## **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 AAOA/ARS Panel

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

4:10pm - 5:30pm

**Endotypes and Phenotypes-Where are** 

we now?

Moderator: Bruce Tan, MD

5:30pm-6:00pm

Fall Film FESStival

Moderator: Christopher Church, MD, FARS

6:00pm-8:00pm

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

8:00am - 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, Stephanie Joe, MD, FARS

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, J. Pablo Stolovitsky, MD, FARS

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 la 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

lan Humphreys, DO, FARS

11:39am - 11:46am

Atypical fungal infections affect outcomes in acute invasive fungal sinusitis: A multi-institutional review lan 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 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, Richard Lebowitz, 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: Amber Luong, MD, PhD, FARS, Justin Turner, MD, FARS, Thomas Higgins, 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

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

### **QOLI**

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-oflife 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 metaanalysis

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, Leigh Sowerby, MD, Dana Crosby, 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

### 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

## 15<sup>th</sup> Annual David W. Kennedy Lectureship

Invited Guest Speaker: Robert Schleimer, PhD

"Mechanisms of Pathogenesis of Chronic Rhinosinusitis"

### **TOP ABSTRACTS:**

Moderators: Benjamin Bleier, MD, FARS, Amber Luong, MD, PhD, FARS, Do-Yeon Cho, 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

Misteri Taricey, IVI

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.

