Our Society is now well into its first formal year of operation. While much has been achieved, big challenges await as it addresses a number of needs relating to the shared concerns of anesthesiology and sleep medicine.

Sleep disorders remain an under-recognised problem by anesthesiologists and other clinicians. To paraphrase Oscar Wilde, at one time this may have been regarded as unfortunate; now it looks like carelessness. The evidence that obstructive sleep apnea (OSA) is associated with unfavourable postoperative outcomes is steadily accumulating. For example, recently Kaw and his colleagues (Kaw R et al, Chest 2012;141:436-41) published findings demonstrating that patients with OSA are at increased risk of upper airway obstruction postoperatively, particularly if arousal mechanisms are obtunded by sedation or narcotic analgesia, and, indeed, may have breathing problems whenever asleep. Anesthesiologists need to use the evidence they collect during their careful perioperative observations regarding airway collapsibility and ventilation to optimise postoperative management and where OSA is suspected but previously unrecognised to arrange for investigation and further management of this problem.

With 60,000 Americans a day undergoing general anesthesia, this is a massive screening opportunity for a common yet notoriously undiagnosed condition. A lot of information has been gathered since and there is a growing engagement with this area, not least by SASM and its membership. The time is ripe for the generation of further guidelines. SASM is keen to facilitate this task. Small societies can certainly produce useful and influential protocols: the airway management guidelines of the UK based Difficult Airway Society come to mind. However we believe that we can best promote optimal perioperative OSA management by encouraging and helping resource ASA sponsored guidelines, perhaps written in collaboration with major sleep medicine organisations such as the American Thoracic Society and the American Academy of Sleep Medicine. We intend to prime this area by preparing protocols for postoperative care of OSA patients for the use of nursing staff and respiratory technologists.

The mission of SASM is to “advance standards of care for clinical problems shared by Anesthesiology and Sleep Medicine, including peri-operative management of sleep disordered breathing, and to promote interdisciplinary communication, education and research in matters common to anesthesia and sleep.” These are the keys to further progress. We have established our Clinical and Research committee to encourage research and clinical practice standards. We have networked with relevant organisations beyond the ASA, including the AASM, ATS, National Institutes of Health (NIH) and the National Sleep Foundation to ensure that issues relating to anesthesia, sleep and its disorders receive the attention they need. At present anesthesia related issues are not part of the NIH Sleep

continued on page 10
Improved Patient Safety Through Multidisciplinary Education and Research: Role of Society of Anesthesia and Sleep Medicine

Within one year of its existence the Society of Anesthesia and Sleep Medicine (SASM) has been able to realize significant achievements. This rapid progress was made possible due to vision and hard work of the Board of Directors and members of various committees. Nevertheless, as noted by Dr. David Hillman, in the President’s message, much needs to be done. It is the passion and hard work of our members that will make further progress possible. Dr. Norman Bolden, Secretary of SASM, delineates the accomplishments thus far.

One of the major achievements is the success of the SASM Annual Conference. The next SASM annual conference will be held on October 11-12, 2012 in Washington, DC. Dr. Frances Chung, Chair and Dr. Babak Mokhlesi, Co-Chair have put together an excellent program that provides an educational opportunity to practitioners of several specialties. Therefore, we request that you share this information with your colleagues including those from other specialties. This conference also provides an opportunity to mingle and allows for transfer of knowledge between the attendees from several specialties and various countries.

Cross education between specialties is necessary, as one of the major causes of mismanagement is miscommunication between healthcare providers (e.g., primary care physicians, anesthesiologists, and surgeons). A common knowledge base should avoid confusion between practitioners, provide a consistent continuum of care, reduce variability and improve patient safety. In fact, it is also necessary to include physician extenders (e.g., physician assistants and nurse practitioners) and nurses in the process.

In addition to education, SASM can contribute towards promoting and facilitating future research. The expertise of its members should allow SASM to play a leading role in critically evaluating currently available evidence as well as assisting with designing and organizing research projects. Early diagnosis of sleep disorders should allow early interventions and prevent or limit the associated adverse consequences. Dr. Robert Farney discusses the current controversies related to clinical diagnosis and cost-effective testing for obstructive sleep apnea. Of note, it is also necessary to develop a clinically useful approach to diagnosis of other sleep disorders such as obesity-related hypoventilation syndrome and central apnea.

Improved understanding about mechanisms of general anesthesia should provide us with approaches to hasten recovery from general anesthesia and reduce the adverse effects of residual anesthetics. Dr. Ken Solt provides us with the latest information on the mechanism of general anesthesia that might allow development of new drugs that could be used to reverse general anesthesia and facilitate recovery.

Dr. Frank Overdyk provides us with an excellent insight into the various aspects of perioperative care of patients with sleep disorders. He calls for members of SASM to collaborate in assembling information related to perioperative care of this patient population. Although research in the field of perioperative management of patients with sleep disorders has increased in recent years, most of the published evidence, particularly related to perioperative complications, has significant limitations. For example, most investigators have used surrogate indicators such as difficult laryngoscopic view, number of attempts to tracheal intubation, hypoxemia (defined variably in different publications) and need for supplemental oxygen to define complications. These surrogate indicators have no correlation with clinically relevant outcome measures such as need for surgical airway, severe hypoxia resulting in brain death, and death. Furthermore, although the need for intensive care unit (ICU) admission and hospital stay are acceptable outcome measures, there appears to be a wide variation in threshold for ICU admission or criteria for discharge home. Thus, future studies will have to assess the effects of interventions on clinically relevant outcome measures.

Overall, it is clear that the complex nature of management of patients with sleep disorders will require a multipronged approach involving multiple disciplines. One of the critical aspects of improving patient care and safety is education of our patients. I look forward to hearing the different points of views from our members. I believe improved discussions and “brain storming” will allow us to reach our goal of improved care of patients with sleep disorders. See you in Washington, DC!
Given the growth and accomplishments of the Society of Anesthesia and Sleep Medicine (SASM) over this last year, it is at times hard to believe that this organization did not exist a little over a year ago. Indeed, what a great year this has been for us!

As Secretary of SASM, I also chair the membership committee. I am honored to have a very talented and dedicated group of committee members looking at ways that we can not only grow our membership, but also explore ways to improve the benefits of membership. We couldn’t be more pleased with our growth in membership over this first year. As I reported at the first annual meeting in October of 2011, SASM has representation from a very broad array of medical specialties, which was one of our early goals. While the majority of members are Anesthesiologists or Sleep Medicine Physicians (see chart), we also have renown scientists with interests in the areas of overlap between Anesthesia and Sleep, as well as Dentists, Pediatricians, Pediatric Anesthesiologists, ENT physicians, Oral Surgeons, Respiratory Therapists, Nurse Anesthetists, and PACU Nurses, all brought together by our shared interest.

We are also very proud of the fact that the Board of Directors of SASM is truly representative of our very diverse and international membership with 2 Anesthesiologists, 2 Sleep Medicine Physicians, 1 Physician with Anesthesia and Sleep Medicine Training, 1 Scientist, and 1 General Hospitalist (representing the United States, Canada and Australia).

We had a number of “Charter Members” making special contributions to SASM during our first year to help with our start up costs and we truly appreciate these donations. We also appreciate the patience and understanding of our members as most of the administrative tasks have been performed by a limited few officers as we have tried to cement our financial situation to allow for the hiring of administrative staff. One of our immediate goals is to hire administrative staff to serve our members better and we hope to have an administrator hired within the next six months.

Our website (www.sasmhq.org) and our newsletter remain our primary means of communication with our members. We hope that you continue to enjoy our Newsletter, which continues to shine under the stellar leadership and guidance of Dr. Girish P. Joshi. We trust that you have seen some of the new additions to the benefits for SASM members. A number of members expressed the desire to have a forum for discussion regarding management issues. In response to this, Dr. John Loadsman agreed to help develop and lead a discussion forum that can be accessed from our website (http://anesthesiaandsleep.org/?page_id=1012). We hope you will take advantage of this.

We have also recently added a “literature update” feature to our website where we have members diligently working to keep all SASM members up to date on recent developments in the areas of overlap between Anesthesia and Sleep Medicine. We are confident that this will prove to be a very valuable resource for our members (http://anesthesiaandsleep.org/?page_id=821). We sincerely thank the many dedicated SASM members working on your behalf to update these articles every two months. We will recognize all of the involved members with each literature update. We are equally excited with the new “Featured Article” that has also been developed for our members where a few members will summarize important recent articles in the areas of Anesthesia and Sleep Medicine (http://anesthesiaandsleep.org/?cat=1).

We have a number of benefits that we hope to roll out over the next year or two, but all of these initiatives require planning, organization, and effort from members. As the Board of Directors continued on page 10...
Screening for Obstructive Sleep Apnea: An Update

Background: Obstructive sleep apnea (OSA) is associated with neurovascular and cardiovascular conditions, metabolic disorders, adverse effects on neurocognitive and psychological functions, motor vehicle accidents, and increased rate of perioperative cardiorespiratory complications. Despite the high prevalence of OSA and many well-known risk factors, it is very often under-diagnosed and untreated. The availability of low risk effective therapy such as positive airway pressure further increases the imperative for early recognition of this disorder. Failure to diagnose OSA can increase healthcare costs. Therefore, accurately screening for OSA should be routine clinical practice and must be an essential aspect of our national health care policy.

Limitations of current screening tools for OSA: Several clinical prediction models have been developed with and without limited screening measurements. However, none of these approaches are optimal. All the currently available approaches to diagnose OSA are based upon similar variables and are compared with a single metric derived from polysomnography, that is, the apnea-hypopnea index (AHI). Unfortunately, the calculation of the AHI is subject to many technical issues, mainly related to the definition of hypopnea. It is no surprise that AHI reflects neither the degree of sleep state fragmentation nor the severity of hypoxemia. Consequently, there may be poor correlation when comparing clinical outcome measures such as hypersomnia, fatigue and cardiovascular effects. Elevation of the AHI may be due to central apnea, for example, Cheyne-Stokes respiration related to heart failure or Biot’s ataxic breathing related to opioids. However, none of the current screening methods includes these conditions or differentiates between central and obstructive breathing patterns. Despite these limitations, the AHI remains the most widely used parameter to define the severity of OSA.

The problem with binary analysis: An additional factor complicating the application of virtually all published screening tests is that identification of patients with OSA is based upon a binary decision (absence/presence) and the chosen threshold value for AHI. Unless there is highly non-normal distribution pattern with the majority of cases occurring at either extreme, dichotomizing a continuous variable such as the AHI will always misclassify subjects particularly at the boundary. In addition, having a single cut off point does not enable one to categorize patients into multiple levels of severity such as normal, mild, moderate and severe.

Polytomous analysis: A screening method is much more flexible if it can provide a range of probabilities for severity of disease. For example, a questionnaire could be used to screen patients for any level of sleep disordered breathing (i.e. mild to severe) in the preoperative assessment in order to modify immediate management. If the questionnaire can also distinguish patients with moderate or severe OSA from normal or mild, then patients who most need urgent diagnosis and therapy could be identified. This could be useful for primary care clinicians in deciding which patients should be referred for polysomnography; or, for sleep centers with limited capabilities in prioritizing increasing numbers of patients who have been referred for testing.

The STOP-Bang Questionnaire: The STOP-Bang questionnaire is simple and easy to use [1]. Briefly, it consists of 8 ‘yes’ or ‘no’ questions based upon snoring, tiredness/sleepiness, observed apnea, hypertension, BMI > 35 kg/m², age > 50 years, neck circumference > 40 cm and male gender. A score of ≥3 affirmative responses indicates the presence OSA. Of note, some information is inevitably lost by dichotomizing most of the variables but is essential to maintain simplicity. Using various cut off points to dichotomize the tested population, the sensitivities measured 83.6%, 92.9% and 100% respectively for patients with at least mild (AHI > 5/h), moderate (AHI > 15/h) and severe (AHI > 30/h) OSA; and proportional odds logistic regression could be used to categorize the ordinal data giving probabilities of disease severity on 4 levels (i.e. no disease, mild, moderate and severe). We hypothesized that increasing the number of risk factors present not only increases the probability of having OSA but also increases the likelihood of having more severe disease. [2].
Categorization of sleep apnea severity using the STOP-Bang Questionnaire: The STOP-Bang questionnaire could be used to estimate the probability and severity of OSA — absence, mild, moderate and severe [2, 3]. By weighting each of the responses, the correlation was significantly improved compared to a non-weighted model. However, we chose to use the linear model because of its simplicity and lack of a major advantage over a weighted model [2]. When the composite score is zero, there is a 52.5% probability of having no sleep apnea and a small probability of having either moderate or severe sleep apnea (10.3 and 4.4% respectively). There is 32.9% probability of having mild OSA with a zero score, which reflects the false negative rate that could be relevant depending upon the purpose of the screening method. With each incremental increase in the score from 0 to 3, the probability of having no sleep apnea diminishes while the probability of having moderate or severe increases. With a composite score of 3, there is a 14.9% probability of having no sleep apnea and a 33.2%, 29.6% and 22.3% probability of mild, moderate and severe sleep apnea respectively (over-all 85% probability for any degree of OSA). With any score > 4, the probability increases proportionately for having severe sleep apnea while the probability for anything else decreases. With a score of 8, the probability of severe sleep apnea is 81.9% (Figure).

Applications of the STOP-Bang Questionnaire: The STOP-Bang questionnaire can be incorporated in several care process models including preoperative screening, inpatient psychiatry, and outpatient management by primary care physicians. Although scores of 3-5 indicate a high probability for at least mild sleep apnea, they do not differentiate between the degrees of severity very well. However, scores of 6-8 indicate a high probability of having severe OSA is 53.3%, 74.1% and 81.9% respectively.

One of the problems is that patients who have been identified as having OSA through a screening process, seemingly unrelated to their primary problem, are often reluctant to pursue a diagnosis that may require consultation from a specialist and a polysomnography. Therefore, integrating overnight oximetry with the STOP-Bang questionnaire can increase the specificity and substantiate the preliminary diagnosis [4]. Thus, a STOP-Bang score ≥3 would trigger a secondary screening of overnight oximetry. The combination of this approach should result in a higher yield of clinically significant OSA.

![Figure: Predicted probability of sleep apnea severity based upon a linear model of the total population studied vs. affirmative STOP-Bang Model responses [reference 2]. Reprinted with permission from American Academy of Sleep Medicine, 2011](image)

References:
Exploring the Role of Dopamine in Emergence from General Anesthesia.

Accumulating evidence suggests that ascending arousal pathways in the brain play important roles in emergence from general anesthesia [1-3]. In the October 2011 issue of Anesthesiology, our research group published the results of a study showing that methylphenidate (Ritalin) induces emergence from isoflurane general anesthesia in rats [4]. We first showed that methylphenidate produces a large decrease in time to emergence from a standardized isoflurane general anesthetic. We then tested for two different mechanisms by which methylphenidate may reduce time to emergence: (1) increased arousal, or (2) increased minute ventilation (leading to faster excretion of isoflurane).

During continuous isoflurane anesthesia at a dose sufficient to maintain loss of righting, we found that intravenous administration of methylphenidate reliably restored the righting reflex and produced EEG changes consistent with arousal, despite no change in the isoflurane dose. These results demonstrate that methylphenidate produces arousal during general anesthesia that is independent of accelerated excretion of isoflurane. Using plethysmography during continuous isoflurane anesthesia, we showed that methylphenidate also increases minute ventilation by increasing the respiratory rate. Therefore, methylphenidate decreases time to emergence by a combination of increased arousal and accelerated excretion of isoflurane.

Methylphenidate is known to enhance dopaminergic, noradrenergic, and possibly histaminergic neurotransmission. In the study we found that pre-treatment with intravenous droperidol (a nonspecific dopamine receptor antagonist) inhibited the arousal-promoting effects of methylphenidate. This suggested that methylphenidate promotes arousal primarily by activating a dopaminergic pathway, but because droperidol also inhibits adrenergic receptors at high doses, the specific arousal pathway underlying the effects of methylphenidate was not clearly established.

At the SASM 2011 annual meeting in Chicago, our group presented 2 abstracts summarizing our most recent work. In one abstract, we showed that methylphenidate induces emergence from general anesthesia with propofol [5]. Methylphenidate reduced the time to emergence after an induction dose of propofol, and restored the righting reflex during a continuous target-controlled infusion of propofol. In addition, methylphenidate induced EEG changes consistent with arousal during continuous propofol general anesthesia. Because isoflurane and propofol likely have distinct molecular mechanisms of action [6], our results support the idea that methylphenidate induces arousal at the circuit level by stimulating dopaminergic and noradrenergic neurotransmission, rather than blocking the actions of general anesthetics at the molecular level.

In the second abstract, we reported that activation of D1 dopamine receptors induces emergence from continued on page 9
Do you have the Missing Pieces to the OSA Patient (safety) Puzzle?

A 89-year old in-patient on a telemetry floor awaiting implantation of a permanent pacemaker ate breakfast, took a bath, and talked with his family on a January morning in 2010. A few hours later, at 10 am in the morning, the patient is found ‘dead in bed’ (DIB) by a nurse, after the alarm systems intended to protect this patient fell on deaf ears (and eyes).

A 41-year old mother of four was admitted to a hospital for management of her renal colic and given escalating doses of opioids for crescendo pain with routine every 4-hour monitoring of vital signs. She has a body mass index (BMI) of 40, snores routinely, but has not been diagnosed with OSA. She is found DIB in the late afternoon.

Both these cases are tragic examples of preventable deaths that continue to occur all too often in our hospitals, resulting in an unadjusted risk of “code blue” of 1.1% [1].

Fortunately, the root cause of the first tragedy, that is, failure of medical staff to respond to a monitoring device alarm because of ‘alarm fatigue’, has been taken up by an impressive consortium of stakeholders, including the FDA, medical device manufacturers, and the nonprofit Emergency Care Research Institute (ECRI) [2]. This issue came to light as a result of regulation imposed by the Safe Medical Devices Act of 1990 (SMDA). Every week, medical device manufacturers receive thousands of reports of serious adverse events relating to perceived ‘failures’ of monitoring equipment. Manufacturers are legally required to address each and every one of these cases, and institute corrective and preventative actions (CPA). The dangers of misused, misprogrammed, and defective patient controlled analgesia (PCA) pumps were also brought to light through this mechanism. Regrettably, such a rigorous mechanism for detecting and quantifying the incidence of patients suffering preventable harm from a lack of monitoring, as in the second case above, does not exist.

Many of us joined the SASM because we recognized a knowledge gap among perioperative caregivers in their understanding of patients with sleep disordered breathing, and suspect the risks of adverse outcomes are amplified in this population. In 2007, the list of potential Joint Commission Patient Safety Goals for 2008 included screening and recognition of patients with sleep disordered breathing (Fig 1). It appeared our premier hospital regulatory agency shared our concerns and was promoting more widespread adoption of misused, misprogrammed, and misused, misprogrammed, misused, misprogrammed, and preventative actions (CPA). The dangers of misused, misprogrammed, and defective patient controlled analgesia (PCA) pumps were also brought to light through this mechanism. Regrettably, such a rigorous mechanism for detecting and quantifying the incidence of patients suffering preventable harm from a lack of monitoring, as in the second case above, does not exist.

Each and every one of the members of the SASM has pieces of the puzzle that can complete the picture. Typically, a complex puzzle had a leader that assigns teams to work on specific parts of the puzzle and similarly, the SASM can guide its members to those areas of the puzzle in which they have an interest, or experience. In the second issue of this Newsletter, several contributors gave clear direction as to which subsections of the puzzle must be completed.

Dr. D’Ambrosio [3] outlined the controversies in preoperative screening. A first step in delineating best screening practices may be a survey of OSA screening protocols at the institutions of SASM members to distill the common and most effective elements. The pioneering works by Frances Chung and others in devising subjective (i.e., STOP-BANG) as well as objective (i.e., nocturnal oximetry) screening tools has given visibility to this issue and promoted more widespread adoption of these screening protocols [4].

Of course the effectiveness of screening procedures is best measured by outcome data, of which death or serious adverse events involving CPA are likely the easiest to track because of their low prevalence. The SASM research committee will be soliciting case reports from members of ‘near misses’ or deaths in patients with known or suspected OSA and create a registry which will start to define a numerator for the perioperative risk quotient in OSA. The denominator may be defined by the screening procedures noted above.

continued on page 8
Potential 2008 National Patient Safety Goals

Goal 17: Obstructive Sleep Apnea
Reduce the risk of post-operative complications for patients with obstructive sleep apnea.

Requirement 17A
The organization screens for obstructive sleep apnea (OSA) prior to surgical procedures involving the use of centrally-acting anesthetic and/or analgesic agents.

Rationale for Requirement 17A
OSA places patients at increased risk for post-operative respiratory complications after receiving a centrally acting anesthetic and/or analgesic agent. It is estimated that 80-90% of patients with OSA are undiagnosed. By screening patients for OSA, organizations will reduce the occurrence of peri-operative respiratory complications in at-risk patients.

Implementation Expectations for Requirement 17A
1. Anesthesia evaluation includes screening patients who may be at risk for OSA.
2. The anesthesia plan of care takes account of identified risk factors.
3. The organization develops an OSA protocol based on recommendations from identified best practices.
4. The organization's OSA protocol is applied to the anesthesia care of both known OSA patients, as well as those patients identified to be at risk by the screening process.


Fig 2. SpO₂ (top trace) and HR (bottom trace) of postoperative continuous oximetry in patient with OSA (unpublished data: Fi Overdyk)

Fig 3. Type III Pattern of Unexpected Hospital Death (Sleep Apnea with Arousal Failure)
in alarm fatigue. Clinical trials of these technologies are underway [8] and we must ensure they include the OSA cohort. Continuous monitoring studies in high-risk populations for OSA, such as the bariatric surgery group, are helping to define the risk explicitly [10].

Ramachandran [3] noted that there is urgent need for cost effectiveness research of continuous monitoring, since capital expenditure remains a serious barrier to implementation. A recent article by Danello et al [11] addresses the return on investment of a capnography-based system used for PCA for opioid administration, and is an excellent example of how a hospital administration becomes a patient safety advocate without compromising its bottom line.

Robert was a 63-year jovial man with a BMI slightly above his apnea hypopnea index (AHI) of 30, compliant with home CPAP, who had an esophageal hernia repaired. Although in some pain, he ambulated to an outside facility for a contrast study, and returned for one last night as an inpatient, during which he accidently received both PCA and nurse-controlled opioids. He did not know to wear his CPAP mask in the hospital. Root cause analysis of his CPA exposed a huge knowledge gap among his caregivers, including nurses and physicians, on the pathophysiology, risks and harms of perioperative OSA patients.

The Education and Training Committee of the SASM has been charged with devising a strategy for dissemination of OSA knowledge to all levels of healthcare providers. This effort will be most effective when coordinated and aligned with other stakeholders, such as, the societies representing perioperative nurses, sleep physicians, bariatric and sleep surgeons. The education piece of the puzzle is as significant and challenging as the screening, outcomes and technology pieces. This Committee will utilize all the new social media tools in its design of content and distribution of information that will allow providers to care for OSA patients (e.g., smart phone Apps for apnea). Failures in communication and coordination of care are prominent root causes for sentinel events in these patients. Real time clinical decision support to caretakers of suspected OSA patients in the perioperative process may be more effective than traditional one time training programs (tweet: “CPAP on Mrs. Jones complete?”). Innovative thinking, leveraging existing resources, such as, the smart phones as well as broad spectrum buy-in will be the critical elements for success in this initiative.

The members of the SASM possess an impressive mix of expertise and experience that can help solve the OSA puzzle. This Society will provide mechanisms by which each member can contribute, if only one piece, to our puzzle that will reveal the optimal safe perioperative care for OSA patients.

Disclosures:
Dr. Overdyk has been a paid consultant and speaker on perioperative respiratory monitoring for Covidien, Oridion, and CareFusion

References:

Exploring the Role of Dopamine continued from page 3

isoﬂurane general anesthesia [7]. The D1 agonist chloro-APB reduced time to emergence from isoflurane anesthesia, and restored the righting reﬂex during continuous isoflurane general anesthesia. Chloro-APB also induced EEG changes consistent with arousal during a steady-state isoflurane anesthetic. Pre-treatment with the D1 antagonist SCH-23390 inhibited the arousal-promoting effects of chloro-APB. Finally, the D2 agonist quinpirole failed to elicit an arousal response during isoflurane anesthesia. Taken together, these results demonstrate that activation of D1 dopamine receptors is sufficient to induce emergence from general anesthesia, and suggest that methylphenidate-induced arousal during general anesthesia is mediated, at least in part, by activation of D1 receptors. Dopamine is well known to be involved in behavioral arousal [8]. However, its precise role has been controversial and the speciﬁc dopaminergic circuits in the brain that promote arousal have yet to be clearly deﬁned. Our recent work shows that stimulating dopaminergic neurotransmission may provide a novel approach to induce emergence from general anesthesia. In addition, methylphenidate, a drug with a well-established safety proﬁle in humans, may be clinically useful as a reversal agent for propofol and other general anesthetics. We plan to conduct a clinical trial in the near future to test this hypothesis.
Message from the President continued from front page

Disorders Research Plan. It is time they were and this deficiency reflects inadequate insight on behalf of planners, a deficiency SASM is determined to address. Communication is an important aspect of our activities: as you know we have a lively website which includes regular literature updates and featured articles and this informative newsletter, back copies of which are available on the website. Our organizational structure is now largely settled and we look forward to engaging an increasingly wide circle of sleep and anesthesiology clinicians and scientists as we engage in the many clinical and basic considerations relating to the shared neurobiology of anesthesia and sleep.

On the education front, we are busy completing planning for our next conference, to be held on October 11-12, 2012 in conjunction with the ASA convention in Washington DC. The meeting follows our highly successful 2011 meeting and will now run over 1.5 days, to allow for a half day “advanced course” component. Entitled “Anesthesia and Sleep Medicine – What Every Health Professional Needs to Know,” the program has great clinical content relevant to any practicing physicians, anesthesiologists, critical care physicians, residents, fellows in-training, general medicine physicians, pulmonary physicians, sleep medicine physicians, surgeons, scientists and allied health care professionals. It provides a forum for discussing the common ground between OSA, sleep and anesthesia. The goal is to promote excellence in medical care, research and education in anesthesia, sleep medicine, and perioperative medicine. The objectives are to review what a health professional should know about sleep apnea and the impact of sedatives/narcotics, and position perioperatively, to interpret the perioperative complications of OSA patients and to appraise practice pathways to screen, diagnose and manage sleep-disordered breathing in the perioperative period. Original work will be presented during the meeting with 6 research awards available for these presentations in clinical and basic research. The deadline for abstract submission is July 1, 2012. A number of social events are planned to ensure lively discussion beyond the auditorium. Details of the conference and registration for it are available on our website (www.sasmhq.org). We are looking forward to seeing you there and hope that you will make the meeting known to your colleagues. We would welcome their involvement and hope to see our membership continue to grow as more become aware of us and of the fascinating and compelling issues that interest and concern us all.

Membership Update continued from page 3

continues to empanel various committees for SASM, we hope that our members will continue to contribute their time and effort in helping these initiatives and the various committees succeed. We also humbly ask for continued patience from our members in that we are trying to solidify the structure of our new organization while concurrently planning our very vital annual conference (to be held in Washington DC October 11-12 this year), all while also trying to advance initiatives to promote improved clinical outcomes and research.

This is indeed a very ambitious agenda, but one that we feel we are well on our way to advancing with your help and support. You may have received the first request for membership renewal. We request that you renew your membership and support the efforts of SASM. A key benefit for SASM membership is that the cost of the SASM annual meeting registration will be reduced by the cost of their SASM membership. Thus, SASM members basically enjoy free society membership when attending the SASM Annual conference!

We hope that you will continue to be a very vital member of our organization, and we hope that you will encourage your colleagues to join us in our mission as well. It is said that there is power in numbers, and thus we hope to continue to grow our organization so that we can continue to be recognized as leaders in this common ground shared between Anesthesia and Sleep medicine, and continue to be strong advocates for our many patients. We have accomplished a great deal in a short period of time and we view this as only the beginning of a very bright future for our blossoming organization. We are all charting the course of SASM — together.

I would like to encourage all members to email me any questions, comments, and suggestions regarding SASM to nbolden@metrohealth.org. SASM is your organization, and I am honored to help chart its course with your ongoing engagement and support.
Exciting news
The upcoming SASM Annual Meeting has great clinical content relevant to any practicing physicians, anesthesiologists, critical care physicians, residents, fellows in-training, general medicine physicians, pulmonary physicians, sleep medicine physicians, surgeons, scientists and allied health care professionals.

This meeting aims to provide a forum for discussions pertaining to the common grounds between obstructive sleep apnea, sleep and anesthesia. The goal is to promote excellence in medical care, research and education in anesthesia, sleep medicine, and perioperative medicine. The objectives are to review what a health professional should know about sleep apnea and the impact of sedatives/opioids, and position perioperatively, to interpret the perioperative complications of OSA patients and to appraise practice pathways to screen, diagnose and manage sleep-disordered breathing in the perioperative period.

When you’re not collecting CME hours, social options during the meeting include a cash bar reception on Thursday evening. For the gold patron members of SASM, there will be the benefit of the VIP dinner on Thursday evening.

Research Awards
There will be 6 research awards for abstracts this year, 3 in basic research and 3 in clinical research. The winners will present their work orally at the meeting.

Looking forward to seeing you in Washington this year!

Frances Chung M.B.,B.S. Babak Mokhlesi M.D.
Chair, Annual Meeting Co-Chair, Annual Meeting

<table>
<thead>
<tr>
<th>Time</th>
<th>Topic</th>
<th>Speaker</th>
</tr>
</thead>
<tbody>
<tr>
<td>12:30-12:35pm</td>
<td>Introduction</td>
<td>Babak Mokhlesi, MD, MSc</td>
</tr>
<tr>
<td></td>
<td>Moderator</td>
<td>Atul Malhotra, MD</td>
</tr>
<tr>
<td>12:35-12:55</td>
<td>What Every Health Professional Should Know About Sleep Apneas and the Impact of Sedatives/Narcotics on Sleep-Disordered Breathing</td>
<td>Timothy Morgenthaler, MD</td>
</tr>
<tr>
<td>12:55-1:15</td>
<td>The Morbidly Obese and Obesity Hypoventilation Syndrome: More Common Than What You Think</td>
<td>Babak Mokhlesi, MD, MSc</td>
</tr>
<tr>
<td>1:15-1:40</td>
<td>Does OSA Cause Perioperative Cardiac Complications?</td>
<td>Atul Malhotra, MD</td>
</tr>
<tr>
<td>1:40-2:05</td>
<td>Sleep Deprivation, OSA and Inflammation: Perioperative Implications</td>
<td>Teofilo Lee-Chiong, MD</td>
</tr>
<tr>
<td>2:05-2:30</td>
<td>Pre-Operative Evaluation of OSA – When Can Home Sleep Testing Replace In-lab Sleep Testing?</td>
<td>Susheel Patil, MD, PhD</td>
</tr>
<tr>
<td>2:30-2:45</td>
<td>Q&amp;A</td>
<td></td>
</tr>
<tr>
<td>2:45-3:15</td>
<td>Refreshment Break</td>
<td></td>
</tr>
<tr>
<td>3:15-3:35</td>
<td>Cannot Ventilate, Cannot Intubate: Can We Eliminate?</td>
<td>Yandong Jiang, MD</td>
</tr>
<tr>
<td>3:35-5:00</td>
<td>Developing Clinical Pathways to Screen, Diagnose and Manage Sleep-Disordered Breathing in the Perioperative Period</td>
<td>The Mayo Clinic Experience: Bhargavi Gali, MD and Peter Gay, MD</td>
</tr>
<tr>
<td></td>
<td>Review challenges in implementing a perioperative OSA program</td>
<td>The Northwestern Experience: Meltem Yilmaz, MD and Lisa Wolfe, MD</td>
</tr>
<tr>
<td></td>
<td>Provide an outline for postoperative monitoring</td>
<td></td>
</tr>
<tr>
<td></td>
<td>How to do PAP therapy</td>
<td></td>
</tr>
<tr>
<td>5:00-5:30</td>
<td>Q&amp;A</td>
<td></td>
</tr>
<tr>
<td>5:30-6:30pm</td>
<td>Welcome Reception (cash bar)</td>
<td></td>
</tr>
</tbody>
</table>

continued on back page
<table>
<thead>
<tr>
<th>Time</th>
<th>Topic</th>
<th>Speaker</th>
</tr>
</thead>
<tbody>
<tr>
<td>7:15-7:55am</td>
<td>Annual General Meeting</td>
<td></td>
</tr>
<tr>
<td>7:00-7:55</td>
<td>Registration and Continental Breakfast</td>
<td></td>
</tr>
<tr>
<td>7:55-8:00</td>
<td>Introduction</td>
<td>David Hillman, MB BS</td>
</tr>
<tr>
<td></td>
<td>Moderator</td>
<td>Frances Chung, MB BS</td>
</tr>
<tr>
<td>8:00-8:50</td>
<td>Keynote: Genetic Architecture of Ventilatory Traits</td>
<td>Kingman Strohl, MD</td>
</tr>
<tr>
<td>8:50-9:30</td>
<td>Sleep and Anesthesia: Common Mechanism of Action</td>
<td>Mervyn Maze, MB BS</td>
</tr>
<tr>
<td>9:30-10:00</td>
<td>Pathogenesis of Upper Airway Obstruction During Sleep: Implications for Sedative Management</td>
<td>Alan Schwartz, MD</td>
</tr>
<tr>
<td>10:00-10:15</td>
<td>Q&amp;A</td>
<td></td>
</tr>
<tr>
<td>10:15-10:45</td>
<td>Refreshment Break and Poster Viewing</td>
<td>Babak Mokhlesi, MD, MSc</td>
</tr>
<tr>
<td>10:45-11:10</td>
<td>Nasal or Oral Ventilation in Anesthetized Subjects?</td>
<td>Shiroh Isono, MD</td>
</tr>
<tr>
<td>11:10-11:35</td>
<td>Postoperative Pulmonary Complications of OSA Patients</td>
<td>Stavros Memtsoudis, MD, PhD, FCCP</td>
</tr>
<tr>
<td>11:35-12:00pm</td>
<td>Postoperative Complications and Challenges in Implementing a Perioperative OSA Protocol</td>
<td>Roop Kaw, MD</td>
</tr>
<tr>
<td>12:00-12:15</td>
<td>Q&amp;A</td>
<td></td>
</tr>
<tr>
<td>12:15-1:15</td>
<td>Lunch Break and Poster Viewing</td>
<td></td>
</tr>
<tr>
<td>1:15-1:35</td>
<td>STOP-Bang Screening: How to Make it Work?</td>
<td>Frances Chung, MB BS</td>
</tr>
<tr>
<td>1:35-1:55</td>
<td>OSA Patient For Ambulatory Surgery: SAMBA Patient Selection Guidelines</td>
<td>Girish Joshi, MB BS, MD, FFARCSI</td>
</tr>
<tr>
<td>1:55-2:25</td>
<td>Using OSA Near Misses (and Catastrophes) as Teaching Tools: Sharing the Metro Experience</td>
<td>Norman Bolden, MD</td>
</tr>
<tr>
<td>2:25-2:55</td>
<td>Opioids and Undiagnosed OSA; Monitoring Miracles and Mishaps On The Medical/Surgical Floor</td>
<td>Frank Overdyk, MSEE, MD</td>
</tr>
<tr>
<td>2:55-3:10</td>
<td>Q&amp;A</td>
<td></td>
</tr>
<tr>
<td>3:10-3:25</td>
<td>Refreshment Break and Poster Viewing</td>
<td></td>
</tr>
<tr>
<td>3:25-3:55</td>
<td>Pediatric OSA and Anesthesia</td>
<td>Ronald Litman, DO</td>
</tr>
<tr>
<td>3:55-5:00</td>
<td>Rapid-Fire Research Snippets and Awards</td>
<td>Presenter of awards: David Hillman, MB BS</td>
</tr>
<tr>
<td>5:00pm</td>
<td>Conference Adjourn</td>
<td></td>
</tr>
</tbody>
</table>