Tackling Problematic Sinusitis: Evolving Towards Personalized Management

World leaders from otolaryngology-rhinology, allergy-immunology and basic sciences will address the most challenging aspects of managing sinusitis, changing the way you view and manage this disease.

International Guests of Honor
Valerie Lund, FRCS, CBE
Professor of Rhinology
London, UK
David Howard, FRCSC
Professor of Head & Neck Oncology
London, UK

Distinguished Guest Faculty
Larry Borish, M.D.
Richard Orlandi, M.D.
Robert Schleimer, Ph.D.
Bruce Tan, M.D.

COURSE DIRECTORS
Devyani Lal, M.D.
Erin O’Brien, M.D.
Matthew Rank, M.D.

MAYO CLINIC EDUCATION CENTER
PHOENIX, ARIZONA
MARCH 22–24, 2018

CE.MAYO.EDU/SINUSITIS2018
COURSE HIGHLIGHTS
This annual three-day meeting will absolutely change how you view and manage problematic sinus disease. We invite you to incorporate novel innovative and personalized approaches in the care for problematic sinusitis patients. World leaders from otolaryngology-rhinology, allergy immunology and basic sciences will address the most challenging aspects of managing sinusitis. The program includes talks and brainstorming sessions led by our world class faculty. We will bring you the latest in applications, opinions, and recommendations of problematic sinonasal disease and share practical tips in optimizing outcomes from medical and surgical interventions. Highly interactive sessions with audience participation for those seeking a deeper understanding beyond the obvious and easy.

- The course will highlight personalized diagnosis, endotyping, medical therapy and surgery, as well as a live surgical prosection.
- New to this year is a workshop on Functional Nasal Surgery which will cover septal perforation repair, nasal valve and caudal septal surgery.
- A hands-on flexible nasal endoscopy workshop is offered for those wishing to incorporate that into their practice.
- A research devoted to cutting-edge rhinosinusitis session is also offered.

TARGET AUDIENCE
The course welcomes otolaryngologists, allergists, primary care and basic scientists with a strong interest in sinusitis and sinonasal disease.

LEARNING OBJECTIVES
Upon conclusion of this program, participants should be able to:

- Describe a practical approach to subtyping chronic rhinosinusitis.
- Select optimal medical treatments based on chronic rhinosinusitis subtyping.
- Identify factors associated with primary sinus surgery failure.
- Perform optimal revision surgeries for chronic rhinosinusitis.

CREDIT
Mayo Clinic College of Medicine and Science is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to provide continuing medical education for physicians.

Mayo Clinic College of Medicine and Science designates this live activity for a maximum of 24.0 AMA PRA Category 1 Credits™. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

AAFP: Application for CME credit has been filed with the American Academy of Family Physicians. Determination of credit is pending.

AOA: This program has been accredited by the American Osteopathic Association for 24.0 credits of AOA Category 2-A.

Other Health Care Professionals: A certificate of attendance will be provided to other health care professionals for requesting credits in accordance with state nursing boards, specialty societies, or other professional associations.

MEETING LOCATION
Mayo Clinic Education Center
5777 East Mayo Boulevard | Phoenix, Arizona 85054
REGISTRATION
To register or view our cancellation policy.

<table>
<thead>
<tr>
<th>Registration Fee</th>
<th>On or Before Feb 22</th>
<th>After Feb 22</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physicians/Scientists</td>
<td>$999 USD</td>
<td>$1,074 USD</td>
</tr>
<tr>
<td>Residents, PAs, NPs, Others</td>
<td>$899 USD</td>
<td>$974 USD</td>
</tr>
</tbody>
</table>

Can only attend 1 day? Call our office for additional information and registration

WELCOME RECEPTION – THURSDAY NIGHT
Attendees are cordially invited to join the course faculty at the Welcome reception. Pre-registration is requested.

LODGING AND ACCOMMODATIONS
Residence Inn Phoenix Desert View at Mayo Clinic
(Located on the Mayo Clinic Phoenix Campus)
5665 East Mayo Boulevard | Phoenix, Arizona 85054
(866) 754-5927 or (480) 563-1500
Hotel Website: www.marriott.com/phxmh

Reserve your room before the room block is filled or by March 7, 2018 in order to receive a discounted rate of $260 (plus applicable taxes). Please see course website for a hotel link to the online hotel room registration to achieve the special rate.

Discounted rates apply three days prior to and after the course dates, based on availability. Hotel cancellation policy applies.

Westin Kierland Resort & Spa
6902 E. Greenway Parkway | Scottsdale, Arizona 85254
(800) 354-5892 or (480) 624-1000
Hotel Website: www.kierlandresort.com

A limited block of rooms have been reserved for attendees with a special course rate of $325 (plus applicable taxes). To ensure accommodations, reserve your room from the course website before the room block is filled or by the cut-off date, February 19, 2018. Group rates will be honored 3 days prior and 3 days following the course dates based on availability. Hotel cancellation policy applies. Please see course website for a hotel link. Hotel rooms are limited. You are urged to make reservations early.

MAYO CLINIC FACULTY
Stephen Bansberg, M.D.
Garret Choby, M.D.
Angela Donaldson, M.D.
John Hagan, M.D.
Grant Hamilton, M.D.
Brittany Howard, M.D.
Joseph Hoxworth, M.D.
Hirohito Kita, M.D.
Devyani Lal, M.D.
Michael Marino, M.D.
Erin O’Brien, M.D.
Osarenoma (Noma) Olomu, M.D.
Matthew Rank, M.D.
Rashmi Halker Singh, M.D.
Janalee Stokken, M.D.
Benjamin Wright, M.D.

ARIZONA FACULTY
Tara Carr, M.D.
Emily Cope, Ph.D.
Timothy Haegen, M.D.
Ryan Rehl, M.D.
Mark Schubert, M.D., Ph.D.
THURSDAY, MARCH 22, 2018

7:45 a.m. Course Overview & Pre-Test – Devyani Lal, M.D., Erin O’Brien, M.D., Matthew Rank, M.D.

Problematic Sinusitis: Definitions, Pathophysiology, and Personalized Diagnosis

Moderators: Matthew Rank, M.D. and Osarenoma (Noma) Olomu, M.D.

8:00 Personalized Care: What Does It Mean in CRS? – Valerie Lund, FRCS, CBE

8:30 The Immune Barrier Hypothesis in CRS Pathophysiology – Robert Schleimer, Ph.D.

9:00 Pathophysiology of Biologically Recalcitrant Chronic Rhinosinusitis (CRS) Subtypes – Larry Borish, M.D.

9:30 Type 2 Immunity in CRS: How Do We Tell? Therapeutic Options? – Bruce Tan, M.D.

10:00 Break

10:30 The Unified Airway Hypothesis – Matthew Rank, M.D.

11:00 The Airway in Extreme Environment: Experiments on Mount Everest – David Howard, FRCS

11:30 Clinical Testing for Endotyping CRS and Directing Personalized Therapy – Devyani Lal, M.D.

12:00 p.m. Panel with Q & A: Personalizing Diagnosis

12:30 Lunch

Problematic Sinusitis: Medical Management

Overview of Medical Management

Moderators: Erin O’Brien, M.D. and Michael Marino, M.D.

1:30 Pre-Operative Medical Management: What is “Appropriate Medical Therapy?” – Richard Orlandi, M.D.

2:00 Biologics for Chronic Rhinosinusitis? – John Hagan, M.D.

2:30 Post-Operative Medical Management: Topical Therapy – Erin O’Brien, M.D.

3:00 Management of Allergy and Immunodeficiency in the CRS Patient – Mark Schubert, M.D., Ph.D.

3:30 Break

Personalized Approaches in CRS Therapy: Interactive Session

Moderators: Devyani Lal, M.D. and Garret Choby, M.D.

4:00 Small Group Discussion with Q & A: Choosing the Right Medical Therapy

Moderators: Devyani Lal, M.D.; Mark Schubert, M.D., Ph.D.; Larry Borish, M.D.; Erin O’Brien, M.D.; Richard Orlandi, M.D.; Michael Marino, M.D.; Matthew Rank, M.D.; Valerie Lund, FRCS, CBE; Osarenoma (Noma) Olomu, M.D.

4:30 Medical Management Cases

Moderators: Matthew Rank, M.D. and Erin O’Brien, M.D.

Presenters: Garret Choby, M.D.; Angela Donaldson, M.D.; John Hagan, M.D.

Panelists: Larry Borish, M.D.; Devyani Lal, M.D.; Valerie Lund, FRCS, CBE; Richard Orlandi, M.D.; Mark Schubert, M.D., Ph.D.

5:15 Q&A for All Faculty for the Day

5:30 Adjourn

FRIDAY, MARCH 23, 2018

7:45 a.m. Announcements

Personalized Management of Problematic Sinusitis Subtypes

Moderators: Matthew Rank, M.D. and Angela Donaldson, M.D.

8:00 CRS with Systemic Disease – Valerie Lund, FRCS, CBE

8:30 CRS with Nasal Polyps – Richard Orlandi, M.D.

9:00 Allergic Fungal Sinusitis and AERD Subtypes – Erin O’Brien, M.D.

9:30 CRS without Nasal Polyps – Michael Marino, M.D.

10:00 Panel with Q & A: Personalized Management of CRS

10:30 Break

11:00 Sinus Headache Management: ENT Perspective – Devyani Lal, M.D.

11:30 Sinus Headache Management: Neurology Perspective – Rashmi Halker Singh, M.D.

12:00 Sinus Headache Q & A

12:20 CT Imaging: Anatomy and Characteristics in Recalcitrant CRS (basic anatomy, technical causes of failed sinus surgery, features or recalcitrant disease) – Joseph Hoxworth, M.D.

12:50 p.m. Q & A

1:05 Lunch

1:30 Prosection Interactive Session with Audience Questions and Requests – Devyani Lal, M.D.

Surgeon Focused Session

Moderators: Valerie Lund, FRCS, CBE; Michel Marino, M.D.; Richard Orlandi, M.D.

Non-Surgeon Focused Session

Moderators: Matthew Rank, M.D.; Larry Borish, M.D.; Erin O’Brien, M.D.

3:00 Break

Moderators: Erin O’Brien, M.D. and Osarenoma (Noma) Olomu, M.D.

3:30 Pediatric Sinusitis and Cystic Fibrosis (includes Medical Surgical Management, CF) – Janalee Stokken, M.D.
“Malignant” Sinusitis and Sinonasal Tumors – David Howard, FRCSC

4:30  Q & A

5:00  Panel: Addressing Causes of Failed Surgery
     Moderators: Erin O’Brien, M.D.; Osarenoma (Noma) Olomu, M.D.
     Presenters: Garret Choby, M.D.; Angela Donaldson, M.D.; Janalee Stokken, M.D.;
                Michael Marino, M.D.
     Panelists: Timothy Haegen, M.D.; Devyani Lal, M.D.; Valerie Lund, FRCs, CBE; Richard Orlandi, M.D.;
                Bruce Tan, M.D.

6:00  Announcement: End of Common Sessions until Research Session; Disburse

SATURDAY, MARCH 24, 2018

Advancing Personalized Management through Diagnostics, Therapy and Research

Surgeon Track: Advancing Personalized Surgical Management

Moderators: Erin O’Brien, M.D. and Michael Marino, M.D.

8:00 a.m.  Tips in Revision Sinus Surgery – Richard Orlandi, M.D.
8:30  Frontal Sinus Anatomy and Surgery – Devyani Lal, M.D.
9:00  Managing Complications of Sinus Surgery – Erin O’Brien, M.D.
9:30  Q & A – Richard Orlandi, M.D.; Devyani Lal, M.D.; Erin O’Brien, M.D.
10:00  Break
10:30  Post-Operative Debridement – Ryan Rehl, M.D.
11:00  Optimizing Outcomes from ESS: Expert Pearls – Valerie Lund, FRCs, CBE
11:30  Panel Q & A – Devyani Lal, M.D.; Valerie Lund, FRCs, CBE; Erin O’Brien, M.D.; Richard Orlandi, M.D.;
       Ryan Rehl, M.D.; Bruce Tan, M.D.

12:00 p.m.  Post Test for Surgical Group
12:15  Lunch

Non-Surgeon Track

Moderators: Matthew Rank, M.D. and Benjamin Wright, M.D.

8:00 a.m.  How to Manage Asthma in Patients with Problematic Sinusitis – Tara Cara, M.D.
8:30  Aspirin Desensitization: A Case-Based and Interactive “How-To” Workshop – Matthew Rank, M.D.
9:30  Basic Sinus Anatomy and Timing of CT Scan in Sinusitis – Bruce Tan, M.D.
10:00  Break
11:00  Nasal Endoscopy Hands-on Workshop – John Hagan, M.D.; Timothy Haegen, M.D.;
       Osarenoma (Noma) Olomu, M.D.; Angela Donaldson, M.D.; Michael Marino, M.D.;
       Matthew Rank, M.D.; Janalee Stokken, M.D.

12:00 p.m.  Post Test for Medical Group
12:15  Lunch

Functional Nasal Surgery Workshop

Moderators: Osarenoma (Noma) Olomu, M.D. and Angela Donaldson, M.D.

1:00  Nasal Obstruction: Overview and Evaluation – Grant Hamilton, M.D.
1:30  Nasal Valve Dysfunction and Treatment – Brittany Howard, M.D.
2:00  The Challenging Nasal Septum – Grant Hamilton, M.D.
2:30  Septal Perforation Surgery – Stephen Bansberg, M.D.
3:00  Break
3:30  Case Presentations and Discussion
4:30  Update on Upper Airway Stimulation for Sleep Apnea – Stephen Bansberg, M.D.
5:00  Questions and Answers
5:30  Adjourn

Cutting Edge Sinusitis Research Workshop

Moderators: Matthew Rank, M.D.; Erin O’Brien, M.D.; Benjamin Wright, M.D.

1:00  Using Animal Models to Understand Sinusitis – Hirohito Kita, M.D.
1:30  CRSwNP Pathophysiology: New Data – Robert Schleimer, Ph.D.
2:00  Antibodies, B-Cells, Complement and IgD: The A-B-C-D’s of CRS – Bruce Tan, M.D.
2:30  Upper Airway Microbiome and CRS – Emily Cope, Ph.D.
3:00  Break
3:30  Environment and Genetics in Sinusitis – Devyani Lal, M.D.
4:00  Novel(s) Arachidonic Acid Mediators – Larry Borish, M.D.
4:30  The Past Year’s Most Impactful Clinical Trials in CRS – Tara Carr, M.D.
5:00  Q & A; Panel Discussion: Studies We Need to Conduct in Sinusitis
     Moderators: Matthew Rank, M.D.; Erin O’Brien, M.D.; Benjamin Wright, M.D.
     Panelists: All Faculty
5:30  Adjourn
TACKLING PROBLEMATIC SINUSITIS
MARCH 22–24, 2018 | PHOENIX, ARIZONA

ADDITIONAL OTOLARYNGOLOGY 2018 CME ACTIVITIES FOR SURGEONS AND PRIMARY CARE SPECIALISTS!

MULTIDISCIPLINARY TRANSORAL SURGERY FOR HEAD AND NECK CANCER
FEBRUARY 12–15, 2018 | SCOTTSDALE, ARIZONA

LARYNGOLOGY AND VOICE REHABILITATION CONFERENCE AND WEBCAST
APRIL 13–14, 2018 | PHOENIX, ARIZONA
  LARYNGOLOGY AND VOICE REHABILITATION PRE-WORKSHOP
  APRIL 12, 2018 | PHOENIX, ARIZONA

TACKLING PROBLEMATIC SINUSITIS
MARCH 28–30, 2019 | PHOENIX, ARIZONA

$75 DISCOUNT expires February 22, 2018
CE.MAYO.EDU/SINUSITIS2018

For more information, contact:
Email: mca.cme@mayo.edu
Phone: 480-301-4580
(Phone registrations not accepted – online only)