Friday, September 16, 2016 – General Session – (LIVE INTERNATIONAL WEBCAST)

12:55 PM
Welcome
Peter Hwang, MD – ARS President
John Del Gaudio, MD – President-Elect / Program Chair

1:00 PM
Panel: Timing of Sinus Surgery: How Quickly Should We Intervene?
Moderator: Richard Orlandi, MD
Zackary Soler, MD
Bruce Tan, MD
Claire Hopkins, MD

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Moderators: Timothy Smith, MD and Doug Reh, MD

1:40 PM
Double-blind Placebo-controlled Randomized Clinical Trial of Verapamil for Chronic Rhinosinusitis with Nasal Polyps: A Pilot Study
Marcel M. Miyake, MD

1:47 PM
Asthma Quality of Life and Control in Patients with Chronic Rhinosinusitis
Rodney Schlosser, MD

1:54 PM
Surgical Therapy Versus Continued Medical Therapy for Medically Refractory Chronic Rhinosinusitis: Systematic Review and Meta-analysis
Zara M. Patel, MD

2:01 PM
Correlation Between Extent of Sinus Surgery, Radiographic Burden of Disease, And Post-Operative Quality of Life Outcomes
Noel F. Ayoub, BS

2:08 PM
Tolerance and Pharmacokinetics of a Ciprofloxacin-coated Sinus Stent in a Preclinical Model
Do-Yeon Cho, MD

2:15 PM
Q&A

2:20 PM
Presidential Address
Peter Hwang, MD

2:40 PM
Pitfalls in Radiologic Imaging of the Sinuses and Skull Base
Patricia Hudgins, MD
3:10 PM
Break with Industry Partners

3:30 PM
Panel: Are you doing Appropriate ESS? Who should have sinus surgery?
Moderator: Rodney Schlosser, MD
Panelists:
Donald Lanza, MD
Richard Douglas, MD
Parul Goyal, MD

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Moderators: Noam Cohen, MD and Vijay Ramakrishnan, MD

4:10 PM
Differential Innate Immunity Gene Expression Between Corticosteroids Responsive and Non-Responsive Patients with Chronic Rhinosinusitis and Nasal Polyposis
Naif Fnais, MBBS

4:17 PM
Interepithelial Transfer of Exosomal P-glycoprotein Promotes Inflammation in Chronic Sinusitis with Nasal Polyps
Angela L. Nocera, MS

4:24 PM
Association Between the Cdhr3 Snp (rs6967330) Risk Allele and Chronic Rhinosinusitis
Amanda L. Willis, MS

4:31 PM
Staphylococcus Aureus Extracellular Proteases Causes Dysfunction of the Airway Epithelial Barrier and Impairs Il-6 Production
Jae Murphy, MBBS

4:38 PM
Prevention of Sinonasal Inflammation by a Synthetic Glosaminoglycan
Abigail Pulsipher, PhD

4:45 PM
Q & A

4:50 PM
Film FESStival
Moderator: Adam DeConde, MD
Panelists:
Subinoy Das, MD
Martin Citardi, MD
Anne Getz, MD
Satish Govinderaj, MD
Stacey Gray, MD

5:30 PM
Closing Remarks and Meeting Adjourned
Saturday, September 17, 2016 - General Plenary Session (LIVE INTERNATIONAL WEBCAST)

6:55-7:55
Ancillary Breakfast Symposium (Pending)

7:55AM
Welcome
John DelGaudio, MD – President Elect / Program Chair

8:00 AM
Panel: The Socioeconomic Impact of CRS and FESS
Michael Stewart, MD
Ralph Metson, MD
Mike Benninger, MD
Mike Setzen, MD

8:35AM
The 12th Annual Kennedy Lecture
Endoscopic Skull Base Surgery: State of the Art & Future Directions
Ricardo Carrau, MD

9:15 AM
Break with Industry Partners

9:40 AM
Radiologic Workup of CSF Leak and Skull Base Defects
Patricia Hudgins, MD

10:10 AM
Panel: Skull Base Issues: When to Resect Skull Base and Orbit
Adam Zanation, MD
Ricardo Carrau, MD
Patricia Hudgins, MD
Arturo Solares, MD

10:50 AM
Valuing Rhinology Procedures: Why RUC Surveys Should Matter to You!
Peter Manes, MD
Jenna Minton, JD

11:20 AM
Panel: AAOA Combined panel: Pediatric CRS: Does it Exist?
Sarah Wise, MD
David Clark, MD
Richard Harvey, MD
Whit Mims, MD
Kara Prickett, MD
Hassan Ramadan, MD
12:00 PM
Lunch with Industry Partners

12:15-1:00 PM
Residents and Fellows Program Luncheon
Five mistakes I Made so you Don’t Have to: How to Succeed in Your Early Career and the ARS
Jamie Litvack, MD
Ayesha Khalid, MD
Adam DeConde, MD
Spencer Payne, MD
## Saturday September 17, 2016 – Breakout Room A

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Presenter(s)</th>
<th>Moderators</th>
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</thead>
<tbody>
<tr>
<td>1:00 PM</td>
<td>Welcome:</td>
<td>Erin O'Brien, MD, Breakout A - Chairperson</td>
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<tr>
<td>1:05 PM</td>
<td>Clinical Interpretability of the Empty Nose Syndrome 6-item Questionnaire (ens6q) Using Office-based Cotton Testing</td>
<td>Andrew Thamboo, MD, MHSc</td>
<td>David Poetker, MD &amp; Jivianne Lee, MD</td>
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<tr>
<td>1:12 PM</td>
<td>Computational Fluid Dynamics (cfd) And Trigeminal Sensory Examinations of Empty Nose Syndrome Patients: Pre and Post Turbinate Surgery</td>
<td>Kai Zhao, PhD</td>
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<tr>
<td>1:19 PM</td>
<td>Arterial Ligation Versus Embolization in Epistaxis Management: Counterintuitive National Trends</td>
<td>Michael J. Sylvester, A.B.</td>
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<td>1:26 PM</td>
<td>Ergonomic Analysis of the Surgical Position in Fess</td>
<td>Benjamin Milam, MD</td>
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<td>1:33 PM</td>
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<td>Q&amp;A</td>
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<tr>
<td>1:40 PM</td>
<td>Determinants and Outcomes of Upfront Surgery vs. Medical Therapy for Chronic Rhinosinusitis in Cystic Fibrosis</td>
<td>Noel F. Ayoub, BS</td>
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<tr>
<td>1:47 PM</td>
<td>F508del Genotype in Endoscopic Sinus Surgery: A Predictor for Improvement in Pulmonary Function Tests After Sinus Surgery</td>
<td>Ashleigh A. Halderman, MD</td>
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<tr>
<td>1:54 PM</td>
<td>Effect of Viral Infection On Clinical Severity of Sinonasal Disease and Iron Sequestration in Cystic Fibrosis Patients</td>
<td>Nicholas R. Rowan, MD</td>
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<tr>
<td>2:01 PM</td>
<td>Partial Loss of CFTR Function in CF Carriers Leads to Craniofacial Sinus Hypoplasia and Increased Incidence of Chronic Rhinosinusitis</td>
<td>Joshua B. Calton, BS</td>
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<tr>
<td>2:08 PM</td>
<td>Sinus Surgery Improves Quality of Life, Lung Infections and Lung Function in Patients with Primary Ciliary Dyskinesia</td>
<td>Mikkel C. Alanin, MD</td>
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<tr>
<td>2:15 PM</td>
<td>Q&amp;A</td>
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<tr>
<td>2:20 PM</td>
<td>Panel: Sinus Disease and the Immunocompromised Patient</td>
<td>David Conley, MD</td>
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<td>2:27 PM</td>
<td>Differential Cl Neg secretory capacity in Transepithelial Ion Transport Properties in Chronic Rhinosinusitis</td>
<td>Do-Yeon Cho, MD</td>
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<td>2:34 PM</td>
<td>Liquid Chromatography/tandem Mass Spectrometry Profiling of Eicosanoid and Docosanoid Metabolomes in Chronic Rhinosinusitis</td>
<td>Thad W. Vickery, BA</td>
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<td>2:41 PM</td>
<td>B Cells Lacking Cd180 in Chronic Rhinosinusitis</td>
<td>Dijana Miljkovic, MS</td>
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<tr>
<td>2:48 PM</td>
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<td>Q&amp;A</td>
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<td>3:05 PM</td>
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<tr>
<td>3:12 PM</td>
<td>Irrigation Based Corticosteroid Therapy is More Effective than Simple Sprays in Managing Post-Surgical Chronic Rhinosinusitis</td>
<td>Richard J. Harvey, MD</td>
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<td>3:19 PM</td>
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3:59 PM
Comparison of Single Versus Double Strength Budesonide Irrigations in Patients with Chronic Rhinosinusitis with Polyposis after Endoscopic Sinus Surgery
Paul D. Neubauer, MD

4:06 PM
The Safety of Long-term Intranasal Budesonide Delivered Via the Mucosal Atomization Device for Chronic Rhinosinusitis
Jamil Manji, MSc

4:13 PM
Manuka Honey Sinus Irrigation for the Treatment of Chronic Rhinosinusitis: A Randomized Controlled Trial
Victoria S. Lee, MD

4:20 PM
Q&A

4:25 PM
Panel: What I learned in Training but have Abandoned in Practice: Experience or Evidence?
Moderator: James Palmer, MD
Panelists:
Jean Anderson Eloy, MD
Alkis Psaltis, MD
Justin Turner, MD
Eugenia Vining, MD

5:00 PM
Closing Remarks and Meeting Adjourned
Saturday September 17, 2016 – Breakout Session B – (LIVE INTERNATIONAL WEBCAST)

1:00 PM
Welcome: Raj Sindwani, MD, Breakout B – Chairperson

1:05 PM
Changing The Surgical Dogma in Frontal Sinus Trauma: Transnasal Endoscopic Repair
Jessica W. Grayson, MD

1:12 PM
Efficacy and Safety of Endoscopically-Assisted Transblepharoplasty Approach for Frontal Sinus Pathology
Eric W. Wang, MD

1:26 PM
Utility of Intraoperative Frozen Sections in Surgical Decision Making for Acute Invasive Fungal Rhinosinusitis
Peter Papagiannopoulos, MD

1:33 PM
Q&A

1:45 PM
A Cost Comparison of Vascular Flap and Free Tissue Graft Reconstruction of Intradural Skull Base Defects
Bryan Brandon, MD

1:54 PM
Failure Pressures After Repairs of 2x2.5 Cm Rhinologic Dural Defects in A Porcine Ex Vivo Model
Ryan P. Lin, MD

2:01 PM
Clinical Outcomes of Sinonasal Squamous Cell Carcinomas Based on Tumor Etiology
Carol Yan, MD

2:08 PM
Enlargement of Meckel’s Cave in Patients with Spontaneous Cerebrospinal Fluid Leaks
Geoffrey P. Aaron, MD

2:15 PM
Q&A

2:20 PM
Panel: The Minimal Disease Patient: Do I Operate and When?
Moderator: Jeremiah Alt, MD
Panelists:
Raj Sindwani, MD
Spencer Payne, MD
Rick Chandra, MD

2:50 PM
Break with Industry Partners

3:00 PM
Histopathologic Analysis
Hannah N. Kuha, BA

3:27 PM
Age-related Changes in Nasal Mucosal Histology of Adult Patients Without Inflammatory Sinonasal Disease
Patricia A. Loftus, MD

3:41 PM
The Efficacy of a Novel Budesonide Chitosan Gel on Wound Healing Following Endoscopic Sinus Surgery
Thanh N. Ha, MD

3:48 PM
Q&A

3:52 PM
The Development and Validation of Septoplasty Surgical Training Model Using Three Dimensional Printing
Mahmoud A. AlReefi, MD

3:59 PM
The Development and Validation of A 3d Printed Ostiomeatal Complex and Frontal Sinus Training Model for Endoscopic Sinus Surgery
Abdulaziz Alrasheed, MD
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<tr>
<th>Time</th>
<th>Presentation</th>
<th>Speaker</th>
<th>Panelists</th>
<th>Time</th>
<th>Activity</th>
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<tbody>
<tr>
<td>4:06 PM</td>
<td><strong>Use of The Concentric Tube Robot in The Maxillary Sinus</strong></td>
<td>Madeleine B. Samuelson, MD</td>
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<td>4:20 PM</td>
<td>Q&amp;A</td>
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<td>4:13 PM</td>
<td><strong>Development of A Fully Automated Ct Sinus Auto-segmentation Pipeline</strong></td>
<td>Spencer Payne, MD</td>
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<td>5:00 PM</td>
<td>Closing Remarks and Meeting Adjourned</td>
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<td>Moderator: Amber Luong, MD</td>
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<td>Stilianos Kountakis, MD</td>
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<td>David Poetker, MD</td>
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<td>Jivianne Lee, MD</td>
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Saturday September 17, 2017 – Breakout Room C

1:00 PM
Welcome: Stella Lee, MD, Breakout Room C - Chairperson

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Moderators:
Michael Platt, MD & Adam DeConde, MD

1:05 PM
Low Molecular Arginine Rich Peptides Stimulate No Production and Decrease Bacterial Density in Respiratory Cell Cultures Infected with Staphylococcus Aureus
Mark A. Zacharek, MD

1:12 PM
Examination of High-antibiotic Users in A Multi-Institutional Cohort of CRS Patients
Vijay R. Ramakrishnan, MD

1:19 PM
Innate Immune Response of Nuli-1 Cells to Staphylococcus Aureus Small Colony Variant Infections
Judy Ou, MD

1:26 PM
A Surgical Hydrogel to Combat Mssa and Mrsa Biofilms

1:33 PM
Q&A

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Moderators:
Zachary Soler, MD & Pablo Stolovitsky, MD

1:40 PM
Unsupervised Network Mapping of Commercially Available Immunoassay Yields Three Distinct Chronic Rhinosinusitis Endotypes
Rohit Divekar, MBBS, PhD

1:47 PM
Measuring Patient Expectations Regarding Diagnoses and Treatment for Rhinosinusitis
Lauren Roland, MD

1:54 PM
Influence of Interpersonal Traits On Patient Outcomes in The Treatment of Chronic Rhinosinusitis
Joshua M. Levy, MD, PhD

2:01 PM
Quality Measures in Rhinology: Results of a National Survey
John S. Schneider, MD

2:08 PM
Association of Olfactory Dysfunction in Chronic Rhinosinusitis with Economic Productivity and Medication Usage
Rodney Schlosser, MD

2:15 PM
Q&A

2:20 PM
Panel: Sinus Surgery Mulligan: A case I would now do Differently
Moderator: Roy Casiano, MD
Panelists:
Peter John Wormald, MD
Todd Kingdom, MD
Pete Batra, MD

2:50 PM
Break with Industry Partners

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Moderators:
Subinoy Das, MD & Esther Kim, MD

3:20 PM
The Longitudinal Impact of Genetics and Clinical Interventions On the Microbiome of Patients with Chronic Rhinosinusitis
Amanda L. Willis, MD

3:27 PM
Sinonasal Microbiome Taxa and Diversity Differ in Subjects with Allergic Rhinitis, Chronic Rhinosinusitis (CRS) Without Nasal Polyps and CRS with Nasal Polyposis
Emily K. Cope, PhD

3:34 PM
Mapping Microbiome Variations in The Noses of Heathy and Diseased Subjects
Devyani Lal, MD

3:41 PM
Can a Panel of Serum Inflammatory Biomarkers Predict Endoscopic Sinus Surgery Outcomes for Chronic Rhinosinusitis?
Marc-Henri Asmar, MD

3:48 PM
Q&A

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Moderators:
Greg Davis, MD & Benjamin Bleier, MD

3:52 PM
Sinonasal Epithelium Produces Nitric Oxide in Response to Staphylococcus Epidermidis Products
Ryan M. Carey, BSE

3:59 PM
Stimulatory Effects of Histamine on Migration of Nasal Fibroblasts
Ryan M. Carey, BSE
4:06 PM
Bactericidal Antibiotics Promote Oxidative Inflammation and Cell Death in Sinonasal Epithelial Cells
Michael A. Kohanski, MD, PhD

4:13 PM
Responsiveness and Reliability of the Sinus Control Test in Chronic Rhinosinusitis
Preeti Kohli, BA

4:20 PM
Q&A

4:25 PM
Panel: Failed Sinus Surgery: Revise or Advanced?
Moderator: Kevin Welch, MD
Panelists:
Alex Chiu, MD
Devyani Lal, MD
Brad Woodworth, MD

5:00 PM
Closing Remarks and Meeting
Adjourned