

December 2015

Anesthesia Insights: Advice for Medical Students

5 Steps to Anesthesia Success in Medical School

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Rarely has anyone equated medical school to an easy task. From day one a medical student is inundated with a newly raised plateau of responsibilities and expectations. There are so many questions to answer, from those behind the science of medicine to those related to career and practice. For those who've answered one of those questions, that of specialty, and find themselves looking toward the field of anesthesiology, here are five steps to take during your medical school to set yourself up for success on the wards and beyond.

Step 1: Get Involved – Attend Anesthesia Meetings

When I say “anesthesia meetings” I actually mean quite a variety of events. However, all of them have significant educational and career benefits. The first is your school’s anesthesia interest group. Join and become an active member of the group – this may actually give you access to the knowledge that aids you with the rest of the steps given here! If your school doesn’t have a chapter, even better – now you have the opportunity to start one and mold it into the style you want. Next, find out if medical students can attend your state anesthesia society’s meetings. These events aid you in finding like-minded medical students across your state as well as new mentors in the field who have much to teach you.

“The National Spotlight”

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Finally, attend the ASA legislative and annual conferences. The former will give you real-life experience in advocating for your profession with congressmen and will give you a better idea of the direction the practice of anesthesia is headed in for the future. The latter will provide you with the opportunity to attend anesthesia-related hands-on workshops, well-made lectures on every topic in anesthesia imaginable, and network with incredible physicians and students from around the country.

Step 2: Find a Mentor

Just one individual can change a medical student's entire career – assuaging the worries of what's next, helping prepare a student's CV for applications, and being a positive role model are all examples of the good just one mentor can do for a student. Once you get to your school, talk to the students who have already been interested in anesthesia or those who have spent time in the operating room. Find out which physicians like to spend time with and teach students. Also, don't necessarily settle for the first doctor you work with. Hospitals usually have many anesthesiologists, so why not shadow as many of them as you can before making that decision? Look for a mentor that gives consistent and constructive feedback – a doctor that always praises you is not a doctor that will help you learn from your mistakes. In the end, a good mentor will be your greatest resource during your student career, and will be the one writing that recommendation letter that blows the others out of the water.

Step 3: Discover Your Hospital's Anesthesia System

Not all anesthesia departments run the same way. Not all hospitals even have an anesthesia department! Find out if there are in-house staff at your hospital, or if the hospital contracts out anesthesia groups or private practices. Look into whether these groups get to bring in their own NAs, or if those individuals are employed by the hospital. Learn if the hospital has a more NA management model, or if it is more physician case-based. Know whether or not your hospital has a residency program in anesthesia and if so, take advantage of these individuals living the life you're envisioning for yourself in 2-3 years. Knowledge of your current anesthesia system gives insight into how that model functions, and whether or not you enjoy fitting into that model or if a different type is right for you. If your hospital does not have an anesthesia department, doing an away rotation can not only help you to learn more about anesthesia as a specialty but also help you find a potential mentor.

Step 4: Deepen Your Pharmacology and Physiology Knowledge Base

Most students interested in anesthesiology are already passionate about anatomy, the physiology of the cardiopulmonary system and biochemistry. Additionally, most schools teach these three topics quite well. However, there is a difference in both desire and quality of instruction in the field of pharmacology between student bodies and schools. Therefore, when establishing your foundation in medicine, dive into pharmacology and master pharmacokinetics and dynamics, from volume of distribution to minimal alveolar concentration. When you strengthen your knowledge-base in pharmacology and physiology, the results will not be disappointing. You will not only impress your mentor and attendings but also have happier and healthier future patients.

Step 5: Explore All Fields within Anesthesia

While not commonly known, there is a multitude of subspecialties to pursue in the field of anesthesiology. Anesthesia fellowship training is available in ambulatory, regional, cardiovascular, critical care, neuroscience, obstetrics, pediatrics, pain management and more! Find out what specific training your faculty have and try to get some experience in a breadth of these subspecialties. This will both broaden your base knowledge of the field and help you make a career

Every individual's path within anesthesia is different, so instead of taking these steps as literal commandments, use them to fit into your own path and help shape the way.

decision in the future on whether or not to pursue a fellowship in our chosen specialty of medicine. On top of these benefits, this will get you the most exposure to the field itself and to the largest number of physicians that, once impressed, will want to help you along in your career in whatever way they can.

Every individual's path within anesthesia is different, so instead of taking these steps as literal commandments, use them to fit into your own path and help shape the way. I wish you the best of luck in your studies and hope to see you at the next annual meeting (if you're following step one you'll be there)!

Pursuing a Career in Anesthesia

The Perioperative Surgical Home

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What do the iPhone, steamboat and Perioperative Surgical Home (PSH) have in common? They are all disruptive innovations – and according to leading practitioners, only one will redefine your role in the field, the way you are paid and your patient outcomes. The PSH has been defined as a multi-departmental initiative aimed at transforming surgical care by improving quality, lowering costs, and increasing patient and provider satisfaction.

The impetus for this change is two-fold. First, many argue the current landscape for the surgical experience is expensive, fragmented, and fails to deliver quality results. Michael Schweitzer, M.D. M.B.A., Vice President of Healthcare Delivery System Transformation, works with over 75 hospitals primarily in the Southeast United States and echoes these sentiments. “Too often patients having invasive procedures or surgeries experience a disjointed perioperative system with gaps in care or poor communication that result in complications or sub-optimal outcomes,” he says.

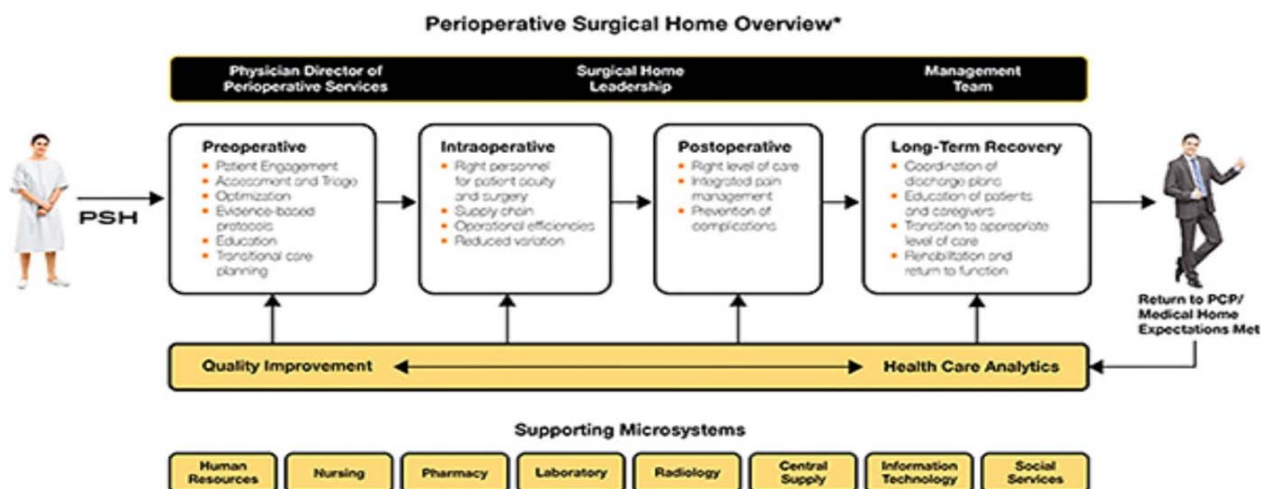
The PSH is a proposed model that unites the disjointed experience and places an increased emphasis on the preoperative and postoperative settings. An anesthesiologist, for example, will coordinate care by leading a team of various disciplines including nursing, pharmacy and physical therapy.

What do the iPhone, steam boat and Perioperative Surgical Home (PSH) have in common? They are all disruptive innovations – and according to leading practitioners, only one will redefine your role in the field, the way you are paid and your patient outcomes.

Second, our public health policy is changing medicine from a fee-for-service payment system to a value-based system. The PSH offers an opportunity for anesthesiologists to ensure career stability and remain relevant from the perspective of hospital administrators and insurance providers. Anesthesiologists are uniquely positioned in this regard since surgeons traditionally focus on surgical management issues over medical ones, while hospitalists are less familiar with the perioperative changes experienced by patient.

According to the ASA, there is currently 44 national provider organizations working to advance the PSH model, including residency programs that offer a stand-alone non-accredited ACGME fellowship dedicated strictly to perioperative services. Leading institutions include the University of Alabama Birmingham and University of California Irvine. Other programs, offering a combined anesthesiology/medicine residency are preparing and training future providers in the PSH model.

“We have seen many organizations across the country reduce complications, readmissions, delays and cancellations, and improve patient satisfaction with their perioperative care experience,” Schweitzer notes. “PSH has addressed the high cost of post-acute care by developing successful pathways that eliminate the need to go to a skilled nursing home or in-patient rehabilitation post discharge.”



In the PSH model, the patient’s experience of care is coordinated by a director of perioperative services, additional surgical home leadership and supportive personnel, which constitutes an interdisciplinary team. The expected metrics include improved operational efficiencies, decreased resource utilization, a reduction in length of stay and readmission, and a decrease in complications and mortality – resulting in a better patient experience of care.

*Figure developed by Daniel J. Cole, M.D.

There are challenges, however. Hospitals must absorb the cost of setting up and maintaining the PSH program until insurance providers reimburse payments. Current providers who prefer to have a traditional role may be reluctant to take on different clinical responsibilities. After all, “leading an interdisciplinary team that reduces variability across the continuum of care requires different skill sets than providing clinical care to a patient one-on-one,” Schweitzer says. Others argue that a title with the word “surgical” may be seen as encroachment on surgeons reluctant to relinquish patient management. In addition, some say the PSH may be best suited for non-academic centers since elements of the program may already be practiced in an academic setting. And finally, some critics question how one will divide the bundled payments accordingly.

But above all, medical students and residents are crucial to implementing a PSH. Darren Raphael, M.D., M.B.A., at the UC Irvine Health says “medical students and residents, especially those brought up in the technology age, see the system with fresh eyes and don’t accept redundancies.” He urges these new members to build a strong foundation in order to improve upon post-op care because most receive substantial training in pre-op and intra-op care. “Their suggestions will improve efficiency and implement solutions which are already out there,” Raphael says. The PSH, he believes, is not a question of if but rather when. After all, no one wants to be a specialty without a home.

Anesthesia Interest Group Highlights

AIG Award Announcements

Winner: University of California, San Francisco

Participating in the UCSF Anesthesia Interest Group allows students the opportunity to explore the field of anesthesia in a fun, friendly and informal environment. Strong faculty support and dedication to student growth are the key to the success of our program. With faculty-run activities designed for every level and degree of interest, we aim to provide a realistic and comprehensive view of anesthesia in both the preclinical and clinical years. Activities begin even before the first year of medical school with the Accepted Students Workshop, where prospective medical students learn basic airway management and intubation skills.

In the fall, first- and second-year students explore the specialty through lunchtime seminars and have the opportunity to shadow anesthesiologists working in their personal area of interest at any point during the year.

Strong faculty support and dedication to student growth are the key to the success for our program.



In the spring, students are invited to participate in the Special Skills Session, a hands-on workshop hosted by anesthesia faculty and residents. Within our simulation center, students practice airway management and central line placement on mannequins, ultrasound-guided nerve blocks on raw meat, and learn ultrasound anatomy of the brachial plexus on faculty and resident volunteers.

In the clinical years, students curious about the specialty are again invited to shadow in the academic or private sector. Faculty and residents serve as career advisors, providing guidance for a successful future in anesthesia. In addition, the AIG sponsors faculty-lead application and interview workshops.

Throughout medical school, students have the opportunity to participate in departmental activities such as Grand Rounds, Morbidity and Mortality conferences, resident didactics and CME. Membership in the ASA is encouraged and paid for by the Department of Anesthesia.

This past September, the UCSF Department of Anesthesia and AIG had the opportunity to host the 4th Annual California Anesthesia Medical Student Symposium, with residency directors, faculty, lecturers, and residents from most California residency programs and medical students from across California and several other states in attendance. The symposium had a short residency fair, then clinical skills workshops were taught by representatives from each school, giving medical students the opportunity to interact with residency directors, faculty and residents in a low-stress, educational environment.



In addition to having faculty and residents that supported our growth, strong communication, trust, and leadership were the source of our group's success. In particular, planning this year's symposium required us to stay organized and share a common goal. Monthly meetings allowed us to update each other, while allowing us to lead our own tasks and responsibilities. Utilizing websites such as Asana and Google Drive allowed us to collaborate remotely and efficiently around our busy schedules. In

addition, finding colleagues we could trust to manage UCSF's AIG allowed us to focus on our own responsibilities, while having confidence in the final product. Finally, working with students who had a genuine desire and interest to improve the field of Anesthesia allowed us to stay motivated with a shared goal.



AIG Faculty Coordinators: Dr. Jeffrey Sall, Marie Lim

AIG Student Coordinators: Rachel Vance (MS2), Eric Foo (MS2), Kiran Sembhi (MS3), Kristen Mackenzie (MS3)



Honorable Mention: Oregon Health and Science University

OHSU's AIG: Success in Collaboration

It is with great honor that Oregon Health & Science University has been selected as runner-up for the 2014–2015 Outstanding AIG Student Chapter Award by the Medical Student Component of the American Society of Anesthesiology.

The success of our AIG program has relied on medical students participating in several events we have held over the course of the year. We have been fortunate to have a dedicated group of acute care faculty members from multiple disciplines come together to help us pool resources and deliver high-quality workshops for the expressed goal of providing hands-on training for common anesthesia procedures. Coupled with ample coordination and leadership between faculty, medical student leaders, and our ASA delegate, we have been able to bring excitement about anesthesia to our medical student body.

One of the main reasons we have been successful this year in putting these workshops together is that we have both dedicated faculty members interested in getting students involved as well as a developed collaboration with other acute-care focused specialties interested in teaching similar skills.”

Our AIG student leaders have organized opportunities focused on providing early and frequent anesthesiology exposure for first and second-year medical students. Our workshops centered around peripheral IV placement, central line placement, intubation, ECG interpretation, lumbar puncture, and other important procedures to showcase the many skills and hands-on opportunities in anesthesia. By structuring our AIG such that second-year students lead the group, our students go from participating in these great events to planning and coordinating them by their second year. Planting early seeds of the professional opportunities that await in anesthesiology helps us achieve the mission of the ASA Medical Student Component.



In addition to utilizing faculty and residents, we rely heavily on the former paramedics, nurses and EMTs from our medical student classes to guide their peers through these workshops of common anesthesiology procedures. By taking advantage of the professional training of those in our class, we are able to expand the size and scope of our AIG sponsored events, while also increasing the quality of experience for those participating. You don't need a lot of faculty support or even a major anesthesiology institution to create positive anesthesia experiences within your medical school. You will be surprised by the breadth of knowledge and skills of your classmates, so make the most of these otherwise untapped resources.

One of the other reasons we have been successful this year in putting these workshops together is that we have both dedicated faculty members interested in getting students involved as well as a developed collaboration with other acute-care focused specialties interested in teaching similar skills. With this collaboration, we have been able to unite our expertise, bring like-minded students together, and deliver high-quality workshops designed to spark interest in the field of acute care and to teach important skills for the future.

AIG Student Coordinator: Ishan Patel (MS3)

Current Events in Anesthesia



ANESTHESIOLOGY.2015
San Diego OCTOBER 24-28

The ASA Annual Meeting: An Imperative for Students Considering Anesthesia as a Profession

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When John Crowley, current Member-at-Large on the MSC Governing Council, suggested that I attend the annual meeting as a second-year student I initially thought he was crazy. Having just returned from the meeting, I joyfully realize now how sorely mistaken I was. The experience has further cemented my desire to pursue anesthesia and has given me tools and resources that will give me the best possible chance at making my dream more of a reality.

The Medical Student Component did a fantastic job of organizing an ideal line-up of speakers and events. Powerful opportunities provided to attendees were: to hear what residencies (e.g., Duke, UCSF, Beaumont, etc.) want in an applicant; to meet and network with residency directors and residents from the majority of residency programs in the United States; to learn from certified financial planners, who specialize in medical student loans, how to tackle our student loans and come out \$4.5 million dollars ahead; to see cutting edge technology and research; to practice hands-on anesthesia skills at UCSD; all while kicking back in the beautiful location of sunny Southern California.

Dr. Kathy Schlect, faculty of the William Beaumont Residency Program, gave, in my opinion, one of the most memorable presentations. At the presentation she discussed the ins and outs of how an applicant can be successful during pre-interview planning, at the interview and post-interview. This presentation wasn't the typical do good on boards, get good grades, be a good person, etc. Instead, the presentation focused on things like how to contact a program if we haven't been invited to interview, how to be effective in the post-interview period at showing continued interest, and who the key individuals are at a program that you need to be sure to impress. She laid out for us how we should organize

As a second year student I walked away from the event with emails of multiple program directors...

ourselves and gave us point by point what would be sure to make us successful at placing into the residency of our choice.

The most important part of the week, again in my opinion, was the two-and-a-half hour long Residency Program Meet and Greet. Nearly 100 programs (e.g., Massachusetts General Hospital, Mayo, Geisinger, Johns Hopkins, etc.) were present to hand out information to interested students, answer questions about programs and talk to students about their upcoming interviews. I am certain that many students found interview invites waiting in their inboxes after the event. As a second year student I walked away from the event with emails of multiple program directors who invited me to stay in touch and bounce any questions I might have off of them over the next two years.

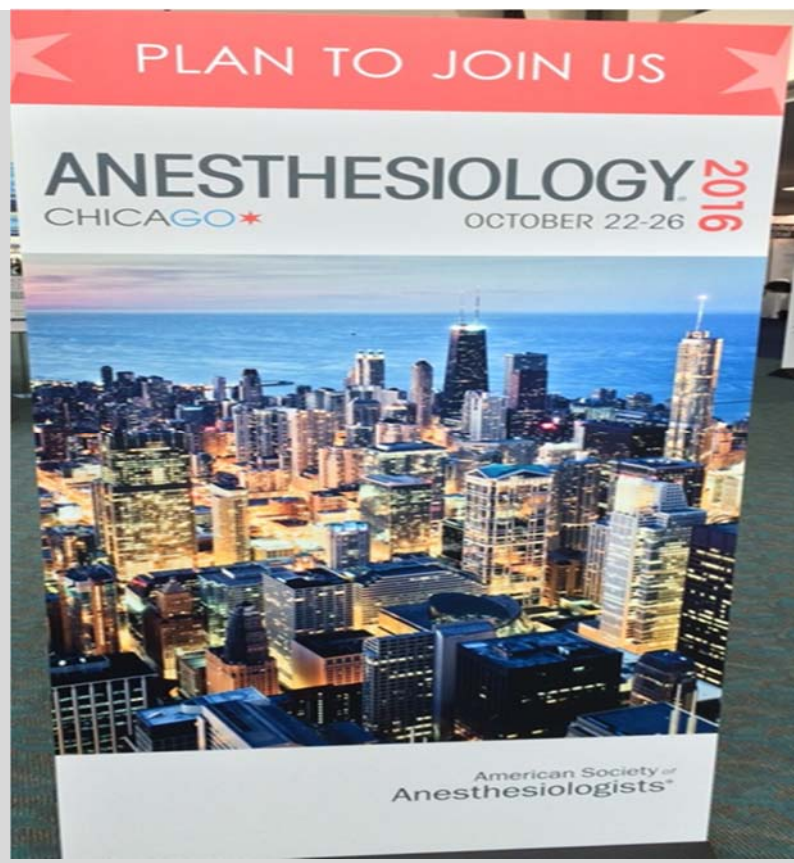
For these reasons, as well as many others too numerous to list, students that are considering Anesthesia must make every effort possible to attend the conference. You will walk away from the conference with a better understanding of the profession and with better connections than you came. I hope to meet all of you in Chicago next October!

*Join Us Next
October!*

The ASA annual meeting will take place in Chicago, Illinois next year.

Dates:

October 22–26, 2016.



Medical Student Finance 101

D. Kyle Robinson, M.S.
Chair, ASA Medical Student Component
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Most of us have little time and even less desire to think about our student loans, interest rates and surmounting debt. As medical students, each of us have unique financial situations that are shaped by our undergraduate debt, medical school debt, geographic location, family status, personal health, residency plans and much more. Additionally, we each have varying levels of skill, training and experience with finances. Regardless of where you stand, we are all quickly approaching the end of medical school (believe it or not!) at which time we must take our heads out of the sand and choose how we will face the very real implications of loan repayment. The gravity of these decisions must not be taken lightly and whether you take the DIY approach or turn to experts for guidance, it is worth your while to be informed.

As part of the Medical Student Component at ANESTHESIOLOGY® 2015 in San Diego, we brought in financial advisor Chris Long of Consolidated Planning to give us a crash course in Medical Student Finance 101 with a focus on Tactical Student Loan Management. As the spouse of an anesthesiologist, Chris recognized the need for medical student specific debt management and now runs a group dedicated to helping students navigate the mine fields, hang-ups and pitfalls aspiring medical professionals face as well as the opportunities and long-term choices students have as they transition from medical student to resident to physician to retirement.

“Pay off your debt as quickly as possible.”

“Don’t even think about your student loans until you are done with residency.”

Many of us have heard advice and recommendations from fellow medical students, family members and many more:

The often unsolicited advice we receive as future medical professionals, though well-intended, needs to be applied and taken in the context of our own circumstances. I was hoping that Chris would provide me with the single formula that worked best for all medical students. Unfortunately, no such formula exists. Instead, he provided us with guidelines and general principles that will prepare us to make the best decisions possible.

Here is a list of key takeaways:

1. Understand the difference between “Accrued” and “Capitalized” interest.

Accrued – Interest on principle balance only.

Capitalized – Interest on loan principal balance + unpaid interest.

2. Time Value of Money considerations of 10-year vs. 25-year repayment plans.

Retirement, home ownership and investment tradeoffs.

Putting extra money towards loans in residency is NOT always your best option.

3. It may not be in your best interest to utilize your 6-month grace period.

4. Set yourself up for the potential of utilizing Public Service Loan Forgiveness.

After making 10 years of loan payments your remaining debt can be forgiven, tax-free.
69% of hospitals across the nation qualify.
Residency years count toward your 10 years.

5. Residency repayment: Forbearance vs. Pay-As-You-Earn vs. Income Base Repayment vs. Interest Only

No one should EVER settle for forbearance.

6. Do your tax returns.

Makes life much easier for loan consolidation considerations at the end of your fourth year.

Keep a digital and hard copy of your returns – the federal government won't!

7. Start strategizing and making a definitive loan repayment plan in January/February of your fourth year.

More than anything, I learned that ***this is complicated***. Even though I salivate over spreadsheets and take great pride in balancing my budget to the penny (maybe I should have gone into finance), the financial implications of my decisions within the loop holes, tradeoffs and ever-changing laws surrounding student debt are more than I have the time and ability to reconcile. Some things are best left in the hands of professionals. When considering my physical well-being as a patient in the operating room, I want an anesthesiologist caring for me. Likewise, when considering my financial well-being and the tremendous implications of my choices, I will be turning to an expert in the field of student debt.

Conventional loan knowledge and strategy is VERY different from student debt and the decisions we make as a result can be costly. Get informed, have a plan and consult an expert to set yourself up for fiscal success as you take the next step toward a fulfilling career in anesthesiology.

Contact info:

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Letter from the Editor

Dear ASA Medical Student Component,

It has been a pleasure to serve as your Secretary and Editor of the national newsletter over the past year. I hope that with each article you have gained invaluable insight into anesthesiology as a specialty. You really have chosen to pursue the best specialty in medicine.

This final newsletter focuses on the national landscape and highlights the awesome things that fellow medical students interested in anesthesia are doing around the nation. Anesthesia is a ground-breaking field in medicine that continues to grow and change each day. It is important that we as the next generation of physicians remain aware and get involved both locally and nationally.

Throughout medical school we continually face challenges that will ultimately help us to grow into outstanding and compassionate clinicians. Remember that it is our future patients and their families that make the journey completely worth it! I wish you success, balance in your lives, and continued self-discovery on your journey in medicine.

Yours truly,

Brittany Young
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Interested in Getting Involved?

Contribute to the MSC Newsletter

If you are interested in writing an article for the upcoming MSC Newsletter, please contact asa.mscsecretary@gmail.com.