

# CIAP 2017 Speaker Program

## Monday July 17

### 8:30-10:00am CI Modeling: Moderator TBN

- 8:30-9:00 Laurel Carney: Aural contrast in midbrain responses to speech: Implications for Cochlear Implant
- 9:00-9:20 Jan Dirk Biesheuvel: Deconvolution of spread of excitation curves: Towards identification of the neural excitation area
- 9:20-9:40 Misagh Khayambashi: Audio re-synthesis from electrode excitations: An enhanced generic physiological approach
- 9:40-10:10 Ian Bruce: Advances in modeling the occurrence and timing of action potentials in response to cochlear implant stimulation

### Break 10:10-10:40

- 10:40-11:00 Jesse Resnick: Simulated spiral ganglion demyelination alters sensitivity and temporal fidelity of responses to extracellular stimulation
- 11:00-11:30 Waldo Nogueira: Psychoacoustic masking models applied to sound coding strategies for cochlear implants
- 11:30-11:50 Mathias Voigt: Electrical stimulation of auditory cortex activates and modulates processing according to stimulated layer

### 12-1pm LUNCH

### 4-6pm Poster viewing

### 6-7pm DINNER

### 7:00-9:30pm Translating to the Clinic/Consumer: Moderator TBN

- 7:00-7:25 Gerard O'Donoghue :
- 7:25-7:50 Kevin Franck: Working within .edu & .com for patients
- 7:50-8:15 Gary Housley:
- 8:15-8:40 Ed Rubel: Fishing and hearing protection: Basic scientist goes to the dark side
- 8:40-9:05 Yeohash Raphael: Biological means for hearing restoration in deaf ears
- 9:05-9:30 Poppy Crum:

### 9:00-midnight Poster and Social Session

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## Tuesday July 18

### 8:30-10:00am Pediatric CIs: Moderator TBN

- 8:30 - 9:00 David Horn: Development of auditory acuity in prelingually-deaf cochlear implant users
- 9:00-9:30 Laurie Eisenberg: Impact of cochlear implants on the development of spoken language: Insights from the CDACI study
- 9:30-9:50 Mishaela DiNino: Assessment of the electrode-neuron interface in children with cochlear implants compared to adults
- 9:50-10:10 Li Xu: Singing proficiency of members of a choir formed by hearing-impaired children with cochlear implants

### Break 10:10-10:40

- 10:40-11:10 Karen Gordon: Programming the developing hearing brain: A responsibility to get it right
- 11:10-11:40 Lisa Davidson: The effects of early acoustic hearing on speech perception and language abilities of pediatric CI recipients
- 11:40-12:00 Andrej Kral: Effects of early hearing experience on activation and functional connectivity in primary and higher-order cortical field

### 12:10-1pm LUNCH

### 1:30-4:00pm FDA update, Company Presentations and Device workshops

### 4-6pm Poster viewing

### 6-7pm DINNER

### 7:00-9:00pm Bilateral/Bimodal: Moderator TBN

- 7:00-7:30 Mattias Dietz: Factors limiting spatial hearing performance with bilateral cochlear implants and first steps to reduce the shortcomings
- 7:30-8:00 Chen Chen: Effects of synchronizing automatic gain controls for bilateral cochlear implant users

### Break, 8 to 8:15

- 8:15-8:35 Yoojin Chung: Neural ITD sensitivity and temporal coding with cochlear implants in an animal model of early-onset deafness
- 8:35-8:55 Christina Lavallee: Assessing frequency-specific effects of deafness on cortical activity in the developing human auditory system

### 9:00-midnight Poster and social session

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## Wednesday July 19

### 8:30-10:00am AES, Bimodal, SSD: Moderator TBN

- 8:30-9:00 David Landsberger: "Correct" electrode positions along the cochlea: Some thoughts about place coding, moveable electrodes, and rational pitch
- 9:00-9:20 Jeremy Marozeau: The sound sensation of electric stimulation in single-sided deafened cochlear implant recipients
- 9:20-9:40 Marina Imsiecke: Electric-acoustic forward masking in Cochlear Implant users with ipsilateral residual hearing
- 9:40-10:10 Tobias Rader: Hearing preservation and electric-acoustic stimulation: long-term results and individualized sound processing strategies

**Break, 10:10-10:40**

- 10:40-11:00 Jeanne Clarke: Top-down repair of interrupted speech in electro-acoustic stimulation
- 11:00-11:30 Rene Gifford: Bimodal hearing versus bilateral implantation: speech understanding, spatial release from masking, and source location uncertainty
- 11:30-11:50 Maaïke Van Eeckhoutte: Objective estimation of binaural loudness balance for bimodal listeners

**12:10-1pm LUNCH**

**4-6pm Posters**

**6-7pm DINNER**

**7-8pm Posters**

**Wednesday 7:00pm to Midnight: Dance Night**

**Thursday July 20**

**8:30-10:00am Speech Perception: Moderator TBN**

- 8:30-9:00 Richard Wright: The importance of stimuli to intelligibility assessment
- 9:00-9:30 Matt Winn: Speech perception and listening effort with a cochlear implant: the rules are different
- 9:30-9:50 Robin Gransier: Speech perception and modulation preservation in the electrically stimulated auditory pathway
- 9:50-10:10 Yue Zhang: Auditory training for an optimal perceptual cue weighting strategy in CI users and its impact on speech perception and listening effort

**Break 10:10-10:40**

- 10:40-11:10 Deniz Bařkent: Voice cues and speech perception in cochlear-implant users
- 11:10-11:30 Mohamed Bingabr: CI electrode stimulation strategy motivated by robust intelligibility in noise of a vocoder based on the zero-crossings of the speech waveform
- 11:30-11:50 Olga Peskova: Speech perception performance and speech production errors in pediatric cochlear implant users

**12-1pm LUNCH**

**4-6pm Poster viewing**

**6-7pm DINNER**

**7-9pm Psychophysics and TFS: Moderator TBN**

- 7:00-7:30 Brian Moore: A new method for identifying "bad" channels based on across-channel modulation masking
- 7:30-8:00 Josh Bernstein: Spectrotemporal modulation sensitivity and sensorineural hearing loss: Implications for cochlear-implant speech understanding in noise

**Break, 8 to 8:15**

- 8:15-8:45 Monita Chatterjee: Complex pitch, speech prosody and lexical tone perception with cochlear implants
- 8:45-9:05 Maureen Shader: Age-related auditory temporal processing deficits in cochlear-implant users

**9:00-midnight Poster and social session**

**Friday July 21**

**8:30-10:00am Objective Measures and Electrophysiology: Moderator TBN**

- 8:30-9:00 Melissa Polonenko: Electrophysiological measures of auditory development in children using bimodal devices
- 9:00-9:20 Olivier Machery: Measuring eABRs to bunched-up pulses: Can this help cochlear implant programming?
- 9:20-9:40 Andrew Dimitrijevic: EEG alpha rhythms as a biomarker for listening effort for speech in noise perception in cochlear implant users.
- 9:40-10:00 Daniel Keppeler: First multichannel optical cochlear implants for optogenetic stimulation of the auditory pathway

**Break, 10-10:30**

- 10:30-11:00 Debi Vickers: The auditory change complex as an objective measure to guide intervention
- 11:00-11:30 Carolyn Brown: Acoustically evoked potentials recorded from an intracochlear electrode in Nucleus hybrid CI users

**12-1pm LUNCH**

**1pm End of Conference**