

TRIOLOGICAL SOCIETY  
122ND ANNUAL MEETING AT COSM  
JW MARRIOTT, AUSTIN, TEXAS

FRIDAY, MAY 3, 2019

***location***

- 7:00 - 7:50**      ***Business Meeting (Triological Fellows only)***  
***New Fellow Ceremony and Reception***
- 7:55**              **Welcome and Introductions by President**  
Sigsbee W. Duck, MD FACS, Rock Springs, WY
- Presidential Citations**  
Gerald S. Berke, MD FACS, Los Angeles, CA  
Paul W.F. Coughlin, MD FACS, High Point, NC  
Kenneth E. Hornowski, DDS, Asheville, NC  
P. Ashley Wackym, MD FACS, New Brunswick, NJ  
David F. Wilson, MD (Posthumous)
- Introduction of Guest of Honor and Remarks**  
Harold C. Pillsbury, MD FACS, Chapel Hill, NC
- 8:15**              **Presidential Address**  
**The Patient's Perspective on Head and Neck Cancer - My Personal Experience**  
Sigsbee W. Duck, MD FACS, Rock Springs, WY
- 8:30 - 9:05**      **Introduction of Joseph H. Ogura, MD Annual Lecturer**  
**Patient Safety: It's Not Rocket Science**  
James P. Bagian, MD PE, Ann Arbor, MI  
*Anesthesiologist, engineer and former NASA astronaut*
- Introduction of 2019 Thesis Award Presenters**  
Dana M. Thompson, MD FACS, Chicago, IL
- 9:06**              **2019 Harris P. Mosher Award for Clinical Research - Thesis Presentation**  
**Frailty as a Predictor of Outcomes in Patients Undergoing Major Surgery for Head and Neck Cancer: A Prospective Cohort Study**  
David P. Goldstein, MD MSc FRCSC FACS, Toronto, Ontario
- 9:14**              **2019 Edmund Prince Fowler Award for Basic Research - Thesis Presentation**  
**Aspergillus Fumigatus Induction of IL-33 Expression in Chronic Rhinosinusitis with Nasal Polyps is Protease Activated Receptor 2-Dependent**  
Amber U. Luong, MD PhD FACS, Houston, TX
- 9:22**              **2019 Maureen Hannley Award for Alternative Science - Thesis Presentation**  
**Patient Values and Preferences Regarding Surgeon Presence, Trainee Participation, and Overlapping Surgery**  
Alexander J. Langerman, MD FACS, Nashville, TN

9:30 Q&A

9:35-9:55 Break in Exhibit Hall/View Posters

9:55 - 12:00 CONCURRENT SCIENTIFIC SESSIONS

CONCURRENT SESSION 1  
HEAD AND NECK AND LARYNGOLOGY

9:55 - 10:35 HEAD AND NECK PANEL: EVOLVING TOPICS IN HEAD AND NECK SURGERY

**Moderator:** Giovana R. Thomas, MD FACS, Miami, FL

**Panelists: Melanoma-MLST-2**

Larry L. Myers, MD FACS, Dallas, TX

**Immunotherapy in Head and Neck Cancer**

Maie A. St. John, MD, Los Angeles, CA

**New Molecular and Genetic Tools in Head and Neck**

Jose P. Zevallos, MD MPH FACS, St. Louis, MO

**Moderators: Samir S. Khariwala, MD, Minneapolis, MN**

**William R. Ryan, MD FACS, San Francisco, CA**

10:35 Insurance Status as a Social Determinant of Health and Its Impact on Treatment and Survival of Sinonasal Cancer Patients

Pratima Agarwal, BA, Boston, MA; Eric A. Jones, BS, Boston, MA; Anand K. Devaiah, MD, Boston, MA

10:40 Occupational Exposure of Oropharyngeal HPV amongst Otolaryngologists

Rahul S. Subbarayan, MD, Kansas City, KS; Matthew Shew, MD, Kansas City, KS; Johnathan Enders, BS, Kansas City, KS; Sufi Thomas, PhD, Kansas City, KS

10:45 Opioid Prescribing Practices for Postoperative Patients in Otolaryngology: A Multiphasic Quality Improvement Project in a Single Large Institution

Sophia Dang, BA, Philadelphia, PA; Jonathan C. Li, BS, Philadelphia, PA; Zachary Gandee, BA, Philadelphia, PA; Alexander Duffy, BS, Philadelphia, PA; Elizabeth Cottrill, MD, Philadelphia, PA; David M. Cognetti, MD, Philadelphia, PA

10:50 Targeting of Apoptosis in Head and Neck Squamous Cell Carcinoma Requires Overcoming Redundant Pro-Survival Mechanisms

Thomas Julian Ow, MD MS, Bronx, NY; Andrea López, BA, Bronx, NY; Cory D. Fulcher, MD, Bronx, NY; Jianhong Chen, PhD, Buffalo, NY; Nicolas F. Schlecht, PhD, Buffalo, NY; Evripidis Gavathiotis, PhD, Bronx, NY

10:55 Clinical Application of Fluorescence Guided Surgery in Head and Neck Cancer: Successes and Limitations

Stan Van Keulen, MD, Palo Alto, CA; Nynke S. Van den Berg, PhD, Palo Alto, CA; Naoki Nishio, MD PhD, Palo Alto, CA; Guolan Lu, PhD, Palo Alto, CA; Quan Zhou, PhD, Palo Alto, CA; Eben L. Rosenthal, MD, Palo Alto, CA

11:00 Performance Characteristics of Computed Tomography in Predicting Extranodal Extension in HPV Positive Oropharyngeal Carcinoma

Farhoud Faraji, MD PhD, San Diego, CA; Nafi Aygun, MD, Baltimore, MD; Stephanie F. Coquia, MD, Baltimore, MD; Christine G. Gourin, MD, Baltimore, MD; David W. Eisele, MD, Baltimore, MD; Carole Fakhry, MD MPH, Baltimore, MD

**11:05**            **RNA in Situ Hybridization for HPV Detection in Oropharyngeal Squamous Cell Carcinoma: Our Institution's Experience and a Review of the Literature**  
Krish Suresh, BA, Chicago, IL; Sydney Coates, BS, Chicago, IL; Borislav Alexiev, MD, Chicago, IL; Sandeep Samant, MD, Chicago, IL

**11:10**            **Q&A**

**11:15 - 12:00**    **LARYNGOLOGY PANEL: DIFFICULT ISSUES IN LARYNGOLOGY**

**Moderator:** Albert L. Merati, MD FACS, Seattle, WA

**Panelists:** Joel H. Blumin, MD FACS, Milwaukee, WI  
Michael M. Johns III, MD, Los Angeles, CA  
Laura A. Matrka, MD, Columbus, OH  
Libby J. Smith, DO, Pittsburgh, PA  
Lucian Sulica, MD, New York, NY

**12:00**            **Adjourn**

**TRIOLOGICAL SOCIETY - NO AFTERNOON SCIENTIFIC SESSIONS**

**5:30 - 7:00**        **TRIO, ANS, AOS, ASPO MEET THE AUTHORS POSTER RECEPTION**

**CONCURRENT SESSION 2**  
**OTOLOGY/NEUROTOLOGY AND PEDIATRIC OTOLARYNGOLOGY**

**Moderators: Jennifer L. Maw, MD, San Jose, CA**  
**Mia E. Miller, MD, Los Angeles, CA**

**9:55**            **Effects of Ganciclovir Treatment in a Murine Model of Cytomegalovirus Induced Hearing Loss**  
Travis J. Haller, BS, Salt Lake City, UT; Melissa S. Price, BS, Salt Lake City, UT;  
Spencer R. Lindsay, BS, Salt Lake City, UT; Matthew A. Firpo, PhD, Salt Lake City, UT;  
Albert H. Park, MD, Salt Lake City, UT

**10:00**            **Quantitative Analysis of Narcotics Prescribed and Used after Ear Surgery**  
Stephany J. Ngombu, BA, Columbus, OH; Jameson K. Mattingly, MD, Columbus, OH;  
Alexander N. Rock, MD, Columbus, OH; Stephen J. Nogan, MD, Columbus, OH; Aaron C. Moberly, MD, Columbus, OH

**10:05**            **Quantifying Tinnitus Suppression in Cochlear Implantation Using a Novel Audiologic Sequence: Tinnitus Interval Limited Tracking (TILT)**  
Jonathan R. Mallen, MD, Farmington, CT; Jerlon Chiu, BS, Farmington, CT; Hillary Marquis, AuD, Farmington, CT; Erin Perez, AuD, Farmington, CT; Steven R. Otto, MA, Los Angeles, CA; Daniel S. Roberts, MD PhD, Farmington, CT

**10:10**            **Sensorineural Hearing Loss Pattern in Patients with Idiopathic Intracranial Hypertension**  
Sunny S. Kim, BA, Washington, DC; Timothy Shim, BS, Washington, DC;  
Andrew D. Sparks, MS, Washington, DC; Ashkan Monfared, MD, Washington, DC

**10:15**            **Impact of Comorbidities on Speech Perception Abilities in CI Patients**  
Nedim Durakovic, MD, St. Louis, MO; Jonathan L. McJunkin, MD, St. Louis, MO; Jacques Herzog, MD, St. Louis, MO; Dorina Kallogjeri, MD MPH, St. Louis, MO;  
Craig A. Buchman, MD, St. Louis, MO; Wick C. Cameron, MD, St. Louis, MO

- 10:20 Hospital Volume and Acoustic Neuroma Resection Outcomes**  
Nicholas S. Andresen, MD, Baltimore, MD; Charles M. Stewart, MD PhD, Baltimore, MD; Christine G. Gourin, MD, Baltimore, MD; Daniel Q. Sun, MD, Baltimore, MD
- 10:25 Barometric Pressure and the Incidence of Benign Paroxysmal Positional Vertigo**  
Jonathan R. Korpon, BS, Richmond, VA; Daniel H. Coelho, MD, Richmond, VA
- 10:30 Relationship of Overall Cardiovascular Health and Hearing Loss in an African-American Population**  
Steven A. Curti, MD, Jackson, MS; Joseph A. Degruy, MD, Jackson, MS; Christopher S. Spankovich, AuD PhD MPH, Jackson, MS; John M. Schweinfurth, MD, Jackson, MS
- 10:35 The Cartilage Cuffed T-Tube Tympanoplasty**  
Alex Bradley Labby, MD, Chicago, IL; Miriam I. Redleaf, MD, Chicago, IL; Jeffrey W. Yu, MD, Chicago, IL
- 10:40 Q&A**
- 10:45 - 11:30 COLLABORATIVE PANEL: TRIOLOGICAL SOCIETY AND AMERICAN OTOLOGICAL SOCIETY**  
**OTOLOGICAL MANIFESTATIONS OF INTRACRANIAL HYPERTENSION**  
**Moderator:** Seilesh C. Babu, MD, Warren, MI  
**Panelists:** Joni K. Doherty, MD PhD FACS, Seal Beach, CA  
Soha N. Ghossaini, MD FACS, New York, NY  
Michael E. Hoffer, MD FACS, Miami, FL  
Joe W. Kutz, MD FACS, Dallas, TX

## PEDIATRIC OTOLARYNGOLOGY

**Moderators: Alessandro de Alarcon, MD MPH, Cincinnati, OH**  
**Romaine F. Johnson, MD MPH, Dallas, TX**

- 11:30 Intraoperative Intravenous Ibuprofen Use Is not Associated with Increased Post-Tonsillectomy Bleeding**  
Nikunj K. Patel, BA, Bronx, NY; Sharan J. Shah, BS, Bronx, NY; Nam K. Lee, BS, Brooklyn, NY; Hoon B. Shim, MD PhD, Manhattan, NY; Veronica P. Carullo, MD, Bronx, NY; Christina J. Yang, MD, Bronx, NY
- 11:35 Postoperative Prescriptions and Corresponding Opioid Consumption after Tonsillectomy**  
Stephanie L. Choo, BS, Columbus, OH; Laura A. Matrka, MD, Columbus, OH; Stephen J. Nogan, MD, Columbus, OH; Alexander N. Rock, MD, Columbus, OH
- 11:40 Implementation of Electronic Pediatric Tracheostomy Care Module to Improve Provider Confidence**  
Catherina Yang, BA, Bronx, NY; Danielle Bottalico, MD, Bronx, NY; Esther Matta-Arroyo, RRT, Bronx, NY; Christina J. Yang, MD, Bronx, NY
- 11:45 Optimizing International Short Term Otolaryngology Service Trips: Perceptions from Learners versus Volunteers**  
Cameron P. Worden, BS, Roanoke, VA; Elizabeth D. Stephenson, BA, Chapel Hill, NC; Brent A. Senior, MD, Chapel Hill, NC

- 11:50**            **Frequency of Post-Tonsillectomy Hemorrhage Relative to Time of Day**  
Sun Joo Kim, BS, Baltimore, MD; Andrew H. Lee, MD, Baltimore, MD; Ji Soo Kim, MS, Baltimore, MD; Jonathan Walsh, MD, Baltimore, MD
- 11:55**            **Lateral Cervical Abscesses: What NSQIP-P Reveals Regarding Length of Stay, Readmission, and Reoperation**  
Vijay A. Patel, MD, Hershey, PA; Christopher A. Roberts, MD, Morgantown, WV; Jad Ramadan, MS, Morgantown, WV; Michele M. Carr, DDS MD PhD FRCSC, Morgantown, WV
- 12:00**            **Low Cost, Easy to Replicate Ventilation Tube Insertion Training System**  
Nicole L. Molin, MD, Philadelphia, PA; Jerlon Chiu, BS, Farmington, CT; Glenn C. Isaacson, MD, Philadelphia, PA
- 12:05**            **Q&A**
- 12:10**            **Adjourn**
- TRIOLOGICAL SOCIETY – NO AFTERNOON SCIENTIFIC SESSIONS**
- 5:30 - 7:00**        **TRIO, ANS, AOS, ASPO MEET THE AUTHORS POSTER RECEPTION**

**SATURDAY, MAY 4, 2019**

- 7:00 - 7:50**        **Annual Business Meeting (Triological Fellows only)**

**8:00 - 12:00      SCIENTIFIC SESSION**

- 8:00**            **Announcements**
- FACIAL PLASTIC/RECONSTRUCTIVE SURGERY**
- 8:05 - 8:50**        **PLASTIC/RECONSTRUCTIVE SURGERY PANEL: CURRENT TREATMENT OPTIONS FOR FACIAL PARALYSIS**  
**Moderator:** J. Madison Clark II, MD FACS, Chapel Hill, NC  
**Panelists:** Kofi D. Boahene, MD FACS, Baltimore, MD  
Nate Jowett, MD FRCSC, Boston, MA  
Jennifer C. Kim, MD, Ann Arbor, MI  
Travis T. Tollefson, MD MPH FACS, Sacramento, CA
- Moderators: Robert H. Deeb, MD, Detroit, MI**  
**Mark A. Varvares, MD FACS, Boston, MA**
- 8:50**            **The Septal Swell Body and Septal Perforation Repair**  
Saba Ghorab, MD, Phoenix, AZ; Cullen M. Taylor, MD, Phoenix, AZ; Stephen F. Bansberg, MD, Phoenix, AZ
- 8:55**            **Free Functional Gracilis Flaps for Facial Reanimation in Seniors**  
Andrew H. Lee, MD, Baltimore, MD; Lisa E. Ishii, MD, Baltimore, MD; Patrick J. Byrne, MD FACS MBA, Baltimore, MD; Shaun C. Desai, MD, Baltimore, MD; Masaru Ishii, MD PhD, Baltimore, MD; Kofi D. Boahene, MD FACS, Baltimore, MD

- 9:00           The Bernoulli Obstruction Theory: A Possible Explanation for Septoplasty Failure Rates**  
David A. Campbell, MD, Milwaukee, WI; Masoud G.H. Moghaddam, PhD, Milwaukee, WI; John S. Rhee, MD MPH, Milwaukee, WI; Guilherme J.M. Garcia, PhD, Milwaukee, WI
- 9:05           Body Dysmorphic Disorder in Adult Cleft Patients: An Unseen Psychological Burden of Orofacial Clefts**  
Eva J. Stein, BS, Chapel Hill, NC; Wesley H. Stepp, PhD, Chapel Hill, NC; Michael Canfarotta, MD, Chapel Hill, NC; Mara Buchbinder, PhD, Chapel Hill, NC; Amelia F. Drake, MD, Chapel Hill, NC; J. Madison Clark, MD, Chapel Hill, NC
- 9:10           Q&A**
- LARYNGOLOGY/BRONCHOESOPHAGOLOGY**
- Moderators: Paul C. Bryson, MD FACS, Cleveland, OH  
Nausheen Jamal, MD, Edinburg, TX**
- 9:15           Assessment of Fiberoptic Endoscopic Evaluation of Swallowing (FEES) Findings in Individuals with Zenker's Diverticulum and Cricopharyngeal Bar**  
David J. Weiland, BS, Orange, CA; Sunil P. Verma, MD, Orange, CA
- 9:20           The Safety and Efficacy of Open Bedside Tracheotomy (OBT): A Retrospective Analysis of 1000 Patients**  
David Z. Liao, MD, Bronx, NY; Vikas R. Mehta, MD MPH, Bronx, NY; Corin Kinkhabwala, BS, Bronx, NY; Daniel Li, BS, Bronx, NY; Thomas J. Ow, MD, Bronx, NY; Bradley A. Schiff, MD, Bronx, NY
- 9:25           Early Endoscopic Intervention for the Treatment of Acute Laryngeal Injury and Laryngotracheal Stenosis**  
Anne S. Lowery, BA, Nashville, TN; Alexander H. Gelbard, MD, Nashville, TN
- 9:30           Adult Epiglottitis: Trends and Predictors of Mortality in Over 30,000 Cases from 2007 to 2014**  
Jonathan M. Hanna, BS, New Haven, CT; Philip R. Brauer, BA, New Haven, CT; Elisa R. Berson, BS, New Haven, CT; Saral Mehra, MD MBA, New Haven, CT
- 9:35           Q&A**
- 9:40           Feasibility of Early Discharge after Open Hypopharyngeal Surgery**  
Jena C. Patel, BS, Philadelphia, PA; Joseph Spiegel, MD, Philadelphia, PA; Michael C. Topf, MD, Philadelphia, PA; Maurits Boon, MD, Philadelphia, PA; Colin Huntley, MD, Philadelphia, PA
- 9:45           Factors Associated with Failure of Electromyography Guided Botox Injection in Adductor Spasmodic Dysphonia**  
Kevin Y.H. Zhao, MD, Vancouver, BC Canada; Amanda C.M. Hu, MD, Vancouver, BC Canada
- 9:50           Superior Laryngeal Nerve Block for Neurogenic Cough**  
Vaninder K. Dhillon, MD, Bethesda, MD; Kristine Pietsch, MA, Bethesda, MD; Michelle Wilson, MA, Bethesda, MD

**9:55 Emergent Surgical Airways in Residency: An Assessment of Competence and a Teaching Model**  
Sarah Khayat, MD, Chicago, IL; Stephanie A. Joe, MD, Chicago, IL;  
Jessica L. Hootnick, MD, Boston, MA; Sheena Samra, MD, Chicago, IL; Brian M. Sweis, BS, Chicago, IL

**10:00 Q&A**

**10:05 - 10:35 Break in Exhibit Hall/View Posters**

## ALLERGY/RHINOLOGY

**10:35 - 11:20 ALLERGY/RHINOLOGY PANEL: NEW BIOLOGICS FOR CRS**

**Moderator:** Jean Kim, MD PhD FACS, Baltimore, MD

**Panelists:** Joseph K. Han, MD, Norfolk, VA  
Timothy L. Smith, MD MPH FACS, Portland, OR  
Michael G. Stewart, MD MPH FACS, New York, NY  
Erica R. Thaler, MD FACS, Philadelphia, PA

**Moderators: Murugappan Ramanathan, MD FACS, Bethesda, MD  
Elie E. Rebeiz, MD FACS, Boston, MA**

**11:20 Comparison of Eosinophilic/Noneosinophilic Inflammation in Chronic Rhinosinusitis with Nasal Polyps between Patients by Generations**  
Yasuyuki Noyama, MD PhD, Stanford, CA; Misato Hirai, MD PhD, Okayama, Japan; Kiyoko Nakai, MD PhD, Okayama, Japan; Peter H. Hwang, MD, Stanford, CA;  
Jayakar V. Nayak, MD PhD, Stanford, CA; Mitsuhiro Okano, MD PhD, Narita, Japan

**11:25 Comparison between Steroid Eluting Implants versus Nonabsorbable Packing as Middle Meatal Spacers Following Endoscopic Sinus Surgery: A Prospective Randomized Trial**  
Jordan W. Rawl, MD, Galveston, TX; Robert A. McQuitty, MS, Galveston, TX;  
Mashfee Khan, BA, Galveston, TX; Yong F. Kuo, PhD, Galveston, TX;  
Mohamad R. Chaaban, MD, Galveston, TX

**11:30 Risk Factors Associated with Increased Opioid Use Following Endoscopic Sinus Surgery**  
Ido Badash, BA, Los Angeles, CA; Christopher G. Lui, BA, Los Angeles, CA; Kevin Hur, MD, Los Angeles, CA; Joseph R. Acevedo, MD MAS, Los Angeles, CA;  
Elisabeth H. Ference, MD MPH, Los Angeles, CA; Bozena B. Wrobel, MD, Los Angeles, CA

**11:35 Failure Pressure of Dural Repairs Using a Novel Reconstruction with Titanium Clips in a Porcine ex vivo Model**  
Kevin T. Chorath, BS, San Antonio, TX; Jacob S. Majors, MD, San Antonio, TX;  
Philip G. Chen, MD, San Antonio, TX; Mason R. Krysinski, MD, San Antonio, TX;  
Kevin C. McMains, MD, San Antonio, TX; Leonid A. Bunegin, BS, San Antonio, TX

**11:40 Turbinate Grafts for Reconstruction of Sellar Defects**  
Tara J. Wu, MD, Los Angeles, CA; Marvin Bergsneider, MD, Los Angeles, CA;  
Marilene B. Wang, MD, Los Angeles, CA

**11:45 Sinonasal Quality of Life Declines in Cystic Fibrosis Patients with Pulmonary Exacerbations**  
Chetan Y. Safi, MD, New York, NY; Emily A. Dimango, MD, New York, NY;  
Claire L. Keating, MD, New York, NY; Zian Zhou, BS, New York, NY; David A. Gudis, MD, New York, NY

**11:50**      **Workforce Analysis of Practicing Rhinologists in the United States**  
Thomas Edward Heineman, MD, Los Angeles, CA; Peter H. Hwang, MD, Palo Alto, CA;  
Jivianne T. Lee, MD, Los Angeles, CA; Marilene B. Wang, MD, Los Angeles, CA;  
Jeffrey D. Suh, MD, Los Angeles, CA

**11:55**      **Q&A**

**12:00 - 1:00**      **Lunch Break**

**1:00 - 5:00      SCIENTIFIC SESSION**

**GENERAL OTOLARYNGOLOGY**

**1:00 - 1:50**      **PANEL: OTOLARYNGOLOGY EDUCATION FROM MEDICAL SCHOOL THROUGH MOC**

**Moderator:**    Liana Puscas, MD MHS MA FACS, Durham, NC

**Panelists:**    **MOC and the ABOHNS**

Brian Nussenbaum, MD FACS, Houston, TX

**Lifelong Learning Resources**

Richard V. Smith, MD FACS, Bronx, NY

**Virtual Reality, Augmented Reality and High Fidelity Simulation**

Gregory J. Wiet, MD FACS, Columbus, OH

**Moderators: Susan R. Cordes, MD FACS, Ukiah, CA**

**1:55**      **The Inclusion of C1 Does not Influence Outcomes in Upper Airway Stimulation for Treatment of Obstructive Sleep Apnea**

Ayan T. Kumar, BS, Philadelphia, PA; Adam Vasconcellos, MD, Philadelphia, PA;

Maurits S. Boon, MD, Philadelphia, PA; Colin T. Huntley, MD, Philadelphia, PA

**2:00**      **Impact of PGY1 Boot Camp on Procedural Skill Development**

Scott W. Gorthey, MD, Bronx, NY; Anna C. Bitners, BS, Bronx, NY; Esther Rong, BA,

Bronx, NY; Marc J. Gibber, MD, Bronx, NY; Christina J. Yang, MD, Bronx, NY

**2:05**      **Factors Correlating to Burnout among Otolaryngology Residents**

Leighton F. Reed, BS, Memphis, TN; Rose Mary S. Stocks, MD PharmD FACS,

Memphis, TN; Anthony M. Sheyn, MD, Memphis, TN

**2:10**      **Evaluation of Drug Induced Sleep Endoscopy (DISE) Performed in an Outpatient Endoscopy Suite**

Shabnam Ghazizadeh, MD, Los Angeles, CA; Kyasha Moore, MPH MS, Los Angeles, CA;

Kianusch Kiai, MD MS, Los Angeles, CA; Abie H. Mendelsohn, MD, Los Angeles, CA

**2:15**      **The Efficacy of Surgical Management for Upper Airway Resistance Syndrome: A Systematic Review and Case Series**

Lucas D. Harless, MD, San Rafael, CA; Megan L. Durr, MD, Oakland, CA

**2:20**      **Does Insurance Status Impact Delivery of Care with Upper Airway Stimulation for Obstructive Sleep Apnea?**

Jena C. Patel, BS, Philadelphia, PA; Michael C. Topf, MD, Philadelphia, PA; Maurits

Boon, MD, Philadelphia, PA; Colin Huntley, MD, Philadelphia, PA

**2:25**      **Resident Physician Burnout and Well Being: One Intervention and Its Impact**

Kristin L. Stevens, MD, Minneapolis, MN; Amy Anne D. Lassig, MD, Minneapolis, MN



**2:30 Q&A**

**2:35 - 3:05 Break with Exhibitors**

**3:05 - 3:55 PANEL: STATE OF THE ART DIAGNOSIS AND MANAGEMENT OF CONGENITAL HEARING LOSS**

**Moderator:** John P. Bent III, MD, Bronx, NY

**Panelists:** Matthew L. Bush, MD PhD FACS, Lexington, KY

John H. Greinwald Jr., MD, Cincinnati, OH

Judith E.C. Lieu, MD MSPH, St. Louis, MO

Blake C. Papsin, MD FACS, Toronto, ON Canada

## CLINICAL FUNDAMENTALS AND GENERAL OTOLARYNGOLOGY

**Moderators: Stacey T. Gray, MD FACS, Boston, MA**

**Todd T. Kingdom, MD FACS, Aurora, CO**

**3:55 Designing a Resident Led Otolaryngology Clinic Curriculum at a Community Health Center for Underserved Patients: An Initial Experience**

Christopher D. Vuong, MD, Loma Linda; Nathan H. Lee, BS, Loma Linda, CA;

Shannon O. Fujimoto, BS, Loma Linda, CA; Khanh K. Nguyen, MD, Loma Linda, CA;

Priya D. Krishna, MD, Loma Linda, CA; Daniel I. Kwon, MD, Loma Linda, CA

**4:00 Evaluating Gender Parity in Operative Experience for Otolaryngology Residencies in the United States**

Richard K. Gurgel, MD, Salt Lake City, UT; Brandon R. Cardon, MD, Salt Lake City, UT;

Chelsea M. Allen, PhD, Salt Lake City, UT; Angela P. Presson, PhD, Salt Lake City, UT;

Sukgi S. Choi, MD, Boston, MA; Robert H. Miller, MD MBA, Houston, TX

**4:05 Hypertension Associated with Epistaxis in U.S. Hospital Population**

James H. Wilson, MChem, Charlottesville, VA; Jose L. Mattos, MD MPH,

Charlottesville, VA; Cyrelle-Elize R. Fermin, BS, Charlottesville, VA; Ian T. Churnin, MD,

Charlottesville, VA; Jamiluddin Qazi, BS, Charlottesville, VA; Spencer C. Payne, MD,

Charlottesville, VA

**4:10 Factors Influencing Medical Student Choice of Otolaryngology: What Impacts Their Decision**

Leila J. Mady, MD PhD MPH, Pittsburgh, PA; Amber D. Shaffer, PhD, Pittsburgh, PA; Noel

Jabbour, MD, Pittsburgh, PA; Barry M. Schaitkin, MD, Pittsburgh, PA

**4:15 Gender Trends in Authorship of Original Otolaryngology Publications: A Fifteen Year Perspective**

Devki C. Shukla, BS, New York, NY; Annie E. Arrighi-Allisan, BA, New York, NY (Presenter);

Annika M. Meyer, MD, New York, NY; Sarah M. Kidwai, MD, New York, NY;

Sharon H. Barazani, BS, New York, NY; Maura K. Cosetti, MD, New York, NY;

Marita S. Teng, MD, New York, NY

**4:20 Q&A**

**4:25 Improving Inpatient Resident Hand-Offs and Transitions of Care with an Automated Tool for Computer Generated Patient Lists**

Austin N. DeHart, MD, Richmond, VA; Kelley M. Dodson, MD, Richmond, VA

- 4:30**            **Otolaryngology Departmental Education and Standardized Guidelines Decrease Number and Amount of Opioid Prescriptions**  
Katherine A. Lees, MD, Rochester, MN
- 4:35**            **Retrospective Severity Analysis of Facial Fractures at an Urban Level I Trauma Center from 2008-2017**  
Bianca Georgakopoulos, BS, Washington, DC; Armon Panahi, BS, Washington, DC;  
Andrew D. Sparks, MS, Washington, DC; Philip E. Zapanta, MD, Washington, DC
- 4:40**            **Building an Otoscopic Screening Tool Using Deep Learning Image Recognition**  
Devon M. Livingstone, MD, Calgary, AB Canada; Aron S. Talai, MSc, Calgary, AB Canada;  
Justin K. Chau, MD, Calgary, AB Canada; Nils D. Forkert, PhD, Calgary, AB Canada
- 4:45**            **ENT Mentorship Program for Preclinical Medical Students**  
Rishabh Sethia, MD, Columbus, OH; Cameron C. Sheehan, MD, Columbus, OH; Douglas Danforth, PhD, Columbus, OH; Garth Essig Jr., MD, Columbus, OH;  
Theodoros N. Teknos, MD, Cleveland, OH; Charles A. Elmaraghy, MD, Columbus, OH
- 4:50**            **Q&A**
- 4:55**            **Introduction of President-Elect, C. Gaelyn Garrett, MD, Nashville, TN**  
**By Sigsbee W. Duck, MD**
- 5:00**            ***Adjourn***

# POSTER PROGRAM

## Allergy/Rhinology

- E1. Predictive Factors for Sinonasal Outcome Test 22 Improvement in Chronic Sinusitis Patients with and without Osteoneogenesis**  
Seth A. Ahlquist, BS, Los Angeles, CA; Ashley E. Kita, MD, Los Angeles, CA; Albert Y. Han, MD PhD, Los Angeles, CA; Jeffrey D. Suh, MD, Los Angeles, CA
- E2. Understanding the Molecular Pathogenesis of Chronic Rhinosinusitis and Potential Therapeutic Agents: A Meta-Analysis**  
David Z. Allen, BA, Columbus, OH; Ross A. Wanner, BA, Columbus, OH; Sean McDermott, BA, Columbus, OH; Jihad Aljabban, BA, Columbus, OH; Omar Latif, BA, Columbus, OH; Charles Elmaraghy, MD, Columbus, OH
- E3. Relationship between Cancer and Olfactory Dysfunction: A Cross-Sectional Analysis of NHANES 2013-2014**  
Cyrelle-Elize R. Fermin, BS, Charlottesville, VA; Jose L. Mattos, MD MPH, Charlottesville, VA (Presenter); Spencer C. Payne, MD, Charlottesville, VA; Jamil J. Qazi, BS, Charlottesville, VA; James H. Wilson, BS, Charlottesville, VA; Ian T. Churnin, MD, Charlottesville, VA
- E4. WITHDRAWN - Evaluation of Olfactory Training for Post-Viral Olfactory Dysfunction**  
Pawina Jiramongkolchai, MD, St. Louis, MO; Dorina Kallogjeri, MD MPH, St. Louis, MO; Daniel P. Lander, BS, St. Louis, MO; Michael Jones, PhD, St. Louis, MO; Jonathan E. Peelle, PhD, St. Louis, MO; Jay F. Piccirillo, MD, St. Louis, MO
- E5. Aspirin Desensitization Therapy in Aspirin Exacerbated Respiratory Disease: A Systematic Review**  
Natasha L. Larivée, BSc MSc, St. John, NB Canada; Christopher J. Chin, MD FRCSC, St. John, NB Canada
- E6. The Transverse Turbinate Line: A Reliable Landmark for Identification of the Maxillary Sinus Natural Ostium**  
Brian C. Lobo, MD, Gainesville, FL; Julia C. Comer, MD, Gainesville, FL; Carolyn A. Chabuz, BS, Gainesville, FL
- E7. Four Handed Endoscopic and Orbital Approach for Frontal Sinus and Medial Orbital Tumors: Surgical Management of Two Cases**  
Chadi A. Makary, MD, Martinsburg, WV; Christopher A. Maroun, MD, Baltimore, MD (Presenter); Christopher A. Maroun, MD, Baltimore, MD; John Nguyen, MD, Morgantown, WV; Hassan H. Ramadan, MD, Morgantown, WV
- E8. Cranial Base Manifestations of IgG4 Related Disease: A Multi-Institutional Study**  
John P. Marinelli, BS, Rochester, MN; Eric M. Dowling, MD, Rochester, MN (Presenter); Chiara A. Marvisi, MD, Parma, Italy; Augusto A. Vaglio, MD PhD, Parma, Italy; Alessandro A. Palumbo, MD, Parma, Italy; Patrick T. Kiessling, BS, Rochester, MN; Matthew L. Carlson, MD, Rochester, MN
- E9. Association between Smell and Taste Dysfunction and Obesity and Metabolic Syndrome in Older Adults**  
Jamiluddin J. Qazi, BS, Charlottesville, VA; James H. Wilson, BS, Charlottesville, VA; Cyrelle-Elize R. Fermin, BS, Charlottesville, VA; Ian T. Churnin, MD, Charlottesville, VA; Spencer C. Payne, MD, Charlottesville, VA; Jose L. Mattos, MD MPH, Charlottesville, VA
- E10. No poster**

- E11. WHIM Syndrome with a Chemokine Receptor Defect and Its Impact on Paranasal Sinus Development**  
Caroline C. Rieger, MD, Washington, DC; Victoria Idowu, BS, Bethesda, MD; Carmen Brewer, PhD, Bethesda, MD; Chris Zalewski, PhD, Bethesda, MD; Kelly King, PhD, Bethesda, MD; Hung J. Kim, MD, Washington, DC
- E12. Surgical Outcomes and Imaging Findings of Respiratory Epithelial Adenomatoid Hamartoma: A Systematic Review**  
Chetan Y. Safi, MD, New York, NY; Carol Li, MD, New York, NY; Charles A. Riley, MD, New York, NY; Rohan Ramakrishna, MD, New York, NY; Abtin Tabaei, MD, New York, NY
- E13. Antibodies Directed against Integration Host Factor Inhibited Biofilm Formation on Multiple Sinus Implant Materials**  
Rishabh Sethia, MD, Columbus, OH; Lauren G. Martyn, BS, Columbus, OH; Laura A. Novotny, MS, Columbus, OH; Steven D. Goodman, PhD, Columbus, OH; Lauren O. Bakaletz, PhD, Columbus, OH; Charles A. Elmaraghy, MD, Columbus, OH
- E14. Atypical Esthesioneuroblastoma Originating in the Maxillary Sinus Extending into the Nasopharynx**  
Eshita Singh, BS, Cincinnati, OH; James C. Wang, MD PhD, Cincinnati, OH; Hayley Born, MD, Cincinnati, OH; Allen M. Seiden, MD, Cincinnati, OH
- E15. Clinical Experience with the Contralateral Transmaxillary Approach to the Petrous Apex**  
Carl H. Snyderman, MD MBA, Pittsburgh, PA; Eric W. Wang, MD, Pittsburgh, PA; Juan C. Fernandez-Miranda, MD, Stanford, CA; Paul A. Gardner, MD, Pittsburgh, PA
- E16. A Rare Presentation of Adenoid Cystic Carcinoma of the Inferior Turbinate**  
Briana Vamosi, BS, Cincinnati, OH; James C. Wang, MD PhD, Cincinnati, OH; Raquel Zemtsov, MD, Cincinnati, OH; Allen M. Seiden, MD, Cincinnati, OH
- E17. Using Ophthalmologic Examination to Predict Long Term Prognosis of Abducens Nerve Palsy in Endoscopic Skull Base Surgery**  
Rachel L. Whelan, MD, Pittsburgh, PA; Michael M. McDowell, MD, Pittsburgh, PA; Courtney C. Chou, MD, Pittsburgh, PA; Carl H. Snyderman, MD, Pittsburgh, PA; Susan T. Stefko, MD, Pittsburgh, PA; Eric W. Wang, MD, Pittsburgh, PA

#### Facial Plastic & Reconstructive

- E18. Prevalence of Patterns of Facial Trauma among Young Athletes**  
Jason R. Audlin, MD, Syracuse, NY; Kiranya E. Tipirneni, MBBS, Syracuse, NY; Jesse T. Ryan, MD, Syracuse, NY
- E19. Facial Plastic Surgery in Otolaryngology: A Struggle for Recognition on Two Fronts**  
Marlon M. Maducdoc, MD MBA, Irvine, CA; Jack L. Birkenbeuel, BS, Irvine, CA; Dillon C. Cheung, BS, Irvine, CA; Hamid R. Djalilian, MD, Irvine, CA; Harrison W. Lin, MD PhD, Irvine, CA
- E20. Narrow Field Fibula Flap**  
Christopher J. Britt, MD, Maywood, IL; Ryan M. Smith, MD, Chicago, IL; Kofi D. Boahene, MD, Baltimore, MD
- E21. Vasoactive Medications in Pedicled Flaps: A Systematic Review**  
Sabrina A. Brody-Camp, MD MPH, New Orleans, LA; Ryan D. Winters, MD, New Orleans, LA

- E22. Objective Results in an Emerging Facial Nerve Center**  
Jimmy Chen, BA, Portland, OR; Natalie A. Krane, MD, Portland, OR; Wenelia Baghoomian, BA, Portland, OR; Mark K. Wax, MD, Portland, OR; Myriam Loyo, MD, Portland, OR
- E23. Risk Factors for Auricular Hematoma and Recurrence after Drainage**  
Prarthana J. Dalal, BS, Chicago, IL; Matthew R. Purkey, MD, Chicago, IL (Presenter); Caroline P. Price, BS, Chicago, IL; Douglas M. Sidle, MD, Chicago, IL
- E24. IL-4 Mediated Regeneration of Facial Nerve Gap Defect in the Rat Model**  
John E. Hanks, MD, Ann Arbor, MI; S. Ahmed Ali, MD, Ann Arbor, MI; Aaron W. Stebbins, BS, Ann Arbor, MI; Eva L. Feldman, MD, Ann Arbor, MI; Michael J. Brenner, MD, Ann Arbor, MI
- E25. The Effect of Platelet Rich Fibrin Matrix on Skin Rejuvenation: A Split Face Comparison**  
Shirley Hu, MD, New York, NY; Michael Tehrani-Bassiri, MD, New York, NY; Manoj T. Abraham, MD, Poughkeepsie, NY
- E26. Improving Graft Survival and Clinical Results in Irradiated Scalps**  
William H. Lindsey, MD, McLean, VA; William W. Lindsey, BS, Richmond, VA (Presenter)
- E27. Machine Learning for Objective Assessment of Intraoperative Technical Skill in Septoplasty: A Multisite External Validation Study**  
Molly L. O'Brien, BS, Baltimore, MD; Narges Ahmidi, PhD, Munich, Germany; Anand Malpani, PhD, Baltimore, MD; S. Swaroop Vedula, MBBS PhD, Baltimore, MD; Greg D. Hager, PhD, Baltimore, MD; Masaru Ishii, MD PhD, Baltimore, MD
- E28. Effect of Perioperative Factors on Ear Keloid Recurrence**  
Amelia K. Ramsey, BS, Shreveport, LA; Kevin A. Moore, MD, Shreveport, LA; Kaveh K. Karimenjad, MD, Shreveport, LA; Paul M. Weinberger, MD, Shreveport, LA; Paige E. Bundrick, MD, Shreveport, LA
- E29. An Overview on Perioperative Pain Management Using Nonopioid Medications in Patients Undergoing Septoplasty or Septorhinoplasty**  
Cong N. Ran, MD PhD, Chicago, IL; Douglas M. Sidle, MD, Chicago, IL
- E30. Analysis of the Aging Face for the Resident**  
Sunthosh K. Sivam, MD, Kansas City, KS; Clinton D. Humphrey, MD, Kansas City, KS; J. David Kriet, MD, Kansas City, KS

#### General

- E31. Otolaryngology Resident Knowledge in Medical Coding, Billing and Documentation**  
Jay J. Agarwal, MD, New York, NY; Enrique G. Gorbea Dolagaray, MD, New York, NY; Arvind K. Badhey, MD, New York, NY; Kirkland Lozada, MD, New York, NY; Patrick Colley, MD, New York, NY
- E32. Evaluating Opioid Prescription Practices in Head and Neck Surgery: A Single Center Analysis**  
Arvind K. Badhey, MD, New York, NY; Anni Wong, MD, New York, NY; Jaclyn Klimczak, MD, New York, NY; Patrick Colley, MD, New York, NY; Marita Teng, MD, New York, NY
- E33. Impact of a Prolonged Surgical Mission Expedition on the Breadth of Otolaryngology-Head and Neck Surgery Practice in a Developing Nation**  
Dessalegn Berihu, MD, Mekelle, Ethiopia; Yikal Zemene, MD, Mekelle, Ethiopia; Joshua P Wiedermann, MD, Mekelle, Ethiopia

- E34. Industry Payments for Otolaryngology Research: A Four Year Analysis of the Open Payments Database**  
Philip R. Brauer, BA, New Haven, CT; Elliot C. Morse, BS, New Haven, CT; Saral Mehra, MD MBA, New Haven, CT
- E35. The Development of an Ultrasound Community of Practice within Otolaryngology**  
Kevin A. Calamari, BA, Columbus, OH; Sean M. McDermott, BS, Columbus, OH; Christine C. Barron, BA, Columbus, OH; Garth F. Essig, MD, Columbus, OH
- E36. Are Opioids over Prescribed in Otolaryngology Surgery?**  
Geoffrey C. Casazza, MD, Salt Lake City, UT; Hilary C. McCrary, MD, Salt Lake City, UT; Ryan Cardon, PharmD BCPS, Salt Lake City, UT; Richard K. Gurgel, MD, Salt Lake City, UT; Jeremy D. Meier, MD, Salt Lake City, UT
- E37. Development and Prospective Evaluation of a Novel High Fidelity Retrobulbar Hematoma Simulator**  
Christopher J. Chin, MD FRCS, St. John, NB Canada; Alexander E. Clark, BA, St. John, NB Canada (Presenter); Kathryn Roth, MD FRCS, London, ON Canada; Kevin Fung, MD FRCS, London, ON Canada
- E38. Parathyroid CT Angiography in Primary Hyperparathyroidism with Nonlocalizing Sestamibi: A Case Series**  
Michael J. Coulter, MD, San Diego, CA; Isaac E. Schwartz, MD, Naples, Campania Italy; Gilbert E. Boswell, MD, San Diego, CA
- E39. Case Report: Facial Nerve Weakness after Sodium Hypochlorite Dental Irrigation**  
Wesley L. Davison, MD, New York, NY; Ana H. Kim, MD, New York, NY
- E40. Opioid Stewardship in Otolaryngology/Head and Neck Surgery**  
Kelly M. Dean, MD, Chapel Hill, NC; Asim A. Lal, BS, Chapel Hill, NC; Trevor G. Hackman, MD, Chapel Hill, NC; Peggy P. McNaull, MD, Chapel Hill, NC; Brooke A. Chidgey, MD, Chapel Hill, NC
- E41. Gender Gap in Residency and Fellowship Directorships in Otolaryngology Training**  
Madison V. Epperson, BA, Cincinnati, OH; Christopher J. Gouveia, MD, Santa Clara, CA; Meredith E. Tabangin, MPH, Cincinnati, OH; Stacey L. Ishman, MD MPH, Cincinnati, OH; Mekibib Altaye, PhD, Cincinnati, OH; Alice C. Tang, MD, Cincinnati, OH
- E42. Does Placement of a Drain Decrease the Rate of Post-Parotidectomy Seroma Formation?**  
Soroush Farnoosh, MD, Syracuse, NY; Mark F. Marzouk, MD, Syracuse, NY
- E43. Trends in National Institutes of Health Funding among Otolaryngology Principal Investigators**  
Zainab Farzal, MD, Chapel Hill, NC; Erin M. Mamuyac, MD, Chapel Hill, NC; Elizabeth D. Stephenson, BA, Chapel Hill, NC; Julia S. Kimbell, PhD, Chapel Hill, NC; Adam M. Zanation, MD, Chapel Hill, NC; Adam J. Kimple, MD PhD, Chapel Hill, NC
- E44. Design and Implementation of an Academic Otolaryngology-Head and Neck Surgery Residency Program in a Developing Nation**  
Filmawit Gebremeskel, MD, Mekelle, Ethiopia; Yilkal Zemene, MD, Mekelle, Ethiopia; Joshua P. Wiedermann, MD, Mekelle, Ethiopia
- E45. Etiology Analysis of Mandibular Fractures at an Urban Trauma Center from 2008-2017**  
Bianca Georgakopoulos, BS, Washington, DC; Armon Panahi, BS, Washington, DC; Andrew D. Sparks, MS, Washington, DC; Philip E. Zapanta, MD, Washington, DC

- E46. Retrospective Analysis of Mandibular Fractures at a Level I Trauma Center from 2008-2017**  
Bianca Georgakopoulos, BS, Washington, DC; Armon Panahi, BS, Washington, DC;  
Andrew D. Sparks, MS, Washington, DC; Sean B. Kane, MD, Washington, DC;  
Philip E. Zapanta, MD, Washington, DC
- E47. Retrospective Comparison of Facial AIS to other Patient Variables at an Urban Trauma Center from 2008 to 2017**  
Bianca Georgakopoulos, BS, Washington, DC; Armon Panahi, BS, Washington, DC;  
Andrew D. Sparks, MS, Washington, DC; Philip E. Zapanta, MD, Washington, DC
- E48. Feasibility of Intensive Ecological Sampling of Tinnitus in Intervention Research**  
Katherine M. Gerull, BA, St. Louis, MO; Dorina Kallogjeri, MD MPH, St. Louis, MO;  
Marilyn L. Piccirillo, MA, St. Louis, MO; Thomas L. Rodebaugh, PhD, St. Louis, MO;  
Eric J. Lenze, MD, St. Louis, MO; Jay F. Piccirillo, MD, St. Louis, MO
- E49. Current Status of Medical Coding Education in US Otolaryngology Residency Programs**  
Enrique G. Gorbea, MD, New York, NY; Kirkland Lozada, MD, New York, NY; Patrick Colley, MD,  
New York, NY
- E50. Status of Medical Coding, Billing and Documentation Knowledge among Otolaryngology Attendings**  
Enrique Gorbea, MD, New York, NY; Jay Agarwal, MD, New York, NY; Arvind Badhey, MD, New  
York, NY; Kirkland N. Lozada, MD, New York, NY; Roheen Rhaitata, MD, New York, NY; Patrick  
Colley, MD, New York, NY
- E51. Role of Preoperative Radiography for Management of Recurrent Secondary Hyperparathyroidism in Chronic Renal Failure**  
Frances Mei L. Hardin, MD, Columbia, MO; Joseph P. Cousins, MD PhD, Columbia, MO;  
Robert P. Zitsch, MD, Columbia, MO
- E52. Evaluating Differences in Subjective Scoring for Commitment to Academic Medicine Using the Standard Letters of Recommendation in Otolaryngology Residency**  
Javier J.M. Howard, MPH, Cincinnati, OH; James Wang, MD PhD, Cincinnati, OH;  
Meredith E. Tabangin, MPH, Cincinnati, OH; Sarah Rohde, MD, Nashville, TN; Vinita Takiar, MD  
PhD, Cincinnati, OH; Alice L. Tang, MD, Cincinnati, OH
- E53. Retropharyngeal Fluid Collection: A Rare Case of Superior Vena Cava Syndrome**  
Jessica B. Howell, MD, Richmond, VA; Tyler K. Deblieux, MD, Richmond, VA; Ryan S. Nord, MD,  
Richmond, VA
- E54. Impact of Otolaryngology PGY-1 Curriculum Changes on Resident Operative Experience**  
Benjamin N. Hunter, MD, Springfield, IL; Marc E. Error, MD, Salt Lake City, UT;  
Dana L. Crosby, MD, Springfield, IL; Arun Sharma, MD MS, Springfield, IL
- E55. ABC Camerawork Guide for Dr. Photographer: An Exploratory Qualitative Study**  
Farid F. Ibrahim, MD, Montreal, QC Canada; Sam J. Daniel, MD, Montreal, QC Canada
- E56. Impact of a Resident Educational Program to Improve Inpatient Documentation**  
Keven S.Y. Ji, BA, Durham, NC; Melissa A. Pressley, BS, Durham, NC; Russel R. Kahmke, MD,  
Durham, NC; Charles R. Woodard, MD, Durham, NC; Howard W. Francis, MD, Durham, NC;  
David W. Jang, MD, Durham, NC
- E57. Pattern of Urgent Airway Management for Otolaryngology Service: A 3 Year County Hospital Experience**  
Jee-Hong Kim, MD, Los Angeles, CA; David Lam, BS, Los Angeles, CA; Kyohei Itamura, BS, Los  
Angeles, CA; Kevin Hur, MD, Los Angeles, CA; Tamara N. Chambers, MD, Los Angeles, CA

- E58. Optimizing the Management of Patients with Cerebrospinal Fluid Leaks Requiring Operative Intervention**  
Ashley Kita, MD, Los Angeles, CA; Montana Upton, BS, Los Angeles, CA; Nikhil Bellamkonda, BS, Los Angeles, CA; Maie A. St. John, MD PhD, Los Angeles, CA
- E59. Laser Tongue Treatment for Halitosis**  
Victor Z. Kizhner, MD, New York, NY; Yosef P. Krespi, MD, New York, NY (Presenter); Karen A. Wilson, DPM, New York, NY; Karen A Wilson, dpm, New York, New York
- E60. Pain Management and Prescribing Practices in Otolaryngology Training Programs**  
Jaclyn A. Klimczak, MD, New York, NY; Arvind K. Badhey, MD, New York, NY; Anni Wong, MD, New York, NY; Patrick M. Colley, MD, New York, NY; Marita S. Teng, MD, New York, NY
- E61. Getting to Know You Better: A Survey of Otolaryngology Residency Applicants' Interview Preferences**  
Alvin B. Ko, MD, Detroit, MI; Amy M. Williams, PhD, Detroit, MI; Kathleen L. Yaremchuk, MD, Detroit, MI
- E62. Should Otolaryngologists Care about Their Online Ratings?**  
Justin A. Koceja, BS, San Antonio, TX; Eric R. Smith, BS, San Antonio, TX; Dylan Z. Erwin, BBA BA, San Antonio, TX; Marisa A. Earley, MD, San Antonio, TX
- E63. Doctor, Will It Hurt? Assessment of Patient Pain during Routine Otolaryngology In-Office Procedures with a Validated Pain Questionnaire**  
Brittany A. Leader, MD, Cincinnati, OH; Javier J.M. Howard, MPH, Cincinnati, OH; John Paul Giliberto, MD, Cincinnati, OH
- E64. Development of a Low Cost, Renewable Endoscopic Sinus Surgery Skills Trainer (ESSST)**  
Ryan P. Leary, MD, Bronx, NY; Jeremy M. Feintuch, BA, New York, NY; Joshua D. Feintuch, BA, New York, NY; Waleed M. Abuzeid, MD, Bronx, NY; I. Martin Levy, MD, Bronx, NY; Marc J. Gibber, MD, Bronx, NY
- E65. Association of Interview Positions Compared to Residency Program Attributes**  
Andrew H. Lee, MD, Baltimore, MD; Ji Soo J. Kim, BS, Baltimore, MD; Ross S. Liao, BS, Baltimore, MD; Patrick J. Young, BS, Los Angeles, CA; Alexander T. Hillel, MD, Baltimore, MD; David W. Eisele, MD, Baltimore, MD
- E66. Analysis of Peritonsillar Abscess Patients Using the NSQIP Surgical Registry**  
Felicity Lenes-Voit, MD, Dallas, TX; Charles Saadeh, MD, Dallas, TX; Ron B. Mitchell, MD, Dallas, TX; Gopi B. Shah, MD MPH, Dallas, TX; Romaine F. Johnson, MD MPH, Dallas, TX
- E67. Improvement of Speech Discrimination with High Dose B Vitamin Therapy: A Case Series**  
Melba F. Lewis, MD, Austin, TX; Jessica K. Malsky, BA, Austin, TX; Joseph A. Malsky, MD, Houston, TX; Jenifer A. Rufin, PA-C, Austin, TX
- E68. Does Nasal Surgery Affect Voice Outcomes? A Systematic Review with Meta-Analyses**  
Friederike S. Luetzenberg, BS, Orlando, FL; Christopher Xiao, MD, Oakland, CA; Nancy Jiang, MD, Oakland, CA; Jonathan Liang, MD, Oakland, CA
- E69. Effectiveness of Adjunctive Mitomycin in Otolaryngologic Procedures: A Systematic Review**  
Kimberly Luu, MD, Vancouver, BC Canada; Paula Tellez, MD, Vancouver, BC Canada; Neil K. Chadha, MD MPH, Vancouver, BC Canada
- E70. Discrete Aerodynamic Pressure Waveform Analysis to Identify Partial Airway Collapse**  
Ahmad F. Mahmoud, MD, Philadelphia, PA; Erica R. Thaler, MD, Philadelphia, PA



- E71. Utility of Smartphone Telemedical Consults for Peritonsillar Abscess Diagnosis and Triage**  
Jonathan R. Mallen, MD, Farmington, CT; Manan U. Shah, MD, Bowie, MD; Steven Wolfe, MD, Hartford, CT; Chia-Ling Kuo, PhD, Farmington, CT; Jinjian Mu, MS, Farmington, CT; Gregory Bonaiuto, MD, Hartford, CT
- E72. Recent Trends in Female and Racial/Ethnic Minority Applicants of US Otolaryngology Residency Programs**  
Erin M. Mamuyac, MD, Chapel Hill, NC; Zainab Farzal, MD, Chapel Hill, NC; Charles S. Ebert Jr., MD MPH, Chapel Hill, NC; Rupali N. Shah, MD, Chapel Hill, NC; Robert A. Buckmire, MD, Chapel Hill, NC; Adam M. Zanation, MD, Chapel Hill, NC
- E73. Cost Savings of an Asynchronous Telemedicine Consult Management System in Military Otolaryngology**  
Kastley M. Marvin, MD, San Diego, CA; Art A. Ambrosio, MB MBA, San Diego, CA
- E74. The Role of Vitamin D in Recurrent Tonsillitis: A Systematic Review**  
Ahmad A. Mirza, MBBS, Jeddah, Makkah Saudi Arabia; Abdulrahman A. Alharbi, MBBS, Jeddah, Makkah Saudi Arabia; Hani Z. Marzouki, FRCSC, Jeddah, Makkah Saudi Arabia; Talal A. Al-khatib, FRCSC, Jeddah, Makkah Saudi Arabia; Faisal Zawawi, FRCSC, Jeddah, Makkah Saudi Arabia
- E75. How Do We Determine the Necessity of Surgery for Deep Neck Infection?**  
Keisuke M. Mizuno, MD, Kobe, Hyogo Japan; Shogo S. Shinohara, MD PhD, Kobe, Hyogo Japan; Kiyomi H. Hamaguchi, MD PhD, Kobe, Hyogo Japan; Shinji T. Takebayashi, MD PhD, Kobe, Hyogo Japan; Keizo F. Fujiwara, MD, Kobe, Hyogo Japan; Yasushi N. Naito, MD PhD, Kobe, Hyogo Japan
- E76. Opioid Prescribing Patterns in Otolaryngology Residents**  
Alexander W. Murphey, MD, Charleston, SC; Shaun A. Nguyen, MD MA, Charleston, SC; Ted A. Meyer, MD PhD, Charleston, SC
- E77. Is the Gender Gap Closing in Academic Otolaryngology Subspecialties? An Analysis of Research Productivity Differences between Male and Female Otolaryngologists**  
Somtochi O. Okafor, BS, Dallas, TX; Ashleigh A. Halderman, MD, Dallas, TX; Kathleen M. Tibbetts, MD, Dallas, TX; Gopi S. Shah, MD, Dallas, TX; Brittany N. Tillman, MD, Dallas, TX; Ashley D. Agan, MD, Dallas, TX
- E78. Sound Intensities Measured during Cadaveric Cortical Bone Drilling**  
Pranati Pillutla, BS, Lubbock, TX; James C. Wang, MD PhD, Cincinnati, OH; Steven Zupancic, PhD AuD, Lubbock, TX; Joshua C. Demke, MD, Lubbock, TX
- E79. Clinical Outcomes of Expansion Sphincter Pharyngoplasty for Obstructive Sleep Apnea Compared to Continuous Positive Airway Pressure Therapy**  
Sophia E. Rokkas, BSc, Philadelphia, PA; Maurits S. Boon, MD, Philadelphia, PA; Colin T. Huntley, MD, Philadelphia, PA
- E80. Hypoglossal Nerve Stimulation Impact on Cardiovascular Risk: A Case Report**  
Sophia E. Rokkas, BSc, Philadelphia, PA; Colin T. Huntley, MD, Philadelphia, PA; Maurits S. Boon, MD, Philadelphia, PA
- E81. Atypical Mycobacterial Infection of the Preauricular Facial Skin**  
Devin M. Ruiz, MD, Boston, MA; Victoria Fischman, BA, Boston, MA; Elie E. Rebeiz, MD, Boston, MA

- E82. Hypoglossal Nerve Stimulation in Veterans with Obstructive Sleep Apnea**  
Kathleen M. Sarber, MD, Cincinnati, OH; Katherine W. Chang, BS, Cincinnati, OH;  
Madison K. Epperson, BS, Cincinnati, OH; Stacey L. Ishman, MD MPH, Cincinnati, OH;  
Reena Dhanda Patil, MD, Cincinnati, OH
- E83. Analysis of Pathogenic Bacteria and Complication Rates in Acute Sinusitis: A Nationwide Inpatient Study**  
Jonathan C. Simmonds, MD, Boston, MA; Elie E. Rebeiz, MD, Boston, MA
- E84. Neurophysiological Monitoring of Tongue Muscle Activation during Hypoglossal Nerve Stimulation**  
Joshua J. Sturm, MD PhD, New York, NY; Oleg Modik, PhD, New York, NY; Maria V. Suurna, MD FACS, New York, NY
- E85. Speaking Softly: Adherence to Subspecialty Guidelines in the Emergency Department**  
Zahrah M. Taufique, MD MBA, New York, NY; Micah Timen, MD, New York, NY;  
Jordan L. Swartz, MD MA, New York, NY; David R. Friedmann, MD, New York, NY
- E86. Impact of a Novel Teaching Paradigm on Surgical Training within the Otolaryngology-Head and Neck Surgery Residency Program in a Developing Nation**  
Seid Temam, MD, Mekelle, Ethiopia; Yilkal Zemene, MD, Mekelle, Ethiopia;  
Joshua P. Wiedermann, MD, Mekelle, Ethiopia
- E87. Ambient Pressure Tympanometry with Respiratory Maneuvers: Use in Patients with Suspected Patulous Eustachian Tube**  
Anthony Thai, BA, Stanford, CA; Zahra N. Sayyid, BS, Palo Alto, CA; Davood K. Hosseini, MD, Palo Alto, CA; Austin Swanson, AuD, Palo Alto, CA; Jennifer Y. Lee, MD, Palo Alto, CA; Yona Vaisbuch, MD, Palo Alto, CA
- E88. Training as a Factor for Leadership Roles in Otolaryngology Residency Programs**  
Brian A. Walker, MD, Phoenix, AZ; S. Ryan Hall, MD, Phoenix, AZ; Michael J. Marino, MD, Phoenix, AZ
- E89. Improving Surgical Training with SIGMA Surgical Software: Implementation with Simulation Temporal Bone Dissection**  
Michael S. Weinstock, MD, Bronx, NY; Jeremy M. Feintuch, BA, New York, NY (Presenter);  
Joshua D. Feintuch, BA, New York, NY; Marc J. Gibber, MD, Bronx, NY
- E90. Three Dimensional Anatomy Learning: A Randomized Comparative Study of a Computer Based Model of the Trigeminal Nerve**  
Douglas M. Worrall, MD, New York, NY; Joshua Zeiger, MD, New York, NY; Ann E. Powers, BA, New York, NY; David Y. Goldrich, BA, New York, NY; Alfred M. Iloreta, MD, New York, NY
- E91. Neural Substrates of Motor Skill Acquisition in Surgical Trainees: An fMRI Study of Otolaryngology Residents**  
Nina W. Zhao, MD, San Francisco, CA; Patpong Jiradejvong, MS, San Francisco, CA;  
Lauren Y. Jacobs, BS, San Francisco, CA; Charles J. Limb, MD, San Francisco, CA

#### Head & Neck

- E92. Recurrent Pigmented Villonodular Synovitis of the Temporomandibular Joint: Case Report and Management of Recurrence**  
Moriyike O. Akinosum, BS, Chicago, IL; Barry L. Wenig, MD, Chicago, IL; Virginie Achim, MD, Chicago, IL

- E93. Meta-Analysis Utilizing Public Data Suggests Role of DKK1 in the Pathogenesis of Anaplastic Thyroid Carcinoma**  
David Z. Allen, BA, Columbus, OH; Ross Wanner, BS, Columbus, OH; Sean McDermott, BS, Columbus, OH; Jihad Aljabban, BA MMSc, Columbus, OH; Omar Latif, BA, Columbus, OH; Kris Jatana, MD, Columbus, OH
- E94. AZD4547 Inhibits Progression in a cSCC Mouse Tumor Cell Xenograft Model via mTORC1 and AKT Signaling**  
Kent L. Burton, MD, Shreveport, LA; Alok R. Khandelwal, PhD, Shreveport, LA; Xiaohua Rong, Shreveport, LA; Tara N. Moore-Medlin, PhD, Shreveport, LA; Xiaohui Ma, MD, Shreveport, LA; Cherie-Ann O. Nathan, MD, Shreveport, LA
- E95. Oral Human Papillomavirus Infections and History of Tonsillectomy in US Adults**  
Janet S. Choi, MD MPH, Los Angeles, CA; Alison J. Yu, BA, Los Angeles, CA; Uttam K. Sinha, MD, Los Angeles, CA
- E96. Head and Neck Cancer Surgery after Admission through the Emergency Department: Short Term Outcomes and Costs of Care**  
Alexander N. Goel, BA, Los Angeles, CA; Govind Raghavan, BA, Los Angeles, CA; Jennifer L. Long, MD PhD, Los Angeles, CA
- E97. Systematic Review of Anastomotic Coupling Devices for Arterial Anastomoses in Microvascular Free Tissue Transfer**  
Abhijit R. Gundale, MD, Shreveport, LA; Yuro J. Berkovic, MD, Shreveport, LA; Brent A. Chang, MD, Shreveport, LA
- E98. Influence of Tourniquet Duration on Postoperative Complications in Free Flap Reconstructive Head and Neck Cancer Surgery**  
John P. Marinelli, BS, Rochester, MN; Joshua R. Labott, BS, Rochester, MN; Jaime A. Aponte-Ortiz, MS, Rochester, MN; Eric J. Moore, MD, Rochester, MN; Christine M. Lohse, MS, Rochester, MN; Jeffrey R. Janus, MD, Rochester, MN
- E99. Aggressive Recurrent Fibromatosis with Laryngeal Involvement - A Case Report and Literature Review**  
Daniel K. Nguyen, BS, Lubbock, TX; Rahul Varman, MD, Lubbock, TX (Presenter); Joe Hassin Cordero, MD, Lubbock, TX
- E100. Thyroid Carcinoma Presentation and Treatment Outcomes between a County Hospital and a Private Hospital**  
Margaret C. Nurimba, BA, Los Angeles, CA; Sheng Zhou, AB, Los Angeles, CA; Brian Cameron, BS, Los Angeles, CA; Guy Talmor, BS, Los Angeles, CA; Kevin Hur, MD, Los Angeles, CA; Tamara N. Chambers, MD, Los Angeles, CA
- E101. Endoscopic Multispectral Relative Fluorescence Lifetime Imaging for Detection of Oral Carcinoma**  
Peter A. Pellionisz, BS, Los Angeles, CA; Yong Hu, BS, Los Angeles, CA; Ameet Braganza, Los Angeles, CA; Khuzaima Rungwalla, Los Angeles, CA; Warren Grundfest, MD, Los Angeles, CA; Maie A. St. John, MD PhD, Los Angeles, CA
- E102. Reconstruction of Open Maxillectomy Defects**  
Nicholas J. Thompson, MD, Chapel Hill, NC; Jeffrey M. Blumberg, MD, Chapel Hill, NC; Eugenie Du, MD, Boston, MA; Adam M. Zanation, MD, Chapel Hill, NC; Brian D. Thorp, MD, Chapel Hill, NC; Samip N. Patel, MD, Chapel Hill, NC

- E103.     Reconstructive and Oncologic Outcomes in Solid Organ Transplant Patients Undergoing Microvascular Free Tissue Transfer for Locally Advanced Cutaneous Squamous Cell Carcinoma**  
Ray Y. Wang, MD, Houston, TX; Andrew T. Huang, MD, Houston, TX
- E104.     Meta-Analysis Delineating the Molecular Pathogenesis behind the Development of Nasopharyngeal Carcinoma**  
Ross Adam Wanner, BS, Columbus, OH; Sean McDermott, BS, Columbus, OH; Jihad Aljabban, AB MMSc, Columbus, OH; Vikrum Thimmappa, MD, Columbus, OH; Nora Ibrahim, MD, Columbus, OH; Kris Jatana, MD, Columbus, OH
- E105.     HPV Related Multiphenotypic Sinonasal Carcinoma: A Case Report and Literature Review**  
Matthew L. Ward, MD, San Antonio, TX; Mikelle L. Kernig, DC, San Antonio, TX; Thomas J. Willson, MD, San Antonio, TX

Laryngology/Bronchoesophagology

- E106.     Evaluating the Role of Simulation in Cricothyrotomy Training: A Systematic Review and Meta-Analysis**  
James Alrassi, BA, Stony Brook, New York; Kevin J. Fujita, BS, Stony Brook, NY; Melissa M. Mortensen, MD, Stony Brook, NY
- E107.     Ulcerative Laryngitis in Patients on Chronic Steroids: A Case Series**  
Vaninder K. Dhillon, MD, Bethesda, MD
- E108.     First Case of Transglottic and Tracheal Histoplasmosis in the Setting of Known Sarcoidosis**  
Zachary M. Helmen, BBA, Milwaukee, WI; Jennifer P. Rodney, MD, Nashville, TN; Alexander H. Gelbard, MD, Nashville, TN
- E109.     Association between Chemotherapy, Hormonal Therapy and Onabotulinum Toxin A (BoNT-A) Efficacy in the Treatment of Adductor Laryngeal Dystonia**  
Nikita V. Kohli, MD, New York, NY; Andrew Blitzer, MD DDS FACS, New York, NY
- E110.     Management of an Aortotracheal Fistula: A Case Report**  
Andrew B. Rees, BS, Nashville, TN; Jennifer P. Rodney, MD, Nashville, TN; Alexander H. Gelbard, MD, Nashville, TN
- E111.     Pharyngeal and Laryngeal Dynamics during Wind Instrument Performance**  
Adam T. Schwalje, MD DMA, Iowa City, IA; Henry T. Hoffman, MD, Iowa City, IA
- E112.     Voice and Swallowing Quality of Life in Patients with X-Linked Dystonia Parkinsonism**  
Sungjin A. Song, MD, Boston, MA; Phillip C. Song, MD, Boston, MA
- E113.     Prediction of Effectiveness of Antacid Treatment on Abnormal Sensation in the Throat: Use of GETS-J**  
Nao Takahashi, Niigata, Japan; Kaori Ikeda, Niigata, Japan; Hironori Baba, PhD, Niigata, Japan; Takano Sasaki, Niigata, Japan; Arata Horii, Niigata, Japan
- E114.     Triticeous Cartilage Identified at Autopsy: Prevalence in Different Ancestries and Its Association with Agenesis of the Superior Horn of Thyroid Cartilage**  
Spencer D. Uetz, MS4, Grand Forks, ND; Walter L. Kemp, MD, Grand Forks, ND
- E115.     Spontaneous Regression of Laryngeal Squamous Cell Carcinoma after Biopsy**  
Mariel O. Watkins, MHS, Nashville, TN; Alan D. Tate, MD, Nashville, TN; Catherine G. Garrett, MD MMHC, Nashville, TN

- E116. Diagnostic Pathways for Dizziness: Factors Associated with Setting of First Diagnosis**  
Meredith E. Adams, MD, Minneapolis, MN; Pinar Karaca-Mandic, PhD, Minneapolis, MN; Schelomo Marmor, PhD MPH, Minneapolis, MN
- E117. Melanoma of the External Auditory Canal: A Review of Seven Cases at a Tertiary Care Referral Center**  
Eric N. Appelbaum, MD, Houston, TX; Neil D. Gross, MD FACS, Houston, TX; Adi Diab, MD, Houston, TX; Paul W. Gidley, MD FACS, Houston, TX
- E118. Endoscopic Pediatric Ossiculoplasty Following Surgery for Chronic Ear Disease**  
Christen L. Caloway, MD, Boston, MA; Anthony M. Tolisano, MD, Dallas, TX;  
Razan A. Basonbul, MPH, Boston, MA; Daniel J. Lee, MD, Boston, MA; Brandon Isaacson, MD, Dallas, TX; Michael S. Cohen, MD, Boston, MA
- E119. Bilateral IgG4 Related Disease of the Temporal Bone and Middle Ear**  
Esther A. Cheng, MD, Maywood, IL; Scott I. Mayer, BS, New Orleans, LA; John P. Leonetti, MD, Maywood, IL
- E120. Metastatic Adenocarcinoma to the Cerebellopontine Angle**  
Esther A. Cheng, MD, Maywood, IL; John P. Leonetti, MD, Maywood, IL
- E121. Evaluating the Relation between Vestibular Migraine and Motion Sickness Susceptibility**  
Dillon C. Cheung, BS, Orange, CA; Tiffany T. Pham, MS, Irvine, CA; Jack L. Birkenbeuel, BS, Irvine, CA; Omid Moshtaghi, MD, San Diego, CA; Harrison W. Lin, MD, Orange, CA;  
Hamid R. Djalilian, MD, Orange, CA
- E122. Radial Forearm Free Flap for Cochlear Implant Coverage in a Post-Irradiated Field**  
Nicholas A. Dewyer, MD, Boston, MA; Rosh K. Sethi, MD, Boston, MA; Alisa Yamasaki, MD, Boston, MA; Derrick T. Lin, MD, Boston, MA; Daniel J. Lee, MD, Boston, MA
- E123. Trends in Hearing Rehabilitation Use among Vestibular Schwannoma Patients**  
Madeleine Drusin, MD MSc, New York, NY; Brienne Lubor, BS, New York, NY; Tasher Losenegger, BS, New York, NY; Samuel Selesnick, MD, New York, NY
- E124. Endoscopic versus Microscopic Lateral to Malleus Underlay Tympanoplasty (LMUT): A Retrospective Comparative Analysis**  
Shanik J. Fernando, MD, Nashville, TN; Nauman F. Manzoor, MD, Nashville, TN;  
Robert J. Yawn, MD, Nashville, TN; Marc L. Bennett, MD, Nashville, TN; David S. Haynes, MD, Nashville, TN; Alejandro C. Rivas, MD, Nashville, TN
- E125. Trends in Vestibular Schwannoma Treatment Management and Access to Care**  
Khodayar Goshtasbi, BS, Irvine, CA; Omid Moshtaghi, MD, San Diego, CA; Marlon Maducdoc, MD, Irvine, CA; Mehdi Abouzari, MD, Irvine, CA; Harrison W. Lin, MD, Irvine, CA;  
Hamid R. Djalilian, MD, Irvine, CA
- E126. Safety Relevant Environmental Sound Identification Skills among Cochlear Implant Candidates and Experienced Cochlear Implant Users**  
Benjamin L. Hamel, BS, Milwaukee, WI; Kara J. Vasil, AuD CCC-A, Columbus, OH; Valeriy Shafiro, PhD, Chicago, IL; Aaron C. Moberly, MD, Columbus, OH; Michael S. Harris, MD, Milwaukee, WI
- E127. Fungal Osteomyelitis of the Temporal Bone: Case Series and Review of the Literature**  
Vivian F. Kaul, MD, New York, NY; Aron Y. Soleiman, BS, New York, NY; Zachary G. Schwam, MD, New York, NY; Cameron L. Budenz, MD, New York, NY; Maura K. Cosetti, MD, New York, NY

- E128. Surgical Repair of Tegmen Dehiscence Correlates with Postoperative Eustachian Tube Dysfunction**  
Judith S. Kempfle, MD, Boston, MA; Rosh Sethi, MD MPH, Boston, MA; Lei O. Tanaka, MD, Paris, France; Joseph Yeb, Boston, MA; Daniel J. Lee, MD, Boston, MA
- E129. The Role of Microvascular Free Tissue Transfer in Patients with Cochlear Implants: A Case Series and Literature Review**  
Nathan R. Lindquist, MD, Houston, TX; Daniel B. Vinh, MD, Houston, TX; Jeffrey T. Vrabec, MD, Houston, TX; Andrew T. Huang, MD, Houston, TX
- E130. Cutaneous Angioinvasive Fungal Infection of the Auricle**  
Justin Loloi, BS, Hershey, PA; Robert A. Saadi, MD, Hershey, PA; Nicole C. Williams, MD, Hershey, PA; Johnathan D. McGinn, MD, Hershey, PA
- E131. Chronic Traumatic Encephalopathy for the Otolaryngologist: Emerging Evidence Regarding Audiovestibular Dysfunction**  
Rory J. Lubner, BS, Boston, MA; Renata M. Knoll, MD, Boston, MA; Ryan A. Bartholomew, BS, Boston, MA; Aaron K. Remenschneider, MD MPH, Boston, MA; David H. Jung, MD PhD, Boston, MA; Elliott D. Kozin, MD, Boston, MA
- E132. Characterization of the Microbiome of the Healthy External Auditory Canal via 16s rRNA Profiling**  
Rachel Marie McCabe, BS, Baltimore, MD; Yang Song, PhD, Baltimore, MD; Ryan D. Vanyperen, PhD, Baltimore, MD; Claire M. Fraser, PhD, Baltimore, MD; Ronna P. Hertzano, MD PhD, Baltimore, MD
- E133. Cochlear Implant Indications: A Review of Third Party Payers' Policies**  
Lindsey E. Moses, MD, New York, NY; David R. Friedmann, MD, New York, NY
- E134. A Comparison of Patients Meeting Vestibular Migraine Criteria and Those not Meeting any Diagnostic Criteria**  
Omid Moshtaghi, MD MS, San Diego, CA; Khodayar Goshtasbi, BS, Irvine, CA; Mehdi Abouzari, MD, Irvine, CA; Dillon Cheung, BS, Irvine, CA; Harrison Lin, MD, Irvine, CA; Hamid R. Djalilian, MD, Irvine, CA
- E135. Comprehensive Balance Testing Correlates Closely with Radiologically Documented Lateral Semicircular Canal Absence in a Competitive Gymnast with 22q11.2 Deletion Syndrome**  
Lindy M.R. Moxham, BSc, Vancouver, BC Canada; Arthur Ian Mallinson, PhD, Vancouver, BC Canada
- E136. Persistence of Adult Derived Porcine Inner Ear Cell Characteristics in Culture**  
Desmond A. Nunez, MBBS MD, Vancouver, BC Canada; Printha Wijesinghe, PhD, Vancouver, BC Canada; Boyuan Zheng, BSc, Vancouver, BC Canada; Elizabeth Hui, PhD, Vancouver, BC Canada; Germain Ho, BSc, Vancouver, BC Canada; Juzer Kakal, MSc, Vancouver, BC Canada
- E137. Novel Scoring Systems for Preoperative Evaluation of Tympanic Membrane Perforation**  
Koshi Otsuki, MD PhD, Fukushima, Japan; Mitsuyoshi Imaizumi, MD PhD, Fukushima, Japan; Shigeyuki Murono, MD PhD, Fukushima, Japan
- E138. Poor Speech Perception Is Predictive of Greater Benefit from User Directed Music Re-Engineering for Enhancing Music Enjoyment**  
Tiffany Peng, MD, New York, NY; Lisa Tian, BA, New York, NY; Francesco Caruana, BA, New York, NY; Dean Mancuso, AuD, New York, NY; Ilana P. Cellum, AuD, New York, NY; Anil K. Lalwani, MD, New York, NY

- E139. Cochlear Nerve Aplasia as a Predictor of Brainstem Morphology in Children Who Are Candidates for the Auditory Brainstem Implant (ABI)**  
Ahad A. Qureshi, MD, Boston, MA; Pranav Parikh, BS, Boston, MA; Merritt C. Brown, PhD, Boston, MA; Katherine Reinshagen, MD, Boston, MA; Daniel J. Lee, MD, Boston, MA
- E140. Implementation of Neural Network Based Visual Speech Recognition Program on Bamford-Kowal-Bench Speech in Noise (BKB-SIN) Test**  
Arun M. Raghavan, BS, Cincinnati, OH; Gavriel D. Kohlberg, MD, Cincinnati, OH; Noga Lipschitz, MD, Cincinnati, OH; Joseph T. Breen, MD, Cincinnati, OH; Ravi N. Samy, MD FACS, Cincinnati, OH
- E141. Association between Cardiometabolic Risk Factors and Dizziness in African-Americans**  
Amrita Ray, DO MPH, Jackson, MS; Christopher Spankovich, AuD PhD MPH, Jackson, MS; Charles E. Bishop, AuD PhD, Jackson, MS; Dan Su, MS, Jackson, MS; John M. Schweinfurth, MD, Jackson, MS
- E142. Practices and Perceptions of Cognitive Assessment for Adults with Age Related Hearing Loss**  
Mallory J. Raymond, MD, Atlanta, GA; Annika C. Lee, BS, Atlanta, GA; Nikhila R. Raol, MD MPH, Atlanta, GA; Esther Vivas, MD, Atlanta, GA
- E143. Thirty Day Readmission and Prolonged Length of Stay in Malignant Otitis Externa**  
Zachary G. Schwam, MD, New York, NY; Rocco Ferrandino, MD, New York, NY; Vivian Z. Kaul, MD, New York, NY; George B. Wanna, MD, New York, NY; Maura K. Cosetti, MD, New York, NY
- E144. Use of Google Trends to Evaluate for Geographical or Seasonal Variation in Search Terms for Meniere's Disease**  
Josh R. Sen, BA, Syracuse, NY; Alex J.F. Tampio, MD, Syracuse, NY; Shaelyn M. Cavanaugh, MPH, Syracuse, NY; Brian D. Nicholas, MD, Syracuse, NY
- E145. Utility of Inpatient Imaging during the Workup for Vertigo: A Nationwide Analysis**  
Jonathan C. Simmonds, MD, Boston, MA; Jonathon S. Sillman, MD, Boston, MA
- E146. Oticara Otic: Topical, Single Dose Application Utilized in 178 Cases of Fungal Otitis Externa**  
Patrick William Slater, MD, Austin, TX; Neha Korla, MDS, Austin, TX
- E147. Bilateral Uveitis and Sensorineural Hearing Loss in a Man with Stage IV Malignant Melanoma after Nivolumab Immunotherapy**  
Alex J.F. Tampio, MD, Syracuse, NY; Abirami Sivapiragasam, MD, Syracuse, NY; Robert T. Swan, MD, Syracuse, NY; Brian D. Nicholas, MD, Syracuse, NY
- E148. Resting Ambient Pressure Tympanometry Provides Key Information Suggesting Alternative Diagnoses in Patients Tested for Patulous Eustachian Tube**  
Anthony Thai, BA, Stanford, CA; Zahra N. Sayyid, MD, Palo Alto, CA; Davood K. Hosseini, MD, Palo Alto, CA; Matthew B. Fitzgerald, PhD, Palo Alto, CA; Jennifer Y. Lee, MD, Palo Alto, CA; Yona Vaisbuch, MD, Palo Alto, CA
- E149. No Shortage of Decibels in Music City: Evaluation of Noise Exposure in Urban Music Venues**  
Sarah M. Tittman, MD, Nashville, TN; Robert J. Yawn, MD, Nashville, TN; Nauman F. Manzoor, MD, Nashville, TN; Matthew M. Dedmon, MD PhD, Nashville, TN; David S. Haynes, MD MMHC, Nashville, TN; Alejandro Rivas, MD, Nashville, TN

- E150. Auditory and Head and Neck Imaging Findings in Neurofibromatosis Type 1**  
Jennifer R. White, MD, Washington, DC; Hung J. Kim, MD, Washington, DC; Victoria Y. Idowu, BA, Bethesda, MD; Carmen C. Brewer, PhD, Bethesda, MD; Kelly A. King, AuD PhD, Bethesda, MD; Chris K. Zalewski, PhD, Bethesda, MD
- E151. A Comparison of Outcomes of Two Intratympanic Steroid Protocols for Meniere Disease**  
Erika A. Woodson, MD, Cleveland, OH; Elizabeth O. Shay, BA, Cleveland, OH (Presenter); Amy S. Nowacki, PhD, Cleveland, OH

### Pediatrics

- E152. Practice Patterns in Pediatric Endoscopic Sinus Surgery for Chronic Rhinosinusitis**  
Michael C. Baxter, MD MSc, San Diego, CA; Matthew T. Brigger, MD, San Diego, CA
- E153. Transpalatal Approach to Repair of Bilateral Choanal Atresia in a Child with Craniofacial and Skull Base Anomalies: Revisiting an Historic Technique**  
Rebecca A. Compton, MD, Boston, MA; Robert J. Scagnelli, BA, Albany, NY (Presenter); Jonathan C. Simmonds, MD, Boston, MA; Andrew R. Scott, MD, Boston, MA
- E154. Weight Gain Velocity as Predictor of Severe Obstructive Sleep Apnea among Obese Adolescents--A Case Control Series**  
Romaine F. Johnson, MD, Dallas, TX; Alexander Hansen, MD, Dallas, TX (Presenter); Ajay Narayann, BS, Dallas, TX; Ahana Yogeshi, BA, Dallas, TX; Gopi B. Shah, MD MPH, Dallas, TX; Ron B. Mitchell, MD, Dallas, TX
- E155. Current Evaluation and Management of Plastic Bronchitis in the Pediatric Population**  
Youjin Li, MD, Boston, MA; Natasha D. Dombrowski, BA, Boston, MA (Presenter); Ryan A. Williams, MD, Boston, MA; Francis Fynn-Thompson, MD, Boston, MA; Kevin P. Daly, MD, Boston, MA; Gary A. Visner, DO, Boston, MA; Reza Rahbar, DMD MD, Boston, MA
- E156. How Pediatric Anesthesiologists Manage Children with OSA**  
Christopher A. Roberts, MD, Morgantown, WV; Raihanah S. Sayegh, Kuwait City, Kuwait; Pavithra R. Ranganathan, MD, Morgantown, WV; Khaled A. Sedeek, MD, Hershey, PA; Michele M. Carr, MD, Morgantown, WV
- E157. Pediatric Endoscopic Nasal Septal Perforation Repair: A Systematic Review and Report of a Novel Technique**  
Lindsey E. Ryan, MD, Tampa, FL; Gary D. Josephson, MD, Jacksonville, FL
- E158. Screening for Obstructive Sleep Apnea in Children with Sickle Cell Disease: A Pilot Study of 100 Patients**  
Anthony M. Sheyn, MD, Memphis, TN; Stephen R. Larson, MD, Memphis, TN (Presenter); Jeremie Estepp, MD, Memphis, TN; M. Boyd Gillespie, MD, Memphis, TN
- E159. Lateral Neck Radiography in Preoperative Evaluation of Adenoid Hypertrophy**  
Liuba Soldatova, MD, Philadelphia, PA; Hansel J. Otero, MD, Philadelphia, PA; David Saul, MD, Philadelphia, PA; Christian A. Barrera, MD, Philadelphia, PA; Lisa M. Elden, MD, Philadelphia, PA
- E160. Effect of Ibuprofen Dosing Interval on Post-Tonsillectomy Outcomes**  
Levi D. Stevens, MD, Morgantown, WV; Krysta Henderson, MS-3, Morgantown, WV; Denise Holcomb, RN, Morgantown, WV; Michele M. Carr, DDS MD PhD, Morgantown, WV
- E161. Effectiveness of Drug Induced Sleep Endoscopy or Cine MRI Driven Adenoidectomy for Children with Obstructive Sleep Apnea**  
James C. Wang, MD PhD, Cincinnati, OH; David R. Lee, MD, Cincinnati, OH; Erin Harvey, BS, Cincinnati, OH; David F. Smith, MD PhD, Cincinnati, OH; Stacey L. Ishman, MD MPH, Cincinnati, OH



**E162. Shared Decision Making and Decisional Conflict in Otolaryngology Patients**  
Habib G. Zalzal, MD, Morgantown, WV; Reena Razdan, BA, Morgantown, WV;  
Rodrigo O. Reyna, BA, Morgantown, WV; Alex S. Mason, BA, Morgantown, WV;  
Amy M. Schattel, BA, Morgantown, WV; Michele M. Carr, MD, Morgantown, WV