NEW IDEAS IN HEARING 2012: HOT TOPICS IN AUDIOLOGY

Programme summary

Programme details

Monday 2nd April

Session I: Auditory deficits
Chaired by: Trevor Agus

09:00 - 09:25  Brian C.J. Moore  “What is temporal fine structure good for?”

09:25 – 09:50  Chris Plack  “Effects of inner and outer hair cell dysfunction on cochlear gain and compression”

09:50 - 10:15  Kelly Tremblay  “Hearing aids and brain: what's the connection?”

10:15 – 10:45

10:45 - 11:10  Christian Füllgrade  “Age-related changes in auditory perception”

11:10 - 11:35  Joost M. Festen  “Auditory and cognitive processing in speech recognition”

11:35 - 12:00  Deni Baskent  “Two ways hearing impairment can interact with cognitive processing”
Session II: Modelling and Physiology  
Chaired by: Marcel Stimberg and Marc Rebillat

13:30 - 13:55 Mike Heinz
“Physiological correlates of perceptual TFS deficits with sensorineural hearing loss”

13:55 - 14:20 Ian C. Bruce
“Modeling changes in auditory nerve fiber excitability for acoustic and electric stimulation”

14:20 - 14:45 Ra Meddis
“Modelling the efferent contribution to hearing speech in noise”

14:45 – 15:15

15:15 - 15:40 Ja T. Rubinstein
“Biophysical simulation of responses to electrical stimulation”

15:40 - 16:05 Christophe Miche I
“Revisiting the place-vs-time debate, from the ground up”

16:05 - 16:30 Shihab Shamma
“Role of coherence and rapid-plasticity in active perception of complex auditory scenes”

16:30 – 17:00

17:00 - 17:25 Sebastien Santurette
“How essential are place and temporal fine-structure cues for high-frequency complex pitch?”

17:25 - 17:50 Chris Sumner
“Is mode-locking the new phase-locking? Complex temporal encoding of periodicity in cochlear nucleus”

17:50 – 18:05

18:05 - 18:30 Enrique A. Lopez Poveda
“Quantifying inner and outer hair cell loss in listeners with mild-to-moderate cochlear hearing loss”

18:30 - 18:55 Hedwig Gockel
“Does the Frequency Following Response (FFR) reflect pitch?”

Tuesday 3rd April

Session III: Hearing Aids
Chaired by: Tim Ives

09:00 - 09:25 Wouter Dreshler
“Perceptual effects of noise reduction in hearing aids”

09:25 - 09:50 Birger Kollmeier
“Models for speech intelligibility in rooms and their consequences for hearing aid processing”
09:50 - 10:15  Olaf Strelcyk  “Bio-inspired hearing-aid design”

10:15 – 10:45

10:45 - 11:10  Sridhar Kalluri  “Toward a laborator measure of hearing-aid Outcome in real-world multi-talker environments”

11:10 - 11:35  Mike Stone  “‘Listening in the dips’: the dynamic depth and range achievable by the hearing impaired”

11:35 - 12:00  Brent Edwards  “How hearing aid technology can affect cognitive function”

Session IV: Implants
Chairied by: Jonathan Laudanski

13:30 - 13:55  Collette McKay  “Temporal processing in CI, ABI and AMI users”

13:55 - 14:20  Robert V. Shannon  “New Results with Auditor Brainstem Implants”

14:20 - 14:45  Jan Wouters  “Enhanced temporal coding can lead to improved sound perception in cochlear implants”

14:45 – 15:15

15:15 - 15:40  Ward Drennan  “Perception of frequency-modulation patterns based on recovered-envelope cues for cochlear implant listeners”

15:40 - 16:05  Norbert Dillier  “Neurophysiologically-based coding strategy for cochlear implants”

16:05 – 16:30  Bernhard Seeber  “Trading of temporal fine structure and envelope cues leads to robust localization in reverb”

16:30 – 17:00

17:00 - 17:25  Patrick Boyle  “AGC performance revealed by the STAR² roving level speech test and the impact of speech rate”

17:25 - 17:50  Kaibao Nie  “Encoding harmonics to improve speech, music and mandarin tone perception with cochlear implants”

17:50 - 18:15  David McAlpine  “Making bilateral binaural”
**Wednesday 4th April**

**Session V: Development**  
**Chaired by: Laurianne Cabrera**

<table>
<thead>
<tr>
<th>Time</th>
<th>Speaker</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>09:00 - 09:25</td>
<td>Carolina Abdala</td>
<td>“Maturation of human cochlear function”</td>
</tr>
<tr>
<td>09:25 - 09:50</td>
<td>Lynne Werner</td>
<td>“Temporal aspects of infants' attention to sound”</td>
</tr>
<tr>
<td>09:50 - 10:15</td>
<td>Quentin Summerfield</td>
<td>“Spatio-temporal brain activity during multi-talker listening in younger and older adults”</td>
</tr>
<tr>
<td>10:15 – 10:45</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10:45 - 11:10</td>
<td>David Horn</td>
<td>“Spectral ripple inversion detection in infants”</td>
</tr>
<tr>
<td>11:10 - 11:35</td>
<td>Paul Deltenre</td>
<td>“The Frequency-Following Response: an ancient tool re-sharpened to the benefit of new ideas”</td>
</tr>
<tr>
<td>11:50 - 12:15</td>
<td>Susan Nittouer</td>
<td>“Developmental changes in perceptual attention and organization for speech: implications for cochlear implant design”</td>
</tr>
</tbody>
</table>

We wish to thank Advanced Bionics, Neurelec and Starkey for their financial support.

We also wish to thank the Société Française d'Audiologie.