. Lin-Dyken, MD; Mark Eric Dyken, MD

Course Level: Basic to intermediate

Purpose: To familiarize the audience with some commonly encountered sleep problems in children with various developmental disabilities. Differential diagnoses, assessment tools, and both medical and behavioral treatments will be presented.

Target Audience: Health professionals, para-professionals, and families of children with developmental disabilities who are interested in sleep problems. Little to no knowledge of specific sleep disorders is required. This course will be relevant to pediatricians, nurses, psychologists, and others interested in pediatric sleep disorders.

Course Summary: This course will introduce health professionals with minimal knowledge to frequently encountered sleep difficulties in children with developmental disabilities, discuss diagnostic tests, and present several treatment options.

The course will begin with a brief discussion of the development of sleep cycles and architecture during the childhood and adolescent years. Common sleep problems in children, including sleep onset association disorder, circadian problems, parasomnias, and sleep related breathing problems will be presented. Diagnostic evaluation, including sleep histories, physical findings, and use of specialized testing will be discussed. Finally, some treatment options, including medications, behavioral therapy, and CPAP will be discussed. Handouts with diagnostic criteria and screening surveys will be presented. Checklists for parents and referents will be presented as well.

2 Evaluation and Treatment of Children in Vegetative or Minimally Conscious States Following Acquired Brain Injury

Christine Murray Houlihan, MD; Peter D. Patrick, PhD

Course Level: Intermediate

Purpose: To provide health professionals with a review of Acquired Brain Injury and to discuss detailed neuropharmacological interventions for arousal and awareness in a vegetative or minimally conscious state. Interventions will be discussed via a case series and

low arousal protocol from an acute inpatient rehabilitation facility.

Target Audience: Health professionals and allied health specialists who care for children with acquired brain injury. This course is relevant to physicians, physical therapists, occupational therapists, speech therapists, educators, and psychologists.

Course Summary: Following background on the incidence and etiology of acquired brain injury in children, this course will focus on the medical and neurobehavioral sequence seen in the emergence from coma. The complicated emergence of medical and neuropsychological recovery in concert with the rehabilitation process in the brain-injured child will be discussed with an evidence-based literature viewpoint. A detailed look at neuropharmacological options to improve arousal and awareness in children in either vegetative or minimally conscious states following brain injury will be discussed. This will include dopaminergic agonist, amphetamines, stimulants and tricyclic antidepressants. A case series will be presented to demonstrate the efficacy of drug interventions in an acute inpatient rehabilitation facility. The low arousal protocol used at this facility will be discussed. The pre- and post-treatment outcome measures (Western Neurosensory Exam), follow-up evaluations, outcome measures and its implication for treatment and recovery will be highlighted.

3 Neurogenic Bladder: Medical, Surgical, and Psychosocial Management for Children and Adolescents with Spina Bifida

Robert Jacobs, MD, MPH; Theresa Schlager, MD; Brian Hardy, MBCHB; Beth Simon, PsyD

Course Level: Intermediate

Purpose: To review advances in neurogenic bladder management including identification and treatment of urinary tract infections (UTI), preservation of renal function, and medical, surgical and psychosocial aspects of urinary continence management.

Target Audience: Health Professionals working in center and community based Spina Bifida teams.

Course Summary: This course will focus on the tremendous improvements in neurogenic bladder management that have occurred for individuals with Spina Bifida over the past 50 years. The course will review assessment of renal and urological status beginning in early infancy and describe surveillance of renal status and optimal management in subsequent

decades. A thorough review of the pathogenesis of bacteriuria and symptomatic UTI, methods aimed to reduce bacteriuria through prophylaxis with antibiotics and/or use of intermittent catheterization will be presented, as will strategies to preserve renal function and promote renal health. Urologic surgery to improve urine flow for prevention of UTIs and provision of continence diversions will be described. Morbidity and impact of poor renal function and urinary incontinence, particularly as a child with Spina Bifida transitions into adolescence and then adulthood will be discussed. This will include the medical issues of coping with hospitalization and surgery related to preservation of renal function and continence, and non-adherence to medical treatments; social issues related to independence in self-care and social skill development; and psychosocial issues of depression, anger, and poor self-image.

4 Evidence Based Botulinum Toxin A Treatment of Children with Cerebral Palsy: An Integrated Approach.

Guy Molenaers, MD; H. Kerr Graham, MD, FRACS; Kaat Deslovere, PhD

Course Level: Intermediate

Purpose: The purpose of this course is to provide the audience with an evidence based approach of the management of spasticity with botulinum toxin A (BTX-A) for children with cerebral palsy and to highlight crucial success factors of the integrated approach, from an interdisciplinary focus.

Target Audience: The course will be relevant to orthopaedic surgeons, (neuro)pediatricians, physicians, kinesiologists, physical therapists and other health care providers involved in the multidisciplinary treatment of children with cerebral palsy.

Course Summary: The course is based on objective results of several studies to define the optimal strategy for BTX-A treatment by identifying crucial factors that determine the outcome success. An in depth discussion of these crucial factors will be preceded by an introduction to the use of BTX-A and by guidelines for doses and injection techniques. The contribution of each crucial factor will be thoroughly explored and illustrated with objective data from clinical practice. The integrated approach includes an optimal muscle selection (based on objective data), appropriate pre- and post injection care (serial casting, orthotic management, physiotherapy and outcome

measurement), and proper patient selection with individually defined goal-settings. Specific protocols will be outlined for different target groups (age, diagnosis, and combination with surgery). Interactive case presentations of different responders will be used to encourage the participants to apply the knowledge that have been gained and to facilitate discussion.

5 Myelomeningocele: Orthopaedic Management and Gait Analysis

Luciano Dias, MD; Claudia Kelp-Lenane, PT; Robert Novak, MS; Loretta Prim, BS; Julie Witka Anderson, MS; Stephen Vankoski, MS

Course Level: Basic/Intermediate

Purpose: Gait Analysis provides an objective evaluation of pathological gait to augment the clinical assessment. This course will demonstrate the adjunctive role gait analysis plays in the clinical decision making process for children with myelomeningocele. We will also introduce the audience to gait analysis techniques beyond the traditional.

Target Audience: Orthopaedic surgeons, physical therapists, neurosurgeons, gait lab professionals and others involved in the assessment and treatment of children with myelomeningocele. Experience in gait evaluation is helpful, but not required.

Course Summary: This course will commence with a brief discussion of the orthopaedic problems typical of patients with myelomeningocele. A presentation of the typical gait patterns of patients with myelomeningocele with emphasis on the relationship between the level of motor lesion, muscle strength and kinematics will ensue. The course will then focus on the effects of specific limitations in joint range of motion and bone deformities. The treatment of hip pathologies including hip subluxation/dislocation and contractures will be addressed. Treatment decisions regarding knee contractures and tibial torsion pathologies will be discussed using kinematic and kinetic data. Appropriate orthotic and assistive device intervention will be discussed using kinematic, kinetic and electromyographic data. Interactive case presentations will be used to encourage the participants to apply the knowledge that they have gained to determine an appropriate treatment plan. Measurement techniques beyond traditional gait analysis methods will be discussed including oxygen consumption, trunk motion, step activity monitor, biomechanical animation and musculoskeletal modelling.

6 Introduction to the Internet, WWW Resources, and Digital Media Production for AACPDM Members

William L. Oppenheim, MD; Loretta M. Knutson, PhD, PT

Course Level: Basic to Intermediate

Purpose: This course is designed for the beginner or intermediate level computer user who wishes to become more knowledgeable about Internet resources, and how to research and utilize these resources in daily practice. The second hour will deal with improving one's skills in formulating computer-based presentations.

Target Audience: AACPDM members who have not yet used the AACPDM website, who may not have done online Medline searches, who may have questions about locating and joining online discussion groups or email listservs. Those who have a computer but don't use it as much as they would like, and those who want to catch up to the computer revolution.

Course Summary: The goal of this course is to help members utilize Internet resources to the betterment of patient care. We will define the internet, explain how to access it, how to search for material in a variety of ways, and how to explore the various communication tools available from pertinent websites, including the Academy's own site, government based sites, newsgroups and listservs. The second half of the course is designed to help users come up to speed in creating their own slide presentations, web sites, or educational CD ROMs.

7 Children with Severe Cerebral Palsy and Complex Medical Problems: Analysis of Needs for Daily Living and Assurance of Optimal Health and Cost of Care

*Leslie Rubin, MD; Elizabeth Elliott, RN;
Gail Charpentier, MA, LCSW; Karen Carter, MD*

Course Level: Intermediate to Advanced

Purpose: This course will present a review of the literature and an analysis of the health care needs and costs of care for children with severe CP and complex medical problems. The desired outcome is to generate discussion and ideas on how to provide optimal health care given the current patterns of cost and reimbursement.

Target Audience: Health Professionals, Administrators, Health Care Policy Academics and Professionals and Parents who are interested in providing optimal health care and improving quality of life for children with severe Cerebral Palsy and Complex Medical Problems in the current climate of health care economics.

Course Summary: Children with severe CP have multiple needs for assuring health and well being. They are more likely to have multiple and complex health care needs requiring constant monitoring, administration of medication, performance of procedures, attention to changes in physiological parameters, attention to acute and chronic health care needs, and visits to primary and specialty providers, emergency rooms, and hospitals. On a daily basis they require assistance with personal hygiene, feeding and nutrition, mobility, socialization, education and recreation. The elements required to provide the necessary care involve personal lifestyles, environmental adaptations, skilled and caring professionals, as well as the availability and accessibility of an array of services. Each of the elements necessary in providing services comes with a cost. This presentation will provide an analysis of needs along with an analysis of the costs of care in providing services to a group of children with severe CP and complex medical problems.

8 Functional Gait Limitations and Treatment of the Ankle in Patients with Cerebral Palsy

*Hank Chambers, MD; David Sutherland, MD;
Arnel Aguinaldo, MA, ATC; Marilyn Wyatt, MA, PT*

Course Level: Intermediate. Requires working knowledge of orthopedics and gait analysis.

Purpose: This course focuses on the management of the ankle limitations in the patient with cerebral palsy. Biomechanics, clinical assessment and gait data used in the decision-making process will be presented. Surgical and non-surgical treatment options will be discussed.

Target Audience: Physicians, physical therapists, kinesiologists, engineers and others involved in the treatment of patients with cerebral palsy.

Course Summary: This course will begin with a discussion of normal foot and ankle biomechanics presented as an important basis for treatment of functional limitations in patients with cerebral palsy. Physiological characteristics of muscles crossing the ankle joint will be covered to clarify their relevance to

2002 ANNUAL MEETING INSTRUCTIONAL COURSES

muscle lengthening/transfer procedures. Integration of these biomechanical factors with clinical observations and gait dynamic measurements form a basis for the rationale of treatment options presented.

The next part of the course will cover the description and treatment options of functional limitations at the ankle. Specific examples of equinus, calcaneal, varus and valgus gait will be presented. Each problem will be defined, its etiology outlined and described based on the clinical examination and gait laboratory data. Treatment options will be discussed including both surgical (myofascial and tendon lengthenings, tendon transfers, osteotomies and subtalar or triple arthrodesis) and non-surgical approaches.

9 Diagnosis and Management of Movement Disorders in Cerebral Palsy: Dystonia, Athetosis, Chorea, Tremor and Ataxia

A. Leland Albright, MD; Meg Stanger, LPT; Susie Oresic, OT; Susan Ferson, PNP

Course Level: Basic to intermediate

Purpose: To introduce health care professionals to the movement disorders (other than spasticity) that are associated with cerebral palsy and to present the treatment options for those disorders. A particular objective is to help caregivers distinguish dystonia from spasticity.

Target Audience: This course will be relevant to physical, occupational and speech therapists, nurses, physiatrists, neurologists and neurosurgeons.

Course Summary: The course will define and illustrate with videotapes the various movement disorders associated with CP: dystonia, athetosis, chorea, tremor and ataxia. It will discuss the pathophysiology of the various disorders, the medical and surgical treatments being used—including oral medications, intramuscular injections, intrathecal baclofen and deep brain stimulation—, and show videotapes of treatment outcomes. The roles, techniques and limitations of PT and OT in the management of movement disorders will be discussed, as well as complex programming and trouble shooting in children treated with intrathecal baclofen.

10 Rehabilitation Considerations in Spasticity Management

Margaret Barry, PhD, PT, PCS; Sue Murr, PT; Kristie Bjornson, MS, PT, PCS; Charlotte Yates, MS, PT

Course Level: Intermediate

Purpose: To provide therapists with previous knowledge of pharmacological and surgical interventions for spasticity with an opportunity to explore the possibilities for rehabilitation for these patients.

Target Audience: Physical and occupational therapists involved in the management of patients with spasticity and other involuntary movement disorders. This course would also be relevant to speech therapists, physiatrists, developmental pediatricians, neurosurgeons, orthopedic surgeons, nurses, and other rehabilitation team members.

Course Summary: This course will provide participants with previous knowledge of pharmacological and surgical interventions for spasticity with an opportunity to explore the possibilities for rehabilitation for these patients.

The course will begin with an introduction describing the role of rehabilitation in patients treated with interventions such as oral and intrathecal medications, injections, and selective dorsal rhizotomy. Each faculty will then present a case based on one of these interventions, identifying the goals of treatment across the dimensions of the disablement model. The decision-making process for developing the rehabilitation plan will be presented. The levels of available evidence for each of the interventions will also be presented. After each case, the audience will have the opportunity to discuss the case, alternatives, and the implications for their practice. A faculty panel will conclude the session to allow participants to ask questions and discuss treatment interventions, the decision-making process, and future directions.

11 Respiratory Assessment and Management of Infants and Children with Cerebral Palsy

Kerstin Sobus, MD; Sheila M. Horan, BS; Robert H. Warren, MD

Course Level: Basic

Purpose: To introduce health care professionals to the

respiratory care assessment techniques and management of infants and children with pulmonary complications related to the neurodisability of cerebral palsy.

Target Audience: Health professionals who have experience with a pediatric population with cerebral palsy but desire increased knowledge in the management of pulmonary complications. The course will be relevant to respiratory, physical, and occupational therapists and speech pathologists.

Course Summary: The course will present etiologies of respiratory complications in cerebral palsy. Clinical symptoms requiring appropriate diagnostic evaluations and respiratory management will be presented. Protocols will be discussed for the initiation of aerosol therapy, including medications and delivery systems. Information regarding various respiratory therapy options and available mechanical devices will be presented. Evaluation of aspiration, gastroesophageal reflux, swallowing difficulties and appropriate therapeutic interventions will be outlined.

12 Integrating Therapy Services into Natural Environments: Advantages and Challenges

*Darbi Breath Philibert, MHS, LOTR;
Susan Ducote, LPT, PCS; Patricia Snyder, PhD*

Course Level: Basic/Intermediate

Purpose: Recommended practices in the field of Early Intervention support the use of therapy services in community-based settings and natural environments. This course will update health professionals and families on the trends, procedures, and outcomes of providing therapeutic interventions within the contexts of natural environments.

Target Audience: Health professionals and paraprofessionals who have little or no experience in providing therapeutic intervention in community-based or natural settings. This course will be relevant to physicians referring children for therapies, physical therapists, occupational therapists, speech-language pathologists, educators, administrators, and family members of children with disabilities.

Course Summary: This course will begin with describing the philosophy and rationales for providing therapeutic intervention in natural environments. This will lead to a discussion of how natural environments are defined. Relevant legislation and research supporting therapeutic service delivery in natural

environment will be reviewed and descriptions and benefits of integrated versus isolated therapy will be discussed. Interactive discussions will occur regarding what therapy looks like in natural environments, including community contexts such as day care and Head Start centers. Examples will be provided of various integrated therapy service delivery models that might be used within community-based settings, followed by presentations of the advantages and challenges of these models. Case studies will be presented with discussions related to selecting appropriate models of service delivery and environments based on child needs and family preferences. This session will conclude with parent perceptions of integrated therapy service delivery models and the environments in which they are delivered.

13 Helping Children with Moderate-Profound Cognitive Disability Achieve Continence

*Lisa Samson-Fang MD; Cindy Meyer, Special Educator,
Teresa Such-Neibar, DO, Physiatrist*

Course Level: Basic, intermediate or advanced.

Target Audience: Professional or lay individuals with interest in toileting training issues as they relate to children with cognitive disability.

Purpose: To enhance the ability of professionals to collaborate with school systems and parents to design school based toileting programs for children with severe disability.

Course Summary: Many children with moderate to profound cognitive disability (with or without physical disability) may achieve continence of bowel and bladder. However, training toileting to special needs children requires expertise. The methodology is quite different from toilet training a typical toddler. In this course we will review approaches to teaching continence to this population including (1) review of the available research data regarding this subject (2) provide detail on several methodologies of toilet training which may be used within a school program, (3) review seating and other adaptations which may be utilized to support this process in children with physical disability.

2002 ANNUAL MEETING INSTRUCTIONAL COURSES

14 The Year's Top Ten Articles on Developmental Disabilities

Gregory S. Liptak, MD, MPH; Gordon Worley, MD

Course Level: All

Purpose: To present summaries of the ten most clinically useful articles on developmental disabilities published in the past year (2001-2002).

Target Audience: Physicians, nurses and therapists who treat children with developmental disabilities and want to keep abreast of the latest scientific findings that have the greatest impact on evidence-based clinical care

Course Summary: The top ten clinically relevant articles published in English between 2001 and 2002 will be presented to the audience. Articles will be chosen from the presenters= personal experience as well as from searches in Medline and CINAHL (Current Information in Nursing & Allied Health Literature). Categories from which the articles will be chosen include the following: autism, cerebral palsy, spina bifida, mental retardation, spinal cord injury, Down syndrome, and attention deficit hyperactivity disorder. They will be selected using the following criteria: (1) impact on clinical care, (2) scientific merit of the study [validity], and (3) generalizability to practices. The presenters will summarize the ten articles in reverse order (saving number one for the end). Their impact on clinical practice, place in the context of current care, and their implications for future research will be discussed. The audience will be encouraged to respond to each article as it is presented.

15 Optimizing the Quality of Research Data: Strategies to Recruit and Train Research Interviewers and Measure Interviewer Reliability

Marilyn E. Swinton, BSc; Patricia Hurley, B.A; Peter L. Rosenbaum, MD (FRCP); Dianne J. Russell, MSc; Stephen D. Walter, PhD; Parminder S. Raina, PhD

Course Level: Basic

Purpose: To familiarize health professionals with strategies for recruiting and training interviewers for research studies, as well as strategies for testing and optimizing interviewer reliability.

Target Audience: Health professionals interested in or involved in clinical research.

Course Summary: Many clinical research studies require the skills of trained interviewers, particularly for studies where sensitive data (quantitative and/or qualitative) are being collected. It is essential to be able to recruit and train interviewers effectively and to ensure that reliable data are collected. Strategies to address these challenges will be illustrated using examples from two multi-centered research studies where interviewers were hired and trained to interview both caregivers of children with physical disabilities and the children themselves.

The course will start with an introduction to interviewing and a discussion of strategies for recruiting interviewers. This will be followed by a discussion about components of interviewer training including the interviewer manual, pre-training package and the workshop (content and logistics). An overview of interviewer reliability will be presented, along with strategies to both evaluate and enhance interviewer reliability. The workshop will be interactive with opportunities for questions and discussion.

16 Introduction to Alternative / Complementary Therapies in Cerebral Palsy

William Oppenheim, MD; Scott Hoffinger, MD; Eileen Fowler, PT, PhD; Diane Damiano, PhD, PT

Course Level: Basic

Purpose: Parents and patients involved with chronic diseases are frequently attracted to therapies, which by their very definition remain unproven. Such therapies are pursued with or without medical supervision, supported by a belief system nurtured by anecdotal experiences, Internet chat rooms, or at times 'caring' practitioners of various 'arts.' This course is designed to familiarize the conventional practitioner with the more popular current alternative therapies offered for cerebral palsy, in order to allow informed discussion with patients seeking advice as to potential risks and benefits.

Target Audience: Health professionals and paraprofessionals who feel inadequate when approached by patients for recommendations or insurance support regarding alternative treatments.

Course Summary: A brief introduction to alternative medicine will be followed by discussions of specific therapies in terms of scientific rationale, the targeted group of patients, costs, risks and potential benefits. Included will be passive therapies such as Hyperbaric Oxygen Treatment, Therapeutic Electrical Stimulation,

Rolfing, Feldenkrais, and Craniosacral Therapy, as well as the more active therapies such as the Euromed system (Adeli Suit), Conductive Education, and Move International. Finally the audience will become familiar with recreational therapies such as Therapeutic Horseback Riding (Hippotherapy), and disability sports. A panel discussion focused on how best to communicate with patients about these treatments will round out the program by actively soliciting audience participation and experiences.

17 Orthopaedic Assessment and Management of Children with Cerebral Palsy - A Basic Course

Michael D. Aiona, MD

Course Level: Basic

Purpose: This course will introduce health professionals with minimal knowledge to the orthopaedic and physical therapy assessment of patients with cerebral palsy and present them with many of the basic treatment options.

Target Audience: Health professionals and paraprofessionals who have little or no knowledge of the specifics of orthopaedic treatment of patients with cerebral palsy. This course will be relevant to pediatricians, physical therapists, occupational therapists, speech therapists, educators, psychologists, administrators, neurosurgeons and others.

Course Summary: The course will start with a discussion of basic deficits of patients with cerebral palsy. A brief discussion on orthotic devices, specifically AFOs as they relate to ankle function will be presented. Following this, there will be a discussion on the common gait abnormalities and the various surgical procedures which are utilized in their treatment. Gait analysis data, video and x-rays will be utilized to illustrate the methods of evaluation and outcomes achieved during the case presentation portion of the course.

18 Intramuscular Pharmacologic Management of Spasticity Associated with Cerebral Palsy with Emphasis on Botulinum A Toxin

*L. Andrew Koman, MD; Jeffrey Shilt, MD;
Laura Kroening, MD; Beth Paterson Smith, PhD*

Course Level: Intermediate/Advanced

Purpose: To provide an indepth discussion of the role of neuromuscular blockade (with special emphasis on botulinum A toxin) in the management of spasticity associated with cerebral palsy. The course will review all aspects of intramuscular pharmacologic management from criteria for appropriate candidate selection to criteria for discontinuation of treatment.

Target Audience: Orthopaedic Surgeons, Physiatrists, Physical Therapists, and Occupational Therapists.

Course Summary: This course will provide an indepth analysis of the role of neuromuscular blockade in the management of spasticity in pediatric cerebral palsy patients. The course will include a brief review of the physiology of spasticity and the effects of neuromuscular blockade. Further discussion will consist of: 1) evidence-based indications(s) for neuromuscular blockade; 2) appropriate treatment objectives and specific treatment goals; 3) selection of instruments to measure treatment outcomes; 4) criteria to define treatment success or failure; 5) alternative management paradigms; 6) injection techniques; 7) post-injection management; and 8) the role of adjunctive management techniques. Presentations will focus on the use of neuromuscular blockade in the upper and lower extremity including: 1) the management of dynamic deformity; 2) the control of painful spasticity; 3) the impact on post-operative care; 4) the effect on muscle imbalance producing skeletal deformity; and 5) the utilization of neuromuscular blockade as a diagnostic aid.

19 After The Operation – So What Happens Now? Rehabilitation and Orthotic Management After Orthopaedic Surgery for Children with Cerebral Palsy

*H. Kerr Graham, MD, FRCS; Adrienne Harvey, PT;
David Phillips*

Course Level: Intermediate

Purpose: To present a systematic and practical overview of orthotic management and rehabilitation strategies for children with cerebral palsy, after simple/single and complex/multiple orthopaedic surgeries. The course will include detailed orthotic management based on biomechanical principles and the early identification and management of surgical complications.

Target Audience: Physical therapists, Orthopaedic Surgeons, Orthotists and Physicians involved in the management of children with cerebral palsy following orthopaedic interventions.

2002 ANNUAL MEETING INSTRUCTIONAL COURSES

Course Summary: This course will cover all aspects of postoperative management for children with spastic hemiplegia and diplegia who undergo common orthopaedic surgeries. The format is based on specific clinical cases, illustrated with clinical, video and motions analysis data. Ranging from simple calf lengthening through to multilevel surgery, principles of postoperative orthotic management and rehabilitation are established. The course will cover pre-operative planning, immediate postoperative/ inpatient management, outpatient management and rehabilitation throughout the first postoperative year. The physiotherapy aims and treatment focus on maintenance of muscle length, regaining muscle strength, regaining function and independence particularly in ambulation. The orthotic management will include appropriate prescription, trouble-shooting and changes in prescription as the child progresses. The critical role for the floor reaction AFO in the immediate postoperative period is emphasized balanced by practical advice on progression to less rigid support in solid or hinged AFO's during the first postoperative year.

The course will also cover the identification, management and prevention of complications following surgery and their impact on rehabilitation and outcome.

20 Gynecologic Issues in Children and Adolescents with Developmental Disabilities

Patricia A. Newhouse, MD

Course Level: Intermediate

Purpose: Gynecologic management of children and adolescents with neurodevelopmental disabilities can present a special challenge. This course is designed to review common diagnoses related to gynecologic issues, and to overview special issues related to menstrual and contraceptive management.

Target Audience: Health professionals and paraprofessional who care for patients with neurodevelopmental disabilities. This course will be relevant to pediatricians, nurses and other caregivers.

Course Summary: This course will provide an overview of developmental issues in young women with neurodevelopmental disabilities, with discussion of premature and delayed sexual maturation, fertility, common menstrual disorders and their special significance in this population and contraceptive management. The course format will review diagnostic

and treatment options and will specifically deal with risks and benefits of various treatment modalities. The course will conclude with case discussions illustrating various conditions with audience participation to assess and review options for care.

21 Guide to Common Statistical Analyses in Clinical Research

Mark Conaway, PhD; Peter Rosenbaum, MD, FRCP(C)

Course Level: Basic

Purpose: To illustrate common challenges in statistical analyses in clinical research

Target Audience: Anyone interested in clinical research

Course Summary: A key component in successful clinical research is the use of an appropriate research design. Equally important, though often overlooked, is the need to perform the appropriate statistical analyses that take full advantage of the study design without 'overdoing' it! We will discuss the analyses most appropriately associated with research designs commonly used in the study of cerebral palsy and developmental medicine, including randomized clinical trials, longitudinal studies, and matched case-control studies. For these designs, we will discuss the problems that can arise from analyses that ignore important aspects of the research design. For example, an analysis that ignores the stratification factors in a randomized clinical trial will generally give valid estimates of the differences between treatments, but with much less precision than analyses that account for the stratification. The statistical principles will be illustrated primarily by example, to illustrate the concepts, with little emphasis on mathematical formulas.

22 Functional Gait Limitations and Treatment of the Knee in Patients with Cerebral Palsy

Hank Chambers, MD; David Sutherland, MD; Arnel Aguinaldo, MA, ATC; Marilyn Wyatt, MA, PT

Course Level: Intermediate. Requires working knowledge of orthopedics and gait analysis.

Purpose: This course defines and examines four common gait limitations of the knee in ambulatory cerebral palsy patients. The biomechanical principles,

clinical assessment and gait dynamics will be presented. Non-surgical and surgical treatment options will be discussed.

Target Audience: Physicians, physical therapists, kinesiologists, engineers and others involved in assessment and treatment of orthopedic aspects of cerebral palsy.

Course Summary: This course will be presented in two parts: Part One will be a review of normal knee biomechanics providing participants with background information regarding the pathophysiology in the gait patterns that will be presented. Osseous and soft tissue structures that contribute to the dynamic motion at the knee will be considered. The significant myoarchitecture will be discussed with respect to surgical interventions (i.e. muscle lengthening/transfer procedures).

23 The Use of Botulinum Toxin-A in the Management of Upper Extremity Spasticity

*Darcy L. Fehlings, MD; Roslyn Boyd, PT;
Ilona Autti-Rämö, MD; Janet Bernstein, OT*

Course Level: Intermediate

Purpose: To enhance the understanding of the use of Botulinum Toxin-A injections in the management of upper extremity spasticity. It will include information on the selection of children for this intervention, injection techniques and therapy considerations post injection.

Target Audience: Health professionals involved in the management of children with upper extremity spasticity including pediatricians, occupational and physical therapists, and orthopedic surgeons.

Course Summary: This course will discuss the role of BTA injections in the management of upper extremity spasticity. A focus of the course will be on the clinical assessment of the child to determine if he/she is a "good" candidate to receive BTA. Participants will enhance their knowledge of which baseline characteristics to assess that will predict response. Injection techniques for upper extremity muscles will be reviewed including the use of EMG guidance, electrical stimulation and anatomical palpation. Therapy intervention post injection will be discussed including splinting and activities to promote hand function. Participants will test their knowledge through participation in case presentations.

24 The Youth En Route Program: Promoting Self-Determination of Youth with Disabilities During Transition to Adulthood

Jan Evans, MSc; Rehabilitation Consultant; Patricia Baldwin, BSc, OT, Rehabilitation Consultant

Course Level: Intermediate

Purpose: To introduce health professionals to a model of practice that reinforces the self-determination of youth with disabilities as they navigate their transition into adulthood.

Target Audience: Health Care Professionals working with adolescents and young adults with disabilities. This course will be relevant to occupational therapists, physical therapists, educators, psychologists, social workers, and others.

Course Summary: The course will begin with a discussion of the common gaps found in the vocational development of youth with disabilities. The Youth En Route program will be presented as a model that has been designed to bridge these gaps by enhancing the self-determination of youth. The philosophy, process and tools utilized to promote self-knowledge, identify strengths, develop accommodation strategies, and formulate goals and personal plans will be discussed in depth. Case studies with audience participation will guide exploration of the utility of this approach to overcome the functional limitations encountered by youth with disabilities and their families. Specific individual outcomes will demonstrate the efficacy of this approach in linking participants to societal participation through employment, voluntarism, post-secondary education, and leisure activities.

25 Pediatric Spinal Cord Injuries: Specialty Topics

*Lawrence C. Vogel, MD; Caroline J. Anderson, PhD;
Randal R. Betz, MD; M. J. Mulcahey, MS, OTR/L*

Course Level: Intermediate/Advanced

Purpose: The purpose of this course is to highlight new and innovative aspects of acute management and rehabilitation of pediatric SCI from an interdisciplinary focus.

Target Audience: This course is applicable to physicians and allied health professionals who care for children who have sustained a SCI.

2002 ANNUAL MEETING INSTRUCTIONAL COURSES

Course Summary: The course will begin with a brief overview of pediatric SCI. The next discussion will review the incidence, prevention, management and functional implications of scoliosis in children and adolescents with SCI. The next presentation will review the prevention and management of several medical complications that children and adolescents experience, including deep venous thrombosis, autonomic dysreflexia, hypercalcemia, latex allergy, spasticity, and dysreflexia. The next presentation will summarize the long-term outcomes of adults with pediatric-onset SCI, and will review the implications of these long-term outcomes on caring for children and adolescents with SCI, especially in respect to employment, independent living, and community integration. There will then be a review of the use of functional electrical stimulation systems for the upper and lower extremities. The final presentation will review the use of a functional electrical stimulation system for bowel and bladder function.

26 Bowel Management in Spina Bifida: Is the ACE A "Winning Hand"?

William O. Walker, Jr, MD; Julia Hulseley, RN; Gregory Liptak, MD; W. Douglas Biggar, MD

Course Level: Basic/Intermediate

Purpose: To familiarize health professionals with the Antegrade Colonic Enema (ACE) procedure as an intervention option for the management of constipation and bowel continence in individuals with disabilities, with an emphasis on those with spina bifida. Indications, evaluation methods, complications and potential impact on quality of life and independence will be presented with an emphasis on an interdisciplinary approach to this process.

Target Audience: Health professionals and paraprofessionals involved in bowel management programs for individuals with disabilities. This course will be relevant to pediatricians, nurses, educators, urologists and others who provide clinical care to this patient population.

Course Summary: This course will familiarize health professionals with the Antegrade Colonic Enema (ACE) procedure as an intervention option for the management of constipation and incontinence and promoting independence in individuals with disabilities, with an emphasis on spina bifida.

The course will start with a review of the anatomic basis for neurogenic bowel problems in these populations. A review of current indications for the ACE, the variety of preparation and intervention methods as well as the post-operative challenges and the potential complications for this procedure will follow. Tools to assess procedural success and patient satisfaction will be reviewed. The impact of this procedure on the individual's and family's quality of life and independence will be presented.

27 Energy Expenditure in Able-bodied Children and Children with Spastic Cerebral Palsy

Viswanath B. Unnithan, PhD, FACSM; Don W. Morgan, PhD, FACSM

Course Level: Basic

Purpose: To provide an update on the current approaches used in assessing energy expenditure in able-bodied children and children with cerebral palsy (CP) and to discuss the significance of these findings with respect to evaluating functional impairment in children with CP.

Target Audience: All practitioners involved in the care and rehabilitation of children and adolescents with cerebral palsy

Course Summary: The first part of this course will begin with a review of how energy expenditure is quantified and a discussion of various methods of collecting energy expenditure data. Normative energy expenditure values for able-bodied children will also be presented and mechanisms responsible for age-related differences in energy expenditure will be described. The second part of this course will focus on the measurement of energy expenditure in youth with cerebral palsy. In addressing this objective, exercise methodologies, protocols and modes used to test CP children will be evaluated and comparisons of locomotor energy expenditure between able-bodied children and children with CP will be made. The role of simultaneous measurement of metabolic, biomechanical, and electromyographic variables will also be highlighted to demonstrate the insights that a multidisciplinary approach can provide in identifying mechanisms responsible for the elevated energy expenditure seen in children and adolescents with CP.

28 Developmental Concerns in Children with Congenital Heart Defects: An Emerging Agenda for Rehabilitation Specialists

Annette Majnemer, OT, PhD;
Catherine Limperopoulos, OT, MSc

Course Level: Basic

Purpose: To make clinicians more aware of the extent and range of developmental disabilities reported in young children with congenital heart defects who require early surgical correction.

Target Audience: Health professionals who provide services directed at enhancing the developmental competence of children with developmental disabilities. This course may be of interest to Occupational Therapists, Physical Therapists, Speech/Language Pathologists, Psychologists, Pediatricians, Neurologists, and Nurses.

Course Summary: This course will begin by clarifying why young children with CHD are at increased risk for developmental impairments and disabilities. Mechanisms of brain injury prior to, during, and following cardiac surgery will be briefly outlined. Developmental concerns and family issues documented acutely in infancy and long-term will be summarized, based on recent evidence. Factors that enhance risk for developmental disability will be addressed. Rehabilitation service delivery models will be discussed interactively. Through consensus, the course participants will explore how we can bridge the gap between existing evidence and current practice.

29 Safe Transportation of Children with Disabilities

Marilyn J. Bull, MD; Jean M. Zimmerman, RPT

Course Level: Basic

Purpose: To increase awareness relevant to the evaluation and selection of optimal safety restraint systems for children with disabilities in passenger vehicles and school buses.

Target Audience: Physicians and therapists who provide care for children with disabilities, participate in counseling about safe transportation and prescribe equipment.

Course Summary: Children with neurologic and

physical disabilities often require special consideration in selection of resources for safe transportation. This course will introduce the principles for patient assessment and selection of equipment to meet the needs of children with hypotonia, spasticity, myelodysplasia and other orthopedic conditions. Discussion will include the use of wheelchairs and positioning adaptations for school age children and the special requirements of preschool age children on the school bus.

The components of a comprehensive community based program for transporting children with disabilities and models for implementation will be provided to participants.

30 Hypoxic Ischemic Encephalopathy in Children after Prolonged Submersion

Sally Evans, MD; Christine Aguilar, MD

Course Level: Intermediate

Purpose: To review treatment options for the management of hypoxic ischemic encephalopathy, with special focus on the needs of children after near-drowning episodes.

Target Audience: Health care professionals involved in the care of pediatric patients in acute or chronic phases following near drowning episodes. This course will be relevant to pediatric physiatrists, pediatricians, orthopedic surgeons, neurologists, neurosurgeons, nurses, physical therapists, occupational therapists, speech pathologists and educators.

Course Summary: This course will focus on the management of hypoxic ischemic encephalopathy and its consequences (impairments, functional limitations, disabilities and societal limitations) in children who have sustained prolonged submersion in water.

The course will begin with a review of the acute findings associated with prolonged submersion as it occurs in children, focusing on expected course and prognostic indicators. Acute rehabilitation and long-term management will be discussed in depth. Similarities and differences with traumatic brain injury will be reviewed. A plan for use of medication, surgery and therapies to treat the complications of the encephalopathy will be presented, as well as recommendations for integration of the patient into school and family life.

2002 ANNUAL MEETING INSTRUCTIONAL COURSES

31 Assessment of General Movements: A Powerful Tool for the Early Detection of Cerebral Palsy, DCD and ADHD

*Mijna Hadders-Algra, MD, PhD;
Teija Salokorpi, MD, PhD*

Course Level: Basic

Purpose: To introduce to health professionals a new assessment method which greatly enhances the possibilities for early detection of cerebral palsy, DCD and ADHD. The new method is based on the assessment of the quality of spontaneous motility of young infants.

Target Audience: Health professionals and paraprofessionals involved in the care of infants at high risk for neurodevelopmental disabilities. The course will be relevant to (neuro)pediatricians, neonatologists, pediatric physical therapists and pediatric nurses.

Course Summary: This course will introduce to health professionals the new method of assessment of the quality of general movements (GMs) in young infants. GMs are complex spontaneous movements which are present till 3-4 months post term age. Recently, various studies demonstrated that a definitely abnormal quality of GMs is a powerful predictor of cerebral palsy and a mildly abnormal quality of GMs indicates an increased risk for DCD and ADHD at schoolage.

The course will start with an introduction on basic principles of early motor development, the characteristics of normal and abnormal GMs, and the significance of various types of abnormal GMs for neurodevelopmental outcome. Next the guidelines for GM-assessment will be provided and some time will be devoted to discussion on the method. The second part of the course consists of learning-by-doing: the participants themselves will assess the quality of video-examples of GMs. Each example will be amply discussed.

32 The Gross Motor Function Measure: GMFM-66 or GMFM-88 - Which One Should I Use?

*Dianne J. Russell, MS; Robert J. Palisano, ScD, PT;
Peter L. Rosenbaum, MD*

Course Level: Basic

Purpose: To familiarise health professionals with the recent revision of the Gross Motor Function Measure (GMFM-66) and provide them with some guidelines for its use and interpretation.

Target Audience: Researchers and health care professionals who are considering using the GMFM for research or clinical practice.

Course Summary: The 88-item GMFM is widely used in both clinical and research activities, and is especially valuable as an evaluative (change-detecting) measure. Recently we have undertaken a Rasch analysis of the GMFM, and in the process have created a 66-item version with interval measurement properties (Russell et al., 2000). The GMFM-66 provides much richer information about both the child being assessed and about the order of item difficulty. Analysis and interpretation of GMFM-66 requires use of a simple computer program, which will be demonstrated during the course. Discussion will focus on the appropriate uses and interpretation of either GMFM-66 or GMFM-88, and on the value of interval versus ordinal data for the assessment of change in function across time.

33 Surgical Solutions to Difficult Upper Extremity Problems: From Assessment to Rehabilitation

Michelle Carlson MD; Catherine Brooks OTR, CHT

Course Level: Intermediate/Advanced

Purpose: To address surgical problem solving and treatment solutions for difficult clinical concerns in the upper extremity resulting from central nervous system involvement.

Target Audience: Surgeons and health care professionals familiar with the basics of upper extremity reconstruction including the principal diagnostic categories of cerebral palsy, surgical anatomy and terminology and fundamental splinting and post operative care concepts and terminology.

Course Summary: The course will be introduced

with a short review of basic surgical criteria and goals for upper extremity reconstruction. Several cases of more complex and challenging concerns will be presented including cases involving athetosis, low tone and more significantly involved but functional patients. Included in the case discussions will be primary concerns considered with each problem and particular assessment techniques fitting each diagnostic challenge.

Participants will have the opportunity to attend a break out session to focus on either specific surgical techniques or specific post-operative rehabilitation techniques. Both groups will be exposed to the presenters preferred techniques but will also be encouraged to engage in group problem solving as well. Overviews of the surgical techniques and post-operative treatment will be provided to the respective groups attending the alternative intensive break out.

34 Orthopaedic Management of Children With Myelomeningocele: Spine, Lower Extremity, Orthotics

Luciano Dias, MD; John Sarwark, MD; Stephanie Butler Figlioli, MPT; Claudia Kelp-Lenane, PT

Course Level: Intermediate/Advanced

Purpose: To provide the most current information for the evaluation/management of complex spine deformities, lower extremity deformities, and gait abnormalities. To provide relevant and current information with respect to prescribing the most common braces and splints for these children at various ages in development.

Target Audience: Health professionals who are involved in the care of children with myelomeningocele. This course is relevant to orthopaedic surgeons, physiatrists, nurses, and physical therapists.

Course Summary: The course will cover the management of spine deformities, lower extremity abnormalities, gait abnormalities and various braces used in the treatment of children with myelomeningocele. Surgical techniques for both the spine and lower extremity will be presented.

The course will begin with the non-operative management and surgical techniques for neuromuscular scoliosis and kyphosis associated with myelomeningocele. Lower extremity deformities such as clubfoot, calcaneus, equinus,

vertical talus, cavus, and varus will be discussed along with surgical techniques. Lastly, the course will cover the precise indications for bracing (i.e. parapodium, RGO) and splinting (i.e. total body splint) for children dependent on age and motor level. The discussion will continue with a description of ongoing brace evaluation during development and growth.

35 Saliva Overflow, Sialorrhea, or Drooling: Use of the Intra-oral Device to Control Drooling

Janet H. Alliare, MA; Peter A. Blasco, MD; Hubert Haberkellner, MD

Course Level: Intermediate

Purpose: To inform health care professionals of an innovative intra-oral appliance that ameliorates drooling in children with cerebral palsy. The course will re-acquaint course participants with the corpus of knowledge about drooling, present the ISMAR or Innsbruck Sensorimotor Activator and Regulator and stress the team therapeutic approach to accompany this intra-oral appliance.

Target Audience: This course is relevant to physicians, dentists, physical and occupational therapists, speech/language pathologists, and educators. Presentation of the intra-oral appliance will stress evidenced-based practice.

Course Summary: This course will present background information on the problem of drooling or saliva overflow. Physiology and natural history will be reviewed. A relatively new approach to the problem of saliva overflow, the ISMAR or the Innsbruck Sensorimotor Activator and Regulator, which is a dental appliance placed intra-orally for the child with a saliva overflow problem will be featured. This device has been proven beneficial for children with problem drooling both in North American and in Europe. The history, fabrication, and fitting of the ISMAR will be outlined. The therapeutic treatment interventions involving oral motor activities sometimes called intra-oral appliance therapy that accompany the placement of the ISMAR will be summarized. The role of the therapy team will be emphasized. Both classic oral motor activities and those that facilitate saliva transport problems will be discussed. These approaches will be highlighted focusing on evidenced-based practices. Case presentations will illustrate the complex clinical implications for children with drooling problems.

2002 ANNUAL MEETING INSTRUCTIONAL COURSES

36

A Medical Home for Children with Special Health Care Needs

*Robert Nickel, MD; W. Carl Cooley, MD;
Lisa Samson-Fang, MD*

Course Level: Basic

Target Audience: The course is designed for a general audience. It will be particularly relevant to pediatricians, to medical specialists, community-based physical and occupational therapists and educators who collaborate regularly with primary care providers, and to the staff of training programs for health professionals.

Purpose: To introduce health professionals to the concept of the Medical Home and to review current educational programs and related resources developed to improve the care of children with chronic conditions in the primary care office and the collaboration of primary care providers with medical specialists and other community providers.

Course Summary: The course will introduce participants to the Medical Home, a concept developed and supported by the American Academy of Pediatrics (AAP) and the Maternal and Child Health Bureau (MCHB), US Department of Health and Human Services. The Medical Home refers to an approach of providing high quality and comprehensive care in partnership with families.

First, we will review the concept of the medical home and its importance to this audience. Next we will review the types of educational and related resources available including the Every Child Deserves a Medical Home training program, the AAP's National Medical Home Resource Center, MCHB sponsored Medical Home grants and state projects, and a model for continuous quality improvement. Finally, we will discuss barriers to providing comprehensive services through a Medical Home and emphasize the opportunities to improve collaboration among all service providers.



Baclofen

- 1 Weight Gain in Patients with Cerebral Palsy Following Implantation of Intrathecal Baclofen Infusion Pumps
Jami Bleichman, MD; Rita Bode, PhD; Deborah Gaebler-Spira, MD; Beverly Tann, BSN
- 2 Treatment of Spasticity with Oral Baclofen in Children with Cerebral Palsy
Glen Baird, MD; Todd DeWees, PTA; Ron L Ferguson, MD; Mark L McMulkin, PhD
- 3 Changes in Seating Needs and Complications After Intrathecal Baclofen Pump Therapy
Shubhra Mukherjee, MD; Susan Taylor, OTR/L; Deborah Gaebler-Spira, MD
- 4 Use of the Modified Ashworth Score as a Selection Criterion For Intrathecal Baclofen Therapy: Is It a Useful Predictor of Long-term Functional Gain?
Rita N Ayyangar, MD; Suzanne L Bukrey, BA; Seth A Warchausky, PhD; Edward A Hurvits, MD

Bone Density

- 5 Bone Mineral Density in Children with Myelomeningocele, a Pilot Study
Susan D Apkon, MD; Amy Drescher, RD; Laura Fenton, MD;
- 6 Bone Mineral Density in Children with Cerebral Palsy: Relationships to Growth Hormone-Dependent Growth Factors
Melanie L Shim, MD; Eileen Fowler, PhD, PT; Marcia Greenberg, Donna Perkins, RD; Helene Cohen, RN; Pinchas Cohen, MD, William Oppenheim, MD

Botulinum Toxin

- 7 Efficacy of Botulinum Toxin Type A, Serial Casting and Combined Treatment: A Retrospective Analysis
Allan Glanzman, PT; Heakyung Kim, MD; Teresa Beck, RN, BSN, MEd, CRRN; Kartik Swaminathan, MD
- 8 The Variability in the Muscle Paralysis Effect Induced by Botulinum Toxin Injection: The Role of Saline Volume, Stretching Exercise with Electrical Stimulation, and Antibody Formation
Hyeon Sook Kim, MD; June-Yong Jung, MD; Yong-Taek Lee, MD; Peter KW Lee, MD, PhD

Gait

- 9 Neuromuscular Activation in Cerebral Palsy
Jessica Rose, PhD; Kevin C McGill, PhD;
- 10 Energy Cost of Walking in Children with Cerebral Palsy: Relation to Gross Motor Function Classification System Level
Therese Johnston, MSPT; Samuel CK Lee, PhD, PT; Samuel R Pierce, PT, MS, NCS; Brian Smith, MS
- 11 Interrelationships Among Thigh Muscle Co-Activation, Quadriceps Muscle Strength and the Aerobic Demand of Walking in Children with Hemiplegic Cerebral Palsy
Daniel J Keefer, PhD; Kathleen Apperson, BS; Sheri McGreal, BS; Jennifer Caputo, PhD; Don Morgan, PhD
- 12 Evaluating the Effectiveness of the Biomechanical Efficiency Quotient (BEQ) as a Measure of Gait Efficiency in Children with Cerebral Palsy
Brian J Benda, PhD; Brian T Smith, MS; Gregory Lange, MD; **Margo Orlin, PT**
- 13 Changes in the Energy Cost of Walking Following Selective Dorsal Rhizotomy and Physical Therapy in Subjects with Cerebral Palsy
Mary L Uhrich, MS; Sandy A Ross, PT; MHS; T S Park, MD; Jack R Engsborg, PhD
- 14 Relationships Between Spasticity, Strength, Gait and GMFM in Spastic Diplegia Cerebral Palsy
Jack Engsborg, PhD; Sandy A Ross, PT, MHS
- 15 Walking Velocity in the Gait Laboratory: Effect of Instrumentation on Children with Cerebral Palsy, Myelomeningocele, Juvenile Chronic Arthritis, and Normal Motor Function
Loretta M Knutson, PhD, PT, PCS; Asa Bartonek, PT; Eva Hedengren, PT; Tuire Karaharju-Huisman, PT; Yvonne Haglund-Akerlind, MD, PhD
- 16 Dynamic EMG Pattern in the Upper Extremity: Comparison of Normal Subjects and Children with Cerebral Palsy
June-Yong Jung, MD; Hyeon Sook Kim, MD; Chung Seung Hyun, MD; Ji-Hye Hwang, MD, PhD; Peter KW Lee, MD, PhD
- 17 Contractile and Fatigue Characteristics of Quadriceps Femoris Muscle in Children with and without Cerebral Palsy
Samuel CK Lee, PhD; Scott K Stackhouse, MSPT; Brian T Smith, MS; Stuart A Binder-MacLeod, PhD

SCIENTIFIC POSTERS

- 18 Calcaneal Lengthening for Flatfoot in Spastic Conditions: Clinical, Radiologic, Kinematic, and Kinetic Analysis

Chin Youb Chung, MD, PhD; Dong Han Kim, MD; In Ho Choi, MD; Tae-Joon Cho, MD

- 19 Sagittal Range of Motion Measures in Spastic Diplegia: Intra-observer Reliability Within and Between Sessions

Gaela Marie Kilgour, BPHED, PT; Peter McNair, PhD; N Susan Stott, MD

Miscellaneous

- 20 Comparison of Bioelectrical Impedance Analysis and Anthropometrics to Dual Energy X-ray Absorptiometry for Determination of Body Composition in Children with Cerebral Palsy

Lisa Samson-Fang, MD; Li-Fen Liu, MS; Laurie Moyer-Mileur, PhD; Ryan Roberts, BS

- 21 Attentional Problems in Children Who Were Extremely Low Birthweight: Do They Change Over Time?

M Marie Kim, MD; Peter Rosenbaum, MD; Michael Boyle, PhD; Janet Pinelli, PhD; Lorraine Hoult MSc; Saroj Saigal, MD

- 22 A Survey of the Emotional and Behavior Disorders in Adolescents with Down Syndrome

M Marie Kim, MD; Jane Summers, PhD; Grace Ho, BA; Kathleen Kitching, MA, Ruth Bolton, MHSCN

- 23 Circumstances Surrounding Diagnosis of Lesch-Nyhan Disease

Kenneth L Robey, PhD; Gary E Eddey, MD; Jesse Mintz, MD; Gabor Barabas, MD

- 24 Impact of Medical Impairments and Functional Limitations on Health, School Attendance, and Mental Health, in 19,570 School Age Children in the 1997 and 1998 National Health Interview Study

Michael E Msall, MD; Roger C Avery, PhD; Michelle R Tremont, MA; Brian Mayer, BA; Dennis P Hogan, PhD

- 25 Psychosexual Function in Cerebral Palsy by Derogatis Sexual Functioning Inventory

Eun Sook Park, MD, PhD; Chang-il Park, MD; Sung-Rae Cho, MD; Yeon Jung Chang, MD

Orthopaedics

- 26 Dynamic and Static Changes of Patella Position in Children with Spastic Cerebral Palsy

Marek Jozwiak MD, PhD; Szymon Pietrzak, MD

- 27 A New Indicator for Performing Rectus Femoris Transfer in Stiff Knee Gait Patterns of Children with Cerebral Palsy

Hank White, PT; Donna J Oeffinger, MS; Chester M Tylkowski, MD; Sam Augsburg, MSME

Outcome Scales

- 28 The Inter and Intra-rater Reliability of Three Clinical Measures in the Lower Limb for Children with Cerebral Palsy

Adrienne Fosang, PT; Mary P Galea, BAppSc, PhD, PT; Dinah S Reddihough, MB, FRACP, FAFRM; Anne T McCoy, BAppSc, MSC

- 29 Blind Video Rating of GMFM Assessments in Children with CP is not Required to Eliminate Scoring Bias

Adrienne Fosang, PT; Pamela Thomason, BPhyt; Jane A King BBS; Anne T McCoy, BAppSc; Grahame J Coleman, PhD; H Kerr Graham, MD, FRCS (Ed), FRACS; Dinah S Reddihough, MB, ChB, BSc, FRACP, FAFRM

- 30 Multi-Center Study: Relationships Between Outcome Assessment Tools and the Gross Motor Functional Classification System (GMFCS)

Donna J Oeffinger, MS; Chester M Tylkowski, MD

- 31 Gross Motor Function at Presentation in Infants Referred with Torticollis: Risk for Developmental Delay?

Mitchell Schertz, MD; Jeffrey Lowengrub, MD; Luba Zuk, MD; Sandra Zin, BPT; Anat Ortner, BPT; Dorit Schwartz, RPT; Kirsi Hadad, PT

- 32 Developing a Middle Childhood Functional Classification System for High Risk Neonates: Impact of Risk and Protective Factors

Michael E Msall, MD; Margaret M McGrath, PhD; Mary C Sullivan, PhD; Sharon Q Capuano, MS, PNP

Quality of Life

- 33 Prevalence of Low Back Pain in Female Caregivers of Children with Physical Disabilities

Virginia S Nelson, MD, MPH; Henry C Tong, MD; Andrew J Haig, MD; Karen Yamakawa, MS; Ki Y Shin, MD; Greta Kandala, MD

- 34 Mothers' Experiences with Their Children's Use of Powered Mobility

Lesley E Wiart; Johanna Darrah, PhD; Vivien Hollis, PhD; Laura May, PhD; Al Cook, PhD

- 35 Factors Affecting Caregiver Distress and Quality of Life in Families with Boys with Duchenne/Becker Muscular Dystrophy

Linda J Michaud, MD; Shari L Wade, PhD

- 36 Intravenous Patient-Controlled Analgesia for Postoperative Pain Management Following Orthopedic Surgery in Patients with Cerebral Palsy

Chin Youb Chung, MD, PhD; Woon-Joon Yoo, MD; Hee-Soo Kim, MD

- 37 Health Promotion in Families of Adolescents with Physical Disabilities ... Perceptions and Concerns of Parents

Catherine Steele, PhD; Ilze Kalnins, PhD; Beverley Antle, PhD; Wendy Mills, MSW; Beth Rossen, MSc

- 38 Daily Activity of Children with Types III and IV Osteogenesis Imperfecta in Relation to Motor Skill Level

Holly Lea Cintas, PhD, PT; Tamara N Johnson; Gloria P Furst, OTR/L, MPH; Lynn H Gerber, MD

- 39 Determinants of Health Related Quality of Life in Individuals with Meningomyelocele

Jo Ann Blaymore Bier, MD; Michelle R Tremont, MS; Anthony Prince; Michael E Msall, MD

- 40 Effect on Outcome of Shortened Length of Stay in Pediatric Rehabilitation

Sydney A Rice, MD; Kevin Elgin, MHSA; Mark Conaway, PhD; Janet H Allaire, MA; James Blackman, MD, MPH



DEMONSTRATION POSTERS

Baclofen

- 1 **Boutlinum Toxin A and Muscle Strengthening in Cerebral Palsy: Initial Report**
Edward A Hurvitz, MD; Rosa M Angulo-Kinzler, PhD; Patrick Brennan, MD; Ayodeji K Badejo; Jefferson W Streepey, MS; Sherry L Herman-Hilker, PT; MS
- 2 **Weight Change Associated with Intrathecal Baclofen**
Michelle B Blate, RN,FNP-C; Adella Bodden, LPN; Katherine F Leonard, MD; Mary Lynn Chu, MD; David S Feldman, MD; Heidi Goldstein, MD; Michelle Rabito, PA-C; Debra A Sala, MS, PT; Howard L Weiner, MD
- 3 **Atypical Baclofen Overdoses during Routine Management of Intrathecal Baclofen Pumps**
Douglas G Kinnett, MD

Head & Neck Positioning

- 4 **The Effect of Head Support Collars for Children on Neck Forces in a Crash**
Marilyn J Bull, MD; Kathleen Weber, MA; Judith Talty, BA, LPN; Miriam Manary, MSE
- 5 **Acquired Atlantoaxial Instability in Pediatric Patients with Spastic Cerebral Palsy**
Freeman M Miller, MD; Athanasios I Tsirikos, MD; Wei-Ning Chang, MD; Suken A Shah, MD
- 6 **Special Seating for Children with Cerebral Palsy**
Fabiola G Barron, MD; Sarah Davies, OT; Paulina Velazco, PT
- 7 **Head Position: A Quantifiable Research and Clinical Technology Tool**
Carrie Brown, PhD; Janet Allaire, MA, CCC-SLP

Health Care

- 8 **Caregivers of Children with Cerebral Palsy: Challenges and Perceived Facilitators**
Marilyn E Swinton, BSc; Jamie Brehaut, PhD; Maureen O'Donnell, MD (FRCP) MSc; Paraminder Raina, PhD; Peter Rosenbaum, MD, FRCP, (C); Dianne Russell, MSc; Stephen Walter, PhD, MSc; Ellen Wood, MD (FRCP) MSc.

- 9 **A Multi-Dimensional Model of Caregiver Health**
Marilyn E Swinton, BSc; Jamie Brehaut, PhD; Susanne King, MSc; Maureen O'Donnell, MD (FRCP) MSc; Paraminder Raina, PhD; Peter Rosenbaum, MD, FRCP, (C); Dianne Russell, MSc; Heidi Schwellnus, MSc; Stephen Walter, PhD, MSc; Ellen Wood, MD (FRCP) MSc.
- 10 **Health Status Outcomes From an Ambulatory Neurobehavioral Respite Program**
Sandra Whisler, MD; Margaret Ann Armstrong, MD; Robert Annett, PhD; John Chimarusti, LMSW; Betsy Raskob, LISW; John Phillips, MD; William H Dodson III, MD; Clifford Qualls, PhD; Odile Ball, RN, CRRN

Hypertonia

- 11 **Inter-rater Agreement Distinguishing Dystonia and Spasticity in Children with Hypertonia**
Adriana Silva, PT, PCS; Gadi Revivo, DO; Charles Knoll, MD; Susan Klinger, PT; Rita Bode, PhD; Deborah Gaebler-Spira, MD
- 12 **Hypertonia in Childhood: Definitions from the Taskforce on Childhood Motor Disorders Consensus Report of a Meeting at the NIH**
Deborah Gaebler-Spira, MD
- 13 **Enhancing Rehabilitation Research in the South (ERRIS)**
James A Blackman, MD; Richard D Stevenson, MD; Peter D Patrick, PhD; Diane L Damiano, PhD, PT; John M Jackson, MA; Mark R Conaway, PhD; Kevin P Granata, PhD; Mark F Abel, MD

Infant Issues

- 14 **The Process of Screening at Four Months of Age: A Study of a Parent Based Movement Screen Administered by Psychologists**
Vickie A Meade, MPH,PT; Robyn Dolby, PhD; Janette Osborne, BscPhy; Beulah Warren, MA;
- 15 **Teaming Parents and Health Professionals to Optimize Early Detection**
Gay L Girolami, PT, MS; Suzanne K Campbell, PhD; Michael N Nelson, PhD; John F Sarwark, MD; H Garry Gardner, MD

16 Competency Checklist for the Neonatal and High Risk Infant Therapist

Nancy Forero-Lilienfeld, PT, MPT; Edith M Mak, BS, OTR; Janet Lurie-Hauser, BA, OTR

Miscellaneous

17 Preventing Child Maltreatment in Children with Disabilities

Teresa Savage, RN, PhD; Diane Dudas-Sheehan, ND, APN; Sheila Hickey; Elizabeth Wojciechowski; Deborah Gaebler-Spira, MD

18 The Mentee-Mentor Role Model Program

Beverly Tann, RN; Judy Panko Reis, MA, MS; Jude Conlon Martin, MAAT; Evelyn Rodriguez; Deborah Gaebler-Spira, MD

19 Reliability and Validity of the Initial Developmental Evaluation of Adaptive Functional Skills (IDEA-FS)

Michael E Msall, MD; Michelle R Tremont, MA; Kristin Smith; Robert Eden, MD; Anthony Alario, MD

20 Empowering the Persons Served: Parent vs. Adolescent Satisfaction

Kevin M Elgin, MHSA; Janet H Allaire, MA; Walter F Farrell, MS, OTR

21 The Edinburgh Visual Gait Score for Use in Cerebral Palsy

Heather Susan Read, FRCSED; Elizabeth Hazelwood, MCSP; Susan Hillman, MSc; Robin Prescott, PhD; James Robb, FRCSED

22 Reduction in Myelomeningocele Before and After Food Fortification with Folic Acid in Costa Rica

Ana Laura Jimenez, MD; Luis Tacsan, MD; Melany Ascencio, MSc; Thelma Alfara

Sports and Disabilities

23 The Benefits of Rehabilitation and Golf for Individuals with Disabilities

Mark W Frace, BA

24 The Childrens Assessment of Participation and Enjoyment (CAPE)

Mary C Law, PhD; Gillian King, PhD; Suzanne King, MSc; Marilyn Kertoy, PhD; **Patricia Hurley, BA;** Peter Rosenbaum, MD; Nancy Young, PhD; Steven Hanna, PhD

25 The Sports Day Camp Experience for Children with Disabilities

Mauricio Sholas, MD; Leo Dokshutsky, BA; Deborah Gaebler-Spira, MD; Gadi Revivo, DO

26 Easter Seals Spasticity and Movement Disorders Program and Toolkit

Lynn Steffes, PT

27 A Model of the Factors Affecting the Participation of Children with Disabilities

Gillian A King, PhD; Mary C Law, PhD; Susanne King, MSc; Peter Rosenbaum, MD; Marilyn Kertoy, PhD; Nancy Young, PhD; **Patricia Hurley, BA**

28 Growth and Health Related Quality of Life in Children with Cerebral Palsy

Sara Lynn Cuthill, MD; Mark Conaway, PhD; Richard D Stevenson, MD

29 An Interdisciplinary Team Approach for Development of a Therapeutic Play Structure for Pediatric Clients

Marilyn E Lefaivre, PT; Susan S Kinosian, PT; Barbara Cupps, PT

30 Remote Activity Monitoring by the Uptimer in Normal Children

Beverley Eldridge, BSc, PT; Anne McCoy, MSc, PT; Rory Wolfe, PhD; H. Kerr Graham, MD, FRCS(Ed) FRACS; Mary Galea, PhD

31 Magic Mobility

Kerstin M Sobus, MD; Tonya Kimball

DEMONSTRATION POSTERS

Treatment of Cerebral Palsy

- 32 Implantable FES System for Upright Mobility in the Growing Child with a Spinal Cord Injury
Randal R Betz, MD; Brian T Smith, MSBE; Therese Johnson, MS, PT; **M J Mulcahey, MS**
- 33 Effect of Percutaneous Functional Electrical Stimulation on Ankle Kinematics in Children with Cerebral Palsy
Samuel R Pierce, MSPT; Therese Johnson, MS, PT; Brian Smith, MS; **Margo Orlin, PT; MS, PCS**; James McCarthy, MD
- 34 Treating Saliva Overflow in a Young Adult Female with Cerebral Palsy Using an Intraoral Saliva Vacuuming Appliance
Carrie Brown, PhD; Janet Allaire, MD, CCC-SLP
- 35 Anterior Rhizotomy for Refractory Spasticity Management in Two Patients with History of Near-Drowning
Gadi A Revivo, DO; Diane Dudas Sheehan, FNP; Laura Lemke, MD; Deborah Gaebler-Spira, MD; John Grant, MD; Luciano Dias, MD
- 36 Preliminary Study of the Effects of Short Term, Intensive Treadmill Training for Children with Cerebral Palsy
Joseph J Krzak, PT; **Ann Flanagan, PT, PCS**; Pat Johnson, MOT, PT, PCS; Noelle Jacoby, PTA

- 37 Young Children with Feeding Disorders: Weaning From Feeding Tubes
Mary Cameron Tarbell Med, CCC-SLP; Janet H Allaire, MA CCC-CLP; Richard D Stevenson, MD
- 38 School Based Respiration Program
Marianne E Gellert-Goldman MA, CCC-SLP, Catherine Fox, MS, OTR/L;
- 39 Efficacy for Maintenance of Elbow Range of Motion: A Comparative Study of Orthotic Devices
Audrey M Yasukawa, OT; Bryan Malas, CO; Deborah Gaebler-Spira, MD

Work Experience

- 40 Factors Associated with Work Experience in Teens with Disabilities
Diane M Krane, BS; Linda J Michaud, MD; J Erin Riehle, RN, MSN
- 41 Assessment, Camping, and Education on the Pathway to Adulthood: A Transition Program Involving Children with Disabilities and Their Families
Elizabeth E Wall-Smith, RN; Tracy Prybylski, PT
- 42 Vocational-Educational Clinic: Enhancing the Vocational Development of Adolescents with Disabilities
Sharon Wenert Ramey, MSW; Linda J Michaud, MD; J Erin Riehle, RN, MSN; Susie Rutkowski, MEd



AUDIO VISUAL PROGRAM

Annual Meeting registrants will be able to check out the 7 audiovisual presentations submitted for the 2002 meeting at the registration desk. There will be a special room in which you can view the presentations at your convenience. The Multi-media Education Committee chaired by Jeri Beth Karkos, MD has approved the following videotapes.

- Legs and Feet: A Review of Musculoskeletal Assessments
- Serial Casting to Restore Soft-Tissue Extensibility at the Ankle and Foot
- Mobilization and Strengthening of the Infant Club Foot
- Parents Talking with Parents
- "Making Tracks" – An Educational Video Demonstrating Manual Wheelchair Skills and Maintenance
- Is My Baby Okay? A film for Parents on Early Detection of Motor Disorders
- The ABC's of AAC

ALSO AVAILABLE FROM THE 2001 SUBMITTALS

- Emerging and Mature Hand Preference and Congruencies
- A Child with a Little Fire
- A Bike of My Very Own
- The Challenge of Osteoporosis for People with Disabilities
- Treating Congenital Muscular Torticollis
- Ready, Set, Go: Pediatric Powered Mobility Training Video and Manual
- Your Smile: Dental Care for Children with Cerebral Palsy

EXHIBITS

The Scientific Program Committee welcomes our exhibitors and encourages you to visit the exhibits during the Box Lunch on Thursday, September 12 from 11:30am to 1:00pm. Please take advantage of this extended time to visit our exhibitors. The exhibitors will also be available during all the continental breakfast and the breaks. The displays are informative and of great assistance to you in delivering quality health care.

Partial List of 2002 Exhibitors

A special thanks to our exhibitors – We appreciate their support.

AACPDM International Affairs Committee	Cascade DAFOS, Inc.
AACPDM Membership Committee	Freedom Concepts, Inc
AACPDM Web Site	Kaye Products
Advanced Medical Technology, Inc.	Medtronic
Allergan	Mobility Research
Alternatives for Special Kids	Nestle Nutrition
Altimate Medical, Inc.	Neuro-Development Treatment Association
Becker Orthopedics	Pathways Awareness
Brookes Publishing, Inc.	Progressive Gaitways, LLC
Cambridge University Press	Slack Inc./O & P Business News
Camp Health Care	W. B. Saunders/Mosby/Churchill/Butterworth

Notes

2002 ANNUAL MEETING REGISTRATION

Early Registration Deadline: August 5, 2002

Please Print or Type

1. Name: _____
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 Address _____
 City _____ State _____ Zip _____
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 Emergency Contact _____ Tel: () _____
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 RN Speech language
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2. Do you require any special assistance with accessibility? Yes

Describe: _____

All program presenters must pay a registration fee. Fee includes the opening reception, 3 continental breakfast, coffee breaks, printed material and box lunch.

3. I am an:

	Early Registration	After Aug. 5
<input type="checkbox"/> AACPDM Member/EACD Member	\$225.00	\$275.00
<input type="checkbox"/> Non-Member	\$300.00	\$350.00
<input type="checkbox"/> Full-Time Student, Intern, Resident (Proof of special status <i>must</i> accompany registration)	\$90.00	\$100.00
<input type="checkbox"/> Past President (Complimentary instructional courses.)	\$135.00	\$135.00
<input type="checkbox"/> One day fee (more than one day must pay full fee) I will only attend on ___/___/___	\$100.00	\$150.00
4. Wednesday Specialty Day		
SD1. Physical Therapy	\$50.00	\$50.00
SD2. Pediatrics	\$50.00	\$50.00
SD3. Orthopaedic Surgery	\$50.00	\$50.00

5. Please register me for the following instructional courses:

Courses	1st choice	2nd choice	List by number		
Friday 1:00 pm				\$50.00	\$55.00
Friday 3:30 pm				\$50.00	\$55.00
Saturday 1:00 pm				\$50.00	\$55.00
Saturday 3:30 pm				\$50.00	\$55.00

Breakfast Seminar	Circle number	Limited to 90 each (an additional 1.25 CME credits)		
Thurs. 7:00 am	1 2 3 4		\$25.00	\$25.00
Fri. 7:00 am	5 6 7 8		\$25.00	\$25.00

6. Spouse/Accompanying Person \$30.00 per person (includes Presidential Reception and 3 continental breakfasts) Name: _____	\$30.00	\$30.00
7. Michaul's - Thursday \$60.00	\$ _____	\$ _____
8. International Affairs Luncheon \$35.00	\$ _____	\$ _____
	Total US	\$ _____

9. If paying by credit card: Mastercard VISA (American Express and Eurocards **NOT** accepted) **US DOLLARS ONLY**

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Print name as it appears on card: _____ Signature: _____

A confirmation will be mailed upon processing your registration form.

10. **Refund Policy:** A request for a full refund must be submitted in writing on or before Aug. 5, 2002; 75% refund Aug. 6-Sept. 11, 2002; No refunds after Sept. 11, 2002. **All payment must accompany completed Registration Forms. NO WIRE TRANSFERS**

11. **Pre-Registration closes August 26, 2002.** After the 26th, register onsite.

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**American Academy for Cerebral Palsy
& Developmental Medicine**

56th Annual Meeting, September 11 – 14, 2002

New Orleans, Louisiana

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* Any Changes to Departure Date after Registration will Result in a \$25.00 Administrative Fee.

* Reservation Requests Received after the Above Mentioned Cutoff Date can only be Confirmed on a Space Availability Basis.

Note: Convention Rates will be extended (3) Days prior and (3) Days after the scheduled convention dates, based on Space Availability.

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