Introductory Remarks to Symposium 22

The listening brain: frontiers in auditory cognition and health

Marcus Jeschke, Goettingen

This symposium aims to provide a comprehensive overview of the current state and future directions of research in auditory cognition with an emphasis on neural processes underlying these phenomena. The central theme revolves around understanding how the brain processes auditory information, bridging the gap between basic neuroscience and clinical implications. Speakers will present research from both animal models as well as human experiments to highlight the diversity of auditory processing as well as to allow for cross-fertilization. As hearing impairment has been identified as the most important predictor for dementia, one key topic will be to highlight the role of hearing loss for auditory cognition.

This symposium will feature an exciting array of presentations, including an in-depth look at auditory cognition in non-human primates using innovative, automated systems; an exploration of the connection between hearing and cognition through the lens of an autism mouse model; an examination of the brain states and traits that characterize the listening mind; a discussion of the cognitive changes observed before and after cochlear implant treatment and a look at the fascinating role of the cerebellum in listening and vocalizing. Together, these presentations promise to provide comprehensive insights into the forefront of auditory cognition research, offering new perspectives on the neural basis of hearing and its profound impact on cognitive health.

Symposium 22

Friday, March 28, 2025 11:30 - 13:30, Lecture Hall 104

Chairs: Marcus Jeschke, Goettingen

11:30 Opening Remarks

- 11:35 Angelika Illg, Hanover
 RELATIONSHIP BETWEEN HEARING LOSS,
 COGNITIVE ABILITIES AND DEPRESSIVE
 SYMPTOMS IN CI USERS WITH UNI- AND
 BILATERAL HEARING LOSS (\$22-1)
- 12:00 Jonas Obleser, Luebeck STATES AND TRAITS OF THE LISTENING BRAIN (S22-2)
- 12:25 Shivani Hariharan, Frankfurt CEREBELLAR ACTIVITY PREDICTS VOCALIZA-TION IN FRUIT BATS (\$22-3)
- 12:35 Marlies Knipper, Tuebingen
 THE LINK BETWEEN HEARING AND COGNITION WHAT CAN WE LEARN FROM AN
 AUTISM MOUSE MODEL? (\$22-4)
- 13:00 Marcus Jeschke, Goettingen EXPLORING AUDITORY COGNITION IN NON-HUMAN PRIMATES WITH AUTOMATIC, HOME CAGE BASED SYSTEMS (\$22-5)

13:25 Concluding Remarks