# Programme summary

## New Ideas in Hearing 2012: Hot Topics in Audiology

**Monday 2nd of April**

<table>
<thead>
<tr>
<th>Time</th>
<th>Session I: Auditory deficits</th>
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<tbody>
<tr>
<td>08:50</td>
<td>Intro - Meddis R</td>
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<tr>
<td>09:00</td>
<td>Moore BCJ</td>
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<td>09:25</td>
<td>Plack C</td>
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<td>09:50</td>
<td>Tremblay K</td>
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<td>10:45</td>
<td>Füllgrabe C</td>
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<td>11:10</td>
<td>Festen J</td>
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<td>11:35</td>
<td>Baskert D</td>
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<td>13:30</td>
<td>Heinz M</td>
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<td>13:55</td>
<td>Bruce I</td>
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<td>14:20</td>
<td>Meddis R</td>
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<td>15:15</td>
<td>Rubinstein J</td>
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<td>15:40</td>
<td>Micheyl C</td>
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<td>16:05</td>
<td>Shamma S</td>
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<td>17:00</td>
<td>Santurette S</td>
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<tr>
<td>17:25</td>
<td>Sumner C</td>
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<tr>
<td>18:05</td>
<td>Lopez Poveda E</td>
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<td>18:30</td>
<td>Gockel H</td>
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## Programme details

### Monday 2nd April

**Session I: Auditory deficits**

### Tuesday 3rd of April

<table>
<thead>
<tr>
<th>Time</th>
<th>Hearing Aids</th>
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<tbody>
<tr>
<td>09:00</td>
<td>Dreschler W</td>
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<td>Kollmeier B</td>
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<td>Strelcyk O</td>
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<td>Kalluri S</td>
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<td>Stone M</td>
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<td>Edwards B</td>
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<td>13:30</td>
<td>McKay C</td>
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<td>Shannon RV</td>
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<td>Wouters J</td>
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<td>15:15</td>
<td>Drennan W</td>
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<td>Diller N</td>
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<td>16:05</td>
<td>Seeber B</td>
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<td>17:00</td>
<td>Boyle P</td>
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<td>17:25</td>
<td>Nie K</td>
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<td>17:50</td>
<td>McAlpine D</td>
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### Wednesday 4th of April

<table>
<thead>
<tr>
<th>Time</th>
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<tr>
<td>09:00</td>
<td>Abdala C</td>
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<td>Werner L</td>
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<td>09:50</td>
<td>Summerfield Q</td>
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<td>10:45</td>
<td>Horn D</td>
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<td>11:10</td>
<td>Deltenre P</td>
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<td>11:35</td>
<td>Nitrourer S</td>
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- talks: 15min
- questions: 10min
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”  
Department of Speech, Language, and Hearing Sciences, Purdue University, West Lafayette, USA;  
Weldon School of Biomedical Engineering, Purdue University, West Lafayette, USA.

13:55 - 14:20  Ian C. Bruce  “Modeling changes in auditory nerve fiber excitability for acoustic and electric stimulation”  
Department of Electrical and Computer Engineering, McMaster University, Hamilton, Canada.

14:20 - 14:45  Ray Meddis  “Modelling the efferent contribution to hearing speech in noise”  
Department of Psychology, University of Essex, Colchester, UK.

14:45 – 15:15  -- Break --

15:15 - 15:40  Jay T. Rubinstein  “Biophysical simulation of responses to electrical stimulation”  
Virginia Merrill Bloedel Hearing Research Center, Department of Otolaryngology-Head and Neck Surgery, University of Washington, Seattle, USA.

15:40 - 16:05  Christophe Micheyl  “Revisiting the place-vs-time debate, from the ground up”  
Department of Psychology, University of Minnesota, Minneapolis, USA.

16:05 - 16:30  Shihab Shamma  “Role of coherence and rapid-plasticity in active perception of complex auditory scenes”  
Neural Systems Laboratory, Department of Bioengineering, University of Maryland, Washington, USA.

16:30 – 17:00  -- Break --

17:00 - 17:25  Sebastien Santurette  “How essential are place and temporal fine-structure cues for high-frequency complex pitch?”  
Department of Electrical Engineering, Technical University of Denmark, Lyngby, Denmark.

17:25 - 17:50  Chris Sumner  “Is mode-locking the new phase-locking? Complex temporal encoding of periodicity in cochlear nucleus”  
MRC Institute of Hearing Research, Nottingham, UK.

17:50 – 18:05  -- Short break --

18:05 - 18:30  Enrique A. Lopez Poveda  “Quantifying inner and outer hair cell loss in listeners with mild-to-moderate cochlear hearing loss”  
Unidad de Audición Computacional y Psicoacústica, Instituto de Neurociencias de Castilla y León, Universidad de Salamanca, Salamanca, Spain.

18:30 - 18:55  Hedwig Gockel  “Does the Frequency Following Response (FFR) reflect pitch?”  
MRC Cognition and Brain Sciences Unit, Cambridge, UK.

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”  
Academic Medical Center, KNO-Audiology, Amsterdam, The Netherlands.

09:25 - 09:50  Birger Kollmeier  “Models for speech intelligibility in rooms and their consequences for hearing aid processing”  
Medical Physics Section, Carl von Ossietzky-Universität Oldenburg, Oldenburg, Germany.
09:50 - 10:15 Olaf Strelcyk  
“Bio-inspired hearing-aid design”  
*Starkey Hearing Research Center, Berkeley, USA.*

10:15 – 10:45 -- *Break* --

10:45 - 11:10 Sridhar Kalluri  
“Toward a laboratory measure of hearing-aid Outcome in real-world multi-talker environments”  
*Starkey Hearing Research Center, Berkeley, USA.*

11:10 - 11:35 Mike Stone  
“ ‘Listening in the dips’: the dynamic depth and range achievable by the hearing impaired”  
*Department of Experimental Psychology, University of Cambridge, Cambridge, UK.*

11:35 - 12:00 Brent Edwards  
“How hearing aid technology can affect cognitive function”  
*Starkey Hearing Research Center, Berkeley, USA.*

**Session IV: Implants**  
*Chair: Jonathan Laudanski*

13:30 - 13:55 Collette McKay  
“Temporal processing in CI, ABI and AMI users”  
*Audiology and Deafness Research Group, School of Psychological Sciences, University of Manchester, Manchester, UK.*

13:55 - 14:20 Robert V. Shannon  
“New Results with Auditory Brainstem Implants”  
*House Ear Institute, Los Angeles, USA.*

14:20 - 14:45 Jan Wouters  
“Enhanced temporal coding can lead to improved sound perception in cochlear implants”  
*ExpORL, Department of Neurosciences, Katholieke Universiteit Leuven, Leuven, Belgium.*

14:45 – 15:15 -- *Break* --

15:15 - 15:40 Ward Drennan  
"Perception of frequency-modulation patterns based on recovered-envelope cues for cochlear implant listeners"  
*V. M. Bloedel Hearing Research Center, Department of Otolaryngology, University of Washington, Seattle, USA.*

15:40 - 16:05 Norbert Dillier  
“Neurophysiologically-based coding strategy for cochlear implants”  
*Laboratory of Experimental Audiology, ENT Department, University Hospital, Zurich, Switzerland.*

16:05 – 16:30 Bernhard Seeber  
“Trading of temporal fine structure and envelope cues leads to robust localization in reverb”  
*MRC Institute of Hearing Research, Nottingham, UK.*

16:30 – 17:00 -- *Break* --

17:00 - 17:25 Patrick Boyle  
“AGC performance revealed by the STAR\(^2\) roving level speech test and the impact of speech rate”  
*Advanced Bionics, Cambridge, UK.*

17:25 - 17:50 Kaibao Nie  
“Encoding harmonics to improve speech, music and mandarin tone perception with cochlear implants”  
*Department of Otolaryngology-Head & Neck Surgery, Department of Electrical Engineering, University of Washington, Seattle, USA.*

17:50 - 18:15 David McAlpine  
“Making bilateral binaural”  
*Ear Institute, University of London, London, UK.*
Wednesday 4th April

Session V: Development
Chaired by: Laurianne Cabrera

09:00 - 09:25 Carolina Abdala  “Maturation of human cochlear function”
House Ear Institute, Los Angeles, USA.

09:25 - 09:50 Lynne Werner  “Temporal aspects of infants' attention to sound”
Dept. of Speech & Hearing Sciences, University of Washington, Seattle, USA.

09:50 - 10:15 Quentin Summerfield  “Spatio-temporal brain activity during multi-talker listening in younger and older adults”
Department of Psychology, The University of York, York, UK.

10:15 – 10:45 -- Break --

10:45 - 11:10 David Horn  “Spectral ripple inversion detection in infants”
Seattle Children’s, Seattle, USA.

11:10 - 11:35 Paul Deltenre  “The Frequency-Following Response: an ancient tool re-sharpened to the benefit of new ideas”
Faculty of Medicine, Université Libre de Bruxelles, Bruxelles, Belgium.

11:50 - 12:15 Susan Nittrouer  “Developmental changes in perceptual attention and organization for speech: implications for cochlear implant design”
Otolaryngology - Head and Neck Surgery
Ohio State University Medical School, Columbus, USA.

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

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