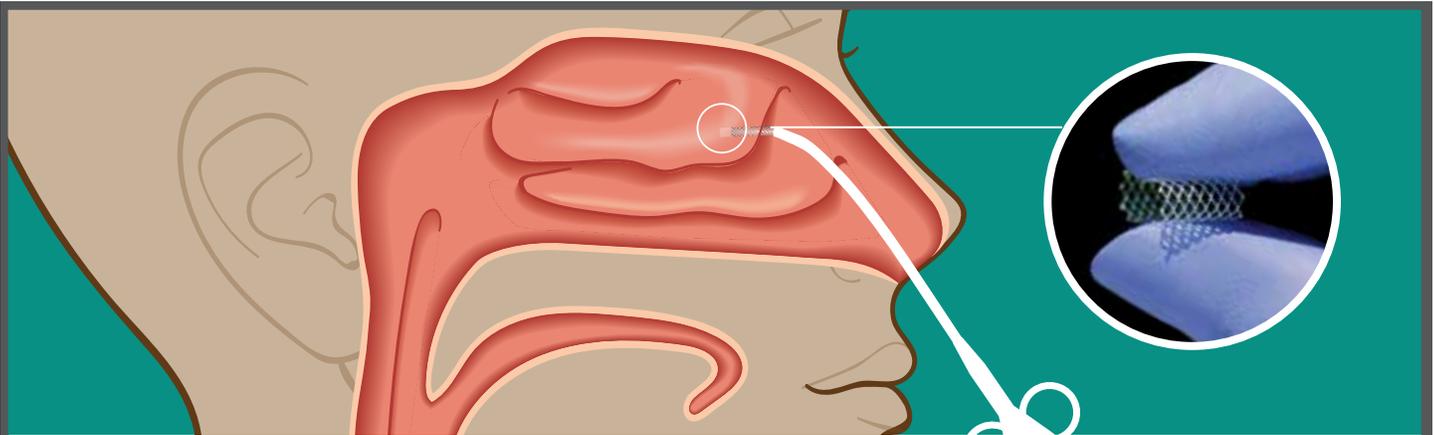




# EXHIBITOR GUIDE

## ARS 68th Annual Meeting

September 9-10, 2022 | Philadelphia Marriott Downtown Hotel, Philadelphia, PA



## Join us at the ARS Annual Meeting for two oral presentations with additional data from the LYR-210 Phase 2 study

### Long-acting corticosteroid matrices improve CRS cardinal symptoms

*Brent A. Senior, MD, FACS, FARS*

**Saturday, September 10, 2022  
8:14 - 8:20am ET**

Session: Chronic Rhinosinusitis  
Histology and Treatment

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

*Brent A. Senior, MD, FACS, FARS*

**Saturday, September 10, 2022  
2:14 - 2:20pm ET**

Session: Health Disparities, Disease  
Burden, and Patient Outcomes

LYR-210\* is designed to provide up to 6 months of local anti-inflammatory treatment from a single in-office administration for CRS patients not controlled with conventional approaches. [Learn more ►](#)

\*LYR-210 is an investigational candidate for CRS currently being evaluated in two Phase 3 clinical trials: ENLIGHTEN I (NCT05219968) and ENLIGHTEN II (NCT05295459)

LYRATHERAPEUTICS.COM

**LYRA**  
THERAPEUTICS

**Forward-Looking Statements:** This communication contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. All statements contained in this communication that do not relate to matters of historical fact should be considered forward-looking statements, including without limitation statements regarding the potential, safety, efficacy, and regulatory and clinical progress of LYR-210 and LYR-220. Such statements are subject to numerous risks and uncertainties, including, but not limited to, the important factors discussed under the caption "Risk Factors" in our Quarterly Report on Form 10-Q for the quarter ended June 30, 2022 and our other filings with the SEC. Except as required by law, we undertake no obligations to make any revisions to the forward-looking statements contained in this communication or to update them to reflect events or circumstances occurring after the date of this communication, whether as a result of new information, future developments or otherwise.



*RODNEY SCHLOSSER, MD, FARS*

## Presidential Welcome

I am excited to welcome everyone to our 68th Annual ARS Meeting in Philadelphia! Sarah Wise, our President-Elect and Program Chair, has put together an outstanding educational meeting. The highlight will be our David W. Kennedy Lecture given by Claire Hopkins, BMBCH, FRCS (ORLHNS).

Claire has been active in the rhinology community for many years in Europe and internationally and is a thought leader in rhinology research and clinical care. During the COVID pandemic, she was instrumental in conducting research and sharing it with colleagues around the world and we are so grateful that she will be traveling from London to spend time with us in Philadelphia.

In addition to Claire's lecture, there will be numerous presentations on the latest treatments for COVID-anosmia, clinical trial data on topical therapies for CRS and current utilization of biologics and drug eluting stents for nasal polyposis. Additional panels will cover a wide spectrum of topics from the role of the rhinologist in cough to medical contracts to cutting edge basic science and translational research. I look forward to the new Hwang Family Lectureship given by James Stankiewicz, MD, FARS on "Mentorship... it goes both ways". As you can see there is something of interest for everyone!

It has been a privilege to serve as the ARS President for the past year and I look forward to seeing everyone in Philadelphia.

Rodney Schlosser, MD, FARS  
*President, American Rhinologic Society*



SARAH K. WISE, MD, FARS

## Welcome from the President Elect and Program Chair

We are excited to welcome you to the 2022 American Rhinologic Society Annual Meeting!

The ARS has now hosted several successful in-person meetings during the COVID era. We look forward to sharing excellent educational and networking experiences with you once again as we gather in Philadelphia at the Marriott Downtown, September 9-10, 2022.

The program for the ARS Annual Meeting is packed with innovative research, timely and informative panels, and thought-provoking keynote lectures. This meeting will not disappoint!

Highlighting original research, over 70 abstracts were accepted for oral scientific presentation, along with more than 100 posters. These presentations cover various aspects of rhinology, allergy, smell and taste, immunology, biologic therapies, basic and translational science, sinonasal tumors, skull base surgery, and more. Many thanks to the research teams, presenters and moderators, and the abstract review committee whose collective work will provide a high quality scientific program for the Annual Meeting attendees.

We are extremely honored to have Professor Claire Hopkins present the David W. Kennedy lecture this year, titled "Improving Outcomes from Sinus Surgery: What are we Missing?" In addition, this will be the inaugural year of the Hwang Family Lecture, a newly established lectureship dedicated mentoring and mentorship. Dr. James Stankiewicz will give the first Hwang Family Lecture, titled "Mentorship: It Goes Both Ways"

The ARS Annual Meeting has several break-out rooms on Saturday morning, which are designed to grab the interest of meeting attendees across various aspects of rhinology. Our ARS Women in Rhinology, Allergy and Immunology, and Skull Base and Orbital Sections were instrumental in planning educational sessions in some of these break-out rooms.

Panels and group discussions at the 2022 ARS Annual Meeting will highlight various innovative and interesting topics, including Artificial Intelligence and Machine Learning in Rhinology, Orbital Decompression, Skull Base Malignancy and Reconstruction, Unified Airway, Diversity in Rhinologic Research, Climate Change and its effect on Rhinologic Disease, Immune Deficiencies and Sinusitis, Cough, and The Future of Rhinology. We look forward to the thought-provoking presentations, questions, and discussions that contribute to the success of these sessions.

Friday's session will be capped off with the President's Reception, which offers a great venue for networking and social interaction with colleagues. Additional learning opportunities are available at the Saturday morning Meet the Authors Poster Viewing and Breakfast, as well as several industry-sponsored satellite symposia occurring during breakfast and lunch hours throughout the meeting. Finally, the combined Women in Rhinology, Mentorship, and Diversity & Inclusion Saturday Lunch will feature Simone S. Hicks, JD, speaking on "Medical Contracts and Negotiations from a Legal Perspective."

Many thanks in advance to our speakers, planners, and attendees. We sincerely appreciate your continued support and engagement with the American Rhinologic Society. Have a great meeting, everyone!

Sarah K. Wise, MD, FARS  
*President-Elect/Program Chair*



# ARS 68th Annual Meeting Industry Supporters

The American Rhinologic Society gratefully acknowledges the following companies for their support of the 68th Annual Meeting

Medtronic  
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GSK  
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Acclarent  
**Women in Rhinology/Diversity & Inclusion/  
Mentorship/Residents & Fellows Program**

Medtronic  
**David W. Kennedy Lectureship**

Medtronic & Intersect ENT is now a part of  
Medtronic  
**Residents Reception**

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## Exhibitors

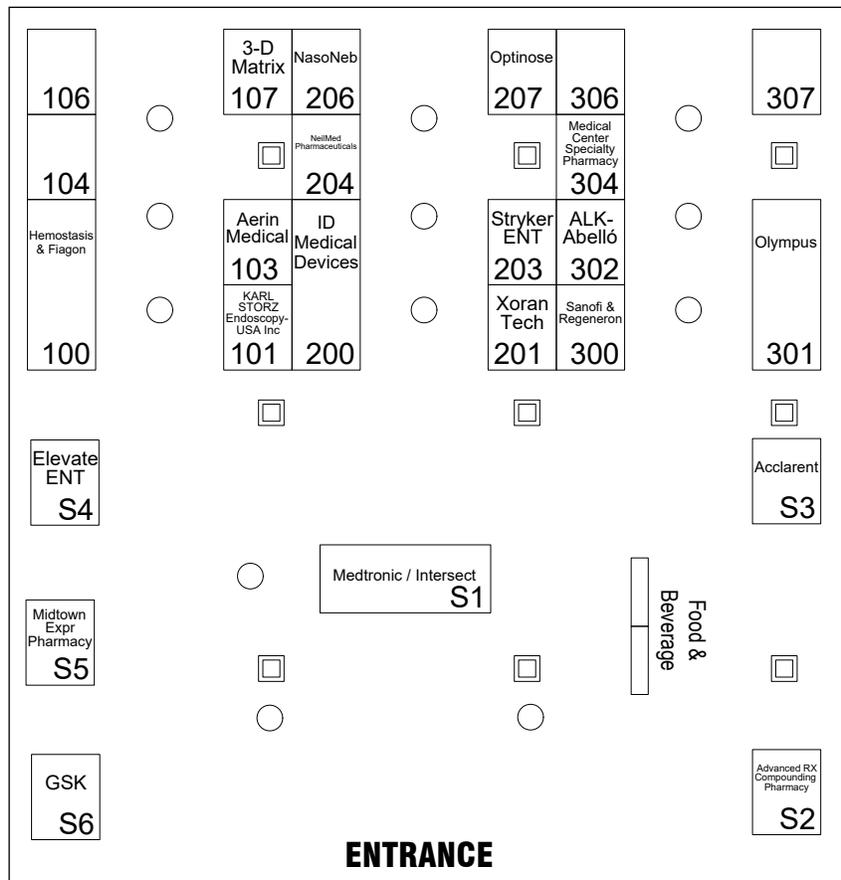
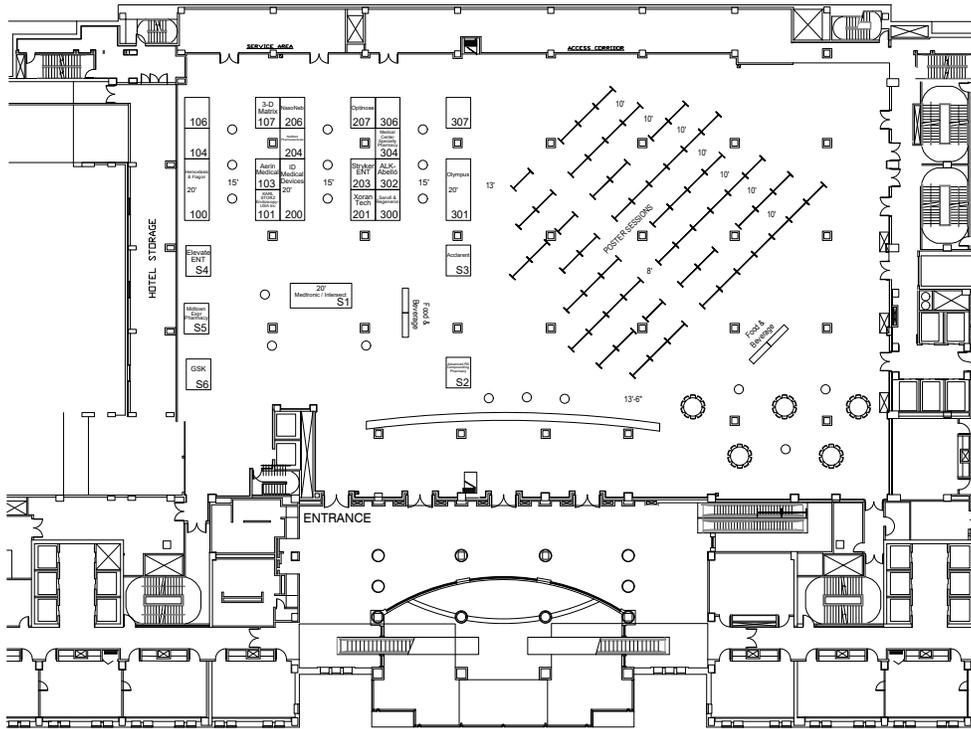
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3-D Matrix, Inc.  
Acclarent  
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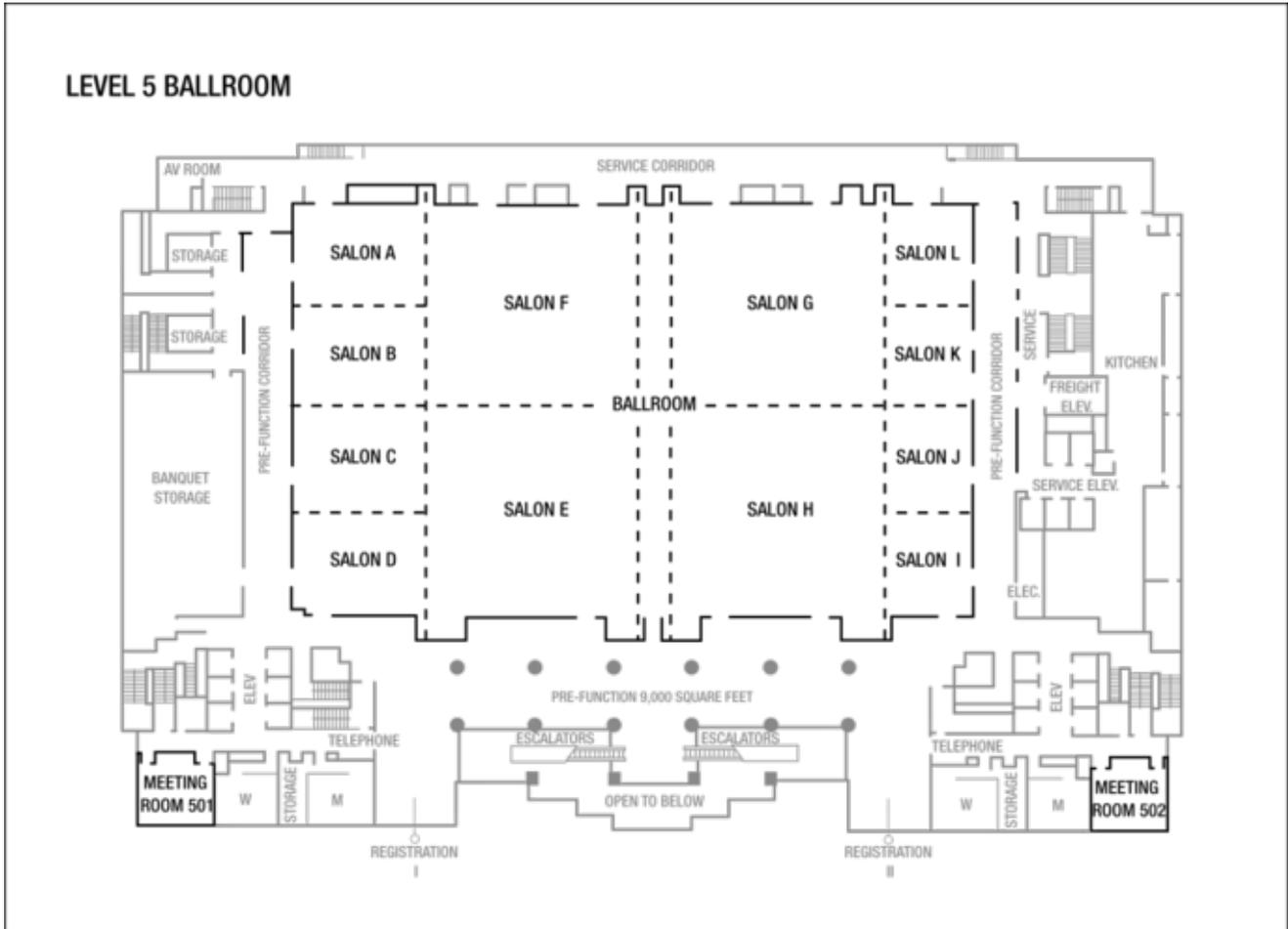
ID Medical Devices  
Intersect ENT is now a part of  
Medtronic  
KARL STORZ Endoscopy-  
America, Inc.  
Medical Center Specialty  
Pharmacy  
Medtronic  
Midtown Express Pharmacy

NasoNeb  
NeilMed Pharmaceuticals Inc.  
Olympus America Inc.  
Optinose  
Sanofi Genzyme & Regeneron  
Stryker ENT  
Xoran Technologies

# Exhibit Hall



# Floor Plan



## Industry Sessions

### Friday, September 9, 2022

12:00 pm – 12:50 pm

#### **GSK Lunch Symposium**

**Location:** Salon C/D

**Title:** “Diagnostic Dilemmas & Pearls for the Practicing Otolaryngologist in CRSwNP”

**Description:** Our expert will use illustrative patient cases to highlight the diagnostic prognostic and high-level treatment challenges that may be encountered when managing patients with chronic rhinosinusitis with nasal polyps. He will then discuss strategies and methods he has used to overcome these diagnostic and treatment challenges.

**Speaker:** David W. Kennedy, MD, FARS

*This is a non-CME event sponsored by GSK. It is neither sponsored by nor endorsed by the ARS.*

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12:00 pm – 12:50 pm

#### **Acclarent Lunch Symposium**

**Location:** Salon K

**Title:** “TruDi Navigation in Advanced Rhinology: Applications Across Sites of Service”

**Moderator:** Raj Sindwani, MD, FARS

**Speakers:** Nithin Adappa, MD, FARS; Zachary Cappello, MD; Pat Colley, MD

*This is a non-CME event sponsored by Acclarent. It is neither sponsored by nor endorsed by the ARS.*

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### Saturday, September 10, 2022

7:00 am – 7:50 am

#### **Sanofi & Regeneron Breakfast Symposium**

**Location:** Salon C/D

**Title:** “Explore a Different Path to Control Chronic Rhinosinusitis with Nasal Polyposis in Your Patients with Inadequately Controlled Disease”

**Speaker:** Roheen Raithatha, MD, FARS

*This is a non-CME event sponsored by Sanofi & Regeneron. It is neither sponsored by nor endorsed by the ARS.*

## PROGRAM AT A GLANCE

## Thursday, September 8, 2022

### Salon C/D

12:00 pm – 5:00 pm  
Resident Course – Didactic Session  
By Invitation Only

### Liberty Ballroom 2/3

6:00 pm – 7:00 pm  
Residents Reception  
By Invitation Only

## Friday, September 9, 2022

### 1:00 pm – 5:00 pm General Session Salon H/I/J

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**  
Devyani Lal, MD, FARS

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 Detwiller, 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**

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 Welcome 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  
**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; Kibwei McKinney, MD; 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

## PROGRAM AT A GLANCE

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

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

Rijul Kshirsagar, MD

9:43 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

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**

Juan Carlos Hernaiz

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**

7:00 am – 8:00 am

**Meet the Authors Poster Viewing & Breakfast**  
Franklin Hall**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**

Brent Senior, MD, FARS

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

8:35am - 8:45 am

**Q&A**

## PROGRAM AT A GLANCE

**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

10:00 am - 10:30 am

**Break with Exhibitors in Franklin Hall****Sinus Surgery I**

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

10:30 am - 10:36 am

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

Audrey Pelletier, PhD

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

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

Norman Orabi, MD

10:58 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

**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

**Saturday, September 10, 2022****8:00 am – 12:00 pm****Breakout C Salon C/D**

7:00 am – 8:00 am

**Meet the Authors Poster Viewing & Breakfast**

Franklin Hall

**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; Kent Lam, MD, FARS; 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

**Allergy and Rhinitis**

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

Joshua Levy, MD, FARS

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

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**

## PROGRAM AT A GLANCE

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 - 12:00 pm

**Q&A**

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

**Saturday,  
September 10, 2022****8:00 am - 2:45 pm****Breakout D****Salon K/L**

7:00 am - 8:00 am

**Meet the Authors Poster Viewing & Breakfast**

Franklin Hall

**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**

Jeffrey J. Falco

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; Bruce Tan, 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

## PROGRAM AT A GLANCE

**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

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

Estephania Candelo

11:43 am - 12:00 pm

**Q&A**

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

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 atopic 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

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**

Brent Senior, MD, FARS

2:21 pm - 2:27pm

**Chronic rhinosinusitis productivity and activity impairment**

Vivek Pandrangi, 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 in Franklin Hall**

**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**

Guest Speaker: James Stankiewicz, MD, FARS  
"Mentorship... It Goes Both Ways"

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**

## PROGRAM AT A GLANCE

## POSTERS

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**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**  
Viraj M. Patel, 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

Poster 030

**Disease-specific quality of life outcomes following anterior skull base surgery**  
Amarbir Gill, MD

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**  
Claire Hopkins, BMBCh, FRCS (ORLHNS)

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

## PROGRAM AT A GLANCE

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Peter Debbaneh, MD
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- Poster 041  
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Natalie Schauwecker, MD
- Poster 042  
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Chengetai Mahomva, MD
- Poster 043  
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Sina Torabi, MD
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Rema Anisha Kandula, MD
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Aman M. Patel, BS
- Poster 053  
**Income in Black and Hispanic patients with skull base fractures**  
Aman M. Patel, BS
- Poster 054  
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Mohsen Naraghi, MD, FARS
- Poster 055  
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Jessica Bishop, MD
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**July effect in orbital cellulitis**  
Joel Feier, BA
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**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
- Poster 059  
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Rachna Goli, BS
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Kent Tadokoro, MD
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Michael Armstrong, MD
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Alexandra Michalowski, MD
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Alexander Choi, MD
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Anthony M. Saad, BA
- Poster 068  
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Rafael Hijano, MD PhD
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Aman M. Patel, BS
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Maggie Donovan, Medical Student
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Keisha Best, MS

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Poster 078 <b>Pediatric chronic rhinosinusitis with Cystic Fibrosis</b> Matt Lelegren, MD	Poster 090 <b>Rhinosinusitis in hematopoietic stem cell transplant patients</b> Yi-Tsen Lin, MD	Poster 103 <b>Solitary neurofibroma of the posterior septum</b> Luis Fernando Macias-Valle, MD, FARS
Poster 079 <b>Pediatric retronasopharyngeal abscess causing erosive skull base osteomyelitis</b> Jordan Teitelbaum, DO	Poster 091 <b>Risk factors of venous thromboembolism following endonasal endoscopic skull base surgery</b> Cecilia Nguyen	Poster 104 <b>Staphylococcus aureus pathoadaptation in chronic rhinosinusitis</b> Ghais Houtak, MD
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Poster 083 <b>Prevalence and associated factors of cognitive dysfunction in patients with chronic rhinosinusitis</b> Ashton Lehmann, MD	Poster 096 <b>Sinus involvement in chronic rhinosinusitis</b> Aman M. Patel, BS	Poster 109 <b>Systematic review of endoscopic management of sinonasal adenoid cystic carcinoma</b> Michael Ye, MD
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Poster 087 <b>Rethinking invasive fungal rhinosinusitis</b> Amanda Bastien, MD	Poster 100 <b>Social determinants of health (SDoH) and sino-nasal outcome test (SNOT-22) scores</b> Taylor Cave	

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Anas AL Tammam, MD

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**Toxic shock syndrome after sinonasal surgery: A systematic review**

Timothy Shim, MD

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**Transnasal endoscopic transpalatal advancement for the treatment of OSA**

Kevin McLaughlin, MD

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**Transsphenoidal? The tumor is already filling the sphenoid!**

Jordan Teitelbaum, DO

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**Trends in clinical trials for olfactory dysfunction in COVID-19**

Vickie Wang

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**Twitter trends for sinusitis**

Shahzeb Hasan, BS

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**Unilateral pediatric chronic rhinosinusitis**

Matt Lelegren, MD

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**Urinalysis dipsticks for differentiating patients with diverse sinus complaints**

Michela Borrelli, BA

Poster 121

**Zygomatic implant salvage and treatment of implant-related CRS with medial maxillectomy**

Gajaan Sittambalam, MSAnnual Residents

## Exhibitors



### **3-D MATRIX MEDICAL TECHNOLOGY – Booth 107**

1234 Chestnut Street, Suite 205  
 Newton, MA 02464  
 Phone: 781-373-9020  
 Email: [info@3dmatrix.com](mailto:info@3dmatrix.com)  
 Website: [www.3dmatrix.com](http://www.3dmatrix.com)

Based on the platform of self-assembling peptides, a technology developed at the Massachusetts Institute of Technology (MIT) in the U.S., 3D Matrix is expanding its business globally in the areas of surgery, regenerative medicine, and drug delivery systems (DDS).



### **ACCLARENT – Showcase S3**

31 Technology Drive  
 Suite 200  
 Irvine, CA 92618  
 Phone: 877-775-2789  
 Email: [customerservice@acclarent.com](mailto:customerservice@acclarent.com)  
 Website: [www.acclarent.com](http://www.acclarent.com)

Acclarent, Inc. Part of the Johnson & Johnson Family of Companies, is aligned around a singular focus to free patients to live better lives by designing, developing, and commercializing medical devices that address conditions affecting the ear, nose, and throat. For more than a decade, Acclarent has led the field in delivering innovative technologies to ENT surgeons. For more information, visit [www.acclarent.com](http://www.acclarent.com)



### **ADVANCED RX COMPOUNDING PHARMACY – Showcase S2**

414 Commerce Drive, Suite 100  
 Fort Washington, PA 19034  
 Phone: 484-681-5756; Fax: 866-308-3832  
 Email: [accounts@advancedrx.net](mailto:accounts@advancedrx.net)  
 Website: [www.advancedrx.net](http://www.advancedrx.net)

Advanced RX is an ENT ONLY compounding pharmacy specializing in steroid, antibiotic, and antihistamine nasal rinses at affordable prices.

## Exhibitors



### **AERIN MEDICAL – Booth 103**

2565 Leghorn Street  
 Mountain View, CA 94043  
 Phone: 833-484-8237  
 Email: [info@aerinmedical.com](mailto:info@aerinmedical.com)  
 Website: [www.aerinmedical.com](http://www.aerinmedical.com)  
 Twitter: <https://twitter.com/AerinMedical>  
 Facebook: <https://facebook.com/AERIN/>

Aerin Medical is a privately held company with offices in Sunnyvale, California and Austin, Texas. Aerin's mission is to provide ENT physicians with non-invasive procedures for the treatment of chronic nasal airway conditions. Aerin's temperature-controlled radio frequency (RF) platform is clinically effective, non-invasive, and utilizes technology indicated to improve nasal obstruction and chronic rhinitis conditions. **VivAer®** addresses nasal airway obstruction by treating the lateral nasal wall, septal tissue, and inferior turbinate. **RhinAer®** comprehensively addresses chronic rhinitis by treating the posterior nasal nerve and inferior turbinate.



### **ALK-Abelló, Inc. – Booth 302**

135 Route 202/206, Suite #3  
 Bedminster, NJ 07921  
 Phone: 800-325-7354  
 Email: [customerservices@alk.net](mailto:customerservices@alk.net)  
 Website: [www.alk.net/us](http://www.alk.net/us)  
 Facebook: <https://www.facebook.com/ALK-US-111100307007981>  
 Twitter: [https://twitter.com/us\\_alk](https://twitter.com/us_alk)

ALK, Inc. is a global, research-driven pharmaceutical company focused on the diagnosis and treatment of allergies. Our products and services include SLIT-Tablets, Allergy Extracts, Penicillin Allergy Skin Testing, Diagnostic Controls, Skin Testing Systems, Sterile Empty Vials, Diluents, Syringes, Trays, Patient Education Materials, and OTIPRIO® (ciprofloxacin otic suspension) 6%.



### **ELEVATE ENT PARTNERS – Showcase S4**

15280 NW 79<sup>th</sup> Court  
 Suite 200  
 Miami Lakes, FL 33016  
 Phone: 305-558-3724  
 Email: [ptuffy@elevateent.com](mailto:ptuffy@elevateent.com)  
 Website: [www.elevateent.com](http://www.elevateent.com)

ELEVATE ENT Partners is a leading practice management support organization that caters to the needs of ear, nose, and throat (ENT) practices nationwide. Our mission is to elevate private practices by providing scalable administrative support that removes barriers to quality care and enables ENT practitioners to achieve more while securing their future. We envision the next generation of ENT care in which we help preserve private practices by enabling their independence and empowering their success.

## Exhibitors



### GSK – Showcase S6

5 Moore Drive  
 Research Triangle Park, NC 27709  
 Phone: 1-888-825-5249  
 Website: [www.gsk.com](http://www.gsk.com)  
 Email: [www.contactus.gsk.com](http://www.contactus.gsk.com)

GSK unites science, technology and talent to get ahead of disease together. We prevent and treat disease with vaccines, specialty, and general medicines.



### HEMOSTASIS & FIAGON – Booths 100/102

5000 Township Parkway  
 St. Paul, MN 55110  
 Phone: 651-855-1466; Fax: 651-855-1465  
 Email: [kkessler@hemostasisllc.com](mailto:kkessler@hemostasisllc.com)  
 Website: [www.hemostasisllc.com](http://www.hemostasisllc.com)

Hemostasis & Fiagon strive to empower ENT surgeons with leading-edge technologies which provide improved surgeon care, and patient outcomes.



### ID MEDICAL DEVICES – Booths 200/202

4101 Ravenswood Road, Suite 315  
 Fort Lauderdale, FL 33312  
 Phone: 305-915-1525  
 Email: [support@idmedicaldevices.com](mailto:support@idmedicaldevices.com)  
 Website: [www.idmedicaldevices.com](http://www.idmedicaldevices.com)

We pride ourselves as one of the leaders in bringing hand held medical devices to medical professionals all over the country.



### INTERSECT ENT is now a part of Medtronic – Showcase S1

1555 Adams Drive  
 Menlo Park, CA 94025  
 Phone: 650-641-2100  
 Email: [info@intersect.com](mailto:info@intersect.com)  
 Website: [www.intersectENT.com](http://www.intersectENT.com)  
 Twitter: <https://twitter.com/intersectent>  
 LinkedIn: <https://www.linkedin.com/company/intersect-ent>

Intersect ENT is a medical technology company dedicated to advancing the treatment of ear, nose, and throat (ENT) conditions through evidence-based innovation. We provide treatments for people with chronic sinusitis, an inflammatory sinus condition that has been shown to substantially reduce quality of life. Our core technology is based upon a bioabsorbable drug release platform and we have recently expanded our offerings to include an innovative navigation and balloon system. The family of implants is designed to provide mechanical support and localized drug delivery, while our newly expanded portfolio will extend our offerings to help patients across the sinusitis care continuum.

## Exhibitors



### **KARL STORZ ENDOSCOPY-AMERICA, INC. – Booth 101**

2151 E. Grand Avenue  
El Segundo, CA 90245  
Phone: 800-421-0837  
Email: [communications@karlstorz.com](mailto:communications@karlstorz.com)  
Website: <https://www.karlstorz.com>

KARL STORZ — Enables Early ENT diagnosis and intervention at any site of care.

KARL STORZ delivers enterprise-wide, scalable endoscopic imaging systems, surgical instrumentation, Operating Room integration and best-in-class service. Focusing on the Quadruple Aim of lower costs, better outcomes, improved clinician satisfaction and better patient experience. Enabling Anywhere Care.



### **MEDICAL CENTER SPECIALTY PHARMACY – Booth 304**

912 South 16<sup>th</sup> Street  
Wilmington, NC 28401  
Phone: 910-763-1896; Fax: 910-763-1709  
Email: [forbes.herring@mcspsc.com](mailto:forbes.herring@mcspsc.com)  
Website: [www.mcspsc.com](http://www.mcspsc.com)  
Facebook: <https://www.facebook.com/MedicalCenterPharmacy/>

Medical Center Specialty Pharmacy is the leader in topical sinus therapy for patients with chronic rhinosinusitis. As an accredited pharmacy, MCSP partners with physicians to offer a simple prescribing process for both steroid and antibiotic sinus irrigations. We work closely with insurance companies and have affordable cash options to help keep costs low for patients. Our MoreRx Care Team will walk patients through every step of the way, from initial education to follow-up and refill reminders throughout their course of therapy. Let us simplify the process for you. Experience the MCSP difference today!



### **MEDTRONIC – Showcase S1**

710 Medtronic Pkwy  
Minneapolis, MN 55432  
Phone: 763-514-4000  
Email: [RS.ENTMarketing@Medtronic.com](mailto:RS.ENTMarketing@Medtronic.com)  
Website: [www.medtronic.com](http://www.medtronic.com)  
Twitter: <https://twitter.com/medtronic>  
Facebook: <https://www.facebook.com/Medtronic/>

We lead global healthcare technology, boldly attacking the most challenging problems. Our Mission – to alleviate pain, restore health, and extend life – unites a global team of 90,000+ people, and our technologies transform the lives of two people every second, every hour, every day. Expect more from us. Medtronic. Engineering the extraordinary.

## Exhibitors



### **MIDTOWN EXPRESS PHARMACY – Showcase S5**

7123 Cockrill Bend Blvd.

Nashville, TN 37209

Phone: 615-320-8414

Email: [hdunklau@midtownexpresspharmacy.com](mailto:hdunklau@midtownexpresspharmacy.com)

Website: [www.midtownexpresspharmacy.com](http://www.midtownexpresspharmacy.com)

Midtown Express Pharmacy is a compounding pharmacy that specializes in topical treatments for sinus therapy. We are infectious disease experts. We will work with your team and your patients to not only create a customized treatment but also get it covered on their insurance. If you are specialized in treating sinus patients, then don't you want a pharmacy that is also specialized in treating sinus patients?



### **NasoNeb® - Booth 206**

153 Industrial Blvd.

Plattsburgh, NY 12901

Phone: 800-833-9653

Email: [asutton@monaghanmed.com](mailto:asutton@monaghanmed.com)

Website: [www.nasoneb.com](http://www.nasoneb.com)

Twitter: @NasoNebOfficial

Facebook: @NasoNebSystem

Instagram: @nasonebofficial

NasoNeb® Nasal Delivery Systems Division, part of Monaghan Medical, is dedicated to the development, manufacture, and worldwide sale of intranasal drug delivery systems. The flagship product, NasoNeb® Sinus Therapy System, is a powered nasal nebulizer that aerosolizes solutions for delivery throughout the nasal and paranasal cavities to provide relief for sinus, rhinitis, and nasal polyps patients. The NasoNeb® NDS division is committed to working with physicians, hospitals, and patients globally to break down barriers to wellness and help people feel better and breathe better. Come see us at booth X for your demo device or at [nasoneb.com/demo](http://nasoneb.com/demo).



### **NEILMED PHARMACEUTICALS INC. – Booth 204**

601 Aviation Blvd.

Santa Rosa, CA 95403

Phone: 707-525-3784; Fax: 707-525-3785

Email: [Ashly.guntz@neilmed.com](mailto:Ashly.guntz@neilmed.com)

Website: [www.neilmed.com](http://www.neilmed.com)

NeilMed® is the largest manufacturer and supplier of LVLP (Large Volume Low Pressure) saline nasal irrigation systems in the world. The NeilMed brand of products helps alleviate common nasal and sinus symptoms in a simple, safe, effective and affordable way. Please visit the website [www.neilmed.com](http://www.neilmed.com) for more details.

## Exhibitors



### **OLYMPUS AMERICA INC. – Booths 301/303**

800 West Park Circle Drive  
Westborough, MA 01581  
Phone: 800-401-1086  
Website: <https://medical.olympusamerica.com/>

For more than 100 years, Olympus has focused on making people's lives healthier, safer and more fulfilling by helping to detect, prevent and treat disease. Olympus' ENT business uses innovative capabilities to deliver diagnostic and therapeutic solutions to Otolaryngologists practicing Rhinology. Our capabilities in visualization – including both 4K and HD solutions – enable surgeons to have the best endoscopic view possible. Olympus therapeutic solutions are found in all sites of care – hospital operating rooms, ambulatory surgical centers, and in the office. Olympus' Rhinology portfolio includes the DIEGO® ELITE Multidebrider, Celon Elite™ radiofrequency system for turbinate reduction, and the just launched world's first CELERIS™ Disposable Sinus Debrider. All your surgical images and videos can be securely captured, stored and shared across the enterprise using Olympus content management solutions such as nCare and Vaultstream.



### **OPTINOSE – Booth 207**

1020 Stony Hill Rd., Suite 300  
Yardley, PA 19067  
Phone: 267-364-3500; Fax: 267-395-2119  
Website: [www.optinose.com](http://www.optinose.com)

Optinose is a specialty pharmaceutical company focused on the development and commercialization of products for patients cared for by, or in consultation with, ear, nose, and throat (ENT) or allergy specialists.

We are focused on value creation, starting with our work on a unique and novel drug delivery concept known as the Exhalation Delivery System™. The innovative mechanism of delivery of the first Optinose technology is designed to enable broad, consistent drug delivery high and deep in the nasal passages, leveraging the mucosal surfaces as a potential target for the treatment of both local and systemic diseases.

### **SANOFI & REGENERON – Booth 300**



Sanofi is dedicated to supporting people through their health challenges. We are a global biopharmaceutical company focused on human health. We stand by the few who suffer from rare diseases and the millions with long-term chronic conditions. With more than 100,000 people in 100 countries, Sanofi is transforming scientific innovation around the globe.

Regeneron is a leading biotechnology company that invents medicines for people with serious diseases. Founded and led for over 30 years by physician-scientists, our unique ability to repeatedly and consistently translate science into medicine has led to multiple FDA-approved treatments, almost all of which were homegrown in our laboratories.

## Exhibitors



### STRYKER ENT – Booth 203

3600 Holly Lane N, Suite 40

Plymouth, MN 55447

Phone: 763-463-1595

Email: [EntMedEd@stryker.com](mailto:EntMedEd@stryker.com)

Website: <https://ent.stryker.com>

Facebook: <https://www.facebook.com/StrykerENT>

Instagram: <https://www.instagram.com/strykerent/>

At Stryker, everything starts with our mission - Together with our customers we are driven to make healthcare better. We work each and every day to deliver on that mission by providing innovative solutions that simplify the complex, address the unmet needs of your patients, and offer you the flexibility to deliver care in your preferred site of service.

Our unique ENT portfolio expands your treatment options for your patients with chronic rhinitis, chronic sinusitis, Eustachian tube dysfunction and nasal airway obstruction. With Stryker, you gain access to a complete suite of solutions to help make your vision of patient care a reality. From room infrastructure to suction and filtration, technology to training, reimbursement tools to patient education, Stryker is here to help.

The control you need. The flexibility you want. The experience your patients deserve. Care without compromise.



### XORAN TECHNOLOGIES – Booth 201

5210 S. State Road

Ann Arbor, MI 48108

Phone: 800-709-6726; Fax: 734-418-5001

Email: [info@xorantech.com](mailto:info@xorantech.com)

Website: [www.xorantech.com](http://www.xorantech.com)

Twitter: [www.twitter.com/xorantech](http://www.twitter.com/xorantech)

Facebook: [www.facebook.com/xorantechnologies](http://www.facebook.com/xorantechnologies)

Xoran Technologies is the pioneer of low-dose radiation, cone beam CT scanners for use in-office and operating rooms. The flagship product, MiniCAT, is an in-office, point-of-care imaging solution for ENT and Allergy physicians. Xoran provides 3-dimensional low dose imaging – with workflow designed for simplicity and ease-of-use.



## Meeting WiFi

Network: Marriott Network  
Password: ARS22



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# SAVE THE DATE 2023



## COSM 2023

May 4-5, 2023

Hynes Convention Center  
Boston, MA



## ARS 12th Annual Summer Sinus Symposium

*Best Sinus Course in the World:  
Improving Rhinology from Office to OR*

July 13-15, 2023

Park MGM Las Vegas,  
Las Vegas, NV



ARS 69th

## Annual Meeting

September 29-30, 2023

Nashville, TN

Contact: Wendi Perez, ARS Executive Administrator  
Tel: 973-545-2735, Ext. 4105 Email: wendi@american-rhinologic.org

[american-rhinologic.org](http://american-rhinologic.org)

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