

ARS 68th Annual Meeting

September 9-10, 2022 | Philadelphia, PA



PROGRAM AT A GLANCE

Thursday, September 8, 2022

Salon A/B

12:00 pm – 5:00 pm
Resident Course – Didactic Session

Liberty Ballroom 2/3

6:00 pm – 7:00 pm
Residents Reception

Friday, September 9, 2022

1:00 pm – 5:00 pm

General Session

Salon H/I/J

7:00 am - 8:00 am
Board of Directors Breakfast
Salon E

8:00 am - 12:00 pm
Board of Directors Meeting
Salon E

12:00 pm - 1:00 pm
Satellite Symposia
(Salon A/B/C/D or 2 sessions A/B and C/D)

1:00 pm - 1:05 pm
Welcome
Sarah Wise, MD, FARS

1:05 pm - 1:15 pm
Presidential Address
Rodney Schlosser, MD, FARS

Top Rated Abstracts – Clinical Rhinology

Moderators: Waleed Abuzeid, MD, FARS; Edward McCoul, MD, FARS; Marilene Wang, MD, FARS

1:15 pm - 1:22 pm
EPX as a biomarker for tissue eosinophilia in chronic rhinosinusitis regardless of polyp status
Beau Idler

1:23 pm - 1:30 pm
Re-Open-1: A randomized double-blind placebo-controlled trial of EDS-FLU for CRSwNP or CRSsNP
James Palmer, MD, FARS

1:31 pm - 1:38 pm
Randomized controlled trial of the effect of TXA on epistaxis following sinonasal surgery
Ashoke Khanwalkar, MD

1:39 pm - 1:46 pm
Chitogel post-ESS promotes healthy microbiome and reduces post-operative infections
Anna Megow

1:47 pm - 1:54 pm
Platelet-rich plasma for COVID-19 smell loss, a randomized controlled trial
Carol Yan, MD

1:55 pm - 2:05 pm
Q&A

2:05 pm - 2:15 pm
Awards Ceremony
Jean Kim, MD, FARS; Jivianne Lee, MD, FARS

2:15 pm - 3:00 pm
David W. Kennedy Lecture
“Improving outcomes from sinonasal surgery – What are we missing?”
Introduction: Sarah Wise, MD, FARS
Guest Speaker: Professor Claire Hopkins, BMBCh, FRCS (ORLHNS)

3:00 pm - 3:30 pm
Break with Exhibitors in Franklin Hall

Top Rated Abstracts – Basic and Translational Science

Moderators: Naweed Chowdhury, MD; Kara Detwiler, MD, FARS; Nyall London, MD, FARS

3:30 pm - 3:37 pm
Epigenetics in chronic rhinosinusitis vs. controls
Tripti Brar, MBBS. MD

3:38 pm - 3:45 pm
CST1 is an upstream initiator of epithelial derived type 2 inflammation in a murine model
Alan Workman, MD

3:46 pm - 3:53 pm
Impact of ambient PM2.5 on differentiated human nasal epithelial cell function and viability
Juliana Theorell

3:54 pm - 4:01 pm
Hypoxia-induced CFTR dysfunction is a mechanism underlying reduced mucociliary transport in CRS
Do-Yeon Cho, MD

4:02 pm - 4:09 pm
CRS related S. aureus strains demonstrate enhanced pathogenicity
Simon Goldie

4:10 pm - 4:20 pm
Q&A

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4:20 pm - 5:00 pm

Panel: Artificial intelligence and deep machine learning in rhinology

Moderator: Zara Patel, MD, FARS

Panelists: David Gudis, MD, FARS; Michael Marino, MD, FARS; Edward McCoul, MD, FARS

5:15 pm - 7:00 pm

President's Reception

Liberty Ballroom

Saturday, September 10, 2022

8:00 am – 3:15 pm

Breakout A

Salon H/I/J

7:00 am - 8:00 am

Breakfast Symposia

7:00 am – 8:00 am

Meet the Authors Poster Viewing & Breakfast

Franklin Hall

Skull Base & Orbital Surgery Section Session

8:00 am – 8:30 am

Panel: Nuances of orbital decompression

Moderator: Mindy Rabinowitz, MD, FARS

Panelists: Benjamin Bleier, MD, FARS; Judd Fastenberg, MD; Alkis

Psaltis, MBBS (hons) PhD, FRACS (ORL), Professor; Michael Rabinowitz, MD

8:30 am – 9:15 am

Panel: Skull base malignancy – case discussion with the experts

Moderator: Garret Choby, MD, FARS

Panelists: Mathew Geltzeiler, MD, FARS; Richard Harvey, MD, FARS; Devyani Lal, MD, FARS; James Palmer, MD, FARS

Endoscopic Endonasal Sella and Skull Base Surgery

Moderators: Emily Barrow, MD; Corinna Levine, MD, FARS; Mathew Geltzeiler, MD, FARS

9:15 am - 9:21 am

Postoperative management following endoscopic skull base reconstruction

Khodayar Goshtasbi

9:22 am - 9:28 am

Endocrinopathy risk factors after transsphenoidal surgery

Jake Lee, MD

9:29 am - 9:35 am

Outcomes after clinical care pathway implementation for EEA approach for sellar pathologies

Aamr Hasanjee

9:36 am - 9:42 am

The volume-outcome relationship for pituitary surgery

Annakan Navaratnam

9:43 am - 9:49 am

Frailty does not impact postoperative outcomes in extended endonasal skull base surgery

Rijul Kshirsagar, MD

9:50 am - 10:00 am

Q&A

10:00 am - 10:30 am

Break with Exhibitors in Franklin Hall

Sinonasal Tumors and Orbital Surgery

Moderators: Anthony Del Signore, MD; Patricia Loftus, MD, FARS; Nicholas Rowan, MD

10:30 am - 10:36 am

Effect of sarcopenia on survival outcomes in patients with nasopharyngeal and sinonasal cancer

Peter Kim, MD

10:37 am - 10:43 am

A multi-institutional survey of sinonasal lymphoma outcomes over the past 20 years

Jacob Eide, MD

10:44 am - 10:50 am

Volume and survival in endoscopic surgery for sinonasal squamous cell carcinoma

Benjamin Bitner, MD

10:51 am - 10:57 am

Orbital resection by intranasal technique (ORBIT) staging system

Aria Jafari, MD

10:58 am - 11:04 am

Risk of frontal sinusitis after orbital decompression

Parker Tumlin

11:05 am - 11:15 am

Q&A

11:15 am - 12:00 pm

Panel: Skull base reconstruction options beyond the naso-septal flap

Moderator: Eric Wang, MD, FARS

Panelists: Emily Barrow, MD; Corinna Levine, MD, FARS; Katie Phillips, MD; Raj Sindwani, MD, FARS

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12:00 pm - 1:00 pm

Lunch with Exhibitors in Franklin Hall

12:00 pm - 1:00 pm

Women in Rhinology/Diversity & Inclusion/Mentorship/Residents and Fellows Luncheon

Guest Speaker: Simone S. Hicks, JD

"Medical Contracts and Negotiations from a Legal Perspective"

Salon E

Biologics

Moderators: Cecelia Damask, DO; Jose Mattos, MD; Lauren Roland, MD

1:00 pm - 1:06 pm

Real world analysis of dupilumab for nasal polyposis not meeting proposed biologic use guidelines

Isaac L. Schmale, MD

1:07 pm - 1:13 pm

Dupilumab treatment delays in asthma and chronic rhinosinusitis with nasal polyps

Samiat Awosanya

1:14 pm - 1:20 pm

Computational fluid dynamic analysis of improved olfaction after dupilumab

Thomas Lepley

1:21 pm - 1:27 pm

Efficacy of dupilumab in allergic fungal rhinosinusitis

Bader Alim, MBBS, MD

1:28 pm - 1:34 pm

Impact of dupilumab on sinonasal outcomes in patients with AERD refractory to other biologics

Glen D'Souza

1:35 pm - 1:45 pm

Q&A

1:45 pm - 2:00 pm

HOT TOPICS: What's on the horizon? Biologics for nasal polyposis

Speakers: Kent Lam, MD, FARS; Lauren Roland, MD

2:00 pm - 2:45 pm

Panel: Unified airway update?

Moderator: Kevin Welch, MD, FARS

Panelists: John Bosso, MD; Cecelia Damask, DO; Claire Hopkins, MD; Anju Peters, MD

2:45 pm - 3:15 pm

Break with Exhibitors in Franklin Hall

Saturday, September 10, 2022

8:00 am - 12:00 pm

Breakout B

Salon A/B

Chronic Rhinosinusitis Histology and Treatment

Moderators: Angela Donaldson, MD, FARS; Elisabeth Ference, MD, FARS; Ashoke Khanwalkar, MD

8:00 am - 8:06 am

Histopathologic differences in adult and elderly patients with CRS
Hannah Brown

8:07 am - 8:13 am

Medical therapy for CRS is associated with a decrease in disease burden and type 2 inflammation

Eli Stein

8:14 am - 8:20 am

Long-acting corticosteroid matrices improve CRS cardinal symptoms

TBD

8:21 am - 8:27 am

Effect of dupilumab on eustachian tube dysfunction in patients with CRS

Michael Chang, MD

8:28 am - 8:34 am

Salicylate limited diet in aspirin exacerbated respiratory disease

Diana Bigler

8:35 am - 8:45 am

Q&A

Women in Rhinology Section Session

8:45 am - 9:30 am

Panel: Ensuring diversity in rhinologic research

Moderators: Elina Toskala, MD, FARS and Troy Woodard, MD, FARS

Panelists: Sandra Brooks, MD; Claire Hopkins, MD

9:30 am - 9:40 am

Anatomy, physiology, psychology, pathology of the female vs male nose and sinuses

Speaker: Devyani Lal, MD, FARS

9:40 am - 9:50 am

Sex-based differences in access and outcomes in rhinology and neurorhinologic procedures

Speaker: Vijay Ramakrishnan, MD, FARS

9:50 am - 10:00 am

Guidelines in managing rhinologic pathology in pregnancy

Speaker: Satish Govindaraj, MD, FARS

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10:00 am - 10:30 am

Break with Exhibitors in Franklin Hall

Sinus Surgery I

Moderators: Kristine Smith, MD; Zachary Soler, MD, FARS; Abtin Tabaei, MD, FARS

10:30 am - 10:36 am

Medical and surgical treatments of chronic rhinosinusitis share common mechanisms of action

Audrey Pelletier

10:37 am - 10:43 am

Systematic review: biologics versus surgery in CRSwNP

Nirushan Narendran

10:44 am - 10:50 a

Bioabsorbable drug eluting microsphere for frontal sinus surgery

Tripti Brar

10:51 am - 10:57 am

RCT on impact of steroid-eluting implants on frontal BSD based on quantitative CT analysis

Anna Gawlicka

10:58 am 11:04 am

Effect of nasal packing saturated with ciprofloxacin and dexamethasone following sinus surgery

Norman Orabi, MD

11:05 am - 11:15 am

Q&A

Sinus Surgery II

Moderators: Mark Arnold, MD; Philip Chen, MD, FARS; Ashleigh Halderman, MD, FARS

11:15 am - 11:21 am

Comparison of endoscopic Draf 2 and Draf 3 procedure outcomes in CRSwNP

Samuel Racette, MD

11:22 am - 11:28 am

Maxillary sinus volume changes after surgery in silent sinus syndrome

Juan Carlos Hernaiz

11:29 am - 11:35 am

The effectiveness of postoperative gabapentin for reduction of opioid consumption and pain control

Hong-Ho Yang

11:36 am - 11:42 am

Tobacco use increases the risk of CRS among patients undergoing ESS

Amarbir S. Gill, MD

11:43 am - 11:49 am

The impact of resident and fellow participation on outcomes following endoscopic sinus surgery

Karandeep Randhawa

11:50 am - 12:00 pm

Q&A

12:00 pm - 1:00 pm

Lunch with Exhibitors in Franklin Hall

12:00 pm - 1:00 pm

Lunch Symposium

Saturday, September 10, 2022

8:00 am – 12:00 pm

Breakout C

Salon C/D

Allergy and Immunology in Rhinology Section

8:00 am – 8:45 am

Panel: Climate change is its effect on rhinologic disease

Moderator: Jean Kim, MD, FARS

Panelists: Regan Bergmark, MD, FARS; Daniel O'Brien, MD; Amber Luong MD, PhD, FARS; Darryn Waugh, MD; Ben Zaitchik, MD

8:45 am – 9:15 am

Immune Deficiencies and sinusitis

Moderator: Chadi Makary, MD, FARS

Panelists: Antoine Azar, MD; Sandra Lin, MD, FARS; Fuad Baroody, MD, FARS

Allergy and Rhinitis

Moderators: Charles Ebert, MD, FARS; Katie Phillips, MD; Ahmad Sedaghat, MD

9:15 am - 9:21 am

Cost-effectiveness of inferior turbinate reduction vs immunotherapy for allergic rhinitis

Michael Yong, MD

9:22 am - 9:28 am

Real-world SLIT persistence and adherence

Michelle Park

9:29 am - 9:35 am

Variability in sinonasal allergen deposition explains asymmetric involvement in CCAD

Daniel Spielman, MD

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9:36 am - 9:42 am

Vidian nerve diameter: A possible association with chronic rhinitis diagnosis

Megha Chandna

9:43 am - 9:49 am

Cost-effectiveness of in-office posterior nasal nerve ablation

Anirudh Saraswathula

9:50 am - 10:00 am

Q&A

10:00 am - 10:30 am

Break with Exhibitors in Franklin Hall

Smell and Taste

Moderators: Daniel Beswick, MD, FARS; Sanjeet Rangarajan, MD, FARS; Carol Yan, MD

10:30 am - 10:36 am

Social determinants of health and olfactory dysfunction in older adults: A population-based analysis

Eli Stein

10:37 am - 10:43 am

Correlation of computed tomography scores to measures of olfaction

Tiffany Chen

10:44 am - 10:50 am

Will septoplasty improve my sense of smell? A prospective observational study

Grant Gillman

10:51 am - 10:57 am

Gabapentin for COVID-19 induced Parosmia

Do-Yeon Cho, MD

10:58 am - 11:04 am

Taste loss correlation with cognition

Shahzeb Hasan

11:05 am - 11:15 am

Q&A

Rhinosinusitis Diagnosis and Associated Conditions

Moderators: David Jang, MD, FARS; Edward Kuan, MD, FARS; Mindy Rabinowitz, MD, FARS

11:15 am - 11:21 am

Increased prevalence of eosinophilic esophagitis in patients with CRS

Arthur Wu, MD, FARS

11:22 am - 11:28 am

Inflammatory endotype of odontogenic sinusitis

John Craig, MD, FARS

11:29 am - 11:35 am

Evaluation and work-up of immunodeficiencies in recurrent acute rhinosinusitis: A scoping review

Jessica Lin

11:36 am - 11:42 am

Importance of sinus cultures in patients with acute exacerbations of CRS

Jessa Miller, MD

11:43 am - 11:49 am

Presence of the CDHR3 risk allele in CRS patients increases the odds of sinus infections

Nirushan Narendran

11:50 am - 12:00 pm

Q&A

12:00 pm - 1:00 pm

Lunch with Exhibitors in Franklin Hall

Saturday, September 10, 2022

8:00 am – 2:45 pm

Breakout D

Salon K/L

Rhinology All Around

Moderators: Stephanie Joe, MD, FARS; Jonathan Mallen, MD; Theodore Schuman, MD, FARS

8:00 am - 8:06 am

Hospital ownership status effect on nasal bone fracture outcomes and cost of care

Maham Ahmad

8:07 am – 8:13 am

Clinical characteristics of patients with TMJ arthritis presenting as CRS

Norman Orabi, MD

8:14 am - 8:20 am

A quantitative approach to measurement of nasal medication irrigation

Aditya Devarakonda

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8:21 am - 8:27 am

Teaching sinus anatomy: efficacy of self-directed online sinonasal anatomy learning modules

Eric Bailey, MD

8:28 am - 8:34 am

Feedback improves E/M billing

Amarbir Gill, MD

8:35 am - 8:45 am

Q&A

8:45 am - 9:25 am

Panel: Moving rhinology forward – high impact rhinology research

Moderator: Stephanie Shintani-Smith, MD

Panelists: Benjamin Bleier, MD, FARS; Murray Ramanathan, MD, FARS; Justin Turner, MD, FARS

Cerebrospinal Fluid Leaks and Biomarkers

Moderators: Edward El Rassi, MD; Tran Locke, MD; Sonya Marcus, MD

9:25 am - 9:31 am

Assessment of CSF biomarkers for cognitive impairment in patients with sinonasal inflammation

Nathaniel Reeve

9:32 am - 9:38 am

Optic nerve sheath diameter correlates to intracranial pressure in spontaneous CSF leak patients

Ashwini Tilak

9:39 am - 9:45 am

Multi-institutional spontaneous CSF leak case-control study

Pedro Escobedo

9:45 am - 9:51 am

Subjective symptoms and signs of postoperative cerebrospinal fluid leak

Jonathan Pang, MD

9:51 am - 10:00 am

Q&A

10:00 am - 10:30 am

Break with Exhibitors in Franklin Hall

10:30 am - 11:15 am

Panel: ARS society structure – how to get involved!

Moderator: Joshua Levy, MD, FARS

Panelists: Amber Luong, MD, PhD, FARS; Brent Senior, MD, FARS; Timothy Smith, MD, FARS; Michael Stewart, MD, FARS

Basic and Translational Science

Moderators: Naveen Bhandarkar, MD, FARS; Do-Yeon Cho, MD; Esther Kim, MD

11:15 am - 11:21 am

Interferon-induced olfactory mucosal inflammation elicits an immune response in the olfactory bulb

Andrew Lane, MD, FARS

11:22 am - 11:28 am

Simvastatin as a topical anti-inflammatory

Nyssa Farrell, MD

11:29 am - 11:35 am

Impact of topical probiotics on differentiated human nasal epithelial cell function and viability

Juliana Theorell

11:36 am - 11:42 am

Proteomic identification of potential antibacterial products from *Corynebacterium accolens*

Martha Menberu

11:43 am - 11:49 am

Host immune response differences to fungus in healthy subjects and sinus mycetoma patients

Estephania Candelo

11:50 am - 12:00 pm

Q&A

12:00 pm - 1:00 pm

Lunch with Exhibitors in Franklin Hall

1:00 pm - 1:45 pm

Panel: Cough -- where does the rhinologist fit in?

Moderator: Abtin Tabaei, MD, FARS

Panelists: John Bosso, MD; Rakesh Chandra, MD, FARS; Patricia Loftus, MD, FARS; Anais Rameau, MD

1:45 pm - 2:00 pm

HOT TOPICS: Central compartment atop disease: recent evidence, knowledge gaps, future understanding

Speaker: John Del Gaudio, MD, FARS

Health Disparities, Disease Burden, and Patient Outcomes

Moderators: Regan Bergmark, MD, FARS; Victoria Lee, MD; Elina Toskala, MD, FARS

2:00 pm - 2:06 pm

Health disparities among adults with sinusitis in the United States

Eric Wei, MD

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2:07 pm - 2:13 pm

The impact of priming on rhinologic patient reported outcome measures

Nathan Yang

2:14 pm - 2:20 pm

Correlation between SNOT-22 and cardinal symptom composite scores in CRS

TBD

2:21 pm - 2:27pm

Chronic rhinosinusitis productivity and activity impairment

Vivek Pandurangi, MD

2:28 pm - 2:34 pm

Validation of the novel postoperative polyp scale (POPS)

Arthur Wu, MD, FARS

2:35 pm - 2:45 pm

Q&A

2:45 pm - 3:15 pm

Break with Exhibitors

Saturday, September 10, 2022

3:15 pm – 5:00 pm

General Session

Salon H/I/J

3:15 pm - 3:25 pm

Business Meeting & Presidential Citations

Michael Stewart, MD, FARS; Rodney Schlosser, MD, FARS

3:25 pm - 3:30 pm

Introduction of Hwang Family Lectureship

Peter Hwang, MD, FARS

3:30 pm - 4:15 pm

Hwang Family Lectureship

"Title TBD"

4:15 pm - 5:00 pm

ARS/AAOA Panel – The Future of Rhinology

Moderator: Jennifer Villwock, MD

Panelists: Dana Crosby, MD, FARS; Sandra Lin, MD, FARS; Anju Peters, MD; James Stankiewicz, MD, FARS

Meeting Adjourns

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PROGRAM AT A GLANCE

POSTERS

Poster 001

Adjuvant chemoradiation therapy following surgical resection of sinonasal malignancies
Lena Kheir, BA

Poster 002

Adoption of posterior nasal nerve cryoablation as a treatment for rhinitis
Allan Wang

Poster 003

Adverse events following endoscopic sinonasal surgery
Ariel Omiunu

Poster 004

Age in acute rhinosinusitis
Aman M. Patel, BS

Poster 005

Ameloblastoma transnasal endoscopic resection
Neeraj Suresh, BS

Poster 006

Anemia in skull base fractures
Aman M. Patel, BS

Poster 007

Anemia in transsphenoidal pituitary surgery
Joel Feier, BA

Poster 008

Anteriorly based middle turbinate flap: A cadaveric study and case series
Anna Lazutkin, MD

Poster 009

Association between intraoperative findings and post-ESS endotype in patients with CRS
Eli Stein

Poster 010

Association between research productivity and NIH funding in academic rhinology
Delphine Gardiner

Poster 011

Association between SARS-CoV-2 and other respiratory viruses in sudden smell loss
Marcel Miyake, MD, PhD

Poster 012

Association of allergic rhinitis and asthma with chronic rhinosinusitis and adenoiditis in children
Ian Sunyecz, DO

Poster 013

Asthma in endoscopic sinus surgery
Abhijit Bhattaru, BA

Poster 014

Attitudes of perioperative communication and patient safety in rhinology
Maria Armache, MD

Poster 015

Biologic use in nasal polyps
Jared Silver

Poster 016

Biphenotypic sinonasal sarcoma: Case report with literature review
Edie Threlkeld

Poster 017

Carcinosarcoma of the nasal cavity and paranasal sinuses: A review of the national cancer database
Jacob Harris, BA

Poster 018

Chronic rhinosinusitis symptoms in CRS patients before and during the COVID-19 pandemic
Michela Borrelli, BA

Poster 019

Clinical predictors of successful symptom improvement following eustachian tube balloon dilation
Hong-Ho Yang, BS

Poster 020

Comparing the severity of chronic rhinosinusitis symptoms before vs. during the COVID-19 pandemic
Jasmine Lin, BA

Poster 021

Complications of absorbable intranasal packing: An analysis of the MAUDE database
Meryl Kravitz, MD

Poster 022

COVID-19 and pituitary surgical volume trends
Mandy Salmon, BS

Poster 023

Craniopharyngioma outcomes in children versus adults
Mandy Salmon, BS

Poster 024

Cystic Fibrosis in pediatric chronic rhinosinusitis
Aman M. Patel, BS

Poster 025

Depression in benign pituitary neoplasm
Aman M. Patel, BS

Poster 026

Deviated nasal septum in chronic rhinosinusitis
Aman M. Patel, BS

Poster 027

Deviated nose entire framework approach
Mohsen Naraghi, MD, FARS

Poster 028

Delayed onset CSF rhinorrhea: An alternative presentation of post-traumatic meningoencephalocele
Samantha Newman

Poster 029

Diabetes mellitus in orbital cellulitis
Joel Feier, BA

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Poster 030

Disease-specific quality of life outcomes following anterior skull base surgery

Paige Shipman, BS

Poster 031

Disparities in access to healthcare

Robert Hagedorn, BS

Poster 032

Dupilumab impact on SNOT-22 items and association with objective outcomes in CRSwNP

Joaquim Mullol, MD, PhD

Poster 033

Dynamics of dupilumab response in CRSwNP

Claus Bachert, MD, PhD

Poster 034

Effects of delays in care in chronic rhinosinusitis patient's symptom severity and Outcomes

Michela Borrelli, BA

Poster 035

Efficacy of olfactory training in treatment of post-viral vs post-traumatic olfactory dysfunction

Krishna Hanubal, BS

Poster 036

Endoscopic transnasal stenting of an obliterated eustachian tube:

Case report of a novel technique

Victor Hsue, MD

Poster 037

Evaluation of PGISS Score as a measure of CRS disease activity

Subin Lim

Poster 038

Exacerbated host-immune responses by the interaction between

RV-C and the CDHR3 risk allele

Sunny Palumbo, PhD

Poster 039

Exploring sociodemographic factors in allergic fungal rhinosinusitis

Peter Debbaneh, MD

Poster 040

Gastro-esophageal reflux disease in transsphenoidal pituitary surgery

Joel Feier, BA

Poster 041

Glomangiopericytoma: A case series

Natalie Schauwecker, MD

Poster 042

Granulomatosis with polyangiitis and chronic rhinosinusitis

Chengetai Mahomva, MD

Poster 043

Growth in endoscopic sinus cancer surgery over time

Sina Torabi, MD

Poster 044

Hospital frailty risk score as a predictor of postoperative outcomes in sinonasal malignancies

Rema Anisha Kandula, MD

Poster 045

Hospital profit status in acute rhinosinusitis

Aman M. Patel, BS

Poster 046

Hospital region in pediatric acute rhinosinusitis

Joel Feier, BA

Poster 047

Hypothyroidism in endoscopic sinus surgery

Abhijit Bhattaru, BA

Poster 048

Iatrogenic rhinolith in a new American: Case report and review of the literature

Daniel Mitchell, BS

Poster 049

Identification of dendritic cells in CRS-associated nasal polyps by immunohistochemistry

Amelia Lawrence

Poster 050

Impact of resident and fellow participation in endoscopic sinonasal procedures—A NSQIP study

Priyanka Singh, BA

Poster 051

Improving accuracy of maxillary balloon dilation using virtual reality navigation: Proof of concept

Kevin Grafmiller, MD

Poster 052

Income in benign pituitary neoplasm

Aman M. Patel, BS

Poster 053

Income in Black and Hispanic patients with skull base fractures

Aman M. Patel, BS

Poster 054

Intrinsic nasal fibro-fat in rhinoplasty

Mohsen Naraghi, MD, FARS

Poster 055

Invasive fungal sinusitis - do topical steroids present a risk?

Jessica Bishop, MD

Poster 056

July effect in orbital cellulitis

Joel Feier, BA

Poster 057

Landmark and techniques for in-office sphenopalatine ganglion block

Francesco Caruana

Poster 058

MAUDE database analysis for adverse events associated with eustachian tube dilation

Sarah Jeoung, BS

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Poster 059

Medical malpractice trends in endoscopic orbital surgeries
Rachna Goli, BS

Poster 060

Medicating the olfactory cleft: Nasal spray vs. drops in kaiteki position
Lucas Axiotakis

Poster 061

Medication compliance in allergic fungal sinusitis of the frontal sinus and its impact on recurrence
Eun Jeong

Poster 062

Mepolizumab versus Dupilumab for chronic rhinosinusitis with polyps
Kent Tadokoro, MD

Poster 063

Metabolomics in sinusitis
Michael Armstrong, MD

Poster 064

Metastatic prostate cancer to the sinuses
Alexandra Michalowski, MD

Poster 065

Modified endoscopic surgery to treat a complex fronto-cutaneous fistula
Yu-Hsuan Lin, MD

Poster 066

Modified technique significantly improves efficacy for in-office posterior nasal nerve ablation
Alexander Choi, MD

Poster 067

Musculoskeletal and connective tissue disease in orbital cellulitis
Anthony M. Saad, BA

Poster 068

Nasal cytology in patients treated with biologic therapies
Rafael Hijano, MD PhD

Poster 069

Nasal endoscopy in the management of epistaxis
Joel Feier, BA

Poster 070

Nasal polyps in pediatric chronic rhinosinusitis
Aman M. Patel, BS

Poster 071

Nonresponders to interleukin-5 inhibitors in CRSwNP
Maggie Donovan, Medical Student

Poster 072

Optimizing success in dacryocystorhinostomy
Hanna Luong, BS

Poster 073

Osteoradionecrosis of the skull base
Sunny Shah, Medical Student

Poster 074

Otolaryngologist perceptions of AI-based CT sinus interpretation
Conner Massey, MD

Poster 075

Outcomes of Dupilumab treatment in patients presenting with severe asthma or CRSwNP, over 65
Keisha Best, MS

Poster 076

Oxidative stress defense mechanisms and senescence in the olfactory epithelium
Melissa Liu, MD PhD

Poster 077

Patient versus provider Twitter perspectives on sinusitis
Shahzeb Hasan, BS

Poster 078

Pediatric chronic rhinosinusitis with Cystic Fibrosis
Matt Lelegren, MD

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