Maximizing Performance in CI Recipients: Programming Concepts

December 8-9, 2019

Faculty

Allison Biever, AuD
Rocky Mountain Ear Center
Denver, Colorado

Barb Buck, AuD
Principal Clinical Project Manager
Cochlear Americas

Erin Castioni, AuD
Senior Product Manager
Advanced Bionics

Margaret Dillon, AuD
Director, Cochlear Implant Clinical Research
Associate Professor
UNC School of Medicine

Camille C. Dunn, PhD
Director of Cochlear Implant Program
University of Iowa

Matthew Fitzgerald, PhD
Chief, Audiology
Assistant Professor of Otolaryngology/Head and Neck Surgery
Stanford University

Robert Froemke, PhD
Associate Professor, Departments of Otolaryngology-Head and Neck Surgery and Neuroscience and Physiology
NYU School of Medicine

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

Meredith Holcomb, AuD  
Director, Cochlear Implant Program  
University of Miami

Ed Overstreet, PhD  
Scientific and Regulatory Consultant  
Oticon Medical

J. Thomas Roland, Jr MD  
Mendik Foundation Chairman  
Otolaryngology-Head and Neck Surgery  
Professor Otolaryngology and Neurosurgery  
NYU Langone Medical Center

Phil Segel, BSEE  
Senior Director Clinical Technical  
Cochlear Americas

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

Josh Stohl, PhD  
Director of MED-EL’s North American Research Laboratory

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 objective measures. Special consideration will be given to the programming of bimodal, electro-acoustic and SSD fittings. Updates on additional topics included animal studies for cochlear implant use, surgical advancements in cochlear implants, improving clinic efficiency and the clinical care model. Format will include lectures, roundtable discussions, audience participation, and dedicated time for participants to visit manufacturer technology suites. Special emphasis will be placed on case studies submitted by attendees!

Learning Outcomes:
After taking this course participants will be able to:
1. Define an Evidence Based Model
2. Identify two examples of how data is being used to provide insights into the clinical management of the Adult CI recipient
3. Describe mapping considerations specific to cochlear implant recipients with normal to near-normal hearing in the contralateral ear
4. List mapping techniques that may influence initial performance with the cochlear implant in this population
5. Describe how human ecology can impact cochlear implant outcomes
6. Describe two recipient behaviors that SLPs may observe that could aid programming audiologists
7. List two programming variables that can be manipulated to improve speech perception errors
8. Explain the state-of-the-art of neuroscience studies of cochlear implant use in rodents
9. Describe evidence-based fitting strategies for the hearing aid and cochlear implant for maximum bimodal benefit
10. Describe expected benefit afforded by different bimodal fitting strategies such as coordinated AGC and binaural beamforming
11. Describe expected benefit(s) from amplifying acoustic hearing in implanted ear(s)
12. Describe fitting strategies aimed to maximize efficacy of combined electric and acoustic stimulation (EAS) for hearing preservation patients
13. Describe the improvements in language development after teletherapy in ‘at-risk’ children
14. Discuss the relationship between the amount of teletherapy and the magnitude of improvement in receptive language
15. Explain to patients the importance of bilateral hearing
16. Define the consequences of poorly matched bilateral devices in children
17. Identify steps to reduce non-billable time in the clinic
18. Evaluate CI program to determine methods of improving efficiency
19. The attendee will understand the potential advantages of perimodiola electrodes.
20. The attendee will understand current techniques and rationale for cochlear implantation under local anesthesia.
21. Describe how to maximize the benefit of hearing assistive technologies through the optimization of device programming and adjustments.
22. Describe how to counsel recipients to maximize the benefit received by hearing assistive technology.
23. Describe how cortical auditory evoked response assessment may be used within a battery of measures to determine cochlear implant candidacy.
24. Describe how cortical auditory evoked response assessment may be incorporated into the cochlear implant programming process.
25. Describe how functional near infrared spectroscopy (fNIRS) may be used to evaluate auditory brain development of children with cochlear implants.
26. Describe how functional near infrared spectroscopy (fNIRS) may be incorporated into the cochlear implant programming process.
27. Utilize the National Correct Coding Initiative Edits to maximize their coding and reimbursement.
28. List various billing modifiers that can be used to maximize payment for audiological test procedures that have been performed with cochlear implant recipients.

To register, please visit the following website: https://www.eventbrite.com/e/maximizing-performance-in-cochlear-implant-recipients-tickets-61600870863

Course Fee: $150 USD

Location:
CUNY Graduate Center
365 Fifth Avenue (at 34th Street)
New York, NY 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 attached to this brochure and posted on our website at: https://med.nyu.edu/departments-institutes/otolaryngology-head-neck-surgery/divisions-centers/cochlear-implant-center
Agenda: Sunday, December 8, 2019

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

Session 1

Moderator: William Shapiro, AuD

9:30am  Use of Human Ecology to Explain Outcomes with Cochlear Implants
Camille Dunn, PhD
9:45am  Improving Clinic Efficiency:
Meredith Holcomb, AuD
10:00am Billing, Coding & Reimbursement for CI Programming – Teresa Zwolan, PhD
10:15am Role of the SLP in Device Programming
Allison Biever, AuD
10:30am Q & A
11:00am Break

Session 2

Moderator: William Shapiro, AuD

11:30am Surgical Advancements with Cochlear Implantation
J. Thomas Roland, Jr, MD
11:50am Role of functional near infrared spectroscopy (fNIRS) in the Management of CI Recipients
Jace Wolfe PhD

12:10pm What Can We Learn From Animal Studies of Cochlear Implant Use and Training
Robert Froemke, PhD
12:30pm Q & A
1:00-2:30pm Lunch/ Tech Suites & Exhibits

Session 3

Moderator: William Shapiro, AuD

2:30pm Effectiveness of teletherapy at facilitating language development in at-risk children with hearing loss
Matthew Fitzgerald, PhD
2:50pm ECoG – Erin Castioni, AuD
3:10pm Bimodal Myth Busting: Programming for Maximizing Bimodal Outcomes – Rene Gifford, PhD
3:30pm Role of Cortical Auditory Evoked Response Assessment in Pre- and Post-Cochlear Implantation Management – Jace Wolf, PhD
3:50pm Clinical Care Model – Barb Buck, AuD
4:10pm Q & A
5:00pm Cocktail Reception – Meet the Speakers
6:15pm Adjourn
Agenda: Monday, December 9, 2019

Session 4 - Moderator: William Shapiro, AuD

8:30am Management of the Difficult Patient: Expert Panel
(Cases submitted by participants)
Faculty/ Audience Participation

10:00am Q & A

Session 5 - Moderator: Susan Waltzman, PhD

10:30am Issues in Programming Single-Sided Deafness: Kids
and Adults – Margaret Dillon, AuD

10:45am My Patient has Preserved Hearing: Now What?
Rene Gifford, PhD

11:00am Matching Device Parameters in Children Receiving
Bilateral CIs: Why and How – Karen Gordon, PhD

11:15am Maximizing CI Outcomes with the Use of Hearing
Assistive Technology – Jace Wolfe, PhD

11:30am Break

Session 6 - Moderator: Susan Waltzman, PhD

11:50am Manufacturers Panel: Clinical and Research Update
Advanced Bionics – Tony Spahr, PhD
Cochlear Corporation – Phil Segel, BSEE
MED-EL – Josh Stohl, PhD
Oticon Medical – Ed Overstreet, PhD

12:50pm Summary

1:00pm Adjourn

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 0.9 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 procedures, 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.
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Presenter Disclosures

In Compliance with requirements of ASHA’s Continuing Education Board concerning transparency in course planning, delivery, and marketing, we provide the following information on speaker’s financial and non-financial interests relevant to the content of their presentation at this course.

<table>
<thead>
<tr>
<th>PRESENTER</th>
<th>COURSE TITLE</th>
<th>Relevant Financial Interest</th>
<th>Relevant Non-Financial Interest</th>
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<tr>
<td>Allison Biever, AuD</td>
<td>Role of the SLP in Device Programming</td>
<td>Receives a salary from Rocky Mountain Ear Center</td>
<td>Member of ACIA (American Cochlear Implant Alliance)</td>
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<td>Barbara Buck, AuD</td>
<td>Clinical Care Model</td>
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<td>Erin Castioni, AuD</td>
<td>ECoG</td>
<td>Receives a salary from Advanced Bionics</td>
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<td>Margaret Dillon, AuD</td>
<td>Issues in programming single sided deafness</td>
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<td>Camille C. Dunn, PhD</td>
<td>Real world assessment of Cochlear implant benefit</td>
<td>Receives funding from NIDCD and DOD. Receives salary from Univ of Iowa. Receives consulting fees from Cochlear America, Med-El, &amp; Advanced Bionics</td>
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<td>Matthew Fitzgerald, PhD</td>
<td>Effectiveness of Teletherapy</td>
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<td>Robert Froemke, PhD</td>
<td>What can we learn from animal studies of CI use and training</td>
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<td>Rene Gifford, PhD</td>
<td>My patient has preserved hearing – now what?</td>
<td>Receives salary from Vanderbilt Bill Wilkerson Ctr, receives consulting fees from Advanced Bionics and Cochlear, Supported/Contracted research from Advanced Bionics, Cochlear, Med-El, (participating in an industry sponsored FDA trial)</td>
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<td>Karen Gordon, PhD</td>
<td>Matching device parameters in children receiving bilateral cochlear implants – why and how?</td>
<td>Receives a salary from Hosp for Sick Children, consulting fees from Cochlear, Salus University, Gov’t of Canada. Supported/contracted research from CIHR.</td>
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<td>Meredith Holcomb, AuD</td>
<td>Improving Clinical Efficiency</td>
<td>Receives salary from Univ. of Maine, consulting fees from ASHA, Audiology Online, ICIT, and Advanced Bionics. Supported/contracted research from Med-El.</td>
<td>Member American Cochlear Implant Alliance</td>
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<td>Ed Overstreet, PhD</td>
<td>Manufacturers Panel</td>
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<td>J. Thomas Roland, MD</td>
<td>Surgical advancements with cochlear implants</td>
<td>Receives a salary from NYU Langone, consulting fees from Cochlear Americas</td>
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<td>Phil Segel, BSEE</td>
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<td>Susan B Waltzman, PhD</td>
<td>Planner/Moderator</td>
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<td>Jace Wolfe, PhD</td>
<td>Roles in spectroscopy, cortical auditory evoked responses and outcomes</td>
<td>Receives a salary form Hearts for Hearing, Cochlear Americas, and Phonak. NYU Langone paid for travel to the conference.</td>
<td>Board Member at Cochlear Americas and Phonak</td>
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<td>Teresa Zwolan, PhD</td>
<td>Billing, coding and reimbursement for CI Programming</td>
<td>Receives a salary from Univ of Michigan, consulting fees from Cochlear Americas, Envoy Medical, Memstim, Supported/Contracted research from Cochlear Americas</td>
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