

PROGRAM AT A GLANCE

Thursday, September 30, 2021

7:00 am – 1:00 pm
Residents Course – Didactic Session
Tiffany Ballroom
By Invitation Only

1:30 pm – 4:20 pm
Residents Dissection Lab
Emerald Ballroom
By Invitation Only

5:30 pm – 7:00 pm
Residents Reception
John F. Kennedy Penthouse
By Invitation Only

Friday, October 1, 2021 7:00 am – 1:00 pm

7:00 am - 8:00 am
Board of Directors Breakfast
Emerald Ballroom

8:00 am - 12:00
Board of Directors Meeting
Emerald Ballroom

Friday, October 1, 2021 1:00 pm – 5:00 pm General Session Crystal Ballroom

1:00 pm - 1:15 pm
Presidential Address & Welcome
Joseph Han, MD, FARS

1:15 pm - 2:00 pm
17th Annual David W. Kennedy Lecture
Introduction: Rodney Schlosser, MD, FARS
Guest Speaker: N. Louis Shipley, Harvard Business School
"Leveraging disruptive technology in a post pandemic world"

2:00 pm - 2:15 pm
Awards Ceremony: Robert Kern, MD, FARS; Benjamin Bleier, MD, FARS;
Jivianne Lee, MD, FARS; Jean Kim, MD, FARS

Top Clinical Abstracts

Moderators: Dana Crosby, MD, FARS; Jean Kim, MD, FARS

2:15 pm - 2:22 pm
PK evidence of consistent drug release from long-acting implantable corticosteroid matrices for CRS
Randall A. Ow, MD

2:22 pm - 2:29 pm
Outcomes of Dupilumab treatment versus FESS for CRSwNP
Harish Dharmarajan, MD

2:29 pm - 2:36 pm
CRS-PRO and SNOT 22 correlations with type 2 inflammatory mediators in chronic rhinosinusitis
Samuel Racette, MD

2:36 pm - 2:43
Dupilumab and ASA desensitization CEA
Michael Yong, MD, MPH, MBA

2:43 pm - 2:50 pm
Predicting malignant transformation of inverted papilloma using image-based machine learning
Angela Yang, BS

2:50 pm - 3:00 pm
Q&A

3:00 pm - 3:30 pm
BREAK

PROGRAM AT A GLANCE

Top Basic Science Abstracts

Moderators: Stella Lee, MD; Cecelia Damask, DO; Justin Turner, MD, FARS

3:30 pm - 3:37 pm

LPS decreases CFTR open probability and mucociliary transport through ROS

Do-Yeon Cho, MD

3:37 pm - 3:44 pm

Transcriptional changes in chronic rhinosinusitis with asthma

Amarbir Gill, MD

3:44 pm - 3:51 pm

Cystatin-induced coagulation and fibrinolysis pathway derangements in a murine model of CRSwNP

Alan Workman, MD, MTR

3:51 pm - 3:58 pm

Steroid responsive and steroid resistant cytokines in AERD

Michael Kohanski, MD, PhD

3:58 pm - 4:05 pm

A human paranasal sinus model of SARS-CoV-2 infection

Wesley Stepp, MD, PhD

4:05 pm - 4:15 pm

Q&A

4:15 pm - 5:00 pm

Panel: "Lessons Learned: Reflections of Seasoned Rhinologists"

Moderator: Eugenia Vining, MD

Panelists: Marilene Wang, MD, FARS; James Stankiewicz, MD, FARS;

Michael Setzen, MD, FARS; Donald Lanza, MD, FARS

5:30 pm - 7:00 pm

President's Reception and Poster Reception

Tiffany Room

7:00 pm - 9:00 pm

Past President's Reception

Presidential Suite

By Invitation Only

Saturday, October 2, 2021

8:00 am – 12:00 pm

Breakout Room A

Gold Room

Biomarkers

Moderators: Andrew Lane, MD, FARS; Victoria Lee, MD; Bruce Tan, MD

8:00 am - 8:07 am

Chronic rhinosinusitis mouse model

John Lee, MD

8:07 am - 8:14 am

Urinary leukotriene E4 as a biomarker for chronic rhinosinusitis clinical subtypes

Beau Idler, BA

8:14 am - 8:21 am

Central compartment atopic disease and allergic rhinitis have similar allergen patterns

Bianca Rullan Oliver, MD

8:21 am - 8:28 am

Biomarker model for predicting type 2 in patients diagnosed with CRS

Austin Heffernan, MD Candidate

8:28 am - 8:35 am

Tissue eosinophil association with obesity

Linsey Ryan, MD

8:35 am - 8:45 am

Q&A

8:45 am - 9:30 am

Panel: "Digital patient engagement for the rhinologist:"

Moderator: Martin Citardi, MD, FARS

Panelists: Alexander Farag, MD, FARS; Chirag Patel, MD, FARS

9:30 am - 10:00 am

BREAK

PROGRAM AT A GLANCE

Cystic Fibrosis

Moderators: Do-Yeon Cho, MD; Michael Kohanski, MD

10:00 am - 10:07 am

Pseudomonas isolates from CRS with CF develop increased virulence under anaerobic conditions
Do-Yeon Cho, MD

10:07 am - 10:14 am

CF olfaction before and after elexacaftor-tezacaftor-ivacaftor
Daniel Bacon, BS

10:14 am - 10:21 am

Comparison of endoscopic sinus surgery timing in lung transplant patients with Cystic Fibrosis
Joseph Johnson, ScB

10:21 am - 10:28 am

Topical antibiotics in chronic rhinosinusitis: A prospective pilot study
Christopher Low, MD

10:28 am - 10:35 am

Olfactory dysfunction in people with Cystic Fibrosis
Daniel Beswick, MD, FARS

10:35 am - 10:45 am

Q&A

Miscellaneous Rhinology

Moderators: Alissa Kanaan, MD; Thomas Higgins, MD, FARS; Jordan Teitelbaum, MD

10:45 am - 10:52 am

Transnasal endoscopic management of frontal sinus anterior table fractures improves cosmetic quality
Natalie Derise, MD

10:52 am - 10:59 am

Clinical features and diagnoses of patients with primary complaints of facial pain
Andrea Plawewski, MD

10:59 am - 11:06 am

Outcome of immunoglobulin replacement therapy in children with rhinosinusitis
John Behnke, MD

11:06 am - 11:13 am

Contralateral sinonasal symptoms following unilateral ESS
Kevin Hur, MD

11:13 am - 11:23 am

Q&A

Diet and Drip

Moderators: Nicholas Rowan, MD; Angela Donaldson, MD, FARS; Edward McCoul, MD, FARS

11:23 am - 11:30 am

Otolaryngic sensory loss as a measure of frailty among older U.S. adults
Nicholas Rowan, MD

11:30 am - 11:37 am

Dietary habits and rhinitis
Darren Cheng, MS

11:37 am - 11:44 am

Diagnostic workup of patients with primary complaint of post-nasal drip
Hector Perez, MD

11:44 am - 11:51 am

Histopathologic features of chronic rhinosinusitis in diabetic patients
Vidit Talati, MD

11:51 am - 12:00 pm

Q&A

Saturday, October 2, 2021

8:00 am – 12:00 pm

Breakout Room B

Crystal Ballroom

Healthcare Economics

Moderators: Jonathan Ting, MD, FARS; Joshua Levy, MD, FARS; Kara Detwiler, MD, FARS

8:00 am - 8:07 am

Resource utilization analysis after PPSV23 vaccination in antibody deficient CRS and RABS patients
Nrusheel Kattar, MD

8:07 am - 8:14 am

Rhinology Medicare reimbursements have not been keeping up with inflation
Sina Torabi, MD

8:14 am - 8:21 am

Impact of gender on outcomes and cost in pediatric acute rhinosinusitis management
Vraj P. Shah, BS

PROGRAM AT A GLANCE

8:21 am - 8:28 am

Impact of operative time on endoscopic sinonasal surgery

Ariel Omiunu, BS

8:28 am - 8:35 am

Procedural and geographic variation in price markup of common rhinology procedures

Rahul A. Patel, Medical Student

8:35 am - 8:45 am

Q&A

Adjunct Therapies for CRS

Moderators: Lauren Roland, MD; Christine Franzese, MD, FARS; Daniel Beswick, MD, FARS

8:45 am - 8:52 am

Long-acting implantable corticosteroid matrix for CRS: LANTERN study 6-month post-treatment outcomes

Joanne Rimmer, MBBS, MA

8:52 am - 8:59 am

The Effect of EDS-FLU on objective and subjective outcomes for patients with CRSwNP

Randall Ow, MD, FARS

8:59 am - 9:06 am

The potential for cortisol suppression with high dose mometasone irrigations

Hannah Brown, BS

9:06 am - 9:13 am

Type 2 inflammation decreases in CRSwNP after ESS with mometasone-eluting stent placement

Bruce K. Tan, MD

9:13 am - 9:20 am

Six months of aspirin therapy acts as an indicator of long-term outcomes in AERD

Siddhant H. Tripathi, BS

9:20 am - 9:27 am

Real world effectiveness of Dupilumab in CRSwNP

Yi Zhang

9:27 am - 9:35 am

Q&A

9:30 am - 10:00 am

BREAK

10:00 am - 10:45 am

Panel: "Omics and biomarkers: How they can impact patient care"

Moderator: Justin Turner, MD, FARS

Panelists: Bruce Tan, MD; Amber Luong, MD, PhD, FARS; Benjamin Bleier, MD, FARS

Miscellaneous Rhinology

Moderators: Kristine Smith, MD; Christian Soneru, MD; Sanjeet Rangarajan, MD, FARS

10:45 am - 10:52 am

Practice patterns and provider satisfaction in a virtual rhinology and skull base surgery clinic

Emily Papazian, Medical Student

10:52 am - 10:59am

Post-operative sinus polyp scale (POPS)

Dhruv Sharma, MD

10:59 am - 11:06 am

Modeling observed nasal nitric oxide levels

Dennis Shusterman, MD, MPH

11:06 am - 11:13

The role of extraoral taste receptors in chronic rhinosinusitis: A systematic review

Nicholas Rowan, MD

11:13 am - 11:23

Q&A

Complications

Moderators: Theodore Schuman, MD, FARS; Jeffrey Suh, MD, FARS; Stacey Gray, MD, FARS

11:23 am - 11:30 am

Systemic corticosteroids-related adverse outcomes in chronic rhinosinusitis with nasal polyposis

Greg Davis, MD, FARS

11:30 am - 11:37 am

Avascular necrosis and oral corticosteroid use

David Poetker, MD, FARS

11:37 am - 11:44 am

Odontogenic sinusitis causing extra-sinus complications

Jennifer Douglas, MD

11:44 - 11:51 am

Correlation of symptoms by sinus subsite

Arthur Wu, MD, FARS

11:51 am - 12:00 pm

Q&A

PROGRAM AT A GLANCE

Saturday, October 2, 2021

8:00 am – 12:00 pm

Breakout Room C

Emerald Ballroom

Skull Base Malignancies

Moderators: Kent Lam, MD, FARS; Jose Mattos, MD; Jeremiah Alt, MD, PhD, FARS

8:00 am - 8:07 am

Treatment facility volume and esthesioneuroblastoma outcomes
Khodayar Goshtasbi, MS

8:07 am - 8:14 am

Effect of hospital safety-net burden on survival of sinonasal squamous cell carcinoma
Christopher Tseng, BS

8:14 am - 8:21 am

Sociodemographic factors in patients with esthesioneuroblastoma
Ariel Omiunu, BS

8:21 am - 8:28 am

Length of stay after surgery as a predictor of survival for sinonasal squamous cell carcinoma
Jeff Gao, BS

8:28 am - 8:38 am

Q&A

Patient Demographics

Moderators: Charles Riley, MD; Naweed Chowdhury, MD; Marc Dubin, MD, FARS

8:38 am - 8:45 am

Demographic variations of participants in rhinitis clinical trials
Neil Mehta, BS

8:45 am - 8:52 am

Effect of race in epistaxis treatment
Avneet Randhawa, BS

8:52 am - 8:59 am

Characterization of biologics patients
Matthew Lelegren, MD

8:59 am - 9:06 am

Demographics in chronic rhinosinusitis subtypes
Cheng Ma, BS

9:06 am - 9:16 am

Q&A

9:16 am - 10:00 am

Panel: "The Role of the Rhinologist in Sleep Disorders"

Moderator: Andrew Goldberg, MD, FARS

Panelists: Jolie Chang, MD; Maria Suurna, MD; Ilene Rosen, MD

10:00 am - 10:30 am

BREAK

Olfaction

Moderators: Carol Yan, MD; David Poetker, MD, FARS

10:30 am - 10:37 am

Population differences between COVID-19 and post-viral olfactory dysfunction: Case-control study
Nikita Chapurin, MD, MHS

10:37 am - 10:44 am

Chemesthesis compensates for decreased flavor sensation due to chemosensory dysfunction in COVID-19
Sameer Kini, MD

10:44 am - 10:51 am

Measurement of healthy utility state values in COVID-19 related anosmia
Mena Said, MD

10:51 am - 10:58 am

Cognitive impairment and awareness of olfactory dysfunction: NHANES 2013–2014
Srivats Narayanan, Medical Student

10:58 am - 11:05 am

Parosmia and health utility state values for COVID-19 related olfactory loss
Sophie Jang, Research Fellow

11:05 am - 11:15 am

Q&A

PROGRAM AT A GLANCE

Nasal Valve, Perforation and Empty Nose

Moderators: David Jang, MD, FARS; Arthur Wu, MD, FARS; Jayakar Nayak, MD

11:15 am - 11:22 am
Temperature-controlled RF treatment of the NV for NAO: A randomized controlled trial
Stacey Silvers, Dr.

11:22 am - 11:29 am
Temperature-controlled RF treatment of nasal valve for nasal airway obstruction
William Yao, MD, FARS

11:29 am - 11:36 am
Endoscopic techniques for nasal septal perforation repair: A systematic review
Arron Gravina, DO

11:36 am - 11:43 am
Surgical repair of nasal septal perforations
Janmaris Marin, MD

11:43 am - 11:50 am
Mental health burden of empty nose syndrome
Meredith Meyer

11:50 am - 12:00 pm
Q&A

Saturday, October 2, 2021

8:00 am – 12:00 pm

Breakout Room D

Bernard's Room

Rhinology Malignancies

Moderators: Garret Choby, MD, FARS; Nyall London, MD, FARS

8:00 am - 8:07 am
Nasal endoscopy and aerosol generation
Amarbir Gill, MD

8:07 am - 8:14 am
Surgical approach is associated with complication rate in sinonasal malignancy: A multi-center study
Daniel Beswick, MD, FARS

8:14 am - 8:21 am
Determinants of survival in sinonasal and skull base chondrosarcoma
Ryan Rimmer, MD

8:21 am - 8:28 am
Healthcare expansion and rhinologic malignancies
Alexandria L. Itrace

8:28 am - 8:38 am
Q&A

Rhinology Workforce

Moderators: Douglas Reh, MD, FARS; Erin O'Brien, MD, FARS; Mathew Geltzeiler, MD, FARS

8:38 am - 8:45 am
Gender gap among rhinology and skull base surgeons
Patricia Johnson, MD

8:45 am - 8:52 am
Socioeconomic trends in rhinology and endoscopic skull base surgery in 2020
Sara Sun, MD

8:52 am - 8:59 am
Predictors of academic career placement and scholarly impact in fellowship-trained rhinologists
Nicholas Rowan, MD

8:59 am - 9:06 am
A geospatial analysis of the rhinologist workforce in the United States
Samir Hassanin, BA

9:06 am - 9:16 am
Q&A

Rhinology Outcomes

Moderators: Waleed Abuzeid, MD; Joshua Levy, MD, FARS; Zara Patel, MD, FARS

9:16 am - 9:23 am
Factors associated with postoperative outcomes in pituitary surgery
Khodayar Goshtasbi, MS

9:23 am - 9:30 am
Ecological momentary assessment of sinonasal outcomes
Victoria Lee, MD

9:30 am - 9:37 am
Endoscopic sinus surgery in patients with comorbidities
Ariel Omiunu, BS

9:37 am - 9:44 am
A cross-sectional analysis of patient information and education on sinusitis
Kolin Rubel, MD

PROGRAM AT A GLANCE

9:44 am - 9:51 am

The use of SN-5 to differentiate chronic rhinosinusitis and chronic adenoiditis in children
Norman Orabi, MD

9:51 am - 10:00 am

Q&A

10:00 am - 10:30 am

BREAK

Skull Base

Moderators: Corinna Levine, MD, FARS; Benjamin Bleier, MD, FARS; Raj Sindwani, MD, FARS

10:30 am - 10:37 am

Outcomes of endoscopic resection of pediatric craniopharyngiomas
Tapan Patel, MD

10:37 am - 10:44 am

Occult nodal involvement in sinonasal squamous cell carcinoma
Samer Elsamna, BA

10:44 am - 10:51 am

Race, ethnicity, and socioeconomic status in esthesioneuroblastoma outcomes
Rahul Sharma, BS

10:51 am - 10:58 am

Impact of distant metastasis in sinonasal squamous cell carcinoma
Samer Elsamna, BA

10:58 am - 11:05 am

Nasal cavity squamous cell carcinoma
Blaine Smith

11:05 am - 11:15 am

Q&A

Skull Base Reconstruction

Moderators: Edward Kuan, MD, FARS; Eric Wang, MD, FARS; Bradford Woodworth, MD, FARS

11:15 am - 11:22 am

Endoscopic repair of anterior encephaloceles: A cost-effective alternative to craniotomy
Matthew Wu, BS

11:22 am - 11:29 am

The role of fascia lata in complex skull base reconstruction: Emergence of a new workhorse
Firas Sbeih, MD

11:29 am - 11:36 am

False negative rate of intrathecal fluorescein in CSF leak repair
Jeffrey Radabaugh, MD

11:36 am - 11:43 am

Systematic review of olfactory preservation techniques in nasoseptal flap harvest
Suat Kilic, MD

11:43 am - 11:50 am

Endoscopic endonasal eustachian tube obliteration for cerebrospinal fluid rhinorrhea
Ryan Rimmer, MD

11:50 am - 12:00 pm

Q&A

12:00 pm - 1:00 pm

(Heinsbergen Room)

Women in Rhinology / Residents & Fellows / Mentorship Lunch Program

Guest Speaker: Nina Shapiro, MD; Professor of Head and Neck Surgery, David Geffen School of Medicine at UCLA
Director of Pediatric Otolaryngology, Mattel Children's Hospital UCLA
"Medical Communication to the Non Medical Audience: Something We All Need to Practice"

PROGRAM AT A GLANCE

Saturday, October 2, 2021

1:00 pm – 4:20 pm

General Session

Crystal Ballroom

1:00 pm - 1:40 pm

Panel: "Building a successful rhinology practice"

Moderator: Thomas Higgins, MD, FARS

Panelists: Greg Davis, MD, FARS; Winston Vaughan, MD, FARS; Danielle Warner, MD; Marc Dubin, MD, FARS; Douglas Reh, MD, FARS

1:40 pm - 2:20 pm

Rhinology Worldwide Panel

Jivianne Lee, MD, FARS; David Gudis, MD, FARS; Brent Senior, MD, FARS; Kibwei McKinney, MD; Angela Donaldson, MD, FARS; Jose Mattos, MD

2:20 pm - 3:00 pm

An ARS/AAOA Panel: "The US burden of rising health care cost - A case study in CRSwNP treatment"

Moderator: Michael Stewart, MD, FARS

Panelists: Lauren Roland, MD; Joshua Levy, MD, FARS; Michael Platt, MD

3:00 pm - 3:30 pm

BREAK

3:30 pm - 3:40 pm

Business Meeting and Presidential Citation

Joseph Han, MD, FARS, Michael Stewart, MD, FARS

3:40 pm - 4:20 pm

David W. Kennedy Lecture

Introduction: Rodney Schlosser, MD, FARS

Guest Speaker: David W. Kennedy

"The introduction of endoscopic sinus surgery and the evolution of rhinology as a specialty"

4:20 pm - 5:45 pm

DWK Reception

John F. Kennedy Suite

By Invitation Only

6:00 pm - 8:00 pm

ARS Co-Sponsor of the 125th Anniversary Celebration of the AAO-HNS Red Carpet Joint Specialty Society President's Reception at the XBox Plaza in the heart of L.A. Live

POSTERS

Poster A001

70-degree endoscope in maxillary anastomy

Firas Hentati, MD

Poster A002

Acute exacerbations, a CRS patient's perspective

Katie Phillips, MD

Poster A003

Balloon septoturbidectomy

Alexander Farag, MD, FARS

Poster A004

Baseline blood eosinophil level is not a biomarker for CRSwNP severity or response to dupilumab

Claus Bachert, MD

Poster A005

Caffeine consumption and rhinitis

Michael DeBakey, MS

Poster A006

Canine endoscopic sinonasal surgery

Charles Riley, MD

Poster A007

CFTR mutations in patients with CRS: A systematic review

Michael Yong, MD, MPH, MBA

Poster A008

Chronic rhinosinusitis with nasal polyposis patients receiving monoclonal antibody therapy

Mohamad Babi, MD

Poster A009

Differences in clinical presentation for patients with frontal sinus mucoceles

Dhruv Sharma, MD

Poster A010

Dupilumab improves sense of smell in CRSwNP patients with 0, 1, 2, or ≥ 3 prior surgeries

Joaquim Mullol, MD, PhD

Poster A011

Endoscopic transnasal fistula repair

Yu-Hsuan Lin, MD

Poster A012

Endoscopic removal of a nasal septal pleomorphic adenoma: A case report and literature review

Hannah Case

Poster A013

ENT visits and procedures in COVID recovered

Dennis Tang, MD

Poster A014

Epistaxis in CPAP patients

Theodore Klug, MD, MPH

Poster A015

Impact of asthma status on outcomes and cost in pediatric acute rhinosinusitis management

Vraj Shah, BS

PROGRAM AT A GLANCE

Poster A016
Impact of asthma status on outcomes and cost in pediatric nasal polyp management
Vraj Shah, BS

Poster A017
Impact of comorbidities on 30-day outcomes after TSS
Sudeepti Vedula, BS

Poster A018
Impact of Cystic Fibrosis on outcomes and cost in pediatric nasal polyp management
Vraj P. Shah, BS

Poster A019
Incidence and implications of HPV tumor status in non-squamous cell carcinoma sinonasal malignancies
Jason Lee, MD

Poster A020
Internal carotid artery pseudoaneurysm and blow-out secondary to chronic invasive fungal sinusitis
Camilo Reyes, MD, FARS

Poster A021
Intranasal budesonide delivered by nasal nebulizer compared to a sinus rinse
Marc Nagel, H.BSc

Poster A022
MicroRNA-29a promotes the allergic rhinitis by down-regulating FOS
Zhiyuan Tang, PhD

Poster A023
Nasal nitric oxide as a biomarker in the diagnosis and treatment of sinonasal inflammatory diseases
Matthew Lelegren, MD

Poster A024
Nasopharyngeal pedicled pituitary mass: A case report
Madison Colcord, BS

Poster A025
National analysis on the inpatient management of chronic rhinosinusitis in the pediatric population
Bryan Le, BS

Poster A026
Navigation-assisted intradural skull base surgery
Ariel Omiunu, BS

Poster A027
Performance and safety of image guided sinus dilation system in revision endoscopic sinus surgery
Joseph Han, MD, FARS

Poster A028
Preoperative laboratory testing in low risk ambulatory ESS
Sudeepti Vedula, BS

Poster A029
Prevention of orbital sinus ostium stenosis after modified Lothrop (Draf III) frontal sinus surgery
Yasuyuki Hinohira, MD, PhD

Poster A030
Progressive improvement of severe CRSwNP with dupilumab: Post-hoc analysis of two Phase 3 studies
Claus Bachert, MD

Poster A031
Qualitative study of disease control in CRS
Katie Phillips, MD

Poster A032
Respiratory epithelial adenomatoid hamartoma in a 76-year-old female
Haroon Alam

Poster A033
Seropositivity to microbial proteins in CRS using high throughput microarray technology
Devyani Lal, MD, FARS

Poster A034
Severity of loss of smell and paranasal sinus opacification
Stella Lee, MD

Poster A035
Shortening the learning curve: Virtual reality rhinoplasty
Janmaris Marin Fermin, MD

Poster A036
Sociodemographic disparities and patterns of care in sinonasal adenocarcinoma
Sudeepti Vedula, BS

Poster A037
The impact of PROPEL® Implant during sinus surgery on healthcare resource utilization
Kathleen Mortimer, ScD, MPH

Poster A038
Topical anesthesia in nasal endoscopy: To use or not to use?
Prithwijit Roychowdhury, BS

Poster A039
Treatment of recurrent frontoethmoid mucocele
Lindsey Ryan, MD

Poster A040
Unilateral Vidian main neurectomy on moderate to severe allergic rhinitis
Zhiyuan Tang, PhD

Poster A041
Vibration therapy in sinonasal disease
Pooya Roozdar, MD, MPH

Poster A042
Woakes' Syndrome: A case series
Alexander Dickie, MD