

ARS 66th Annual Virtual Meeting – Program at a Glance

Thursday, September 10, 2020 – 6:50 pm-9:00 pm

Breakout Room 1

6:50 pm - 7:00 pm **Introduction** – Robert Kern, MD, FARS – ARS President
Joseph Han, MD, FARS – President-Elect/Program Chair

Moderators: Troy Woodard, MD, FARS; Naveen Bhandarkar, MD, FARS; Dana Crosby, MD, FARS; Waleed Abuzeid, MBBS

7:00 pm - 7:10 pm **Randomized trial on the effect of postoperative oral corticosteroids on QOL and biomarkers**
Sarina Mueller, MD

7:10 pm - 7:20 pm **Mepolizumab for chronic rhinosinusitis with nasal polyps**
Joseph Han, MD, FARS

7:20 pm - 7:30 pm **Prophylactic antibiotics after functional endoscopic sinus surgery: A randomized controlled trial**
Ashton Lehmann, MD

7:30 pm - 7:40 pm **The cost of rhinitis**
Lauren Roland, MD

7:40 pm - 7:50 pm **CRISP/Cas9 enables CFTR correction in the endogenous locus in airway stem cells**
Dawn Bravo, PhD

7:50 pm - 8:00 pm **Questions and Discussion**

8:00 pm - 8:10 pm **Inter Session Break**

8:10 pm - 9:00 pm **Panel: Nasal Polyp Management Algorithm**
Moderator: Joseph Han, MD, FARS
Panelists: James Palmer, MD, FARS; Jivianne Lee, MD, FARS; Anju Peters, MD; Kent Lam, MD; Zachary Soler, MD, FARS; Christine Franzese, MD, FARS

Breakout Room 2

- 6:50 pm - 7:00 pm **Introduction** – Robert Kern, MD, FARS – ARS President
Joseph Han, MD, FARS – ARS President-Elect/Program Chair
- 7:00 pm - 7:40 pm **David Kennedy Lectureship: “Moving Forward: Rhinology in the Post-COVID Era”**
Guest Speaker: Peter Hwang, MD, FARS
- 7:40 pm – 7:50 pm **Scientific Awards**
Presenters: Robert Kern, MD, FARS; Jean Kim, MD, FARS
- 7:50 pm - 8:00 pm **Inter Session Break**
- Moderators: Jennifer Villwock, MD; Ian Humphreys, DO, FARS; Philip Chen, MD, FARS; Garrett Choby, MD, FARS
- 8:00 pm - 8:10 pm **IL-13 acts on human sinonasal epithelial basal cells to increase hypoxia-associated gene expression**
Syed Khalil, PhD (*Presented by Nicholas Rowan*)
- 8:10 pm - 8:20 pm **Predictors of rhinorrhea response after posterior nasal nerve cryoablation for chronic rhinitis**
Frederick Yoo, MD
- 8:20 pm - 8:30 pm **IL-17A levels are associated with increased prior ESS**
Nikita Chapurin, MD, MHS
- 8:30 pm - 8:40 pm **A randomized clinical trial to evaluate mometasone lavage versus spray for management of CRS**
Pawina Jiramongkolchai, MD
- 8:40 pm - 8:50 pm **DMBT1 is the endogenous carrier ligand for eosinophil death receptor Siglec-8 in nasal polyps**
Jean Kim, MD, PhD, FARS
- 8:50 pm - 9:00 pm **Questions and Discussion**

Saturday, September 12, 2020

Breakout Room A

11:50 am - 12:00 pm **Introduction** – Robert Kern, MD, FARS – ARS President

Joseph Han, MD, FARS – ARS President-Elect/Program Chair

Moderators: Corinna Levine, MD, FARS; David Gudis, MD, FARS; Angela Donaldson, MD, FARS

12:00 pm - 12:10 pm **Submucosal gland morphology and secretory cell identities are aberrant in chronic rhinosinusitis**

Onyekachi Nnabue, Medical Student

12:10 pm - 12:20 pm **Broad lipidomic analysis of patients with AERD undergoing aspirin desensitization**

Adam DeConde, MD

12:20 pm - 12:30 pm **Cell adhesion molecule expression in chronic rhinosinusitis**

Brennan Blight, BS

12:30 pm - 12:40 pm **Macrophages regulate olfactory regeneration through the IL-6/Stat3 pathway**

Andrew Lane, MD, FARS (*Presented by Kathleen Kelly, MD*)

12:40 pm - 12:50 pm **A novel device combining acoustic vibration and expiratory pressure for nasal congestion**

Rodney Schlosser, MD, FARS

12:50 pm - 1:00 pm **Questions and Discussion**

1:00 pm - 1:10 pm **Inter Session Break**

1:10 pm - 2:00 pm **Panel: Understanding the role, questions, and concerns of biologic in the management of NP**

Moderator: Amber Luong, MD, PhD, FARS

Panelists: Lauren Roland, MD; Kent Lam, MD; Jean Kim, MD, FARS; Rodney Schlosser, MD, FARS; Christine Franzese, MD, FARS

2:00 pm - 2:10 pm **Inter Session Break**

2:10 pm - 3:00 pm **Panel (Women in Rhinology): “Work-life Balance during COVID-19 Era”**

Moderator: Elina Toskala, MD, FARS

Panelists: Timothy Smith, MD, FARS; Mindy Rabinowitz, MD, FARS; Ian Koszewski, MD; Jivianne Lee, MD, FARS; Lori Lemonnier, MD

Breakout Room B

- 11:50 am - 12:00 pm **Introduction** – Robert Kern, MD, FARS – ARS President
Joseph Han, MD, FARS – ARS President-Elect/Program Chair
- 12:00 pm - 12:50 pm **Panel: Clinical Importance of Bench Research**
Moderator: Andrew Lane, MD, FARS
Panelists: Justin Turner, MD, FARS; Benjamin Bleier, MD, FARS; Erin O’Brien, MD, FARS; Carol Yan, MD
- 12:50 pm - 1:00 pm **Inter Session Break**
- Moderators: Theodore Schuman, MD, FARS; Arthur Wu, MD, FARS; David Jang, MD, FARS; Alissa Kannan, MD
- 1:00 pm - 1:10 pm **SNOT-22 subdomain analysis of patients treated with Omalizumab for nasal polyposis**
Joseph Han, MD, FARS
- 1:10 pm - 1:20 pm **Sinonasal inflammation impairs resting-state functional brain connectivity**
Aria Jafari, MD
- 1:20 pm - 1:30 pm **Patient satisfaction with telemedicine clinical visits for chronic rhinosinusitis**
Megan Morisada, MD
- 1:30 pm - 1:40 pm **Red ginseng aqueous extract improves markers of mucociliary clearance in the Cystic Fibrosis rat**
Do Yeon Cho, MD
- 1:40 pm - 1:50 pm **Predictors of completion of sublingual immunotherapy**
Sophia Song
Presented by Nanki Hura, BS
- 1:50 pm - 2:00 pm **Questions and Discussion**
- 2:00 pm - 2:10 pm **Inter Session Break**
- 2:10 pm - 3:00 pm **Panel: Utility of Pedicled Flap: Nose to Skull Base**
Moderator: Eric Holbrook, MD, FARS
Panelists: Stacey Gray, MD, FARS; Zara Patel, MD, FARS; Troy Woodard, MD, FARS; Waleed Abuzeid, MBBS; Jonathan Ting, MD, FARS

Breakout Room C

- 11:50 am - 12:00 pm **Introduction** – Robert Kern, MD, FARS – ARS President
Joseph Han, MD, FARS – ARS President-Elect/Program Chair
- 12:00 pm - 12:40 pm **Panel: Management of CRS: Perspective Around the World**
Moderator: Brent Senior, MD, FARS
Panelists: Marcio Nakanishi, MD; Renato Roithmann, MD; Peter Hellings, Professor; Claus Bachert, MD, Professor; Wytse Fokkens, Prof.dr.; Claire Hopkins, Professor; Martin Desrosiers, MD; Jannis Constantinidis, MD, PhD
- 12:40 pm – 12:50 pm **Inter Session Break**
- 12:50 pm - 1:30 pm **Panel: Impact of COVID 19 in Rhinology: From Office to OR**
Moderator: Seth Brown, MD, FARS:
Panelists: Abtin Tabaei, MD, FARS; J. Pablo Stolovitzky, MD, FARS; Parul Goyal, MD, FARS; Arthur Wu, MD, FARS
- 1:30 pm – 1:40 pm **Inter Session Break**
- 1:40 pm – 2:20 pm **Panel: New and Innovative Management: From Rhinitis to Sinusitis**
Moderator: Jeffrey Suh, MD
Panelists: Ashutosh Kacker, MD; Jose Gurrola, MD; Carol Yan, MD; Esther Kim, MD
- 2:20 pm – 3:00 pm **Panel: Evidence versus Myth: Management of Allergic Rhinitis**
Moderator: Stella Lee, MD
Panelists: Mike Tankersley, MD; Seong Cho, MD; Sarah Wise, MD, FARS; Gregory Capra, MD, FARS

ON DEMAND PRESENTATIONS

66TH Annual Oral Presentations

A comparison between anterior and lateral CSF leaks in meningocele patients

Rahul Alapati, BS

Adverse events with monoclonal antibodies

Mohamad Chaaban, MD, MSCR, MBA

Age-related changes in olfactory cleft anatomy and airflow using computational fluid dynamics

Ryan Little, MD

Antibody deficiencies in chronic rhinosinusitis

Chadi Makary, MD

Are rhinitis and eustachian tube dysfunction associated in United States adolescents?

Dara Adams, Dr.

Association of air pollutant exposure and sinonasal histopathology in chronic rhinosinusitis

Tirth Patel, MD

Association of nasopharyngeal inflammation in patients with eustachian tube dysfunction

Jeffrey Bergeron, MD

Automated 3D sinus CT evaluation

Vijay Ramakrishnan, MD, FARS

Azithromycin and ciprofloxacin inhibit IL-8 secretion without disrupting HSNEC integrity in vitro

Dong Jin Lim, PhD

Biologics in the management of CRSwNP

Ahmad Mirza, MBBS

Bone mineral density of the anterior skull base in spontaneous cerebrospinal fluid leak patients

Christopher Low, MD

Chemosensory dysfunction and diet quality

Christopher Roxbury, MD

Comparing CRS severity between Hispanics and non-Hispanics undergoing primary ESS

Corinna Levine, MD, FARS

Cost-effectiveness of antibiotic prophylaxis for nasal packing

Ximena Maul, MD

Delta neutrophil index in chronic sinusitis

Ki Il Lee, MD, PhD

Dupilumab efficacy in CRSwNP by NP surgery history in the SINUS-24 and SINUS-52 studies

Claire Hopkins, FRCS DM

Endoscopic repair of congenital basal encephaloceles decreases complications compared to open

Harrison Thompson, BS

Examination of SCL-90 subdomains in empty nose syndrome patients

Dayoung Kim

Gabapentin and postoperative pain after sinus surgery

David Lerner, MD

Gender-related differences in outcomes after FESS

Arthur Wu, MD, FARS

Health literacy in rhinology patients

Jakob Fischer, MD

Impact of novel CFTR modulator on sinonasal outcomes in patients with Cystic Fibrosis

Jennifer Douglas, MD

In vitro safety and efficacy of mitochondrially-targeted antioxidant mitoquinone after FESS

Michael Gouzos, MD

Intercarotid artery distance in the pediatric population: Implications for skull base approaches

Nyall London, MD, PhD

Medicare payment sex disparities for endoscopic sinus procedures

Jeremy Ruthberg, Medical Student

Microbiomics of irrigation with xylitol or Lactococcus lactis in chronic rhinosinusitis

Paul Lambert, MD

Mometasone irrigations compared to Budesonide irrigations

Peter Papagiannopoulos, MD

Mucin expression in allergic fungal sinusitis

Carly Clark, BA

Outcomes following exclusively endoscopic endonasal resection of benign orbital tumors

Aria Jafari, MD

Pain catastrophizing in chronic rhinosinusitis

Aasif Kazi, MD, PharmD

P-gp Inhibition with verapamil overcomes mometasone resistance in CRSwNP

Maie Taha, PhD

Practice of telemedicine in otolaryngology: Systematic review in the era of COVID-19

Jonathan Overdeest, MD, PhD

Predictors of revision surgery: An analysis of Draf 3 on index surgery and disease endotype

Tran Locke, MD

Predictors of survival outcomes in sinonasal squamous cell carcinoma

Nyssa Farrell, MD

Primary dural suturing via an endoscopic endonasal corridor: 3D printed model for training

Ivanna Nebor, MD

Psychometric properties of the brief version of the questionnaire of olfactory disorders

Jose Mattos, MD, MPH

Quality of life before and after ESS and ASA desensitization in AERD patients as measured by SF-12

Tran Locke, MD

Randomized trial of nasal theophylline irrigation for treatment of post-viral olfactory dysfunction

Jake Lee, MD

Readmission following inpatient functional endoscopic sinus surgery for chronic rhinosinusitis

Habib Khoury

Sinonasal mucin in aspirin exacerbated respiratory disease

Cameron Worden, BS

Socioeconomic factors affect stage at presentation and survival in sinonasal squamous cell carcinoma

Aria Jafari, MD

Surgical outcomes for endoscopic versus open skull base resection for malignant tumors

Nicholas Lenze, BS

The association of frailty and chemosensory dysfunction in older adults

Nicholas Rowan, MD

The ENS6Q used to distinguish patients with empty nose syndrome from primary nasal obstruction

Ameen Amanian, MD

Topical budesonide is associated with decreased Nrf2

Murugappan Ramanathan, MD, FARS

Type 2 biologics versus aspirin desensitization with aspirin maintenance therapy

Auddie Sweis, MD

Type 2 inflammatory mediators decrease after ESS

Samuel Racette, MD

Vascular pathophysiology characterization in chronic rhinosinusitis

Nitish Khurana

2020 COSM ORAL Presentations

Beta-amyloid plaques in murine olfactory bulbs during chronic olfactory inflammation

Andrew Lane, MD, FARS *(Presented by Omar Ahmed, MD)*

Academic rhinologists' online rating and perception, scholarly productivity, and industry payments

Khodayar Goshtasbi, BS

Asthma control in patients with and without nasal polyps on biologic therapy

Prachi Patel, BA

Can frail patients safely undergo TINTS?

Jordan Sukys, MD

Chronic rhinosinusitis' impact on transsphenoidal surgery complications

Jake Lee, MD

Clinical correlation of 15LO1 and CCL26 in CRSwNP

Nadeem Kolia, MD

Clinical effectiveness of Benralizumab in severe asthma and chronic rhinosinusitis with nasal polyps

Chandala Chitguppi, MD

Complications of aspirin desensitization in aspirin-exacerbated respiratory disease

Auddie Sweis, MD

Denatonium benzoate bitter taste perception in chronic rhinosinusitis (CRS)

Alyssa Civantos, BA

Educational informed consent video non-inferior to standard verbal consent for FESS: A RCT

Rohit Nallani, MD *(Presented by Joseph Penn, BS)*

Electrical stimulation of olfactory neurons may improve regeneration after damage

Zara Patel, MD

Elevated urine leukotriene E4 levels associated with worsened objective asthma and CRS markers

Garret Choby, MD

Evaluating the safety of mometasone nasal lavage for patients with CRS

Pawina Jiramongkolchai, MD

Gender and age differences in aspirin-exacerbated respiratory disease

Tran Locke, MD

Histopathologic markers are not associated with QOL or olfactory function in patients with CRS

Nyssa Farrell, MD

IMPA redirects airflow and improves ENS symptomology: A CFD study

Jennifer Malik

Long-term follow up of nasal nitric oxide in chronic rhinosinusitis

Daniel Lee, MD

Machine learning of biomarkers and clinical observation to predict eosinophilic CRS

Ryan Thorwarth, MD

Mechanisms governing NSD symptoms

Jennifer Malik

Mepolizumab in eosinophilic chronic rhinosinusitis

Sophie Walter, Medical Student

Natural language processing phenotype algorithm in CRS

Robert Tuliszewski, MD

Non-sponsored evaluation of cryosurgical ablation device for rhinitis

Rohit Garg, MD, MBA

Olfactory function after surgical treatment of CRS

Jose Mattos, MD, MPH

On-demand sclerotherapy for HHT-related epistaxis

Andrew Peterson

Otologic outcomes after sinus surgery for chronic rhinosinusitis

Michael Chang, MD

Outcomes in ENT assisted and unassisted anterior skull base surgeries

Chris Choi, BS

Predictors of objective olfactory dysfunction following sinus surgery

David S. Lehmann

Prevalence of olfactory and neurocognitive dysfunction in patients with subjective smell disorder

Justin Morse, MD

Quantification of biomarker heterogeneity in control specimens used for analysis in CRS

Taylor Carle, MD

Sinonasal inflammatory gene expression correlates with sleep dysfunction in CRSwNP

Katherine Lees, MD

Solitary chemosensory cells and its relation to cholinergic innervation

Jie Deng, MD

Surgeon cost feedback reduces cost in sinonasal surgery

Amarbir Gill, MD

Surgical outcomes in aspirin-exacerbated respiratory disease without aspirin desensitization

Elysia Grose, MD(c)

Synechia incidence after primary and revision FESS

William Yao, MD

Systematic review: Objective smell and taste in eating disorders

Evelyn Leland, BS

The detrimental effects of olfactory dysfunction as a non-motor symptom of Parkinson's Disease

Patrick Kim

The effect of pre-operative steroids on surgical field visibility during sinus surgery

Sen Ninan, BA

Treatment outcomes in patients with chronic rhinosinusitis and immunodeficiency: A systematic review

Shireen Samargandy, MBBS

TSLP and type 2 inflammatory cytokines in CRS, emerging endotypes

Joel Franco, MD

Unbiased measure of health-related qol in CRS reveals dominant modifiers in qol

Madison Epperson, MD

Under pressure: Differentiating CRS from non-rhinologic facial pain with facial and nasal symptoms

Thomas Higgins, MD, MSPH

Validation of sinus drug delivery CFD modeling with in vitro gamma scintigraphy

Kathryn Kudlaty, MD

POSTER PRESENTATIONS

ARS 66th Annual Posters

A drug release and pharmacokinetic evaluation of novel mometasone furoate eluting matrices

Changcheng You, PhD

A prospective prevalence study of chronic rhinosinusitis associated with inflammatory bowel disease

India Dhillon, BSCh

Adjunctive techniques to dacryocystorhinostomy: an evidence-based review with recommendations

Michael Yim, MD

Allergen sensitization patterns in chronic rhinosinusitis subtypes

Heather Ungerer, BA

An atypical, asymptomatic case of life-threatening rhino-cerebral mucormycosis

Agamemnon Pericleous, MBBCh, MRCS (ENT)

Analysis of public search queries relating to anosmia in the novel coronavirus-2019 pandemic

Humzah Quereshey, BA

Anosmia Google search and COVID-19 in the US

Christopher Xiao, MD

Antibiotic use following functional endoscopic sinus surgery

Mackenzie O'Connor, BS

Anxiety and opioid use after ESS

Brian Scott, MD

Are routine type and screens cost-effective in transsphenoidal surgery?

Aviv Spillinger, BS

Assessing the academic influence of otolaryngologists on sinus and allergy research

Zachary Grace

Assessing use and popularity of publicly available online videos in rhinology

Benjamin Bitner, MD

Assessing web-based audiovisual multimedia for patient education in skull base surgery

Amarbir Gill, MD

Association of environmental factors with allergic rhinitis

Victoria Lee, MD

Association of quality of life measures and otolaryngologic care in Cystic Fibrosis patients

Stephen Leong

Awareness and understanding of empty nose syndrome

Angela Yang, BS

BRAF V600E and KRAS gene expression in human nasal polyposis

Gul Acar, MD

Calvarium thinning in spontaneous cerebrospinal fluid leak patients

Dhruv Sharma, MD

Cardiovascular comorbidities and the anterior skull base

Aksha Parray

Cardiovascular comorbidities and the posterior skull base

Aakash Shah, BS

Centralization of care and patient travel for transsphenoidal surgery of the pituitary

Aisosa Omorogbe, BS

Characterization of AERD at a single institution

Uche Nwagu, BS

Chronic rhinosinusitis in patients with spontaneous cerebrospinal fluid leak

Emily Barrow, MD

Comorbidities in chronic rhinosinusitis

Amarbir Gill, MD

Comorbidities of chronic alcohol use and the anterior skull base

Aksha Parray

Complications from CSF leak repairs

Rashiqah Syed, BS

Current practices regarding middle turbinate resection among otolaryngologists

Andrea Ziegler, MD

Development of CFD methodology appropriate for EDS performance evaluation

Marit Kleven

Diabetes as a risk factor for complications following ventral skull base surgery

Dongmin Kim

Diagnosis of anosmia: A systematic review

Abdul Saltagi, BS

Diet modification in AERD

Rijul Kshirsagar, MD

Differentiation of chronic rhinosinusitis and primary headache disorder via analysis of SNOT-22

Kolin Rubel, MD

Disease control after surgery for CRS: Prospective, multi-institutional validation of the SCT

Ryan Little, MD

Disease recurrence in the central compartment in eosinophilic chronic rhinosinusitis

Chadi Makary, MD

Disparities in access to care and outcomes following rhinoplasty

Aisosa Omorogbe, BS

Distant metastasis to the clivus: The University of Arizona experience

John Richards, MD

Dupilumab improved smell outcomes in severe CRSwNP patients regardless of NP history

Joaquim Mullol, MD, PhD

Dupilumab improves pan-sinus opacification in patients with CRSwNP in SINUS-52

Stella Lee, MD

Dupilumab rapidly improves and sustains smell in CRSwNP

Joaquim Mullol, MD, PhD

Duration of frontal sinusotomy

Philip Chen, MD, FARS

Ectopic silent gonadotroph adenoma in the sphenoid sinus

Rachel Jonas, MD

Efficacy of adenoidectomy for chronic rhinosinusitis in children older than 7 Years of Age

Chengetai Mahomva, MD

Empty nose syndrome following endoscopic skull base surgery

Katie Melder, MD

Endoscopic approaches to the pterygopalatine fossa and infratemporal fossa: A systematic review

Max Newby, MD

Endoscopic endonasal repair of a sphenoid meningoencephalocele

Rafael Hijano, MD, PhD

Endoscopic endonasal surgery after maxillectomy and midface free flap reconstruction

Peter Filip, MD

Endoscopic fluorescein in the immediate post-operative period for evaluation of skull base leaks

Micah Timen, MD, MSc

Endoscopic outcomes in AERD patients treated with topical antibiotics and intranasal steroids

Jhon Martinez Paredes, MD

Endoscopic reconstruction of skull base defects using tutoplast allografts

Ghassan Alokby, MD, FARS

Endoscopic vidian canal landmarks: An anatomic relationship

Alice Liu

Ethmoid-to-maxillary inflammation ratio: A predictor of postoperative outcomes in nasal polyposis

Daniel Beswick, MD

Evaluating inflammation in an obstruction-based chronic rhinosinusitis model in rabbits

Stella Lee, MD

Evaluating the SNOT-22's "one most important symptom" over time

Michela Borrelli

Evaluation of chronic sinonasal tract inflammation as a potential risk factor for COVID-19

Michael Marino, MD, FARS

Evaluation of outcomes in patients with comorbid OSA following FESS

Leonard Estephan

Evaluation of the NEUROMARK™ system (Rhinitis Neurolysis Therapy™) in patients with chronic rhinitis

Douglas Reh, MD, FARS

Evidence-based recommendations for middle turbinate medialization in endoscopic sinus surgery

Ximena Maul, MD

Exploring adverse events in steroid-eluting stents using a FDA database

Chengetai Mahomva, MD

Extent of endoscopic sinus surgery

Yasuyuki Hinohira, MD, PhD

Extranodal NK/T cell lymphoma–nasal type mimicking chronic rhinosinusitis

Annick Aubin-Pouliot, MD

Frontal sinus delivery in Draf III by EDS confirmed with novel CFD

Narinder Singh

Functional status and posterior skull base procedures

Aakash Shah, BS

Fungal sinusitis: A spectrum of disease?

Ashleigh Halderman, MD

Granulomatous chronic invasive fungal sinusitis: A case report and review of literature

Derek Kong, MD

Hemiplegia and posterior skull base procedures

Aakash Shah, BS

IgG-4 related disease in the paranasal sinuses-an underrecognized pathology

Brett Comer, MD

Impact of postoperative budesonide irrigations after endoscopic sinus surgery on clinical outcomes

Jenna Bergman, Medical Student

Impact of preoperative dehydration in endoscopic transsphenoidal pituitary surgery

Dongmin Kim

Impact of prolonged steroid delivery by LYR-210 on four cardinal symptoms of CRS

Yina Kuang, PhD

Impact of sinusitis symptoms among the Latino population in Los Angeles

Erick Garcia

Improved CRS control with higher mometasone irrigation dose

Peter Papagiannopoulos, MD

Improving readability in patient targeted educational materials

Lori Lemonnier, MD

Insight into cervical lymph node metastases of sinonasal mucosal melanoma

Christopher Tseng, BS

Intracranial complications associated with cerebrospinal fluid leaks

Lauren Luk, MD, FARS

Laser vs microdebrider eustachian tuboplasty - A systematic review

Waqas Jamil, MBBS, MRCS ENT, Mch ENT

Locally recurrent solitary fibrous tumor with skull base reconstruction: A case report

Sydney Sachse

LYR-210 reduces sinonasal type 2 inflammation in chronic rhinosinusitis

Atsushi Kato, PhD

Management of a unique sinonasal undifferentiated carcinoma subtype in the Era of COVID-19

Jennifer Douglas, MD

Management of anosmia: A systematic review

Amit Nag, BS

Management of epistaxis during Covid-19 crisis

Abigail Walker, MBChB, MSc, MRCCS, DOHNS

Microbiology and histopathology of silent sinus syndrome

Henry Zheng, BA

Modern treatment of sinonasal melanoma

Abigail Walker, MBChB, MSc, MRCCS, DOHNS

Mometasone versus fluticasone in treatment of chronic sinusitis

Rajesh Havaladar, MS

Nasal cavity squamous cell carcinoma outcomes

Jordan Teitelbaum, DO

Nasal nitric oxide emission is driven by ethmoid sinuses and diffusion: A computational study

Kai Zhao, PhD

Nationwide trends in treatment and survival for sinonasal extramedullary plasmacytoma

Jeff Gao, BS

Neurologic comorbidities and the posterior skull base

Aakash Shah, BS

Odontogenic sinusitis: Clinical characteristics, treatments, and outcomes

Erik Risa, MD

Olfactory training for post-viral olfactory dysfunction

Edward McCoul, MD, FARS

Outcomes of skull base procedures in association with wound complication

Aksha Parray

Outcomes of skull base procedures in emergency settings

Aakash Shah, BS

Outcomes of skull base procedures in obese patients

Aakash Shah, BS

Outcomes of skull base procedures in patients with disseminated cancer

Aksha Parray

Paraganglioma of the nasal septum

Aasif Kazi, MD, PharmD

Patient satisfaction after chin fillers

Aakash Shah, BS

PDT to reduce post-operative infection after sinonasal surgery

Claire Hopkins, FRCS DM

Perioperative management of aspirin in AERD

Hannah Wangberg, MD

Perioperative opioid use in patients undergoing endoscopic sinus surgery based on OSA status

Glen D'Souza, MD

Posterior skull base outcomes in stroke patients

Aakash Shah, BS

Postoperative complications in CSF leak repairs

Rashiqah Syed, BS

Postoperative length of stay after elective CSF leak repair: Costs and outcomes

Davis Aasen, BS

Post-operative outcomes in posterior skull base procedures by immunosuppressant use and subspecialty

Aksha Parray

Posttraumatic cerebrospinal fluid fistula - Surgical management

John Symms, MD

Potential costs of dental treatment and endoscopic sinus surgery for odontogenic sinusitis

Haley Sibley, MD

Preoperative screening for obstructive sleep apnea in endoscopic skull base surgery: NASBS survey

Ryan Rimmer, MD

Preoperative smell changes as predictors of post FESS clinical difference in SNOT-22 scores

Emily Sagalow, BS

Prevalence of specific antibody deficiency in recurrent acute sinusitis and chronic rhinosinusitis

Anna Bareiss, MD

Prevention of the frontal sinus ostium restenosis

Naruo Shoji, MD, PhD

Psychosocial improvements in CRS patients after FESS

Michela Borrelli

Pulmonary comorbidities and the anterior skull base

Aksha Parray

Pulmonary comorbidities and the posterior skull base

Aakash Shah, BS

Quality of life instruments in endoscopic endonasal skull base surgery – A systematic review

Aishwarya Shukla, MD, MPH

Radiographic Differences in Skull Base Height and Anterior Ethmoid Artery Location in AFRS

Dylan Erwin

Reducing intraoperative bleeding in endoscopic sinus surgery

Yoichiro Narikawa, MD

Regional peak mucosal cooling predicts outcomes of radiofrequency treatment of nasal obstruction

Zhenxing Wu, PhD

Relationship between target registration error (TRE) and fiducial registration error (FRE)

Amin Javer, MD, FARS

Renal cell-like adenocarcinoma (SNRCLA) of the nasal cavity: Case report and literature review

Ellen Tokarz, MD

Responder analyses dupilumab NC and LoS scores

Claus Bachert

Role of ER stress in TGF- β 1-induced EMT in airway epithelium

Heung-Man Lee, MD, PhD

Role of zileuton in treatment of aspirin exacerbated respiratory

Chadi Makary, MD

Salvage endoscopic nasopharyngectomy

Kerolos Shenouda, MD

SARS-CoV-2 viral inactivation using low dose povidone-iodine via sinonasal and oral cavity

Samantha Frank, MD

Sinonasal extranodal natural killer/t cell lymphoma: National analysis of a rare lymphoma

Jordon Grube, DO

Sinonasal mucormycosis: Revisited

Annanya Soni, MS

Sinonasal outcomes using oral steroids in patients with CRSwNP and positive sinonasal cultures

Jhon Martinez Paredes, MD

Sinonasal schwannoma: Case series and literature review

Rosalie Machado

Sinus surgery and perceptions in social media

Prachi Patel, Research Fellow

SINUS-24 and SINUS-52 dupilumab smell recovery in asthma or N-ERD

Joaquim Mullol, MD, PhD

Skull base osteoradionecrosis

Kerolos Shenouda, MD

Skull base outcomes in septic patients

Aakash Shah, BS

Sleep subdomain of SNOT-22 is a useful screening tool for obstructive sleep apnea

Chandala Chitguppi, MD

Spectrum of tissue loss associated with empty nose syndrome

Sachi Dholakia, BS

Spindle cell sinonasal rhabdomyosarcoma in a 73-year-old man: A case report

Bronson Wessinger

Structured histopathologic comparisons of sinonasal tumors

Auddie Sweis, MD

Subjective smell & taste in skull base surgery

Nanki Hura, BS

The effect of diabetes mellitus on post-operative outcomes following endoscopic sinus surgery

Kolin Rubel, MD

The effects of burn pit exposure on the respiratory tract: A systematic review

James McLean, MD

The infratemporal fossa sign

Edward McCoul, MD, FARS

The role of anesthesia on intraoperative outcomes during endoscopic sinus surgery: A meta-analysis

David Moffatt

The turbinate pump: Targeted inferior turbinate decongestion in sinonasal surgery

Ashton Lehmann, MD

Three cases of sinonasal organized hematoma

Sei Kobayashi, Associate Professor

Treatment of PVOD: Evidence-based review

Nanki Hura, BS

Treatment patterns and survival of sinonasal diffuse large b-cell lymphoma in the United States

Gregory Barinsky, PharmD

Unfolded protein response in sinonasal inverted papilloma

Paul Lee, MS

Unique hemostasis in JNA

Anupam Mishra, MBBS, MS, DNB

Use of balloon sinuplasty in the management of secondary complications to acute frontal sinusitis

Agamemnon Pericleous, MBBCh, MRCS (ENT)

Utilization trends of surgical and endovascular management of refractory epistaxis

Matt Lelegren, MD

Validating starling resistor model of airway collapse in patients with sleep disorder breathing

Michael Schlewet, MD

Validation of intranasal fluorescein for cerebrospinal fluid detection: An in-vitro analysis

Christopher Pool, MD

Xhance for ETD

Arthur Wu, MD, FARS

COSM 2020 Posters

A case of orbital mucocele after endoscopic sinus surgery

Daniel Arkfeld, MD

A rare case of basaloid squamous cell carcinoma arising from the anterior nasal septum

Macaulay Ojeaga

Acute frontal sinusitis in a child presenting with acute ischemic stroke

Wesley Davison, MD

African rhinoplasty versus Asian rhinoplasty average patient satisfaction

Chris Choi, BS

Allergic rhinitis in an active duty population

Danielle Anderson, DO

An elderly patient with bilateral, progressively growing, symptomatic nasolabial cysts

Asad Haider, BA

Assessment of clinical patterns associated with diagnosis of rhinologic disease

Sean Parsel, DO

Association of surgeon USNWR medical school rankings with outcomes after pituitary surgery

Christopher Park, BA

Atypical meningioma of the sinonasal tract

Linnea Fechtner, MD/MS

Automated skull base segmentation with atlas-based segmentation

Neeraja Konuthula, MD

Career patterns of Women in Rhinology

Kristen Echanique, MD

Centralization of care and patient travel for transsphenoidal surgery of the pituitary

Aisosa Omorogbe, BS

CF infection prevention protocol

Meghan Norris, MS

CHEER radiology

Aria Jafari, MD

Clinical characteristics and cost of surgically managed nasal polyps patients

Krista Schladweiler, PhD

Clinical factors distinguishing orbital invasive fungal sinusitis from orbital cellulitis

Jeffrey Bernstein, MD

Complications after endoscopic sinus surgery in sinonasal cancer patients with mental illness

Gregory Barinsky, PharmD

Computational analysis of nose-to-brain drug delivery after nasal midvault reconstruction

Hannah Martin, BS

Contemporary diagnosis of primary ciliary dyskinesia

Erin Lopez, MD

Control of carotid bleed with nasoseptal flap

Matthew Kim, MD

CSF leaks due to electric scooter injury

Jeehong Kim, MD

Demographic predictors of complications in endoscopic sinus surgery in national database

Sonam Dodhia, MD

Determining population-wide interest in different sinus procedures using Google trends

David S. Lehmann, MD

Disparities in access to care and outcomes following rhinoplasty

Aisosa Omorogbe, BS

Distinct histopathologic features of sinusitis complicated by orbital or intracranial extension

Hannah Brown, BS

Effect of nasal fluticasone exhalation delivery system on eustachian tube dysfunction

Arthur Wu, MD, FARS

Effects of smoking on post-operative outcomes in skull base procedures comparing ENT assisted and Unassisted Surgeries

Aakash Shah, BS

Empty nose syndrome

Macauly Ojeaga

Endoscopic endonasal resection of a carcinoma ex-pleomorphic adenoma of the skull base

Tara Wu, MD

Endoscopic muscle graft to right carotid artery blowout

Shravani Pathak, BA

Endoscopic olfactory anatomy

Roberto Soriano, MD

Environmental exposure and histopathologic findings in WTC relief workers with CRS undergoing FESS

Rohini Bahethi, BS

Epithelial remodeling alters PAR-2 polarization

Ryan Carey, MD

Eustachian tube balloon dilation

Jose Alonso, MD

Exclusively endoscopic surgical resection of esthesioneuroblastoma: A systematic review of outcomes

Daniel Spielman, MD

Extranasal recurrence of inverting papilloma following previous Caldwell-Luc

Andy Chua, MBBS

Gender representation at national rhinology meetings

Kathryn Kreicher, MD

Hydraulic dissection technique during endoscopic sinus surgery using a novel balloon sinus dilation

Isaac Schmale, MD

Hypoalbuminemia in anterior skull base procedures

Chris Choi, BS

Impact of prophylactic antibiotics on healthcare utilization following endoscopic sinus surgery

Ashoke Khanwalkar, MD

Increased prevalence of sinusitis in Gulf War veterans

Kenric Tam, MD, MM

Inter-pathologist agreement on CRS structured histopathology

Ashwin Ganti, BA

Intranasal drug delivery to the ostiomeatal complex and maxillary sinus in chronic rhinosinusitis

Hannah Martin, BS

Invasive mucorales infection of the nasopharynx

Abel David, MD

Ki-67 as a marker for recurrence in pituitary adenoma

Kent Tadokoro, MD

Long term efficacy of interior turbinate outfracture in CRS patients

Gina Trinh, MD

Lymph node metastasis in maxillary sinus squamous cell carcinoma

Tapan Patel, MD

Metastasis to the sinuses

Nardin Derias, MS3

Middle turbinate concha bullosa osteoma

Rakhna Araslanova, MD

Modified endoscopic Denker's approach for management of anterior maxillary sinus tumors

Taylor Carle, MD

Nasoseptal flap for reconstruction of hard and soft palate defect

Anas Eid, MD

Nasoseptal rescue flap approach for endoscopic surgery of the clivus and upper cervical spine

Chetan Safi, MD

Nitric oxide nanotherapeutics to combat candida auris

Kevin Li, bs

Non-opioid vs. opioid analgesics for pain control after endoscopic sinus surgery for CRS

Jenna Bergman, Medical Student

Opioids after endoscopic skull base surgery

Alexander Kovacs

Ostial patency measurement analysis after endoscopic sphenoidotomies and frontal sinusotomies

Thomas Higgins, MD, MSPH, FARS

Outcomes in ENT assisted and unassisted anterior skull base surgeries for high risk patients

Chris Choi, BS

Outcomes of anti-hypertensive therapy in skull base procedures

Aakash Shah, BS

Patient satisfaction after septoplasty

Aakash Shah, BS

Patient satisfaction after surgical or nonsurgical rhinoplasty

Aakash Shah, BS

Perioperative management of spontaneous CSF leak repair

Justin McCormick, MD

Post-op outcomes in ENT assisted and unassisted surgeries for patients with steroid use

Aakash Shah, BS

Potential costs of dental treatment and endoscopic sinus surgery for odontogenic sinusitis

Haley Sibley

Practice patterns in the medical and surgical management of traumatic optic neuropathy

Megan Morisada, MD

Prelacrimal approach in managing sinonasal diseases

Yu-Hsuan Lin, MD

Quality of life outcomes 10 years after endoscopic sinus surgery

Kent Tadokoro, MD

Quantification of nasal cavity and sinuses in patients with and without chronic rhinosinusitis

Anisha Singh, BSE

Race, insurance, and facility affect treatment modality in SNSCC

Jesse Qualliotine, MD

Radiologic algorithm for identification of maxillary and sphenoid sinus natural ostia

Julia Comer, MD

Real world attributes of patients on anti-asthma biologic therapy that have concurrent CRS

Devyani Lal, MD, FARS

Recurrent nasal hamartoma in DICER1

Lara Reichert, MD, MPH

Responsiveness and convergent validity of the CRS-PRO in CRS patients undergoing sinus surgery

Katherine Lin, BS

Revision frontal sinus surgery

Mohamed Elsayed, MD, PhD

Sinonasal angiomatous polyp: Case report and review of imaging features

Eliezer Kinberg, MD

Sinonasal small cell neuroendocrine carcinoma – Case series of a rare malignancy

Nikita Chapurin, MD, MHS

Sinonasal symptoms in hospitalized patients

Kirsten Meenan, MD

Sinus irrigation penetration after a Draf IIA vs modified Draf IIA in a cadaveric model

Khalil Issa, MD

Skull base COREAH: Case report and literature review

Anna Flaherty, MD

Sleep outcomes lack association with mucosal eosinophilia or neutrophilia in patients with CRS

Nyssa F. Farrell, MD

Sociodemographic factors impact adjuvant treatment and survival in sinonasal mucosal melanoma

Sarek Shen, MS

Squamous cell carcinoma and pituitary adenoma, a collision tumor of the cavernous sinus

Lindsay Olinde, MD

Structured histopathologic comparisons of benign and malignant sinonasal tumors

Audie Sweis, MD

Subacute IFS, a distinct entity from acute fulminant and chronic IFS

Thomas Edwards, MD

Surgical extent increases risk of post-operative epistaxis in outpatient sinus surgery in Florida

Jeffrey Bernstein, MD

Surgical management of world trade center relief workers with chronic rhinosinusitis

Lauren Williams

Surgical versus endovascular ligation for epistaxis in the anticoagulated patient population

Sarek Shen, MS

Survival outcomes by treatment modality in HPV+ sinonasal squamous cell carcinoma

Vivian Wung

Survival outcomes in patients with acute invasive sinusitis with intracranial extension

Nancy Wang, MD

Survival outcomes in sinonasal neuroendocrine carcinoma: An NCDB analysis

Khalil Issa, MD

Symptom scores and CT findings in CF sinusitis

Lindsey Ryan, MD

The case of a solitary fibrous tumor of the nasal cavity with expansion into the intracranial fossa

Randall Bloch, BS

The diagnostic utility of sinonasal pathology in systemic vasculitides

Ashton Lehmann, MD

The effects of sinus surgery and aspirin desensitization on sleep in AERD

Tran Locke, MD

The effects of site-specific metastases on nasopharyngeal squamous cell carcinoma survival

Christopher Tseng, BS

The impact of head position on sinonasal drug delivery via actuated nasal sprays

Joseph Conduff, MD

The impact of inspiration on sinonasal drug delivery via actuated nasal sprays

Joseph Conduff, MD

The impact of nasal steroid irrigations on the management of chronic rhinosinusitis

Auddie Sweis, MD

The impact of sinus surgery and aspirin desensitization on psychological burden in AERD

Theodore Lin

The influence of population density on survival in sinonasal cancer

Rushi Patel, BA

The role of anesthesia on intraoperative outcomes during endoscopic sinus surgery: A meta-analysis

David Moffatt

The role of CT and endoscopy in the evaluation of patients referred for intranasal cryoablation

Isaac Schmale, MD

Topical anesthesia for scope exams

Matthew Naunheim, MD, MBA

Transorbital sinonasal trauma due to impalement with a felt tip marker

Habib Zalzal, MD

Treatment and clinical outcomes in acute orbital invasive fungal sinusitis

Bridget MacDonald, BA

Understanding nasopharyngeal lymphoepithelial carcinoma: A national analysis

Jeff Gao, BS

Utility of an ultrasonic aspirator in performing a frontal sinus osteoplastic flap

Dominic Catalano, MD

Utility of preoperative phone calls for endoscopic sinus surgery

Mallory McKeon, BA

Value of inferior meatal flap as an adjuvant approach in managing maxillary sinus lesions

Ahmed Mahmoud El Batawi, MD

Vitamin D level is inversely associated with Lund-Mackay score in AERD

Kevin Ig-Izevbekhai, MD

Woakes' Syndrome: A case series

Alexander Dickie, MD

YouTube as a surgical instructional tool for endoscopic transsphenoidal pituitary tumor removal

Victoria Lee, MD