

AUDITORY NEUROPATHY GUIDELINES DEVELOPMENT CONFERENCE

Deborah Hayes, Ph.D.
Co-Chair

Bill Daniels Center for Children's Hearing



The Children's Hospital

Affiliated with



University of Colorado at Denver
and Health Sciences Center



DANIELS FUND

Making life better... one individual at a time.



The Children's Hospital
it's all better™

FINANCIAL DISCLOSURE INFORMATION

- **I have no relevant financial relationship with the manufacturers of any commercial products and/or provider of commercial services discussed in this CME activity.**
- **I do not intend to discuss an unapproved/investigative use of a commercial product/device in my presentation.**



The Children's Hospital
it's all better™

GUIDELINES DEVELOPMENT CONFERENCE

- Stimulated by Yvonne Sininger's *Advances in Children's Hearing Lecture: "Update on Auditory Neuropathy"* (4/07)
- Developed as a "conference within a conference" and held in conjunction with NHS2008: Infant and Childhood Hearing in Science and Clinical Practice, Como Italy
- Included scientific presentations and panel discussion by nine internationally - renowned clinicians, hearing scientists, and physicians



The Children's Hospital
it's all better™

MOTIVATION FOR GUIDELINES DEVELOPMENT CONFERENCE

- **Significant numbers of very young infants presenting with auditory neuropathy (AN)**
- **Variable nature of the disorder impacts identification, diagnosis, and management of youngsters with AN**
- **Significant confusion about**
 - **Terminology**
 - **Diagnosis**
 - **Intervention**
 - **Parent support and counseling**
- **Stimulate discussion, debate, and consensus (where possible) among experts**



The Children's Hospital
it's all better™

GUIDELINES DEVELOPMENT CONFERENCE ~ FACULTY

- Yvonne Sininger, PhD, ~ UCLA, USA
Conference Co-Chair
- Arnold Starr, MD, ~ UC-Irvine, USA
- Christine Petit, MD, Ph.D. ~ Pastuer Institute, France
- Gary Rance, PhD ~ U of Melbourne, Australia
- Barbara Cone, PhD ~ U of Arizona, USA
- Patricia Roush, AuD ~ U of N Carolina, USA
- Jon Shallop, PhD ~ Mayo Clinic, USA
- Kai Uus, MD, PhD ~ U of Manchester, UK
- Charles Berlin, PhD ~ U of S Florida, USA
- Deborah Hayes, PhD ~ *Bill Daniels Center for Children's Hearing* USA, Moderator & **Conference Co-Chair**



The Children's Hospital
it's all better™

GUIDELINES DEVELOPMENT CONFERENCE - OUTCOMES

- **Monograph with guidelines and scientific papers submitted by conference faculty,**
- **Guidelines address:**
 - **Terminology**
 - **Diagnostic criteria**
 - **Comprehensive assessments**
 - **Audiological test battery**
 - **Amplification strategies**
 - **Special consideration for cochlear implantation**
 - **Habilitation for communication development**
 - **Screening newborns; monitoring infants with “transient” ANSD**
 - **Parent support**

GUIDELINES DEVELOPMENT CONFERENCE – A FEW HIGHLIGHTS

- **Terminology**
 - **Retain auditory neuropathy ~ public and professional familiarity with term**
 - **Spectrum ~ recognize the vast range of etiologies, presentations, and developmental effects**
 - **Recommend: auditory neuropathy when discussing with parents and families**
- **Diagnostic criteria**
 - **Tests of cochlear (sensory) function**
 - **Otoacoustic emissions (OAEs) and/or cochlear microphonic (CM)**
 - **Test of auditory nerve function**
 - **Auditory brainstem response (ABR)**



The Children's Hospital
it's all better™

GUIDELINES DEVELOPMENT CONFERENCE – A FEW HIGHLIGHTS

- **Recommended audiological test battery**
 - **Developmentally appropriate behavioral and physiological measures to assess functional hearing and auditory development in infants and toddlers**
- **Recommended audiological habilitation**
 - **Hearing aids and cochlear implant considerations**
- **Recommended habilitation for communication development**
 - **Informed choice by families**



The Children's Hospital
it's all better™

GUIDELINES DEVELOPMENT CONFERENCE – A FEW HIGHLIGHTS

- **Newborn hearing screening**
 - **Per Joint Committee on Infant Hearing recommendations**
 - **Do not rely on OAE screening if infant has failed an A-ABR screening or if parent expresses concern about infant's development**
- **Supporting parents**
 - **Parents need to participate with a team of knowledgeable professionals committed to long-term care and follow-up**



The Children's Hospital
it's all better™

LAGO di COMO





The Children's Hospital
it's all better™

NHS 2010

- **NHS 2010 will be held in Cernobbio (Como Italy) from June 8 - June 10, 2010.**
 - **Auditory neuropathy will be among the topics presented in an international forum**
 - **for more information**

nhs@polimi.it