Restore patient tissue.¹

The Biodesign® Sinonasal Repair Graft is designed specifically to aid in the body’s natural healing process during nasal and sinus mucosal tissue procedures. The repair graft is easy to work with² and provides a scaffold that supports the infiltration of host cells.³

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Illustration by Lisa Clark

Biodesign®
SINONASAL REPAIR GRAFT


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Illustration by Lisa Clark

Biodesign® Sinonasal Repair Graft

INTENDED USE: The Biodesign® Sinonasal Repair Graft is intended to separate tissue or structures compromised by surgical trauma, help control minimal bleeding, and act as an adjunct to aid in the natural healing process. The device is indicated for use where an open wound dressing material is required in the nasal and/or sinus cavities following nasal and/or sinus surgery where separation of tissue or structures is desired. The device is supplied sterile and is indicated for one-time use. CAUTION: Federal (U.S.A.) law restricts this device to sale by or on the order of a physician. This symbol means the following: Sinonasal Repair Graft. This product is intended for use by trained medical professionals.

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/Infectious 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

See instructions for use for full product information.
Presidental 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
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 entitles “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
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
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

8:00 am – 8:07 am
Treatment practices for aspirin exacerbated respiratory disease: Analysis of a national insurance claims database
Lauren Roland, MD, MSCI

8:07 am – 8:14 am
Complete surgery followed by aspirin desensitization decreases overall corticosteroid use
Edward C. Kuan, MD

8:14 am – 8:21 am
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

8:21 am – 8:28 am
Aspirin exacerbated respiratory disease: Longitudinal assessment of a large cohort & implications of diagnostic delay
Rijul Kshirsagar, MD

8:28 am – 8:32 am
Discussion

8:32 am – 9:29 am
AERD Panel
Panelists: Tanya Laidlaw, MD, Rodney Schlosser, MD, FARS

New Drugs/Devices
Moderators: William Yao, MD, Adam DeConde, MD

10:30 am – 10:37 am
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

10:37 am – 10:44 am
Mometasone absorption in human nasal airway epithelial cultures
Tuong Nguyen, BS

10:44 am – 10:51 am
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

10:51 am – 10:58 am
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

10:58 am – 11:05 am
Drug-coating stability and release kinetics of the ciprofloxacin-azithromycin sinus stent
Do-Yeon Cho, MD

11:05 am – 11:11 am
Discussion

Practical Issues/Immunosuppression
Moderators: Ian Humphreys, DO, FARS, Jarrett Walsh, MD, Christopher Le, MD, FARS

11:18 am – 11:25 am
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

11:25 am – 11:32 am
Discussion

11:32 am – 11:39 am
Treatment with immune stimulating therapies improves survival in chronic invasive fungal sinusitis: A multi-institutional review
Ian Humphreys, DO, FARS

11:39 am – 11:46 am
Atypical fungal infections affect outcomes in acute invasive fungal sinusitis: A multi-institutional review
Ian Humphreys, DO, FARS

11:46 am – 11:53 am
Outcomes in treatment of chronic and recurrent acute rhinosinusitis in the setting of medication induced immunosuppression
Zara Patel, MD, FARS

11:53 am – 12:00 pm
Lunch with Exhibitors in Salon A

Olfaction and Skull Base Surgery
Moderators: Waleed Abuzeid, MBBS, Sammy Khalili, MD

9:29 am – 9:36 am
Olfactory-specific quality of life outcomes after endoscopic endonasal surgery of the sella
Milap Raikundalia, MD

9:36 am – 9:43 am
Olfactory function via sniffin sticks following bilateral superior turbinate resection
William Yao, MD

9:43 am – 9:50 am
Predictors of subjective olfactory dysfunction after endoscopic transspheinal hypophysectomy
Jake Lee, MD

9:50 am – 10:00 am
Discussion

10:00 am – 10:30 am
Break with Exhibitors in Salon A

11:18 am – 11:25 am
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

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Outcomes in treatment of chronic and recurrent acute rhinosinusitis in the setting of medication induced immunosuppression
Zara Patel, MD, FARS

11:53 am – 12:00 pm
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 perioperative 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 polypos: 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

All information was taken from the original abstract submission
### 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

- **8:00 am – 8:07 am**
  - Factors driving olfactory loss in patients with chronic rhinosinusitis: A case control study
  - Rodney Schlosser, MD, FARS

- **8:07 am – 8:14 am**
  - The use of platelet-rich plasma in treatment of olfactory dysfunction, a pilot study
  - Carol Yan, MD

- **8:14 am – 8:21 am**
  - Short-term chronic rhinosinusitis medical management: Differential impact on quality of life and olfaction
  - Andrew Thomas, MD

- **8:21 am – 8:28 am**
  - Olfactory cleft mucus inflammatory proteins and olfaction in chronic rhinosinusitis
  - Frederick Yoo, MD

- **8:28 am – 8:38 am**
  - Discussion

#### Microbiome
**Moderators:** Dana Crosby, MD, Charles Ebert, MD, FARS, Jordan Glicksman, MD

- **9:06 am – 9:16 am**
  - Kappa-carrageenan sinus rinses reduce inflammation and intracellular Staphylococcus aureus infection in airway epithelial cells
  - Ms. Catherine Bennett

- **9:16 am – 9:23 am**
  - Association of the sinonasal microbiome with clinical outcomes in chronic rhinosinusitis: A systematic review
  - James Wang, MD, PhD

- **9:23 am – 9:30 am**
  - Long term outcomes of maximal medical management of chronic rhinosinusitis: Paving the way for more accurate cost effectiveness comparisons
  - George Scangas, MD

- **9:30 am – 9:37 am**
  - Collapse of bacterial diversity of the sinus microbiome differentiates poor from good-evolution after ESS for CRS
  - Axel E. Renteria, MD, MSc

- **9:37 am – 9:44 am**
  - Discussion

#### Economics and Outcomes Skull Base
**Moderators:** Edward McCoul, MD, FARS, John Schneider, MD, Eric Wang, MD, FARS

- **8:38 am – 8:45 am**
  - Association of sellar mass proliferative markers with radiographic features and clinical outcomes
  - Robert Liebman, MD

- **8:45 am – 8:52 am**
  - Predicting readmission after endoscopic trans-sphenoidal pituitary surgery using machine learning
  - Christopher Puchi, BS

- **8:52 am – 8:59 am**
  - Predicting prolonged length of stay after endoscopic transsphenoidal surgery for pituitary adenoma
  - Swar Vimawala, BS

- **8:49 am – 8:56 am**
  - Economic implications of diagnostic strategies for cerebrospinal fluid rhinorrhea
  - Christopher Pool, MD

- **9:06 am – 9:16 am**
  - Discussion

#### QOL I
**Moderators:** Stella Lee, MD, Stacey Gray, MD, FARS, Anthony DeSignore, MD

- **10:30 am – 10:37 am**
  - Sexual health in patients with chronic rhinosinusitis and the effect of endoscopic sinus surgery
  - Arthur Wu, MD, FARS

- **10:37 am – 10:44 am**
  - Acute exacerbations in recurrent acute rhinosinusitis: Differences in quality-of-life and endoscopic exam
  - Daniel Beswick, MD

- **10:44 am – 10:51 am**
  - The relationship between sinonasal and disease specific quality of life in cystic fibrosis
  - Chetan Safi

- **10:51 am – 10:58 am**
  - Differential perception and tolerance of chronic rhinosinusitis symptoms as a confounder of gender-disparate disease burden
  - Katie Phillips, MD

- **10:58 am – 11:05 am**
  - Does age impact long term outcomes in chronic rhinosinusitis?
  - Thomas Holmes, MD

- **11:05 am – 11:10 am**
  - Discussion

#### QOL II
**Moderators:** Douglas Reh, MD, FARS, Oswaldo Henriquez, MD, Monica Patadia, MD

- **11:10 am – 11:17 am**
  - Modified Lund-Kennedy score as a predictor for significant symptom improvement after endoscopic sinonasal surgery
  - Yossawee Wangworawut, MD

- **11:17 am – 11:24 am**
  - Development of a standardized assessment of patient reported outcomes following endoscopic sinonasal surgery for chronic rhinosinusitis
  - Connor Sommerfeld, MD

- **11:24 am – 11:31 am**
  - Increased abundance of staphylococcus aureus characterizes microbiome in refractory CRS patients
  - Axel E. Renteria, MD, MSc

- **11:31 am – 11:38 am**
  - Voice dysfunction in patients with chronic rhinosinusitis before and after endoscopic sinus surgery
  - Arthur Wu, MD, FARS

- **11:38 am – 11:45 am**
  - Predictors of success in primary and revision endoscopic dacryocystorhinostomy
  - Ashton Lehmann, MD

- **11:45 am – 11:59 am**
  - Discussion

- **12:00 pm – 1:00 pm**
  - Lunch with Exhibitors in Salon A
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

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

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 neo-sinus 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

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.

Credit Designation Statement:
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.

All information was taken from the original abstract submission
Poster #001
30-Day readmission and coordination of care following endoscopic transphenoidal 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 deliver
Ari Stone, BS

Poster #008
A single surgeon experience with nasal defect reconstruction using the melolabial flap
Fergal Cadden, MBBS

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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 photodisinfection 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.

RHINOMED – Booth 112
1430 Walnut Street, Suite 200
Philadelphia, PA  19102
Phone:  859-307-1919
Email:  mutesales@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

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](https://ent.stryker.com)

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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](http://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](http://www.xorantech.com).
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SLIT=sublingual immunotherapy.
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Contact: Wendi Perez, ARS Executive Administrator
Tel: 973-545-2735 (Option #6)  Email: wendi@american-rhinologic.com
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