

hearing (Sig Soli, PhD), and the impact of SSD on childhood development and school performance (Nancy Young, MD). The different rehabilitation methods available will be presented, including osseointegrated bone conduction technologies (Jack J. Wazen, MD) and nonsurgical options (John Goddard, MD). Future trends and clinical research on the use of cochlear implants in SSD will be presented (Bruce Gantz, MD, and Tom Roland, MD). Open discussion, questions, and audience participation will follow the presentations.

**Educational Objectives:** (1) Recognize the benefits of binaural hearing in children and adults and the potential deficits imposed by SSD. (2) Differentiate between surgical and nonsurgical options in the rehabilitation of SSD. (3) Use developing technologies and clinical research in the rehabilitation of SSD, including the use of cochlear implants.

### Endoscopic Ear Surgery: Tips and Pearls

João F. Nogueira, MD (moderator); Muaaz Tarabichi, MD; Daniele Marchioni, MD; Livio Presutti, MD; David D. Pothier, MD

**Program Description:** Endoscopic ear surgery (EES) is a current hot topic in our specialty; however, it is not entirely correct to introduce EES as “new.” Although not new, it is clear that during the past few years, endoscopes have proven to be safe and effective instruments to manage ear diseases in a minimally invasive way, preserving important anatomic structures, allowing functional approaches to well-known conditions. Moreover, endoscopes have provided a better view and understanding of traditional middle ear anatomy and physiology, allowing new landmarks, novel concepts of tissue preservation, ventilation routes, and management of other conditions within the middle ear and beyond.

**Educational Objectives:** (1) Describe the endoscopic anatomy of the middle and inner ears, discussing the concepts of related physiology. (2) Examine totally endoscopic and combined surgical approaches to middle ear conditions, discussing the possible advantages and disadvantages. (3) Present the instruments needed, system setup, surgical skills, learning curve, and also some important tips and pearls to surgeons to start doing endoscopic ear surgery.

### Managing Complications of Chronic Otitis Media

Dennis I. Bojrab, MD (moderator); Richard K. Gurgel, MD; Brandon Isaacson, MD; Marc L. Bennett, MD; Eric E. Smouha, MD; James V. Crawford, MD

**Program Description:** Chronic otitis media is a condition commonly encountered by otolaryngologists. During this miniseminar, we will cover the fundamentals of managing chronic otitis media, medically and surgically, in a case-based, interactive format. Particular emphasis will be given on how to recognize, evaluate, and avoid or treat common complications of chronic otitis media. Specifically, the presentation will include the following topics: managing the tegmen and

dura, facial nerve, vascular injury, otic capsule, and ossicular erosion; recurrent disease; and intracranial complications. This presentation will assist the otologic surgeon in the pre-, intra-, and postoperative care of patients with chronic otitis media.

**Educational Objectives:** (1) Recognize the most common complications of chronic otitis media. (2) Interpret critical findings that will alert the clinician to the presence of a complication from chronic otitis media. (3) Implement management strategies that will assist in the care of patients with chronic otitis media with attention to intraoperative findings.

### Managing the Unexpected in Otologic Surgery

Ashkan Monfared, MD (moderator); Nikolas H. Blevins, MD; Anil K. Lalwani, MD; Lawrence R. Lustig, MD; Debara L. Tucci, MD

**Program Description:** Sponsored by the American Neurotology Society, this interactive presentation aims to provide general practitioners tips and techniques employed by experts in management of intraoperative complications encountered during common otology cases such as tympanoplasty, tympanomastoidectomy, and stapedotomy. The panelists will present illustrative cases and discuss best practice approaches to intraoperative cerebrospinal fluid (CSF) leak and encephaloceles, facial nerve injury, vascular complications, stapedotomy challenges, ossicular chain and external auditory canal damage, and inner ear violation.

**Educational Objectives:** (1) Recognize unexpected circumstances and anatomic variations that could lead to complications in otologic surgery. (2) Manage intraoperative complications such as facial nerve palsy, vascular injury, encephaloceles, CSF leaks, postoperative sensorineural hearing loss, and vertigo.

### The Martha Entenmann Tinnitus Research Center, Inc: Abraham Shulman, MD; and Barbara Goldstein, PhD; “Tinnitus Treatment Modalities and Neuromodulation: State of the Art 2014”

Michael E. Hoffer, MD (moderator); Michael D. Seidman, MD; Abraham Shulman, MD; Richard Tyler, PhD; Berthold Langguth, MD; Tobias Kleinjung, MD

**Program Description:** A neurobiology for all clinical types of tinnitus is emerging reflecting advances in the basic science and neuroscience of brain and brain function and the cochleovestibular system. As tinnitus types begin to be objectively identified, treatment modalities can be applied in a more precise manner. The goal of this miniseminar is to examine new and existing tinnitus treatment specifically in reference to how to apply these techniques for the different tinnitus types. Surgery, intratympanic treatment, neuromodulation, and magnetic stimulation will all be examined, allowing the participants to understand the cutting edge of tinnitus therapy.

**Educational Objectives:** (1) Cite the clinically applicable methods of tinnitus treatment. (2) Determine the rationale for