

Monday, 15. September

Session 5: Schwann Cells and Macrophages in Inner Ear Disease and Regeneration

Chairpersons: J. Kempfle, T. Kaur

- 08:30 – 09:00 O23 Target Lecture:
Peripheral myelin disorders and the mechanisms of hidden hearing loss
**G. Corfas, L. Cassinotti, L. Ji, D. Kohrmann, B. Borges, G. Wan*
- 09:00 – 09:15 O24 Auditory phenotype in neurofibromatosis type 2 is associated with Schwann cell dysfunction and peripheral myelinopathy
**J. Kempfle, L. Cassinotti, S. Myoung, A. Zhang, R. Kuang, D. Montigny, B. Welling, G. Corfas, D. Jung*
- 09:15 – 09:30 O25 Important roles of auditory nerve glial cells and extracellular matrix molecules in noise-induced hearing loss
**H. Lang, J. Barth, E. Fabrizio-Stover, K. Harris*
- 09:30 – 09:45 O26 Harnessing macrophages for the treatment of noise-induced hidden hearing loss
**T. Kaur*
- 09:45 – 10:00 O27 Molecular signatures of cochlear injury: Unveiling oxidative and inflammatory drivers in acquired SNHL
**A. Pisani, F. Paciello, V. Mohamed Hizam, B. Hassler, C. Grassi, A. R. Feroni*

10:00 – 10:30

Break

Session 6: MED-EL Symposium

Investigating Inner Ear Health to Optimise CI Outcomes

Chairperson: A. Warnecke

- 10:30 – 10:32 Introduction by the Chair
- 10:32 – 11:02 O28 Pathological substrates in Meniere's disease and novel imaging-based stratification for predicting cochlear implant candidacy
A. H. Eckhard
- 11:02 – 11:15 O29 The status of the auditory nerve in CI candidates
R. Glueckert
- 11:15 – 11:28 O30 Perilymph sampling in human: The state of the art
T. Melchionna
- 11:28 – 11:30 Concluding Remarks by the Chair

11:30 – 12:00

Spoendlin Junior Award Lecture

- O31 A single-nucleus atlas of human prenatal inner ear development reveals cell type vulnerabilities and regulatory mechanisms
W. van der Valk

12:00 – 13:00

Lunch

13:00 – 14:30

Poster Presentations II

- P43 – P58: [Hearing Loss 2/2](#)
P59 – P67: [Schwann Cells and Macrophages](#)
P68 – P82: [Gene Therapy, Drug Delivery, Genetic Screening](#)

Session 7: Genetic Screening
Chairpersons: K. Steel, R. Pennings

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| 14:30 – 14:45 | O32 | Divergent modes of hair cell bundle maturation in developing and mature mouse utricle
<i>*A. Cheng, A. Mahmoudi, T. Wang, R. Cai, K. Xu, K. Miller, J. He, N. Mohit, K. Giffen, T. Jan, N. Grillet</i> |
| 14:45 – 15:00 | O33 | Cochlear implantation outcomes in genotyped individuals with sensorineural hearing loss: Reassessing the spiral ganglion hypothesis
<i>*C. Lanting, M. Fehrmann, L. Haer-Wigman, H. Kremer, H. Yntema, M. Thijssen, E. Mylanus, W. Huinck, R. Pennings</i> |
| 15:00 – 15:15 | O34 | 412 families' whole genome sequencing in early onset hearing loss: The French Reference Center's experience
<i>*S. Marlin</i> |
| 15:15 – 15:30 | O35 | Single-nucleus multiomics and spatial transcriptomics define heterogeneity and spatial niches in the human fetal utricle
<i>*A. Dabdoub, W. Liang, R. Yamamoto, E. Luca</i> |
| 15:30 – 15:45 | O36 | MDAtlas: A Meniere disease multiomic data resource of genes and cells
<i>K. Bagheri, P. Cruz-Granados, *J. A. Lopez-Escamez</i> |
| 15:45 – 16:00 | O37 | Cost-effective genetic screening for newborn hearing loss using a high-density SNV microarray
<i>*C.-Y. Tsai, Z. S. Shih, M. F. Chiu, Y. S. Lu, M. Y. Lo, Y. T. Chen, C. H. Lin, C. J. Hsu, P. L. Chen, H. J. Su, P. N. Tsao, C. C. Wu</i> |
| 16:00 – 16:30 | | Break |

Session 8: From Basic Research to Novel Therapies
Chairpersons: W. Marcotti, J. Gale

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| 16:30 – 16:45 | O38 | Investigating AAV-mediated gene therapies in a mouse model of progressive hearing loss
<i>*A. Zanella, M. Hool, W. Marcotti</i> |
| 16:45 – 17:00 | O39 | Development of hiPSC-derived inner ear organoids harboring GJB2 mutation to model genetic inner ear hearing loss
<i>*W. van den Boogaard, D. Vinke, W. van der Valk, N. Geijsen, P. Shang, H. Locher</i> |
| 17:00 – 17:15 | O40 | Optimizing tropism of human MSC derived extracellular vesicles for inner ear applications through peptide coating
<i>*A. Warnecke, P. Huang, X. Pan, Y. Li, H. Staecker</i> |
| 17:15 – 17:30 | O41 | Tmprss3 expression in the mouse cochlea
<i>*R. Arora, L. Pífková, A. Deutschmann, E. Reisinger</i> |
| 17:30 – 17:45 | O42 | Dose response and toxicity evaluation of TMPRSS3 gene therapy delivered either by AAV2 or novel next generation AAV capsid variant
<i>J. Marx, P. Huang, A. Warnecke, H. Büning, *H. Staecker</i> |
| 17:45 – 18:00 | O43 | A novel AAV capsid and promoter design for GJB2 gene therapy
<i>*K. Kamiya</i> |
| 19:00 – 23:00 | | Networking Event
Museum 1821, Wilhelmstraße 3, 72074 Tübingen |