



Maximizing Performance in CI Recipients: Programming Concepts

December 2-3, 2018



Faculty

Andreas Buechner, PhD

Associate Professor-Audiology
Professor for Auditory Implants
Medizinischen Hochschule Hannover

Camille C. Dunn, PhD

Director of Cochlear Implant Program
University of Iowa

Darla Franz, MA

VP of Education and Corporate Communications
MED-EL North America

Rene Gifford, PhD

Director, Cochlear Implant Program
Associate Director, Implantable Hearing Technologies
Vanderbilt Bill Wilkerson Center

Karen Gordon, PhD

Director, Archie's Cochlear Implant Laboratory
The Hospital for Sick Children

Prof. Dr. Paul Govaerts MD, MSc, PhD

Director, The Eargroup
Antwerp, Belgium

Lillian Henderson, MSP

Clinic Manager-Speech
The Children's Cochlear Implant Center at UNC

Kurt Koester, PhD

Director, Diagnostics and Monitoring
Advanced Bionics Corporation

Artur Lorens, PhD Eng

Head, Implants and Auditory Perception
Institute of Physiology and Pathology of Hearing
Warsaw, Poland

Derek Minihane, JD BSEE

Vice President of Sound Processors & Clinical Care
Cochlear Limited

Ed Overstreet, PhD
Research Audiologist
Oticon Medical

David Pascoal, MSc, AuD
Project Manager, The Eargroup
Antwerp, Belgium

Bobbi Scheinin, AuD
Group Product Manager - Software & Clinical Care
Cochlear Corporation

William H. Shapiro, AuD
Lester S. Miller, Jr and Kathleen V. Miller Clinical Assistant Professor
of Hearing Health
Supervising Audiologist, NYU Cochlear Implant Center

Tony Spahr, PhD
Director of Audiology and Product Management
Advanced Bionics Corporation

Holly Teagle, AuD
Clinical Director- The Hearing House
Associate Professor- Audiology
University of Auckland
Auckland, New Zealand

Susan B. Waltzman, PhD
Marica F. Vilcek Professor of Otolaryngology
Co-Director, NYU Cochlear Implant Center

Jace Wolfe, PhD
Director of Audiology and Research
Hearts for Hearing

Teresa Zwolan, PhD
Professor and Director
University of Michigan Cochlear Implant Program

Course Description:

This course will address topics related to routine and special programming issues and methods in pediatric and adult recipients. It will also present new and promising techniques to assist in programming including genetic algorithms and the use of objective measures. Consideration will be given to the programming of bimodal, electroacoustic and SSD fittings. Format will include lectures, roundtable discussions and audience participation, *with special emphasis on case studies*.

Target Audience:

Professionals involved in the programming of cochlear implants.

Learning Outcomes:

- Describe outcomes for bimodal and bilateral CI recipients.
- Describe clinical strategies that may guide clinical decision making for bimodal vs. bilateral CI candidacy.
- Describe outcomes of the classic CI literature and newer peer-reviewed studies regarding the number of active electrodes and spectral maxima needed for optimum speech recognition and sound quality.

Learning Outcomes: (continued)

- Describe clinical strategies for determining electrode deactivation and maxima selection.
- Describe how cortical auditory evoked response assessment may be used within a battery of measures to determine cochlear implant candidacy.
- Describe how cortical auditory evoked response assessment may be incorporated into the cochlear implant programming process.
- Describe how maximize the benefit of hearing assistive technologies through the optimization of device programming and adjustments.
- Describe how to counsel recipients to maximize the benefit received by hearing assistive technology.
- Identify the benefits of co-treating with speech language pathologists in audiology mapping appointments.
- Define ASHA's definition for co-treating.
- Describe alternative methods (A.I.) of device programming.
- Develop a vision on the future of A.I. based CI programming.
- Describe some next steps towards self fitting at home.
- Understand who might be a candidate for CROS technology.
- Understand possible benefits of fitting your patient with CROS technology.
- Explain how electrocochleography can be utilized during cochlear implant surgery.
- Interpret electrocochleography information that is recorded clinically using a cochlear implant.
- List the ways patients and audiologists can use technology to encourage patient-directed care.
- List the ways smartphone technology enables patients to obtain care remotely.
- Describe the impact that hours of sound processor device use has on children and adults.
- Provide improved counseling regarding the importance of consistent device use.
- List the types of duties that Audiology Assistants can perform in a CI Program.
- Describe the financial benefits of having an Audiology Assistant in a CI Program.
- Describe the new features of the Rondo2 and Maestro 7 fitting software.
- Describe the concept of CI application in SSD and identified the benefit of CI.
- Describe the concept of electro-acoustic stimulation.
- Selecting the lower limit of the frequency range over which electric stimulation is provided (the minimum electric frequency).
- Understand how to create an audible map using objective measures.
- Identify minimum behavioral responses required to ensure comfortable listening.
- Describe the basic concept of fitting and rehabilitating single sided deaf (SSD) subjects.
- Understand the main differences between fitting a conventional cochlear implant subject and SSD subjects.

To register, please visit the following website:

<https://www.eventbrite.com/e/maximizing-performance-in-cochlear-implant-recipients-tickets-48255764290>

Course Fee: \$105

New Location:

CUNY Graduate Center

365 Fifth Avenue (at 34th street)

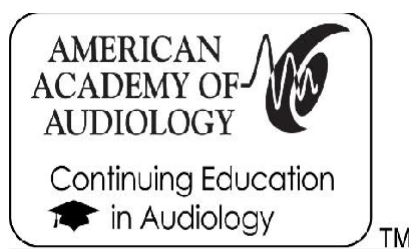
Concourse Level

New York, New York 10016

Presenter's financial and non-financial interests relevant to the content of their presentation for the Maximizing Performance in Cochlear Implant Recipients: Programming Concepts Conference is posted on our website at:

<https://med.nyu.edu/departments-institutes/otolaryngology-head-neck-surgery/divisions-centers/cochlear-implant-center>

Continuing Education Credits:



The Children's Hearing Institute is approved by the American Academy of Audiology to offer Academy CEUs for this activity. The program is worth a maximum of 0.8 CEUs. Academy approval of this continuing education activity is based on course content only and does not imply endorsement of course content, specific products or clinical procedure, or adherence of the event to the Academy's Code of Ethics. Any views that are presented are those of the presenters/CE Provider and not necessarily of the American Academy of Audiology.



and audiology. See course information for number of ASHA CEUs, instructional level and content area. ASHA CE Provider approval does not imply endorsement of course content, specific products or clinical procedures.

The Children's Hearing Institute is approved by the Continuing Education Board of the American Speech-Language-Hearing Association (ASHA) to provide continuing education activities in speech-language pathology



**This course is offered for up to 0.80 ASHA CEU's
Intermediate Level, Professional Area**

**Conference CEUs sponsored by
The Children's Hearing Institute**

Agenda Sunday, December 2nd

8:30am Registration & Continental Breakfast
9:15am Welcome –*Waltzman, PhD*
9:20am Opening Remarks –*Shapiro, AuD*

Session 1

Moderator: William Shapiro, AuD

9:30am Bimodal Fitting – *Gifford, PhD*
9:45am How many active electrodes does my patient need? -
Gifford, PhD
10:00am Role of Cortical Testing in Device
Programming – *Wolfe, PhD*
10:15am Role of the SLP in Device Programming-
Teagle, AuD & Henderson, MSP
10:30am Q&A
11:00am BREAK

Session 2

Moderator: William Shapiro, AuD

11:30am New Approaches to Device Programming
Introduction- *Shapiro, AuD*
Panel discussion- *Pascoal MSc AuD, Zwolan PhD, Gifford PhD*
Audience participation
Future directions- *Govaerts MD, PhD*
1:00pm LUNCH
2:00pm Tech Suite and Exhibits

Session 3

Moderator: William Shapiro, AuD

3:30pm Naida CROS – *Dunn, PhD*
3:40pm ECoG –*Koester, PhD*
3:50pm Smartphone Connectivity – *Scheinin, AuD*
4:00pm Data-logging – *Zwolan, PhD*
4:10pm Use of Audiology Assistants – *Zwolan, PhD*
4:20pm Rondo2/Maestro 7 – *Franz, MA*
4:30pm Q&A
5:00pm Cocktail Reception – Meet the Speakers
6:15pm Adjourn

Agenda Monday, December 3rd

8:00am Continental Breakfast

Session 6

Moderator: Susan Waltzman, PhD

Session 4

Moderator: William Shapiro, AuD

8:30am Management of the Difficult Patient: Expert Panel
(Cases submitted by participants)- *Faculty*

10:00am Q&A

11:50am Manufacturers Panel: Clinical and Research Update
Advanced Bionics –*Spahr, PhD*
Cochlear Corporation –*Minihane, JD*
MED-EL –*Franz, MA*
Oticon Medical –*Overstreet, PhD*

12:50pm Summary

Session 5

Moderator: Susan Waltzman, PhD

10:30am Issues in Programming Single-Sided Deafness: Kids
and Adults – *Buechner, PhD*

10:45am Electro Acoustic Stimulation – *Lorens, PhD*

11:00am Use of Electrophysiological Measures to Program CI's
in Children with Developmental Delays- *Gordon, PhD*

11:15am Incorporation of Assistive Technologies – *Wolfe,
PhD*

11:30am BREAK

1:00pm Adjourn