

CIAP 2013 Speaker Program

Monday July 15: 8:00am – 11:00am

Coding I: F0, Lexical Tones, Prosody (Chair: Jan Wouters)

8:00 AM: Welcome and Announcements: Chatterjee/Kral/Shannon

8:15 Li Xu: Cochlear Implants and Tonal Languages

8:45 XinLuo: Intrinsic and Extrinsic Pitch Cues to Tone Recognition with Cochlear Implants

9:15 Monita Chatterjee: Processing of Pitch, Prosody, Voice Emotion, and Lexical Tones by Cochlear Implanted Children

9:35 Break

Coding II: Neural mechanisms and models(Chair: Jan Wouters)

9:55 Bob Carlyon: Limitations of temporal pitch perception measured using the auditory nerve response to electrical stimulation

10:25 Jason Boulet: Facilitation, Accommodation and Refraction in Electrically-Stimulated Model Auditory Nerve Fibers Is Dependent on Location of Stimulation and Voltage-Gated Channel Type Distribution

10:40 Johan Frijns: Reducing Electrical Interaction during Parallel Stimulation Using Various Compensation Techniques

11:00 AM to 12:45 pm: Poster viewing

12:00 noon to 1:00 pm: Lunch

1:00pm Mentoring Session (Litovsky)

Monday July 15: 7:00pm – 9:00pm

Top-Down Processes, Plasticity (Chair: Bob Shannon)

7:00 David Pisoni: Some Observations on the Indexical Properties of Speech: What Are They and Why do We Need Them for Robust Speech Recognition and Spoken Language Understanding?

7:30 Ingrid Johnsrude: Effortful listening: perception and learning of degraded speech depends critically on attention

8:00 Break

8:15 Deniz Baskent: How cognitive factors can affect the outcome in cochlear implants

8:40 Lina Reiss: Pitch, Fusion, and Binaural Spectral Integration

9:00pm to Midnight: Poster and social session

Tuesday, July 16, 8:35am - 11:00am

Development and Bilateral Implantation; Bimodal Hearing (Chair: Bernhard Seeber)

8:35 Bertrand Delgutte: Why is binaural performance with bilateral cochlear implants poorer than expected? Insights from neural data

9:05 Ruth Litovsky: Emergence of Binaural Hearing in Bilaterally Implanted Children

9:35 Karen Gordon: Bilateral cochlear implantation can protect the developing auditory system from unilaterally driven reorganization

10:05 Break

10:25 Matthew Goupell: Spatial Attention in Bilateral Cochlear-Implant Users

10:45 Matthew Winn: Duplex Perception by Listeners with Bilateral Cochlear Implants: A Measure of Bilateral Integration of Speech

11:00am to 12:45pm: Poster viewing

12:00 noon to 1:00 pm: Lunch

1:00pm to 3:00pm Research Interface Workshop (Loizou PDA, HEINRI, Cochlear, MedEI, AB)

Tuesday, July 16, 7:00pm to 9:00pm

Nerve Survival/Regeneration/Effects of Long-term Auditory Deprivation (Chair: Rob Shepherd)

7:00 Pat Leake: Long-Term Effects Of Neurotrophins And Electrical Stimulation On Survival And Function Of Cochlear Spiral Ganglion Neurons

7:30 John Middlebrooks: Loss of Temporal Fidelity in the Auditory Pathway Following Auditory Deprivation

8:00 Andrew Wise: Drug Delivery to the Cochlea for Neural Survival

8:30 Break

8:45 Bob Shannon/Karen Kirk: Tribute to Bill House

9:00pm to Midnight: Poster Viewing

Wednesday, July 17, 8:30am to 11:00am

Cross-modal Plasticity and Development (Chair: Mario Svirsky)

8:30 Anu Sharma: Changes in cortical resource allocation in hearing loss

9:00 Andrej Kral: Cross-Modal Plasticity in the Congenitally Deaf Cat

9:30 Break

9:50 Karen Kirk: Multimodal Sentence Recognition by Children with Cochlear Implants or Hearing Aids

10:20 Rebecca Dewey: Functional Near Infrared Spectroscopy Reveals Cortical Cross-Modal Reorganisation Following Deafness

10:35am to 12:45pm: Poster viewing

12:00 noon to 1:00 pm: Lunch

1:00pm to 6:00pm: Poster Viewing, free time

Wednesday, July 17, 1:00 to 3:00 PM Afternoon Workshop

1:00 Shu-Chen Peng/VasantDasika: FDA process/protocols

1:30 Company Presentations on New Technology (20 min each: Advanced Bionics, Cochlear, Med-EI)

2:30 Livermore Electrodes (Pannu)

Wednesday 7:00 PM to Midnight: Dance Night

Thursday, July 18, 8:10am to 11:00am

Coding III: Signal Processing: Philip Loizou Memorial Session (Chair: Ruth Litovsky)

8:10 Michael Dorman: Philip Loizou – an Appreciation

8:30 Jan Wouters: Speech Processing Optimization in Cochlear Implants Based on Objective Measures

9:00 Qian-jie Fu: Signal Optimization for Cochlear Implants: Philip Loizou's Contribution to Cochlear Implant Research

9:30 Break

9:50 Tom Francart: Sound processing to improve transmission of interaural level differences with combined cochlear implant and hearing aid stimulation

10:10 Julie Bierer: Using the Estimated Electrode-Neuron Interface to Optimize Speech Processor Settings Improves Speech Perception

10:30 Yi Hu: Synthesis-Driven Noise Suppression Strategies Based on Harmonic Regeneration

10:45 Kostas Kokkinakis: Acoustic Reverberation in Cochlear Implant Processors with Two Microphones

11:00am to 12:45pm: Poster viewing

12:00 noon to 1:00 pm: Lunch

Thursday, July 18, 7:00pm to 9:00pm

Coding IV: Spectral and Temporal Interactions (Chair: Johan Frijns)

7:00 Bryan Pfungst: Rehabilitation Strategies Based on Across-Site Patterns of Temporal Acuity

7:30 Colette McKay: Temporal information processing: can current focussing help?

8:00 Break

8:15 Charles Finley: Monopolar-Coupled, Ectopic Stimulation in Cochlear Implants

8:45 Rachel Schepelerle: Relationships Among Peripheral and Central Electrophysiological Measures of Spatial / Spectral Resolution and Speech Perception in Cochlear Implant Users

9:00pm to Midnight: Poster Viewing

Friday, July 19, 9:00am to 11:15am

Novel Approaches: Other Fields (Chair: John Middlebrooks)

9:00 Announcements

9:15 Rob Shepherd: Visual prostheses: a progress report to the CIAP community

9:45 Takayuki Nakagawa: Challenge for technological regeneration of the cochlear sensory epithelium: development of the artificial cochlear sensory epithelium using piezoelectric materials

10:15 Charles Della Santina: Progress Toward a Multichannel Vestibular Implant to Treat Profound Loss of Inner Ear Balance Sensation

10:45 Hannes Maier: Implantable Hearing Systems – Rationale, Concepts, Technology, Clinical Results and Perspectives

11:15 Check out and departure

12:00 noon to 1:00 pm: Lunch

1:00pm Buses depart for SFO