25th Annual

Advances in Diagnosis and Treatment of Sleep Apnea and Snoring

Disney's Grand Floridian Resort & Spa Lake Buena Vista, Florida

February 15-17, 2019
PRESIDENTS' DAY WEEKEND

PRESENTED BY:

Penn Sleep Centers
Penn Medicine





Faculty

COURSE DIRECTORS

Richard Schwab, MD

Professor,
Department of Medicine
Medical Director,
Penn Sleep Center
Perelman School of Medicine at
the University of Pennsylvania
Philadelphia, PA

Andrew Goldberg, MD, MSCE

Director of Rhinology & Sinus Surgery Professor of Otolaryngology– Head & Neck Surgery University of California, San Francisco San Francisco, CA

Eric Kezirian, MD, MPH

Professor,
Department of Otolaryngology—
Head & Neck Surgery
Keck School of Medicine of the
University of Southern California
Los Angeles, CA

GUEST FACULTY

Peter Cistulli, MD, PhD

Professor & Director, Centre for Sleep Health & Research Royal North Shore Hospital, Sydney Medical School University of Sydney Sydney, Australia

Atul Malhotra, MD

Kenneth M. Moser Professor of Medicine Vice Chief, Research, Pulmonary, Critical Care & Sleep Medicine University of California, San Diego San Diego, CA

Ron B. Mitchell, MD

Professor & Vice Chairman
Department of Otolaryngology—
Head & Neck Surgery
Chief of Pediatric Otolaryngology
UT Southwestern & Children's
Medical Center Dallas
Dallas, TX

Ed Weaver, MD, MPH

Chief of Sleep Surgery
Co-Director of UW Medicine
Sleep Center
Professor, Head & Neck Surgery
Harborview Medical Center
University of Washington
Seattle, WA

UNIVERSITY OF PENNSYLVANIA FACULTY

Gary Foster, PhD

Chief Science Officer, Weight Watchers Adjunct Professor of Psychology Department of Psychiatry Perelman School of Medicine at the University of Pennsylvania Philadelphia, PA

Nalaka Gooneratne, MD, DABSM

Associate Professor of Medicine Division of Geriatric Medicine Perelman School of Medicine at the University of Pennsylvania Philadelphia, PA

Samuel Kuna, MD

Associate Professor of Medicine Perelman School of Medicine Sleep Medicine Division Chief, Sleep Medicine Section, Philadelphia Veteran Affairs Medical Center Perelman School of Medicine at the University of Pennsylvania Philadelphia, PA

Diane Lim, MD, MTR

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Allan Pack, MB ChB, PhD

John Miclot Professor of Medicine Chief, Division of Sleep Medicine Director, Center for Sleep & Circadian Neurobiology Perelman School of Medicine at the University of Pennsylvania Philadelphia, PA

Ilene Rosen, MD, MSCE

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Erica Thaler, MD

Professor, Department of Otorhinolaryngology– Head & Neck Surgery Perelman School of Medicine at the University of Pennsylvania Philadelphia, PA

Course Overview

This course is coordinated by the Division of Sleep Medicine and the Department of Otorhinolaryngology–Head and Neck Surgery at the University of Pennsylvania and the Department of Otolaryngology–Head and Neck Surgery at the University of California, San Francisco. The program is designed to provide a comprehensive review and update on recent advances in the diagnosis and management of sleep apnea and snoring. New approaches and controversies in the management of patients with sleep disordered breathing will be highlighted. Leaders in the field of sleep science from Otolaryngology, Pulmonary and Critical Care Medicine, Sleep Medicine, Neurology, Bariatric Surgery and Oral Maxillofacial Surgery will share their medical and surgical expertise in didactic lectures and optional break-out sessions. There will be ample opportunity for interaction with participating faculty.

TARGET AUDIENCE

This continuing medical education program is intended for the physician in Otolaryngology, Pulmonary Medicine, Sleep Medicine, Oral Maxillofacial Surgery, Dentistry, Family Practice, Internal Medicine, Neurology, Cardiology, and Psychiatry. Nurses and sleep and respiratory therapy technologists are also invited to attend this program.

OBJECTIVES

Upon completion of this course, participants should be able to:

- Discuss new developments in the pathogenesis, diagnosis and management of patients with sleep disordered breathing
- Identify new and alternative medical and surgical treatments for sleep apnea and snoring
- Discuss new clinical and business directions for the sleep field including home sleep testing
- Assess new insights from upper airway imaging and drug induced sleep endoscopy
- Discuss the association between obesity and obstructive sleep apnea and the outcomes of medical and surgical treatment of obesity
- Describe the indications and consequences of oral appliances for the treatment of OSA
- Review the current surgical options for OSA and snoring.

JOINT ACCREDITATION STATEMENT

In support of improving patient care, this activity has been planned and implemented by the Postgraduate Institute for Medicine and Department of Otorhinolaryngology-Head & Neck Surgery /Hospital of the University of Pennsylvania. Postgraduate Institute for Medicine is jointly accredited by the Accreditation Council for Continuing Medical Education (ACCME), the Accreditation Council for Pharmacy Education (ACPE), and the American Nurses Credentialing Center (ANCC), to provide continuing education for the healthcare team.





DESIGNATION OF CREDIT

The Postgraduate Institute for Medicine designates this live activity for a maximum of 14 AMA PRA Category 1 Credits™. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

DISCLOSURES OF CONFLICTS OF INTEREST

Postgraduate Institute for Medicine (PIM) requires instructors, planners, managers, and other individuals who are in a position to control the content of this activity to disclose any real or apparent conflict of interest (COI) they may have as related to the content of this activity. All identified COI are thoroughly vetted and resolved according to PIM policy. PIM is committed to providing its learners with high quality activities and related materials that promote improvements or quality in healthcare and not a specific proprietary business interest of a commercial interest.

course schedule

FRIDAY, FEBRUARY 15, 2019

7:00-7:55am

Registration, Continental **Breakfast & Exhibit Viewing**

7:55-8:00am Introduction & **Course Announcements**

8:00-8:30am

Overview of Sleep Disorders Including New Treatments for Insomnia

Richard Schwab, MD

- Sleep deprivation
- · Narcolepsy, parasomnias, PLMs, RBD, CBT-I, frontal lobe cooling

8:30-8:50am

Complementary & Alternative Medicines for Sleep Disorders Nalaka Gooneratne, MD

- Use of herbal medications
- Use of melatonin

8:50-9:10am

Artificial Intelligence & Machine Learning Applications to Sleep Testing

llene Rosen, MD

- Utility for PSG
- Utility for HSAT

9:10-9:30am

New Insights into the Pathogenesis of Sleep Apnea: **Anatomic Perspective**

Richard Schwab, MD

- Upper airway phenotypingimportance of tongue fat
- Dynamic imaging

9:30-9:50 am

New Insights into the Pathogenesis of Sleep Apnea: **Physiologic Perspective**

Atul Malhotra, MD

- Airway collapsibility (Pcrit), respiratory arousal threshold
- · Loop gain, pharyngeal muscle responsiveness

9:50-10:20am

What Metrics Do You Use to **Assess OSA?**

PANEL DISCUSSION

Andrew Goldberg, MD, MSCE (MODERATOR) Diane Lim, MD, Atul Malhotra, MD, Allan Pack, MB, ChB, PhD, Ilene Rosen, MD, MSCE, Ed Weaver, MD, MPH

10:20-10:40am

Wearable Technology & Phone Apps for the Diagnosis of OSA & Snoring

Nalaka Gooneratne, MD

- Mobile approaches to the diagnosis of OSA
- What should you be wearing?

10:40-11:10am

Break & Exhibit Viewing

11:10-11:40 am

The Ongoing Transformation of Sleep Medicine: Home Sleep Testing was Just the Beginning!

Samuel Kuna, MD

- New models for delivering care including HSAT
- Sleep telemedicine

11:40-12:10pm

Diagnostic Testing for OSA (PSG/HSAT)

PANEL DISCUSSION

Atul Malhotra, MD (MODERATOR) Nalaka Gooneratne, MD, DABSM Eric Kezirian, MD, MPH Sam Kuna, MD Diane Lim, MD, MTR Richard Schwab, MD

12:10-12:30pm

Managing the Driving Risks of OSA

Allan Pack, MB, ChB, PhD

- Should all truck drivers be screened?
- What is the public policy?

12:30-12:50pm

Association Between Cognitive Dysfunction/Alzheimers & OSA

Nalaka Gooneratne, MD

- Association of OSA with dementia
- Does treatment of OSA help dementia?

12:50-1:10pm

Cardiovascular Consequences of Sleep Apnea

Atul Malhotra, MD

- Results of clinical trials
- What level of AHI increases CV risk?

1:10-1:30pm

COPD & OSA: Are They Bed Partners?

Diane Lim, MD

- Overlap syndrome
- Does treatment of OSA help COPD?

8:00-9:30pm

Illuminations: Fireworks & Dessert Reception at **EPCOT's® French Island**

- Private Dessert Buffet
 Spectacular fireworks display and laser show
- Free for participants (additional fee for family or guests)
- Advance reservations are required

SATURDAY, FEBRUARY 16, 2019

7:00am-8:00am Continental Breakfast, **Exhibit Viewing**

8:00am-8:20am

Sleep Apnea & its **Relationship to Cancer**

Diane Lim, MD

- Does OSA increase the risk of cancer?
- Related to intermittent hypoxia?

8:20am-8:40am

Diagnosis & Cognitive Effects of OSA in Children

Ronald B. Mitchell, MD

- · How to diagnosis OSA in children & adolescents? HSAT
- OSA and school performance

8:40am-9:10am

Sleep Disorders: Year in Review

Allan Pack, MB, ChB, PhD

- Update on sleep apnea
- Update on narcolepsy, PLMs, insomnia

9:10am-9:30am

The Obesity Epidemic & Sleep Apnea

Gary Foster, PhD

- Obesity, diabetes and OSA
- Update on Sleep Ahead Study and RCT's

9:30am-9:50am

The Relationship of the Microbiome to Obesity & OSA

Andrew Goldberg, MD, MSCE

- · Relationship of obesity to the microbiome
- OSA & the microbiome

9:50am-10:20am **Medical & Surgical Strategies** in Weight Loss

Gary Foster, PhD

- · Behavioral strategies for weight loss
- Role of medications & bariatric surgery

10:20am-10:50am **Break & Exhibit Viewing**

10:50am-11:10am

CPAP: Evidence Based Treatment of Choice for OSA

Sam Kuna, MD

- Clinical outcomes with CPAP
- CPAP adherence

11:10am-11:40am The Nuts & Bolts of the Delivery of Positive Airway Pressure Ilene Rosen, MD

- CPAP, Bilevel systems, AutoPAP, ASV
- New interfaces

11:40am-12:00am

CPAP Adherence Tracking: How to Use the Data & When to Ouit?

Richard Schwab, MD

- Clinical guidelines
- Why residual AHI and mask leak are important

12:00pm-12:30pm

CPAP Adherence Tips, Tricks, & Tracking

PANEL DISCUSSION

Sam Kuna, MD (MODERATOR) Nalaka Gooneratne, MD, DABSM Ronald B. Mitchell, MD Ilene Rosen, MD, MSCE Richard Schwab, MD Edward Weaver, MD, MPH

12:30 pm - 1:00 pm

Towards A Personalized Approach to Obstructive Sleep Apnea

Allan Pack, MB, ChB, PhD

- OSA and personalized medicine
- Cluster based symptoms

SATURDAY, FEBRUARY 16

Optional Break-out Sessions

Advance on-line registration is required

7:00am-8:00am

How to Manage a Sleep Practice in 2019–Lessons Learned: What to do with Home Sleep Studies

Nalaka Gooneratne, MD, DABSM, Sam Kuna, MD, Diane Lim, MD, Atul Malhotra, MD, Allan Pack, MB, ChB, PhD, Ilene Rosen, MD, Richard Schwab, MD

Practical Techniques in OSA Surgery including Pain Control

Andrew Goldberg, MD, MSCE, Eric Kezirian, MD MPH, Ronald B. Mitchell, MD, Erica Thaler, MD, Ed Weaver, MD MPH

SUNDAY, FEBRUARY 17, 2019

7:30am-8:00am

Continental Breakfast &
Exhibit Viewing

8:00am-8:30am Oral Appliances & Their Clinical Indications in OSA: Are they Better than CPAP?

Peter Cistulli, MBBS, PhD

- Who should be treated with them?
- · What is the best oral appliance?

8:30am-8:50am

The Nose in OSA: Soup to Nuts

Edward Weaver, MD, MPH

- Significance of septal deviation & obstruction
- Nasal dilators, septoplasty, treatment of rhinosinusitis

8:50am-9:10am

Tonsillectomy & Adenoidectomy in Children

Ronald B. Mitchell, MD

- Indications for surgery
- Management of persistent OSA post T&A

9:10am-9:30am

Insights into the Management of SDB Utilizing Upper Airway Imaging

Richard Schwab, MD

- Understanding how OSA treatments alters the upper airway anatomy
- Soft tissue & craniofacial changes with surgery, appliances, CPAP, weight loss, hypoglossal nerve stimulation

9:30am-9:50am

Drug Induced Sleep Endoscopy to Identify Sites of Obstruction in Patients with OSA

Eric Kezirian, MD, MPH

- What type of collapse is important?
- Correlating the site of obstruction with surgical options

9:50am-10:20am

How to Identify the Site of Upper Airway Obstruction including Pros & Cons of DISE

PANEL DISCUSSION

Ronald B. Mitchell, MD (MODERATOR) Andrew Goldberg, MD, MSCE Richard Schwab, MD Erica Thaler, MD Ed Weaver, MD, MPH 10:20am–10:40am

Break & Exhibit Viewing

10:40am-11:00am

Treatment of Snoring

Andrew Goldberg, MD, MSCE

- Palatal implants, radiofrequency, laser
- New Options

11:00am-11:20am

Should a TRADITIONAL UPPP still be Performed?

Ed Weaver, MD, MPH

- Indications for palate surgery
- Palate surgery options

11:20am-11:40am

Robotic Base of the Tongue Surgery (TORS) for OSA

Erica Thaler, MD

- Specific patient indications: lingual tonsils
- Outcome data/complications

11:40am-12:10pm

Selecting Hypopharyngeal Surgery in OSA Including MMA

Eric Kezirian, MD, MPH

- Does hypopharyngeal surgery improve outcomes?
- Factors associated with procedure outcomes

12:10pm-12:30pm

Hypoglossal Nerve Stimulation—it's here!

Erica Thaler, MD

- Discuss hypoglossal nerve stimulation systems and implantation
- Examine study data from Inspire Medical's STAR trial & other studies

12:30pm-1:00pm

Treatment of Obstructive Sleep Apnea

PANEL DISCUSSION

Ed Weaver, MD, MPH (MODERATOR) Andrew Goldberg, MD, MSCE Eric Kezirian, MD, MPH Diane Lim, MD. MTR Ilene Rosen, MD, MSCE Richard Schwab, MD Erica Thaler, MD

1:00pm

Closing Remarks

Registration Fees

This CME activity offers an early registration discount for registrations received by December 15, 2018. The standard registration fee of \$725.00 will apply to all online registrations submitted after December 15th. Seating capacity is limited. We encourage participants to register early.

Physicians

Early Registration: \$675Standard Registration: \$725

Nurses, allied health professionals, sleep technicians, residents & fellows are eligible for a reduced registration fee of \$600.

Optional break-out sessions are offered on on Saturday mornings. Participants must pre-register on line. Registration fees include program, breakfast, refreshment break each day, 1 complimentary ticket to the EPCOT® fireworks reception and all course materials. Confirmatory email is sent when registration is complete. If you do not receive an immediate automated confirmation email please contact Mary Hamburg at mary.hamburg@uphs.upenn.edu.

Course Cancellation Policy

If a participant must cancel his/her course registration, refunds are possible if written notification is received by January 3, 2019. Refunds will not be processed after this date. All refunds are subject to a \$75.00 cancellation fee. Please email your cancellation notification to mary.hamburg@uphs.upenn.edu.

PENN Medicine and the course directors reserve the right to cancel or postpone any activity due to unforeseen circumstances. In the event of cancellation or postponement by Penn Medicine or the course directors, we will refund registration fees but will not be responsible for any related costs, charges or expenses to participants including cancellation charges assessed by airlines, hotels or travel agencies.

Services for the Disabled/Special Arrangements

If special arrangements are required for an individual with a disability, or for any reason, to attend this meeting please contact Mary Hamburg by December 1, 2018.



Disney's Grand Floridian Resort & Spa

Walt Disney World's flagship hotel, Disney's Grand Floridian Resort & Spa, provides the highest level of attentive service in an exquisite world of turn-of-the-century elegance. From the stunning lobbies to the meticulously detailed Guest rooms, experience hospitality with a manner of refinement and sophistication characterized by care and luxury.

Disney's Grand Floridian Resort & Spa features:

- Over 860 well-appointed Guest rooms and suites
- 156 concierge-level rooms and 25 suites with concierge service conveniently located in 2 distinct buildings
- Wi-Fi available at no or low cost in meeting and convention facilities, in addition to complimentary Wi-Fi available in Guest rooms and public areas of the Resort
- Convention center featuring 40,000 square feet of flexible meeting and event space on one contiguous level
- Outdoor venues featuring views of the nightly fireworks, marina, lagoon and garden
- 2 private dining venues ideal for catered group breakfasts or lunches
- Full-service business center
- 10 distinctive dining, lounge and bar venues
- Convenient location close to Magic Kingdom park

For further assistance with your visit to Walt Disney World, please call (407) 939-5277. For dining reservations call 407-WDW-Dine. Advance dining reservations are recommended and most may be made 6 months ahead of time.

HOTEL RESERVATIONS

Overnight rooms are available at the Grand Floridian Resort and Spa from Wednesday, February 13th through Monday, February 18th at a special discounted conference rate of \$265.00 per night for single or double occupancy (additional persons 18yrs and older \$25.00 per night). This rate does not include taxes (currently at 12.5%). Subject to availability rooms may be reserved at the group rate 3 days before and 3 days after these dates for those who wish to extend their stay.

To help offset the cost of the meeting Disney has agreed to provide a credit to our master bill for each room night actually occupied and paid for in our room block.

For reservations call the Group Reservations Office at 407-939-4686 and identify yourself as a participant in the University of Pennsylvania Sleep Apnea Conference. Or you may make reservations online at: http://www.mydisneygroup.com/sleepapnea19.

You will need to guarantee your reservations with a credit card or deposit. All reservations must be made by January 15. 2019 to receive this special rate. Please note that reservations will be accepted based upon space availability, and rates may increase if you call after January 15h. Rooms are available on a first come, first served basis and may sell out quickly. In the event that rooms at this hotel sell out, an alternative hotel may be offered to you. We urge you to plan ahead and make your arrangements early!

Take the hassle out of arrival with Disney's Magical Express Service! This complimentary service provides transportation for you and your bags from Orlando International Airport (MCO) to your Disney Resort Hotel, then back again at the end of your stay. Luggage is delivered right to your Resort room. To book, call 407-827-6777 or visit www.disneysmagicalexpress.com.

Conference Center: The Sleep Apnea course will be held in the Conference Center at Disney's Grand Floridian Resort and Spa. It is a short walk from the hotel main lobby front entrance. If you are driving to the meeting, complimentary self-parking is available.

SPECIAL DISNEY THEME PARK TICKETS

Available only to meeting attendees, their guests and family members, Disney's multi-day and half-day Meeting/ Convention Tickets are designed to fit any agenda and can only be purchased in advance.

For more information, visit:

http://www.mydisneygroup.com/sleepapnea19

The Disney parks feature something for everyone, from the seven whimsical lands in the Magic Kingdom®, to the iconic Spaceship Earth and World Showcase at Epcot®, to **the newly opened Toy Story Land** at Disney's Hollywood Studios, to Disney's Animal Kingdom's Kilimanjaro Safari® and **Pandora-the World of Avatar**, and everything in between, **including** the two awesome water parks at Typhoon Lagoon and Blizzard Beach!





CME Coordinator Department of Otorhinolaryngology – Head and Neck Surgery University of Pennsylvania Medical Center 3400 Spruce Street, 5 Silverstein Philadelphia, PA 19104 Non-Profit Organization U.S. Postage PAID Permit No. 2563 Philadelphia, PA



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FOR MORE INFORMATION, CONTACT:

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www.pennmedicine.org/otorhinolaryngology

