Educational Objectives: 1) Learn the techniques for diagnosing hard and soft cochlear implant failures. 2) Learn the history of device recalls and failure modes and understand the process for reporting device failures. 3) Learn the techniques for ensuring precise and safe implant placement and the techniques for revision cochlear implant surgery.

Contemporary Management of Cholesteatoma
Brandon Isaacson, MD (moderator);
Dennis I. Bojrab, MD (moderator);
Frank M. Warren, MD; Seilesh Babu, MD;
Hussam K. El-Kashlan, MD;
Anil K. Lalwani, MD; David S. Haynes, MD

Program Description: Cholesteatoma continues to provide a significant management challenge to the otolaryngologist. The purpose of this miniseminar is to review the contemporary management of cholesteatoma. A case-based approach will be used to discuss the following issues: staging, pre- and postoperative imaging, ossicular chain reconstruction, and canal wall down surgery indications and variations.

Educational Objectives: 1) Understand the role and indications for pre- and postoperative CT and diffusion-weighted MR imaging in the management of cholesteatoma. 2) Understand indications and options for staging cholesteatoma surgery. 3) Understand indications and variations of canal wall down surgery.

Diagnosis and Management of Spontaneous Cerebrospinal Fluid Fistula
J. Walter Kutz, MD (moderator);
Pete S. Batra, MD; Brandon Isaacson, MD;
Marc L. Bennett, MD; Peter Manes, MD

Program Description: Spontaneous cerebrospinal fluid (CSF) fistula is an important emerging clinical entity that may be related to excess production or inadequate resorption of CSF. The recurrence rates for spontaneous leaks are higher than other etiologies and may be related to underlying elevated intracranial pressure. Spontaneous CSF leaks generally present with otorrhea or rhinorrhea depending on the site of leakage in the anterior, middle, or posterior cranial fossa. Successful management requires accurate diagnosis and timely surgical repair to minimize the risk of associated infectious intracranial complications. This miniseminar will comprehensively review the diagnostic and treatment algorithm for management of spontaneous CSF rhinorrhea and otorrhea. Salient pathophysiologic mechanisms will be discussed. The role of imaging studies, including computed tomography, magnetic resonance imaging, and radionuclide studies, will be outlined. Open and endoscopic techniques for repair of rhinologic and otologic leaks will be reviewed. The utility of various graft materials and role of lumbar drainage will be explored.

Long-term management strategies for increased intracranial pressure, including use of diuretics and shunting, will be discussed. Multidisciplinary approach with close collaboration with neurosurgery, neurology, and neuro-ophthalmology will be stressed. A case-based format will be used to illustrate key clinical points.

Educational Objectives: 1) Be able to use the diagnostic modalities available to diagnose and localize spontaneous cerebrospinal fluid fistulas. 2) Understand the various lateral and anterior skull base approaches used for repair of cerebrospinal fluid leaks. 3) Appreciate the importance of the multidisciplinary approach and treatment of underlying concurrent conditions, such as benign intracranial hypertension.

Endoscopic Middle Ear Surgery: Tips and Pearls
Joao Flavio Nogueira, MD (moderator);
Muaaz Tarabichi, MD; Daniele Marchioni, MD; Livio Presutti, MD; David Douglas Pothier, MD

Program Description: We are going to discuss, with excellent quality presentations, high-definition surgical movies, endoscopic anatomic dissection images, virtual reality, and augmented reality, the current techniques of endoscopic middle ear surgery, discussing and commenting on the equipment needed, surgical indications, potential advantages and disadvantages, postoperative care, results, and some tips and pearls.

Educational Objectives: 1) Learn and review the endoscopic anatomy of the middle ear, discussing the important endoscopic anatomic landmarks and showing new endoscopic anatomical findings. 2) Identify the actual indications and limitations of this minimally invasive approach. 3) Describe and demonstrate stepwise endoscopic middle ear approaches for several diseases of this area.

Management of Presbycusis: Central and Peripheral
Kourosh Parham, MD (moderator);
George A. Gates, MD; Robert T. Sataloff, MD;
Frank R. Lin, MD; Daniel H. Coelho, MD

Program Description: This lecture will address the growing geriatric population in which progressive hearing loss and cognitive decline coexist. Impaired executive function (short-term memory, attention) affects speech understanding, particularly in noise. Central auditory testing, which integrates a simple assessment of cognitive function, can impact aural rehabilitation, including hearing aids and cochlear implants.

Educational Objectives: 1) Understand the interactive impact of hearing loss and cognitive decline in geriatric patients presenting to the otolaryngologist. 2) Learn that in geriatric patients, reduced executive function is associated with central