

# SLEEP NEWS

International Surgical Sleep Society  
December 2016

[www.surgicalsleepp.org](http://www.surgicalsleepp.org)

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## Next ISSS Meeting May 5-6, 2017 Los Angeles, United States



Please join us as we address essential topics for the care of patients with Obstructive Sleep Apnea and Snoring! We will again have 2 special sessions focused on the care of children.

Join Us!

The meeting with focus on:

- Thoughtful, lively discussions about the latest technological innovations and discoveries
- Cutting-edge treatment options from around the globe
- Novel research and the application to your patients and your practice
- AND MORE...

WE LOOK FORWARD TO SEEING YOU IN LOS ANGELES IN 2017

## PRESIDENT'S MESSAGE

Eric Kezirian, MD, MPH

### MESSAGE

On April 15-16, 2016, the ISSS held its seventh scientific meeting in Sao Paulo, Brazil. Over 250 attendees from 26 countries came together to share experiences and discuss insights related to sleep surgery. This was the largest ISSS meeting to date and also the most comprehensive. The program included an expanded focus on pediatric sleep disordered breathing and maxillofacial surgery. Thanks to the dedication and hard work of Co-Directors Michel Cahali and Denilson Fomin, it was a tremendous success in a wonderful city!



The Sao Paulo meeting set the bar high, but plans are in full swing for the next ISSS conference, to be held on May 5-6, 2017 at the University of Southern California in Los Angeles.

Registration and program information (including submission of research abstracts for oral or research presentation) is available at <http://keck.usc.edu/cme/2017surgsleepreg>. All 2017 ISSS members will receive a \$100 discount on registration fees. Because the ISSS annual membership fee is also \$100, this makes membership effectively free for anyone paying the registration fee, although you still must submit payment and information for membership separately from registration.

In addition to the main program for the ISSS meeting, there will be a 1-day workshop dedicated to sleep surgery research on May 4, 2017, in Los Angeles. All registrants for the main ISSS conference will be able to attend this workshop for a \$50 fee (to cover expenses).

This organization has been committed to bringing together sleep surgeons from around the world at our conferences, but we are expanding our activities with the help of our members. Based on input from you, we have posted our Position Statement on Sleep Surgery online (<http://surgicalsleepp.org/iss-s-position-statement-on-sleep-surgery/>) as a centralized location for procedure-specific publications. With your support and continued involvement, we are maintaining our dedication to being the world's major organization dedicated to the surgical treatment of sleep disordered breathing through education of members, other medical professionals, and the public about sleep surgery.

Please join us in our commitment to sleep surgery by joining or renewing your ISSS membership. Your \$100 membership dues for 2017 entitles you to all member benefits, including receipt of the ISSS newsletter, discounted registration fees for ISSS scientific meetings, and member listing on the ISSS website (<http://surgicalsleepp.org/current-members/>). Membership information is available at <http://surgicalsleepp.org/membership/>.

Do not hesitate to direct any questions to me at [eric.kezirian@med.usc.edu](mailto:eric.kezirian@med.usc.edu).

Please also explore the exhibits and latest technological advancements with our industry partners.

**INTERNATIONAL SURGICAL SLEEP SOCIETY MEETING**  
**MAY 5-6, 2017**  
 Sleep Surgery Trials Workshop | May 4, 2017

USC University Park Campus, Los Angeles, CA

**Registration:**  
 Email: [uscme@usc.edu](mailto:uscme@usc.edu)  
[www.usc.edu/cme](http://www.usc.edu/cme)  
<http://surgicalsleepp.org/meetings>

**Registration Fees:**  
 Early bird registration closes on May 1, 2017 at noon PST  
 \$625 MD/DO, \$550 RN/Allied Health Professionals  
 After May 1, 2017  
 \$875 MD/DO, \$725 RN/Allied Health Professionals

Presented by:  Keck School of Medicine of USC

**PROGRAM TO FEATURE LEADING SLEEP SURGEONS FROM AROUND THE WORLD**

**Course Director:**  
 Eric J. Kezirian, MD, MPH

**Course Highlights:**

- Palatal Surgery: New techniques and the Evidence
- Hypopharyngeal Surgery (Does it Offer Real Benefit?)
- Hypoglossal Nerve Stimulation, including Inspire and iThera
- Transoral Robotic Surgery (TORS)
- Expanded Indications on Pediatric OSA, TGA and Management of TGA, Non-Responders
- Drug-induced Sleep Endoscopy in Children and Adults
- Therapies in OSA: Integrating Surgery with Other Non-IPAP Therapies
- Oral Appliance Therapy: Maxillomandibular Advancement and Maxillary Expansion: Are there Consequences of Untreated Snoring?
- Snoring: What Works? Positional Therapy
- Performance Management: Novel Therapies for Snoring and OSA
- Complications in OSA Surgery



**ISSS SEVENTH INTERNATIONAL SYMPOSIUM - SAO PAULO, BRAZIL**

The April 2016 meeting in Sao Paulo, Brazil was a great success. The meeting was chaired by Michel Cahali, MD (Brazil), Denilson Fomin, MD (Brazil) and Eric Kezirian, MD (USA) and included € attendees from over 26 countries.

Panel discussions allowed for easy exchange of ideas and covered topics such as:

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- € Hypopharyngeal surgery
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- € Oral appliance therapy
- € Q ] æó! Á æ æÁ ˘ |\*^!^
- € Innovative surgical therapies



We will be holding our second Poster Competition at the meeting in Los Angeles, Please submit for an oral or poster presentation for the meeting.



## RESEARCH UPDATE

Two multicenter studies have been developed with the support of the ISSS from our discussions at the October 2014 meeting. These 2 multicenter collaborations are focused on the development of larger studies that are the key to answering many important research questions.

### Drug-Induced Sleep Endoscopy and Surgical Outcomes

This is a retrospective cohort study of adults undergoing preoperative drug-induced sleep endoscopy (DISE) and pharyngeal surgery for the treatment of obstructive sleep apnea. The objective of the study is to examine the association between preoperative DISE findings and surgical outcomes, although the database will be available for additional studies to those who contribute patients. The principal investigator is Eric J. Kezirian, MD, MPH at the University of Southern California, and the study has already received funding from the [American Sleep Medicine Foundation](#).

### Prospective Study of Surgical Outcomes

This prospective study is based on a group discussion and consensus for a core set of patient evaluation and outcome measures in obstructive sleep apnea surgery. The principal investigator is M. Boyd Gillespie, MD, MS at the University of Tennessee Health Science Center. Please contact Dr. Gillespie at [mgilles8@uthsc.edu](mailto:mgilles8@uthsc.edu) if you are interested in becoming a study center.

### Research Symposium in Los Angeles

Please join in Los Angeles for a research conversation regarding the future of adult and pediatric OSA sleep surgery and the critical questions that we need to address. This will occur on May 4th. You may register to participate in this meeting if you are interested in joining us!

## CLINICAL CONTROVERSIES

### What is the Müller maneuver?

The Müller maneuver consists in the endoscopic observation of the upper airway during intensified inspiratory respiration with closed nose and closed mouth. It has been considered controversial in terms of not representing collapse patterns during sleep and not predictive for treatment outcome.

### Pros of Müller maneuver (Dr. Madeline Ravesloot - Netherlands)

Recent research show a statistically significant concordance between the results from DISE and MM for procedures involving the anteroposterior (73%), lateral (92.1%), and concentric (74.6%) configuration of the velum<sup>1</sup>. The predictive value of MM for surgical outcome was recently studied in two groups: one group was selected with DISE and the other by MM. The surgical outcome of both groups was not statistically different. Although the DISE group resulted in more changes in the surgical treatment plan and higher rate of combined treatment compared to MM, it was determined that this difference did not result in a significant difference in treatment success<sup>2</sup>. In OSAS patients, increased BMI and AHI are correlated with lateral pharyngeal wall collapse in retropalatal and retrolingual levels on MM<sup>3</sup>. Retropalatal collapse on MM is highly related to both the presence and severity of OSA, particularly in males<sup>4</sup>. For those reasons the MM is a useful measure when assessing patients with OSA.

1. Yegın Y, Çelik M, Kaya K, Koç A, Kayhan F. Comparison of drug-induced sleep endoscopy and Müller's maneuver in diagnosing obstructive sleep apnea using a VOTE classification system. *Braz J Otorhinolaryngol*. 2016 Jun 20. pii: S1808-8694(16)30114-8. doi: 10.1016/j.bjorl.2016.05.009. [Epub ahead of print]
2. Yılmaz Y, Kum R, Ozcan M, Gungor V, Unal A. Drug-induced sleep endoscopy versus Müller maneuver in patients with retropalatal obstruction. *Laryngoscope*. 2015 Sep;125(9):2220-5. doi: 10.1002/lary.25160. Epub 2015 Jan 30.
3. Kum R, Ozcan M, Yılmaz Y, Gungor V, Yurtsever Kum N, Unal A. The Relation of the Obstruction Site on Muller's Maneuver with BMI, Neck Circumference and PSG Findings in OSAS. *Indian J Otolaryngol Head Neck Surg*. 2014 Jun;66(2):167-72. doi: 10.1007/s12070-014-0699-1. Epub 2014 Jan 30.
4. Wu M, Ho C, Tsai H, Huang H, Lee P, Tan C. Retropalatal Müller grade is associated with the severity of obstructive sleep apnea in non-obese Asian patients. Retropalatal Müller grade and OSA in non-obese. *Sleep Breath*. 2011 Dec;15(4):799-807. doi: 10.1007/s11325-010-0441-5. Epub 2010 Nov 16.

### Cons of Müller maneuver (Dr. Evert Hamans - Belgium)

The first point of criticism is the fact that the Müller maneuver (MM) is performed in the awake patient and often whilst the patient is in an upright position. It may therefore be an indirect estimation of the level of obstruction that occurs during sleep. The second reason to doubt the value of the Müller maneuver (MM) is its reproducibility and the inter-rater reliability of the maneuver.<sup>1, 4</sup> Complicating matters further some patients have difficulty producing a full force inspiratory effort. In 1985 the first study was published suggesting that MM is a positive predictive identification method for the velar collapse type, and therefore recommended as selection criterium for a successful uvulopalatopharyngoplasty (UPPP). It was hypothesized that patients with greater than 80% collapse at velum level and of the hypopharynx would be Already in 1989, the first study was published revoking this recommendation. Studies have shown that MM is not only a poor method to detect velar collapse type, but also a poor predictor of surgical success (defined as a postoperative AHI reduction greater than 50% and postoperative AHI less than 20), nor surgical response (postoperative AHI reduction greater than 50%), nor surgical failure of UPPP.<sup>2,3,4</sup>

1. Sher AE, Thorpy MJ, Shprintzen RJ, Spielman AJ, Burack B, McGregor PA. Predictive value of Müller maneuver in selection of patients for uvulopalatopharyngoplasty. *Laryngoscope*. 1985 Dec;95(12):1483-7.
2. Katsantonis GP, Maas CS, Walsh JK. The predictive efficacy of the Müller maneuver in uvulopalatopharyngoplasty. *Laryngoscope*. 1989 Jul;99(7 Pt 1):677-80.
3. Mattos Soares MC, Raposo Sallum AC, Moraes Goncalves MT, Martinho Haddad FL, Gregório LC. Use of Muller's maneuver in the evaluation of patients with sleep apnea - literature review. *Braz J Otorhinolaryngol*. 2009;75(3):463-6.
4. Woodson BT, Naganuma H. Comparison of methods of airway evaluation in obstructive sleep apnea syndrome. *Otolaryngol Head Neck Surg* 1999;120:460-463

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## IN CLOSING

**Take a moment to explore the ISSS Website**

[surgicalsleep.org](http://surgicalsleep.org)