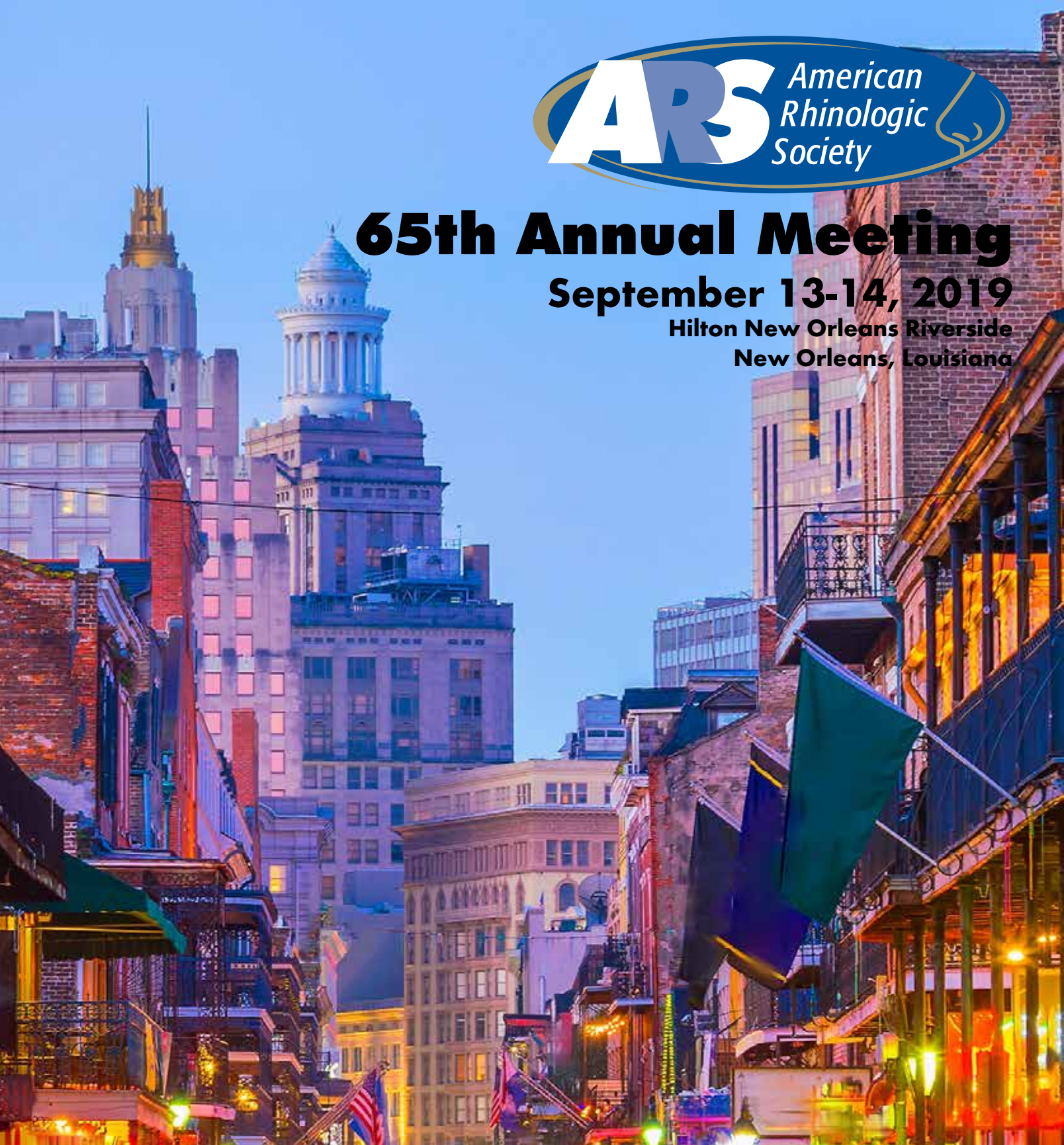




65th Annual Meeting

September 13-14, 2019

**Hilton New Orleans Riverside
New Orleans, Louisiana**



EXHIBITOR GUIDE

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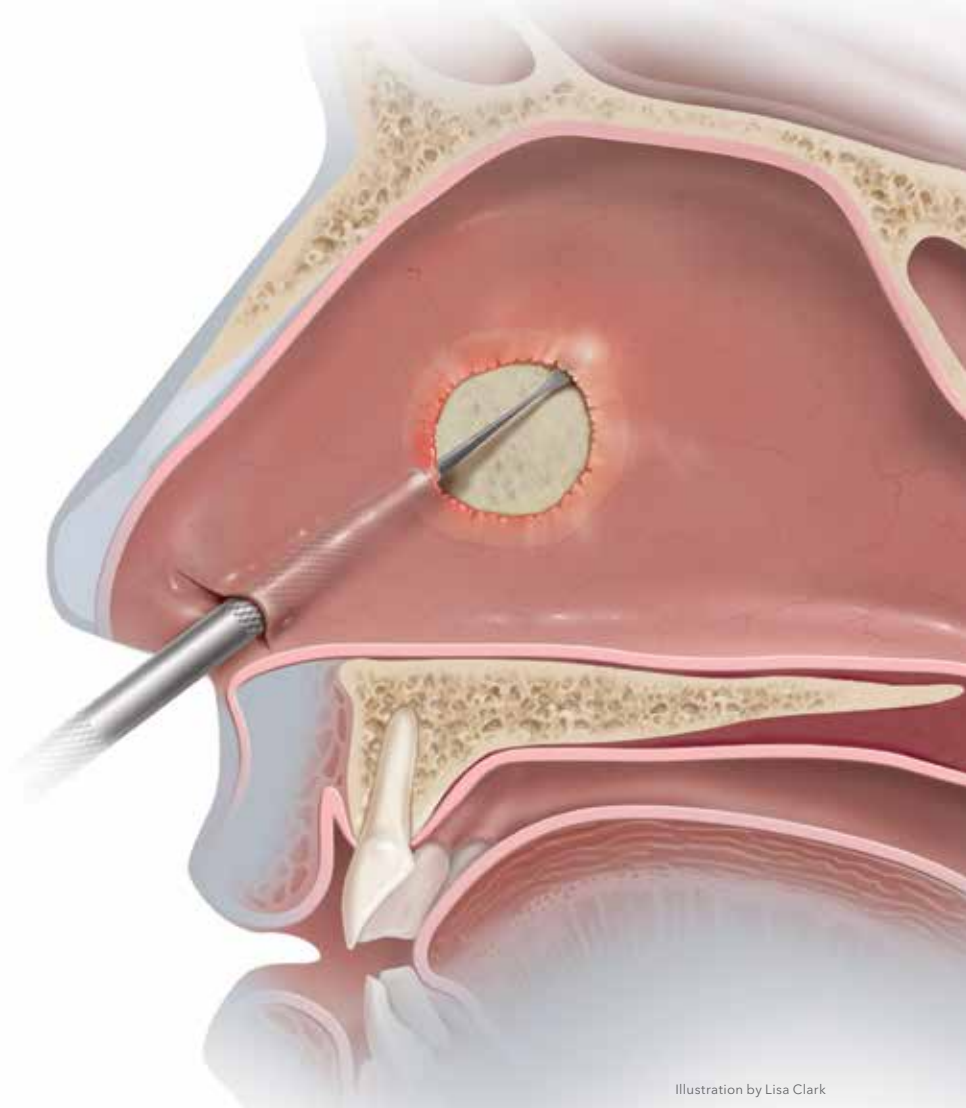


Illustration by Lisa Clark

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1. Ambro BT, Zimmerman J, Rosenthal M et al. Nasal septal perforation repair with porcine small intestinal submucosa. *Arch Facial Plast Surg.* 2003;5(6):528-529.
2. Greywoode J, Hamilton J, Malhotra PS et al. Repair of nasal septal perforation with porcine small intestinal submucosa xenograft. *J Otol Rhinol.* 2012;1(2).
3. Nayak JV, Rathor A, Grayson JW et al. Porcine small intestine submucosal grafts improve remucosalization and progenitor cell recruitment to sites of upper airway tissue remodeling. *Int Forum Allergy Rhinol.* 2018;8(10):1162-1168.

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CONTRAINDICATIONS: This graft is derived from a porcine source and should not be used in patients with known sensitivity to porcine material.

PRECAUTIONS: This device is designed for single use only. Attempts to reprocess, resterilize, and/or reuse may lead to device failure and/or transmission of disease. • **Do not resterilize.** Discard all open and unused portions of the graft. • The graft is sterile if the package is dry, unopened and undamaged. Do not use if the package seal is broken. • Discard graft if mishandling has caused possible damage or contamination, or if the graft is past its expiration date. • The graft should not be applied until excessive exudate, bleeding, acute swelling, and infection is controlled. • Ensure that all layers of the graft are secured during fixation.

POTENTIAL COMPLICATIONS: The complications listed below are possible with the use of surgical graft materials in nasal/sinus surgery. If any of these conditions occur, the graft should be removed if possible. However, if graft removal is not possible due to graft incorporation, then appropriate care should be given to treat the complication. • Infection/Toxic Shock Syndrome • Acute or chronic inflammation (initial application of surgical graft materials may be associated with transient, mild, localized inflammation) • Allergic reaction • Excessive redness, pain, swelling, or blistering • Septal perforation recurrence

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JAMES PALMER, MD, FARS

Presidential Welcome

On behalf of the American Rhinologic Society, I am so pleased to invite all those interested in Rhinologic disease to our 65th annual meeting in New Orleans. We are so glad to be back to a city that is so full of zest and energy, and especially hope you will have a chance to “work out” your special senses of taste and smell in some of NOLA’s world famous restaurants!

A gargantuan thank-you is due to Dr. Robert Kern and the entire program committee, who have worked very closely to organize the many facets of this meeting and we hope it nicely serves all of your interests. Coming on the heels of RhinoWorld

Chicago, I am excited to see the springboard of the Chicago meeting come to fruition as we continue to advance the science and clinical care of Rhinology.

The American Rhinologic Society has been committed to diagnosing and treating nasal and sinus disorders for over 60 years, and the society goals include teaching, research and socioeconomic support for its membership. It has been my great pleasure to serve as your President over the past year, and it has been a wonderful and exciting experience, full of friendship and camaraderie.

I am certain our organization is headed to do even more great things, and I thank you for the chance to serve as a steward of such a wonderful organization!

James Palmer, MD, FARS
President, American Rhinologic Society



ROBERT C. KERN, MD, FARS

Welcome from the Program Chair

Welcome to New Orleans for the 65th Annual American Rhinologic Society Meeting. As your President-Elect, I appreciate the opportunity to serve as program chair for 2019. This will pick up on many of the key RhinoWorld themes that are rapidly coming into sharper focus. We live in an exciting and transformative time in our subspecialty and this meeting is designed to keep our membership up to date, despite the pace of change.

The Program Committee has reviewed over 200 abstracts for this meeting and we once again owe them a huge debt of gratitude for their tireless work in ensuring the finest possible meeting content.

The Friday Scientific Sessions will begin with a Joint AAOA-ARS panel, this year re-evaluating the role of antibiotics and CRS. This is a vitally important topic to discuss as the appropriate use of antibiotics for chronic rhinosinusitis is changing. Following this, Roy Casiano will lead the first skull base surgical panel, followed by John Craig who will lead a panel on odontogenic sinusitis. The emphasis here will be on the appropriate roles of the oral surgeon and the rhinologist to optimize long term outcomes. Lastly, Bruce Tan is moderating a panel on phenotypes and endotypes, fast moving areas which have engendered much confusion in the field. The introduction of biologics for the treatment of CRS mandates that we have some consensus on the definitions of these terms and how those definitions will be applied. We will close on Friday with the Fall Film FESStival followed by the poster session and cocktail reception.

Saturday morning, we will again break up into 4 rooms with multiple sessions in each room. A broad range of topics will be covered including basic science, health economics, AERD, practical issues, the microbiome, olfaction and skull base surgery. Two panels will be featured, one on state-of-the-art management of AERD and the other on biologic therapies.

On Saturday afternoon, we will begin with the Women in Rhinology, Mentorship Program & Resident and Fellows Combined luncheon with

guest speaker Maisie Shindo, MD. The topic will be "Coaching Resiliency in Residents and Preventing Physician Burnout". This will be followed by the 15th Annual Kennedy Lecture featuring Robert Schleimer, PhD, addressing the latest translational research findings in the pathophysiology of CRS. Appropriately, this will be followed by the session featuring this year's top-rated abstracts, which were selected in a blinded fashion by the Program Committee. Having been a part of this society for over 25 years, it is a great pleasure to see the scientific quality of the submissions continue to rise. Anderson Eloy will then moderate the second session on skull base surgery.

Lastly, in something that we hope will become an annual event, Dr. Kennedy will be leading a panel entitled "Ask the Experts – An Endoscopic Potpourri".

I am confident that this year's meeting will again provide all otolaryngologists interested in the field of Rhinology and Skull Base Surgery with valuable content that will impact their care of patients.

It has been an honor and a pleasure to serve as President-Elect and Program Chair and I look forward to seeing you all in New Orleans!

Robert C. Kern, MD, FARS
ARS President Elect and Program Chair

PROGRAM AT A GLANCE

Friday, September 13, 2019 - 12:00 pm – 5:00 pm, Grand Ballroom A

12:00pm – 12:45pm

Ancillary Session Luncheons

12:45pm – 1:00pm

Welcome and Business Meeting

Robert Kern, MD, FARS
President Elect / Program Chair

1:00pm – 2:00pm

ARS/AAOA Panel

What is "Appropriate" in CRS Diagnosis and Treatment?

Moderator: Sarah Wise, MD
Panelists: Claire Hopkins, MD,
Sandra Lin, MD, Amber Luong, MD Ph.D.,
Vijay Ramakrishnan, MD,
Timothy Smith, MD

2:00pm – 2:15pm

Presidential Address

James Palmer, MD, FARS

2:15pm – 3:00 pm

Skull Base Panel #1

"Selecting Effective Treatment Options for Malignant Sinonasal Neoplasms"

Moderator: Jean Anderson Eloy, MD, FARS
Panelists: Devyani Lal, MD, FARS, Stacey T. Gray, MD, FARS, Zara M. Patel, MD, FARS

3:00pm – 3:30pm

Break with Exhibitors in Salon A

3:30pm – 4:10pm

Odontogenic Sinusitis Panel

Moderator: John Craig, MD, FARS
Panelists: David Poetker, MD, FARS,
Stacey Gray, MD, FARS, Al Pokorny, MD,
Jose Mattos, MD, Roderick Tataryn, DDS,
Tara Aghaloo, DDS, MD, PhD

4:10pm – 5:30pm

Endotypes and Phenotypes-Where are we now?

Moderator: Bruce Tan, MD
Panelists: Devyani Lal, MD, FARS, Zachary Soler, MD, FARS, Elina Toskala, MD, FARS, Justin Turner, MD, FARS

5:30pm-6:00pm

Fall Film FESStival

Judges: Christopher Church, MD, FARS,
Erin O'Brien, MD, FAS, Jean Anderson Eloy, MD, FARS, Jamie Litvack, MD, FARS, Alex Chiu, MD, FARS

6:00pm-8:00pm - **Grand Ballroom B**

Presidents Welcome Reception

Poster Presentation

Women in Rhinology

David W. Kennedy Lecturer

All information was taken from the original abstract submission



PROGRAM AT A GLANCE

**Saturday September 14, 2019, Breakout Room 1 - 8:00 am – 12:00pm,
Chart Ballroom A/B – Riverside Building**

AERD Session

Moderators: Zachary Soler, MD, FARS,
Nithin Adappa, MD, FARS, Edward Kuan,
MD

8:00am – 8:07am

**Treatment practices for aspirin
exacerbated respiratory disease:
Analysis of a national insurance claims
database**

Lauren Roland, MD, MSCI

8:07am – 8:14am

**Complete surgery followed by aspirin
desensitization decreases overall
corticosteroid use**

Edward C. Kuan, MD

8:14am – 8:21am

**Up front DRAF III frontal sinusotomy
results in sustained improvement in
sinonasal quality of life in patients with
aspirin exacerbated respiratory disease**

Peter Papagiannopoulos, MD

8:21am – 8:28am

**Aspirin exacerbated respiratory disease:
Longitudinal assessment of a large
cohort & implications of diagnostic delay**

Rijul Kshirsagar, MD

8:28am – 8:32am

Discussion

8:32am-9:29am

AERD Panel

Panelists: Tanya Laidlaw, MD, Rodney
Schlosser, MD, FARS

Olfaction and Skull Base Surgery

Moderators: Waleed Abuzeid, MBBS,
Sammy Khalili, MD

9:29am – 9:36am

**Olfactory-specific quality of life
outcomes after endoscopic endonasal
surgery of the sella**

Milap Raikundalia, MD

9:36am – 9:43am

**Olfactory function via sniffin sticks
following bilateral superior turbinate
resection**

William Yao, MD

9:43am – 9:50am

**Predictors of subjective olfactory
dysfunction after endoscopic
transsphenoidal hypophysectomy**

Jake Lee, MD

9:50am-10:00am

Discussion

10:00am – 10:30am

Break with Exhibitors in Salon A

New Drugs/Devices

Moderators: William Yao, MD,
Adam DeConde, MD

10:30am – 10:37am

**VISUALIZE: A 24-Week, open-label study
using nasoendoscopic video to evaluate
the efficacy and safety of EDS-FLU 186
µg twice daily in adults with bilateral
nasal polyps**

William Yao, MD

10:37am – 10:44am

**Mometasone absorption in human nasal
airway epithelial cultures**

Tuong Nguyen, BS

10:44am – 10:51am

**Regional mass deposition of fluticasone
propionate (FP) delivered with exhalation
delivery system (EDS) device in
postsurgical chronic rhinosinusitis (CRS)
Draf III geometry estimated and
visualized by Computational Fluid
Dynamics (CFD)**

John Craig, MD, FARS

10:51am – 10:58am

**A Phase Ia tolerance and safety
evaluation of topical nitric oxide sinus
irrigation (NOSi) dose escalation in
individuals with recalcitrant chronic
rhinosinusitis (RCRS)**

India Dhillon, MSCh

10:58am – 11:05am

**Drug-coating stability and release
kinetics of the ciprofloxacin-azithromycin
sinus stent**

Do-Yeon Cho, MD

11:05am – 11:11am

Discussion

Practical Issues/ Immunosuppression

Moderators: Ian Humphreys, DO, FARS,
Jarrett Walsh, MD, Christopher Le, MD, FARS

11:11am – 11:18am

**Lightening in a bottle: Comparison of
ultraviolet light to traditional sterilization
in saline irrigations bottles**

Qasim Husain, MD

11:18am – 11:25am

**The effect of topical epinephrine 1:1000
with and without infiltration of 1%
lidocaine with epinephrine 1:100,000 on
endoscopic surgical field visualization: a
double-blind randomized controlled
study**

Garret Choby, MD

11:25am – 11:32am

Discussion

11:32am – 11:39am

**Treatment with immune stimulating
therapies improves survival in chronic
invasive fungal sinusitis: A multi-
institutional review**

Ian Humphreys, DO, FARS

11:39am – 11:46am

**Atypical fungal infections affect
outcomes in acute invasive fungal
sinusitis: A multi-institutional review**

Ian Humphreys, DO, FARS

11:46am – 11:53am

**Outcomes in treatment of chronic and
recurrent acute rhinosinusitis in the
setting of medication induced
immunosuppression**

Zara Patel, MD, FARS

11:53am – 12:00pm

Discussion

12:00pm – 1:00pm

Lunch with Exhibitors in Salon A



Saturday September 14, 2019, Breakout Room 2 - 8:00 am – 12:00 pm, Chart Ballroom C – Riverside Building

Pain Session

Moderators: Arthur Wu, MD, FARS, Philip Chen, MD, FARS, H. Peter Doble, MD, FARS

8:00am – 8:07am

Effect of an evidenced based peri-operative pain protocol on postoperative opioid use after endoscopic sinus surgery

Jaxon Jordan, MD

8:07am – 8:14am

Effect of gabapentin pretreatment on peri-procedural pain during in-office posterior nasal nerve cryoablation

Steven Hoshal, MD

8:14am – 8:21am

A multicenter study on the effect of NSAIDs on postoperative pain after endoscopic sinus surgery

Arthur Wu, MD, FARS

8:21am – 8:28am

Opioid prescription and usage after rhinologic surgery: A systematic review

John Zheng, MD

8:28am - 8:35am

Discussion

Health Economics

Moderators: Joshua, Levy, MD, PhD, FARS, Adam De Conde, MD, Zachary Soler, MD, FARS

8:35am – 8:42am

Complications after endoscopic sinus surgery in smokers: A 2005-2016 NSQIP analysis

Jordan Teitelbaum, DO

8:42am – 8:49am

Developing consistent epistaxis management in the emergency department: Clinical care pathway utilization reduces transfers and improves care

Clare Richardson, MD

8:49am – 8:56am

Cost analysis of endoscopic sinus surgery for chronic rhinosinusitis: In-office based procedures versus traditional operating room endoscopic sinus surgery

Aliasgher Khaku, MD, MBA

8:56am 9:03am

A Multi-centre prospective study investigating the management of periorbital cellulitis

Sridhayan Mahalingam, MRCS (ENT)

9:03-9:10am

Operative time and cost estimation itemized by component procedures of endoscopic sinus surgery

Andrew J. Thomas, MD

9:10am-9:21am

Discussion

Polyps and Revision Surgery Session

Moderators: Marc Dubin, MD, FARS, Peter Manes, MD, FARS, Charles Tong, MD

9:21am – 9:28am

Patient and surgeon factors impacting revision surgery rates in chronic rhinosinusitis with nasal polyposis

Catherine Loftus, MS

9:28-9:35am

Histopathologic influences of tissue eosinophilia among chronic rhinosinusitis patients

Ashwin Ganti, BA

9:35am – 9:42am

Predictors of efficacy for combination oral and topical corticosteroids to treat patients with chronic rhinosinusitis with nasal polyps

Ahmad Sedaghat, MD, PhD

9:42am – 9:49am

Expected revision rates in chronic rhinosinusitis with nasal polyps: Meta-analysis of risk factors

Catherine Loftus, MS

9:49am – 10:00am

Discussion

10:00am – 10:30am

Break with Exhibitors in Salon A

Endotypes

Moderators: Justin Turner, MD, FARS, Thomas Higgins, MD, FARS, Jivianne Lee, MD, FARS

10:30am – 10:37am

Periostin: An emerging biomarker for CRS endotype and sinonasal quality of life

Ashton Lehmann, MD

10:37am – 10:44am

Central compartment atopic disease: Prevalence of asthma and allergy compared to other chronic rhinosinusitis with nasal polyp endotypes

Sonya Marcus, MD

10:44am – 10:51am

Dupilumab and CRS-np: A case series and observations on its efficacy in twenty-eight patients

Mr. Arjun Prasad

10:51am – 10:58am

Association of cough with asthma in chronic rhinosinusitis patients

Michael Marino, MD

10:58am – 11:05am

Subcutaneous nucala injection: An adjunctive treatment for recalcitrant allergic fungal rhinosinusitis

John Karp

11:05am - 11:10am

Discussion

11:10am – 12:00 pm

Biologics Panel

“Biologic therapy in the nasal polyp patient, from immunology to injection - A case-based discussion

Moderator: Sarah Wise, MD, FARS

Panelists: Cecelia Damask, DO, Joseph Han, MD, FARS, Douglas Reh, MD, FARS, Lauren Roland, MD, Stella Lee, MD

12:00pm – 1:00pm

Lunch with Exhibitors in Salon A

PROGRAM AT A GLANCE

**Saturday September 14, 2019, Breakout Room 3 - 8:00 am – 12:00 pm,
Quarterdeck A/B – Riverside Building**

Olfaction Session

Moderators: Justin Turner, MD, FARS,
Jivianne Lee, MD, FARS

8:00am – 8:07am

Factors driving olfactory loss in patients with chronic rhinosinusitis: A case control study
Rodney Schlosser, MD, FARS

8:07am – 8:14am

The use of platelet-rich plasma in treatment of olfactory dysfunction, a pilot study
Carol Yan, MD

8:14am – 8:21am

Short-term chronic rhinosinusitis medical management: Differential impact on quality of life and olfaction
Andrew Thomas, MD

8:21am – 8:28am

Olfactory cleft mucus inflammatory proteins and olfaction in chronic rhinosinusitis
Frederick Yoo, MD

8:28am – 8:38am

Discussion

Economics and Outcomes Skull Base

Moderators: Edward McCoul, MD, FARS,
John Schneider, MD, Eric Wang, MD, FARS

8:38am – 8:45am

Association of sellar mass proliferative markers with radiographic features and clinical outcomes
Robert Liebman, MD

8:45am – 8:52am

Predicting readmission after endoscopic trans-sphenoidal pituitary surgery using machine learning
Christopher Puchi, BS

8:52am – 8:59am

Predicting prolonged length of stay after endoscopic transsphenoidal surgery for pituitary adenoma
Swar Vimawala, BS

8:49am – 8:56am

Economic implications of diagnostic strategies for cerebrospinal fluid rhinorrhea
Christopher Pool, MD

9:06am – 9:16am

Discussion

Microbiome

Moderators: Dana Crosby, MD, Charles Ebert, MD, FARS, Jordan Glicksman, MD

9:16am – 9:23am

Kappa-carrageenan sinus rinses reduce inflammation and intracellular Staphylococcus aureus infection in airway epithelial cells
Ms. Catherine Bennett

9:23am – 9:30am

Association of the sinonasal microbiome with clinical outcomes in chronic rhinosinusitis: A systematic review
James Wang, MD, PhD

9:30am – 9:37am

Long term outcomes of maximal medical management of chronic rhinosinusitis: Paving the way for more accurate cost effectiveness comparisons
George Scangas, MD

9:37am – 9:44am

Collapse of bacterial diversity of the sinus microbiome differentiates poor from good-evolution after ESS for CRS
Axel E. Renteria, MD, MSc

9:44 am – 10:00 am

Discussion

10:00am – 10:30am

Break with Exhibitors in Salon A

QOL I

Moderators: Stella Lee, MD, Stacey Gray, MD, FARS, Anthony DelSignore, MD

10:30am – 10:37am

Sexual health in patients with chronic rhinosinusitis and the effect of endoscopic sinus surgery
Arthur Wu, MD, FARS

10:37am – 10:44am

Acute exacerbations in recurrent acute rhinosinusitis: Differences in quality-of-life and endoscopic exam
Daniel Beswick, MD

10:44am – 10:51am

The relationship between sinonasal and disease specific quality of life in cystic fibrosis
Chetan Safi

10:51am – 10:58am

Differential perception and tolerance of chronic rhinosinusitis symptoms as a confounder of gender-disparate disease burden
Katie Phillips, MD

10:58am – 11:05am

Does age impact long term outcomes in chronic rhinosinusitis?
Thomas Holmes, MD

11:05am – 11:10am

Discussion

QOL II

Moderators: Douglas Reh, MD, FARS,
Oswaldo Henriquez, MD, Monica Patadia, MD

11:10am – 11:17am

Modified Lund-Kennedy score as a predictor for significant symptom improvement after endoscopic sinonasal surgery
Yossawee Wangworawut, MD

11:17am – 11:24am

Development of a standardized assessment of patient reported outcomes following endoscopic sinus surgery for chronic rhinosinusitis
Connor Sommerfeld, MD

11:24am – 11:31am

Increased abundance of staphylococcus aureus characterizes microbiome in refractory CRS patients
Axel E. Renteria, MD, MSc

11:31am – 11:38am

Voice dysfunction in patients with chronic rhinosinusitis before and after endoscopic sinus surgery
Arthur Wu, MD, FARS

11:38am – 11:45am

Predictors of success in primary and revision endoscopic dacryocystorhinostomy
Ashton Lehmann, MD

11:45am – 11:59am

Discussion

12:00pm – 1:00pm

Lunch with Exhibitors in Salon A

Saturday September 14, 2019, Breakout Room 4, 8:00 am – 12:00 pm Kabacoff Room – Riverside Building

Basic Science Session

Moderators: Benjamin Bleier, MD, FARS,
Do-Yeon Cho, MD, Michael Kohanski, MD

8:00am – 8:07am

Barrier disruptive effects of mucus isolated from chronic rhinosinusitis
Stephen Kao, MBBS

8:07am – 8:14am

Measuring potential difference in the sinuses more accurately predicts acquired CFTR dysfunction in chronic rhinosinusitis
Do-Yeon Cho, MD

8:14am – 8:21am

Unexpected effects of systemic steroids on the CRSwNP proteome: Is protein upregulation more important than inhibition?
Alan D. Workman, MD, MTR

8:21am – 8:28am

Identification of significant poly-omic and functional upregulation of the PAPP-A/IGFBP/IGF axis in CRSwNP
Sarina Mueller, MD

8:28am – 8:35am

Reversal of smoking induced nasal mucosal changes after quitting smoking
Samy Elwany, MD

8:35am-8:53am

Discussion

Skull Base Basic Science and Clinical

Moderators: Jose Gurrola II, MD, Bradford Woodworth, MD, FARS, Jeb Justice, MD, FARS

8:53am – 9:00am

A metagenomic analysis of the virome of inverted papilloma and squamous cell carcinoma: Prevalence of HPV18-E6
Charles Tong, MD

9:00am – 9:07am

Is the Dulguerov staging system superior to Kadish for olfactory neuroblastoma? An individual participant data meta-analysis
Mark Arnold, MD

9:07am – 9:14am

Comprehensive genomic profiling demonstrates low tumor mutational burden in olfactory neuroblastoma
Jacob Friedman, MD

9:14am – 9:21am

Constellation of cellular changes following acute exposure to external beam radiotherapy
Mr. Phillip Gall

9:21-9:25am

Discussion

9:25am – 9:32am

Application of holographic augmented reality for external approaches to the frontal sinus
Caio Neves, MD

9:32am – 9:39am

Assessment of emotional well-being in patients treated for sinonasal malignancies
Alexander Graf, BS

9:39 am – 9:46am

The role of neoadjuvant therapy in the management of non-squamous cell carcinoma sinonasal malignancies: A national perspective
Zaid Al-Qurayshi, MD, MPH
Presented by Andrew Liu, MD

9:46am - 10:00am

Discussion

10:00am – 10:30am

Break with Exhibitors in Salon A

Draf III Session

Moderators: Eric Wang, MD, FARS, Jeffrey Suh, MD, Jonathan Ting, MD, FARS

10:30am – 10:37am

DRAF III leads to sustained improvement in sinonasal quality of life
Peter Papagiannopoulos, MD

10:37am – 10:44am

Eosinophilic chronic rhinosinusitis managed by the creation of functional neosinus cavity and post-operative corticosteroid irrigation care
William Li, MBBS

10:44am – 10:51am

Free mucosal grafts and anterior pedicled flaps to prevent ostium restenosis after endoscopic modified Lothrop (frontal drillout) procedure: A randomized controlled study
Ying-Piao Wang, MD, PhD

10:51am – 10:58am

Discussion

Misc

Moderators: Henry Barham, MD, FARS,
Dana Crosby, MD, Stella Lee, MD

11:03am – 11:10am

Medial flap turbinoplasty: Revisiting safety and efficacy
Michelle Menon-Miyake, MD

11:10am – 11:17am

Complete middle turbinate resection is unlikely to cause empty nose syndrome in the first year postoperatively
Richard Law, MD

11:17am – 11:24am

Characteristics and treatment outcomes of suspected mast-cell activation syndrome with sino-nasal obstruction: A single institution experience
Jeehong Kim, MD

11:24am – 11:31am

Topography of polyp recurrence in eosinophilic chronic rhinosinusitis
Jessica Grayson, MD

11:31am – 11:36am

Discussion

11:36am – 11:43am

The effect of continuous positive airway pressure on the nasal cavity
Erin Reilly, MD

11:43am – 11:50am

A retrospective study of the efficacy and safety of balloon eustachian tuboplasty
Camilla Stepniak, MD

11:50am – 11:57am

Discussion

12:00pm – 1:00pm

Lunch with Exhibitors in Salon A

All information was taken from the original abstract submission

Saturday, September 14, 2019 - 12:00 pm – 6:00 pm, Grand Ballroom A

12:00pm – 1:00pm
COMPASS ROOM, RIVERSIDE BUILDING
Women in Rhinology, Mentorship Program and Resident's & Fellows Combined Lunch Program "Coaching Resiliency in Residents and Preventing Physician Burnout"

Guest Speaker: Maisie Shindo MD
Professor of Otolaryngology - Head and Neck Surgery
Surgical Director of the Thyroid and Parathyroid Center
Oregon Health and Science University

1:00pm – 1:55pm
15th Annual David W. Kennedy Lectureship

Invited Guest Speaker: Robert Schleimer, PhD
"Mechanisms of Pathogenesis of Chronic Rhinosinusitis"

TOP ABSTRACTS:

Moderators: Benjamin Bleier, MD, FARS, Do-Yeon Cho, MD, Michael Kohanski, MD

2:00pm – 2:08pm
The presence of virus significantly associates with chronic rhinosinusitis disease severity
Rachel Goggin, MBBS

2:08pm – 2:16 pm
Chronic inflammation directs an olfactory stem cell functional switch from neuroregeneration to immune defense
Andrew Lane, MD, FARS

2:16pm – 2:24pm
Longitudinal stability of chronic rhinosinusitis endotypes
Kristen Yancey, MD

2:24pm-2:30pm
Discussion

2:30pm – 2:38pm
Controlled delivery of ciprofloxacin and ivacaftor via sinus stent in a preclinical model
Do-Yeon Cho, MD

2:38pm – 2:46pm
Loss of BMI1 in mature olfactory sensory neurons leads to increased olfactory basal cell proliferation
Rhea Choi, MD, PhD

2:46pm-2:54pm
Gene correction of the Df508 CFTR mutation in human airway stem cells as a novel cell-based treatment strategy for cystic fibrosis
Jayakar Nayak, MD, PhD

2:54pm-3:00pm
Discussion

3:00pm – 3:30pm
Break with Exhibitors in Salon A

3:30pm-4:15pm
Skull Base Panel #2
"How I do it: Providing Endoscopic Exposure and Resection of Skull Base Neoplasms"
Moderator: Roy Casiano, MD, FARS
Panelists: Corrina Levine, MD, FARS, Bradford Woodworth, MD, FARS, Adam Zanation, MD

4:15pm – 6:00pm
AAO Panel 'Ask the Experts – An Endoscopic Potpourri'
Moderator: David Kennedy, MD
Panelists: Peter J. Wormald, MD, Benjamin Bleier, MD, FARS, Eugenia Vining, MD, Elina Toskala, MD, FARS, James Palmer, MD, FARS, Timothy Smith, MD, FARS

Cocktails from 6-7pm

Accreditation Statement

The American Rhinologic Society (ARS) is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians.

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ARS designates this live activity for a maximum of 13.25 *AMA PRA Category 1 Credits*[™]. Physicians should claim only the credit commensurate with the extent of their participation in the activity.



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POSTER PRESENTATION

Poster #001

30-Day readmission and coordination of care following endoscopic transsphenoidal pituitary surgery

Michael Ghiam, MD

Poster #002

A case of refractory cerebrospinal fluid rhinorrhea

Atsushi Ishibashi, MD

Poster #003

A comparative analysis of sphenoid sinus osteoneogenesis in aspirin exacerbated respiratory disease

Madison Malfitano

Poster #004

A comparison of chronic rhinosinusitis recurrence rates after unilateral versus bilateral functional endoscopic sinus surgery

Devon Webb

Poster #005

A comparison of the cytokines involved in chronic rhinosinusitis and sickness behavior: A meta-analysis

Wasiq, Nadeem, MS2

Poster #006

A perioperative assessment of acute invasive fungal sinusitis symptoms and each prognostic value: A retrospective study

Courtney Hunter

Poster #007

A semitransparent 3D-printed paranasal sinus model: A novel tool for studying medication and irrigation delivery

Ari Stone, BS

Poster #008

A single surgeon experience with nasal defect reconstruction using the melolabial flap

Fergal Cadden, MBBS

Poster #009

A traumatic cerebrocyst presenting as severe pneumocephalus, secondary to chronic intranasal cocaine abuse with an anterior skull base defect in the setting of acute trauma

Daniel Spielman, MD

Poster #010

Abducens nerve palsy in the setting of sphenoid sinusitis and clival metastasis

Lauren Luk, MD, FARS

Poster #011

Acute bacterial rhinosinusitis treatment

Mark Gelpi, MD

Poster #012

Acute invasive fungal rhinosinusitis: Factors contributing to improved survival

Jaimin Patel, MD

Poster #013

Administrative burden of prior authorizations for computed tomography of the paranasal sinuses ordered by the otolaryngologist

Thomas Higgins, MD, MSPH, FARS

Poster #014

Analysis of practice trends in office nasal endoscopy based on Medicare provider utilization and payment data

Ashoke Khanwalkar, MD

Poster #015

Anesthesiologist opinions on inhalational anesthesia and total intravenous anesthesia for endoscopic sinus surgery

Philip Chen, MD, FARS

Poster #016

Assessing public interest in nasal and sinus surgery: A five-year analysis

Lindsey Goyal, MD

Poster #017

Assessment of internal nasal valve using anatomically accurate 3D airway models

Sana Hosseini, MSC

Poster #018

Association between smell dysfunction and nutritional eating

Robert Roth, BA

Poster #019

Average nasal cartilage framework thickness estimation for reconstructive purposes- A cadaveric study

Moustafa Ali, MD

Poster #020

Balloon dilatation for the management of pyriform aperture stenosis: A Case Report

David Chan, MD

Poster #021

Cadaveric study of unilateral nasal saline irrigation after surgery with and without posterior septectomy

Kent Tadokoro, MD

Poster #022

Case report of a pleomorphic adenoma of the nasal septum

Samantha Frank, MD

Poster #023

Case report: An unusual cause of eustachian tube dysfunction: Nasopharyngeal oncocyctic cysts

Joshua Hwang

Poster #024

Case report: Complete occlusion of the contralateral cavernous carotid artery due to extrinsic compression of the lateral sphenoid wall, in the setting of a symptomatic pseudoaneurysm

Angela Donaldson, MD

Poster #025

CBD as a potential post-operative pain treatment; patient interest in CBD post-operative pain therapies in otolaryngology

Ashutosh Kacker, MD

Poster #026

Challenging the need for opioids in management of post-operative pain after functional endoscopic sinus surgery

Kurren Gill, MD

Poster #027

Characteristics of patients enrolled in two identical trials of omalizumab in chronic rhinosinusitis with nasal polyps

Joseph Han, MD, FARS

Poster #028

Characterization of WTC relief workers with post-exposure chronic rhinosinusitis

Lauren Williams, BA

Poster #029

Chemotherapy, radiation or resection? The use of neoadjuvant radiochemotherapy to treat sinonasal teratocarcinoma

Matthew Miller, BA

Poster #030

Chronic invasive fungal sinusitis due to scedosporium apiospermum causing orbital apex syndrome and mandibular neuropathy

Matt Miller, MD

Poster #031

Chronic lymphocytic leukemia with orbital manifestations: A rare presentation of progressive disease

Donald Bennett, MD

Poster #032

Clinical characteristics and patient-reported outcomes (PROs) among chronic rhinosinusitis with nasal polyps (CRSwNP) patients with a history of sinus surgery

Megan Scott, BSc

Poster #033

Clinical characteristics, treatment patterns, and healthcare resource utilization (HCRU) in patients with chronic rhinosinusitis with nasal polyps (CRSwNP)

Claire Hopkins

Poster #034

Clinical validation of an automated, deep learning-based protocol for quantitative sinus CT analysis

Conner Massey, MD

Poster #035

Combined robotic transorbital and transnasal approach to the nasopharynx and anterior skull base: Feasibility study

Pavol Surda, Rhinology Consultant

Poster #036

Contour map point distribution and surgeon experience level affect accuracy of surgical navigation

Jason Talmadge, MD

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- Poster #037
Correlation between physician-assessed cosmetic changes with patient-assessed quality of life following orbital reconstruction
Gregory Epps, MD
- Poster #038
Correlation of interpupillary distance (IPD) and width of nasal cavity
Heather Koehn, MD
- Poster #039
Correlation with self-reported allergies and quality of life as determined by rhinosinusitis disability index in patients with sinonasal complaints
April Peterson
- Poster #040
Cross reactivity in skin prick test results of members within Pooideae subfamily in the middle Missouri population
Brette Harding, MD, MS
- Poster #041
Cross-sectional market analysis of innovation within the field of rhinology
Noel Ayoub, MD, MBA
- Poster #042
CRS in ethnic groups: Are there differences in CRS Presentation?
Corinna Levine, MD, MPH, FARS
- Poster #043
Cystic Fibrosis possibly protective against orbital complications of acute sinusitis
Richard Bavier, BA
- Poster #044
Demographic characteristics between adults with obstructive sleep apnea who received nasal surgery
Dang-Khoa Nguyen, MS
- Poster #045
Diagnosis and management of orbital fat during endoscopic sinus surgery
Edward Westfall, MD
- Poster #046
Diagnostic utility of the opacification/pneumatization (O/P) ratio on quality of life after endoscopic sinus surgery
Sean Parsel, DO
- Poster #047
Differences in preoperative CT findings in patients with chronic rhinosinusitis with polyps
Lauren Roland, MD, MSCl
- Poster #048
Dupilumab efficacy in patients with severe chronic rhinosinusitis with nasal polyps with or without prior sinonasal surgery: Pooled results from the sinus-24 and sinus-52 phase 3 studies
Stella Lee, MD
- Poster #049
Effect of the human cathelicidin LL-37 on nasal epithelial barrier integrity
Yujie Cao, Master of Medicine
- Poster #050
Effects of essential oils to inhibit biofilm formation by sinonasal pathogens
James Wang, MD, PhD
- Poster #051
Effects of pharyngeal packing in sinonasal surgeries: A randomized controlled trial
Bader Alim, MD
- Poster #052
Emerging trends in nasal surgery: What is the impact of a bioabsorbable nasal implant?
Marshall Ge, MD
- Poster #053
Endoscopic DCR versus endoscopic laser assisted DCR, comparative study
Wasam Albusalih, MD
- Poster #054
Endoscopic management of CSF rhinorrhea in children: A systematic review with meta-analysis
Chadi Makary, MD
- Poster #055
Epithelial-myoepithelial carcinoma of the lacrimal sac: Case report and literature review
Elisa Illing, MD
- Poster #056
Eustachian tube dysfunction symptoms in chronic rhinosinusitis before and after endoscopic sinus surgery
Arthur Wu, MD, FARS
- Poster #057
Evaluation of PD-L1 expression in sinonasal inverted papilloma
Andrew Thomas, MD
- Poster #058
Experiences with diagnostic and management surprises in AFRS
Sourabha Patro, MBBS, MS
- Poster #059
Extended endoscopic sinus surgery for revision eosinophilic rhinosinusitis cases with asthma
Yasuyuki Hinohira, MD, PhD
- Poster #060
Extended frontal sinus endoscopic approach. University of Chile Clinical Hospital experience
Cesar Funzalida, MD
- Poster #061
Factors considered important in the rhinology match
Zachary Farhood, MD
- Poster #062
Frontal Ostium Grade (FOG): A novel CT grading system for a safe endoscopic approach to the frontal sinus
Heitham Gheriani
- Poster #063
Functional endoscopic sinus surgery and other rhinologic surgery after face transplantation
Alisa Yamasaki, MD
- Poster #064
Geographic variation in epistaxis interventions among Medicare beneficiaries
Ido Badash, Medical Student
- Poster #065
Hidden-port approach to endoscopic pericranial scalp flap for septal perforation closure
Alfredo García-Fernández, MD, PHD
- Poster #066
Human papillomavirus-related multiphenotypic sinonasal carcinoma: A case study and literature review
Cody Anderson, BA
- Poster #067
Improvement of nasal morbidity following nasoseptal flap reconstruction of skull base defects using reverse rotation flap
William Strober
- Poster #068
Increase in IL-17-positive cells in sinonasal inverted papilloma
Chen Cao, Master of Medicine
- Poster #069
Inflammatory infiltration characteristics of nasal inverted papillomas
Chen Cao, Master of Medicine
- Poster #070
Infracochlear pneumatization of the sphenoid - Evidence of the "Fifth Sinus"
Spencer Payne, MD, FARS
- Poster #071
In-hospital costs associated with expanded endonasal approach to meningioma resection
David Lerner, MD
(Presented by Theodore Lin, MD)
- Poster #072
Investigation of allergic rhinitis epidemics by Baidu index in China
Yujie Cao, Master of Medicine
- Poster #073
Lacrimal sac blue nevus
Rohit Garg, MD, FARS
- Poster #074
Life-threatening epistaxis: a case of ruptured intra-sphenoidal internal carotid artery aneurysm, complicated by orbital apex syndrome following endovascular treatment
Marie Bussieres, MD
- Poster #075
Living with nasal polyps in the US: A study to understand the patient journey
Zachary Soler, MD
- Poster #076
Management of acute invasive fungal sinusitis with orbital involvement – When can the eye be saved?
Ryan Rimmer, MD

- Poster #077
Management of recurrent acute rhinosinusitis (RARS): A systematic review
Mohamad Saltagi, MD
- Poster #078
Managements of inferior turbinate hypertrophy by: Endoscopic inferior turbinoplasty and inferior turbinectomy (comparative study)
Wasam Albusalih, MD
- Poster #079
Markers of eosinophilic inflammation are associated with response to the DP2 antagonist GB001
Brett Skolnick
- Poster #080
Maxillary giant cell reparative granuloma: Case report and review of the literature
Nicholas Andresen, MD
- Poster #081
Medicare reimbursement for balloon catheter dilations among high volume surgeons
David Kasle, MD
- Poster #082
Modified endoscopic Denker's approach in management of inverted papilloma of the anterior maxillary sinus
Jivianne Lee, MD, FARS
- Poster #083
Monitoring the trends of popular homeopathic remedies for sinusitis on internet search engines
Sydney Sachse
- Poster #084
Occupational chronic rhinosinusitis: A review
Avi Albeg
- Poster #085
Our experience with cone beam CT and it's utilisation in rhinology practice - 3-year retrospective review of our practice
Jana van der Veen, DOHNS, MRCS
- Poster #086
Outcomes and complications of concurrent FESS and rhinoplasty: A systematic review
Benjamin Bitner, BS
- Poster #087
Paediatric sino-nasal masses: Diversity and the challenges in a developing country
Kartik Parelkar, MS
- Poster #088
Patterns of cervical lymph node metastasis in sinonasal squamous cell carcinoma
Roman Povolotskiy, BA
- Poster #089
Perivascular epithelioid cell tumor (PEComa) of the pterygopalatine fossa
Michael Dougherty
- Poster #090
Persistent pneumocephalus following cranialization of the frontal sinuses: An endoscopic approach for skull base repair
Lindsey Ryan, MD
- Poster #091
Perspectives and expectations in endoscopic sinus surgery for patients with chronic rhinosinusitis: A description of the patient journey
Nadim Saydy, MD
- Poster #092
Physical intervention outcomes for epistaxis control in pediatric coagulopathy
Jordan Teitelbaum, DO
- Poster #093
Pleomorphic adenoma of the nasal septum: A case report
Mohamed Elrakhawy, MD
- Poster #094
Post-operative pain management and perceived patient outcomes following endoscopic pituitary surgery
Austin Hoke
- Poster #095
Predictors of survival in patients with acute invasive rhinosinusitis: A retrospective review
Nancy Wang, MD
- Poster #096
Prescription patterns and opioid usage in sinonasal surgery
Christopher Newberry, MD
- Poster #097
Prevalence of eustachian tube dysfunction in the U.S. elderly population
Jakob Fischer, MD
- Poster #098
Primary skull base lymphoma: A case series
David Goldrich
- Poster #099
Prolonged hospital stay following definitive surgical resection of sinonasal malignancies: Causes, predictors and survival
Kevin Connors
- Poster #100
Pseudo frontal sinus due to incomplete frontal sinus cranialization
Donovan Lockwood, BS
- Poster #101
Psychiatric morbidity in sinonasal malignancies: Analysis of incidence, predictors, and role of social support
Chandala Chitguppi, MD
- Poster #102
Quality of YouTube videos as an educational tool for maxillary antrostomy
Craig Miller, MD
- Poster #103
Radiation sinusitis: Head and neck radiation induces paranasal sinus mucosal thickening
Taha Mur, MD
- Poster #104
Rapid detection of cerebrospinal fluid leaks at the point of care
Brandon Strong, BS
- Poster #105
Readability of patient-reported outcome measures for chronic rhinosinusitis and anterior skull base diseases
Eric Lee
- Poster #106
Recurrent benign vascular papillary neoplasm of the sphenoid sinus and sella with markers of both spindle cell oncocyoma and pituicytoma – A case report
Roshan Nayak, BS
- Poster #107
Repeated intranasal fentanyl use in the setting of lamina papyracea and periorbita dehiscence: A case report and review of literature
Aaliyah Riccardi
- Poster #108
Respiratory epithelial adenomatoid hamartoma: An under-diagnosed benign condition
Joseph Schertzer, BS
- Poster #109
Review of Cystic Fibrosis transmembrane conductance regulator modulator therapy for chronic rhinosinusitis in Cystic Fibrosis patients
Eric Lee
- Poster #110
Revision sinus surgery in the era of balloon dilation
David Jang, MD
- Poster #111
Short course acetazolamide may be a safe and effective alternative to lumbar drains in repairing moderate to high flow CSF leaks after expanded approaches to suprasellar tumors
Murugappan Ramanathan, MD, FARS
- Poster #112
Silent sinus syndrome with an accompanying benign deep masticator space mass: A case report and literature review
Nanki Hura, BS
- Poster #113
Sinonasal adenocarcinoma: A population-based analysis of cancer disparities
Christopher Low, MD
- Poster #114
Sinonasal complications in nasopharyngeal cancers following chemoradiotherapy
Zahed Shaikh
- Poster #115
Sinonasal neuroendocrine carcinoma: A single institution experience
Christopher Low, MD

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Poster #116

Sinonasal scalp hair growth from paramedian forehead flap for skull base reconstruction

Stewart Bernard, MD

Poster #117

Sinonasal squamous cell carcinoma presentation and outcome: A national perspective

Zaid Al-Qurayshi, MD, MPH

Poster #118

Sjogren's syndrome sequelae: Nasal synechiae and nasopharyngeal stenosis

Amarbir Gill

Poster #119

Spontaneous nasal polypectomy induced by fluticasone propionate (XCHANCE®) and ziluetin (Zyflow®)

Marija Rowane, OMS

Poster #120

Surgical anatomy and management of the internal carotid artery in expanded endoscopic endonasal approaches to the cranial base

ZhaoHui Shi, MD, PhD

Poster #121

Synchronous inverted papilloma, oncocytic papilloma and pleomorphic adenoma: A case report and review of the literature

Ashleigh Halderman, MD

Poster #122

Telehealth in otolaryngology: Where is the evidence for cost-effectiveness?

Claudia Cabrera, MD, MS

Poster #123

Telemedicine in ENT maintains patient satisfaction and improves in accuracy over time

Anne Ning, BA

Poster #124

The effect of upper vs lower nostril irrigation – A post-surgical cadaver study

Kanghyun Kim, BS

Poster #125

The effects of daily intranasal probiotic irrigation on olfaction in normosmic and healthy participants

Nadim Saydy, MD

Poster #126

The effects of sphenoid surgery on nasal irrigation delivery

Jessica Grayson, MD

Poster #127

The extended anterior inferior approach to endoscopic medial maxillectomy for lesions of the anterior and inferior maxillary sinus

Alice Huang, BS

Poster #128

The growth of the advanced practice provider's role in otolaryngology

Gregory Barinsky, PharmD

Poster #129

The impact of resident involvement in endoscopic sinus surgery

Kristine Smith, MD

Poster #130

The many noses of opioid abuse – Case report and review of literature

Sharon Li, MD

Poster #131

The trends and risk factors of biphasic and recurrent anaphylaxis in the U.S. using ICD-10 CM codes

Jared Stuart, BBA

Poster #132

The value of STATATE PET/CT in the management and detection of local and distant metastases: Case study and review of literature

David Goldrich

Poster #133

Two cases of IgG4-related disease in the nasal ala associated in the setting of chronic inflammation

Annesha Basu, MD

Poster #134

Two cases of sinonasal necrosis concerning for invasive fungal sinusitis with no fungal elements on final pathology

Rachel Jonas

Poster #135

Understanding isolated sphenoid sinusitis and its management: Case report and literature review

Parsa Salehi, MD

Poster #136

Update on non-rhinologic facial pain: Single institutional experience

Gregory Epps, MD

Poster #137

Use of off-label steroid irrigations in chronic rhinosinusitis: A survey of the American Rhinologic Society

Qasim Husain, MD

Poster #138

Vascular anatomy of the inferior turbinate and its clinical implications

John Scott, MD FRCSC

Poster #139

Volumetric analysis of the maxillary sinus and orbit in silent sinus syndrome

Dev Amin, BS

Poster #140

YouTube as an information source for endoscopic sinus surgery

Arthur Uyesugi, MD

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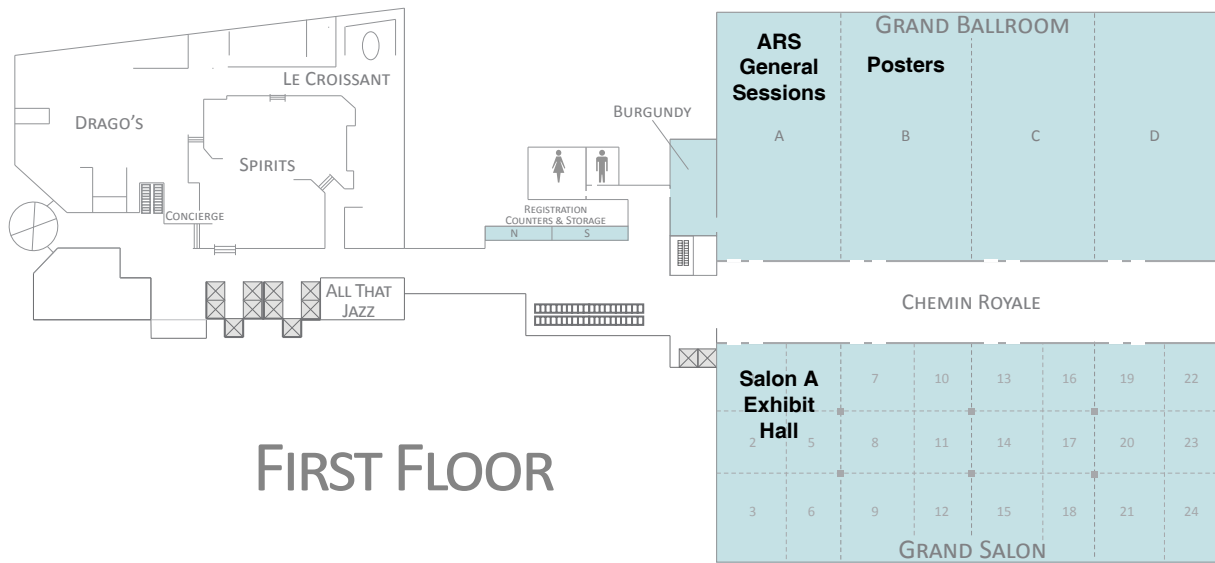
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Exhibitors



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Exhibitors



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Website: www.intersectENT.com

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Patients are at the center of everything we do – and we believe medical technology can play an even greater role in improving people's lives. Join us in our commitment to take healthcare Further, Together. Be inspired at Medtronic.com.



Superior Diagnostics. Targeted Treatments. Better Outcomes.

MICROGEN DX – Booth 212

5826 Hoffner Avenue, Suite 1004
Orlando, FL 32822
Phone: 855-208-0019; Fax: 407-204-1401
Email: info@microgendx.com
Website: www.microgendx.com

MicroGen DX provides physicians and their patients with the most advanced molecular testing for accurate identification of microbes. Through the utilization of Next Generation DNA Sequencing (NGS) MicroGenDX identifies causative microbes within patient samples and matches DNA sequence of 30,000+ microbial and fungal species with 99.9% accuracy. This technology provides physicians with the precise information needed to make confident treatment decisions based on solid DNA evidence. This knowledge ensures targeted antibiotic selection leading to superior patient outcomes.



NEILMED PHARMACEUTICALS INC. – Booth 106

601 Aviation Blvd.
Santa Rosa, CA 95403
Phone: 707-525-3784; Fax: 707-525-3785
Email: tradeshows@neilmed.com
Website: www.neilmed.com

The mission of the company is to create and maintain safe, affordable and effective products to sustain long-term growth and create drug free and effective Sinus, Ear, First Aid, and Baby care devices for millions of consumers worldwide. Please visit the website www.neilmed.com for more details.



NOVARTIS Pharmaceuticals – Booth 111

One Health Plaza
East Hanover, NJ 07936
Phone: 888-669-6682
Website: www.novartis.com

Novartis is reimagining medicine to improve and extend people's lives. As a leading global medicines company, we use innovative science and digital technologies to create transformative treatments in areas of great medical need. In our quest to find new medicines, we consistently rank among the world's top companies investing in research and development. Novartis products reach more than 750 million people globally and we are finding innovative ways to expand access to our latest treatments. About 105,000 people of more than 140 nationalities work at Novartis around the world. Find out more at www.novartis.com

Exhibitors



NOZAID – Booth 202

15 West 36th Street, Floor 8

New York, NY 10018

Phone: 917-756-2102

Email: contact@nozaid.com

Website: www.NozAid.com

NozAid nasal moisturizer lubricates severely dry nasal passages, supporting the nose's natural moisture barrier. It was developed by Dr. Emily McPherson to provide an alternative to saline products which evaporate too fast and irritate nasal mucous membranes with preservatives. NozAid is 100% pharmaceutical grade sesame oil.

NozAid Benefits:

- 100% pharmaceutical grade sesame oil
- Preservative free
- Fragrance free
- TSA compliant
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- Significantly better than nasal saline
- Safe for the nose
- Drug Free
- Enhances the noses protective barrier against bacteria, viruses, allergens, and pollutants
- Restores the nose's delicate mucous membranes



OLYMPUS AMERICA INC. – Booths 205, 207

3500 Corporate Parkway

Center Valley, PA 18034

Phone: 800-401-1086

Email: louis.lariviere@olympus.com

Website: <https://medical.olympusamerica.com>

Olympus is a global technology leader, crafting innovative optical and digital solutions in medical technologies; life sciences; industrial solutions; and cameras and audio products. Throughout our nearly 100-year history, Olympus has focused on being true to society and making people's lives healthier, safer and more fulfilling.

Our Medical Business works with health care professionals to combine our innovative capabilities in medical technology, therapeutic intervention, and precision manufacturing with their skills to deliver diagnostic, therapeutic and minimally invasive procedures to improve clinical outcomes, reduce overall costs and enhance quality of life for patients. For more information, visit medical.olympusamerica.com and truetolife.com.



ONDINE BIOMEDICAL INC. – Booth 102

5435 Bull Valley Rd., Suite 212

McHenry, IL 60050

Phone: 773-304-8446; Fax: 425-489-1101

Email: support@ondinebio.com

Website: www.ondinebio.com

Ondine is a leader in photodisinfection solutions and dedicated to the development of non-antibiotic anti-infective therapies for a broad spectrum of bacterial, viral and fungal infections. In addition to photodisinfections solutions, Ondine also created, SurgENT, a versatile new tool for deep cleaning, debriding and irrigating all paranasal sinuses. Featuring an innovative intrasinus balloon with a center lumen to direct the irrigant circumferentially around the sinus walls while leveraging customizable, manual pressure control in sensitive areas.

Exhibitors



OPTINOSE US, INC. – Booth 100 and Showcase Tabletop 2

1020 Stony Hill Rd., Suite 300
Yardley, PA 19067
Phone: 267-364-3500
Website: www.optinose.com and www.xhance.com

Optinose is a specialty pharmaceutical company focused on creating and bringing to market innovative products for patients with diseases treated by ear, nose, and throat (ENT) and allergy specialists.

R H I N O M E D

RHINOMED – Booth 112

1430 Walnut Street, Suite 200
Philadelphia, PA 19102
Phone: 859-307-1919
Email: mutesaes@rhinomed.global
Website: <https://www.rhinomed.global/>

With a focus on nasal breathing, Rhinomed's technology provides a front-line defense against sleep-disordered breathing which can result in a variety of sleep problems. The intranasal device gently stents the nostril allowing smoother airflow and prevents collapse.



RHINOSYSTEMS, INC. – Booth 213

One American Road, Suite 1100
Brooklyn, OH 44144
Phone: 800-203-6400
Email: support@navage.com
Website: www.navage.com

RhinoSystems, Inc. is the developer, manufacturer, and distributor of Naväge Nasal Care, the world's only saline nasal irrigation system with powered suction. Naväge pulls refreshing saline in one nostril, around and through the posterior margin of the nasal septum, and out the other nostril, flushing out allergens, mucus, dust, and germs. Naväge is distributed online and in retail stores throughout the US and Canada, including CVS and Walgreens, and over one million Naväge systems have been sold as of April 2018. Naväge Nasal Care is Nature's Decongestant® – it's safe, effective, all natural, and drug free. You'll LOVE that clean nose feeling!



SMITH & NEPHEW – Booth 214

7000 W. William Cannon Dr.
Austin, TX 78735
Phone: 512-895-1089
Email: Melissa.Maniscalco@smith-nephew.com
Website: www.smith-nephew.com

Smith & Nephew is committed to providing solutions our customers can trust. Our line of Coblation Wands, sinus access devices, & nasal dressings help surgeons improve the quality of patients' lives.

Exhibitors

The Stryker logo is written in a bold, lowercase, sans-serif font.

STRYKER – Showcase Tabletop 1

3600 Holly Lane N, Suite 40

Plymouth, MN 55447

Phone: 763-463-1595

Email: ent.info@stryker.com

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

Stryker delivers evidence-supported technologies that enable you to deliver excellent outcomes and enhanced experiences to your patients. Stryker's ENT solutions – making success the standard. Please contact us for more information at <https://ent.stryker.com>

The Xoran Technologies logo features the word "XORAN" in a bold, blue, serif font. The letter "X" is stylized with a blue outline and a white fill, and the "O" is also outlined in blue. A registered trademark symbol (®) is located to the right of the word.

Xoran Technologies – Booth 108

5210 S. State Rd.

Ann Arbor, MI 48108

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

Email: info@xorantech.com

Website: www.xorantech.com

Founded in 2001, Xoran Technologies LLC is the pioneer of low-dose radiation, cone beam CT (CBCT) scanners for use in office and operating rooms. Xoran creates innovative products and services by leveraging its core competencies in Medical Imaging, Information Technologies, and Customer Service. Xoran provides 3-dimensional low dose imaging – with workflow designed for simplicity and ease-of-use. Xoran is based in Ann Arbor, Michigan. For more information visit www.xorantech.com.



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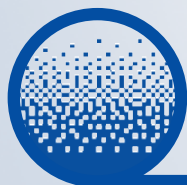
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