The Next Chapter – Dr. Sarah

I’ve been asked to share some “wisdom” or parting thoughts as I prepare to leave UCSF on April 7th. While I am unsure how wise my writing may be, I am happy to share some things I have found to be helpful in my journey through medicine.

Have Compassion for Yourself

We have all been immersed in a system that teaches us to be selfless and perpetually give of yourself, physically and emotionally, to others. It is very challenging to step back and take time for yourself, focus on your health and healing, and be well in this system – especially when it has been taught to us over and over again that our patients are the center and everything is enveloped in patient safety and outcomes. I ask that you learn to have compassion for yourselves. Having compassion for yourself can look many ways and it may feel difficult or unnatural at times. The same way you’d be supportive and kind to a friend or colleague, practice doing this with yourselves, too. Show yourself warmth, understanding, and grace, even in the face of error, failure, or when you may be feeling inadequate. It is easy to self-flagellate – try to understand the concept of compassion, how you apply it to others, and learn to do so for yourselves.

(continued on page 2)
Be Patient with Others

It’s really easy to get frustrated or lose your cool in the work that we do, especially when faced with long hours, overnight calls, and difficult colleagues. I ask that you try to practice patience with others and be hopeful to receive the same in return. Remember, those alongside you are oftentimes dealing with the same issues you are, or others. You’ve probably heard me talk about the allostatic load people carry – “the cumulative burden of chronic stress and life events” that people deal with on a daily basis. For some, just the action of showing up to work can be incredibly difficult. As you have compassion for yourself, extend it to others, too. Everyone carries their own burdens and what you experience with others may be a projection of those burdens. It is often hard to take the high road, hold back a rebuttal, or allow someone the patience to exist, especially when tired and frustrated. But I promise, if you change the way you interact with others, in time, they will alter their actions toward you. It may take a while, but be patient, with yourself... and others.

Working at UCSF was always my dream. It is an amazing institution that has helped and supported me in ways I can’t describe. I hope you enjoy your time here as much as I have. I hope that, even when faced with frustration or anger, that you look back on your time here and understand how special this place is and how many gifts it can give you. I leave you in the very capable hands of Kristina, John, and Jannot. They care for you very much. Thank you for caring for me.

- Gabriel E. Sarah, MD, MAEd

“As you have compassion for yourself, extend it to others, too.”
- Gabe Sarah, Associate PD

“Working at UCSF was always my dream. It is an amazing institution that has helped and supported me in ways I can’t describe.”
- Gabe Sarah, Associate PD
Since 2014, I’ve been one of the 200-plus physician volunteers who are ABA APPLIED examiners. While the APPLIED exam is colloquially known as the oral exam, there are two components: a standardized oral examination (SOE) and an objective structured clinical examination (OSCE). In this article, I’ll share some insights into how a current resident should think about the SOE. I’ll start by addressing two questions: (1) what are examiners trying to learn about you with their questioning approach, and (2) how are examiner questions framed to accomplish this. Next, I’ll give some examples of less-effective and more-effective answers to a sample question. Finally, I’ll share some advice on how to practice for the SOE.

The SOE is not a direct knowledge exam - that’s what the BASIC and APPLIED exams are for. Instead, the SOE is a test of four things: application of knowledge, judgment, adaptability, and your ability to organize and present yourself as an anesthesia consultant. In order to assess this, the candidate must be put in a situation where there is more than one correct approach, or where the management of one condition is counter to the management of another.

For example, a case stem may involve a patient with features suggestive of difficult tracheal intubation such as morbid obesity and Mallampati 4 airway, as well as poorly controlled diabetes mellitus, and small bowel obstruction requiring exploratory laparotomy. SpO2 is 92% on room air.

Perspectives of a board examiner: what should residents know about the process?

“[T]he SOE is a test of four things: application of knowledge, judgment, adaptability, and your ability to organize and present yourself as an anesthesia consultant.”
- Manny Pardo, ABA board examiner

The candidate may propose to perform an awake fiberoptic intubation (why - demonstrate your applied knowledge) then the examiner says the patient develops mucosal bleeding obscuring the fiberoptic view (what will you do - adaptability and judgment). If the candidate communicates in a clear, concise, organized fashion, this demonstrates their ability to organize and present themselves as a consultant. If we were to create a screenplay based on the scenario above, let’s imagine two versions.

(continued on page 4)
Scene 1

**Examiner:** How would you induce anesthesia in this patient?

**Candidate:** Well, I’m concerned about losing the airway and having this patient aspirate, and his sat is low to start. This patient is at high risk of problems.

**Examiner:** So what will you do to manage his airway?

**Candidate:** I will go to the patient’s bedside and do a complete history and physical, recheck the saturation and talk to the patient about an awake versus asleep fiberoptic intubation.

**Examiner:** The patient will go along with your recommendation - which one will you pick and why?

**Candidate:** I’ll do an awake nasal, it’s the safer option, I’m concerned about losing the airway and having him aspirate.

**Examiner:** You provide topical anesthesia to the nares, and the patient develops a nosebleed. You try looking with a fiber, and the scope keeps getting blood on the tip and you can’t see. What will you do next?

**Candidate:** Well, I’d stop the attempts at a fiber because of the blood, but I would prepare a Glidescope for an awake oral video intubation. Even with a nosebleed, I expect the glottis view to be adequate for intubation as long as my topical is good.

Critique of scene 1. While there is no single candidate answer that is incorrect, there are several ways for this candidate to improve, especially in their organization and application of knowledge. I would advise this candidate to be more direct in answering the questions. The first two responses did not actually provide an actionable answer - being concerned and thinking about option 1 versus option 2 is a start, but not an end point. The candidate is also providing unnecessary information such as the details of going to the bedside. Examiners are under time pressure to cover exam topics, so unnecessary or prolonged explanations take away other opportunities for a candidate to demonstrate their abilities.

Scene 2

**Examiner:** How would you induce anesthesia in this patient?

**Candidate:** I am planning an awake fiberoptic intubation, so will do an IV induction with propofol after the airway is secured.

**Examiner:** Why not do the fiberoptic intubation asleep - would that be a better approach?

**Candidate:** While an asleep fiberoptic might have better patient cooperation and less need for topical anesthesia, I would stick with an awake intubation to reduce his risk of aspiration - with the SBO that risk is particularly high.

**Examiner:** Let’s assume you provide topical nasal anesthesia but the patient develops a nosebleed. You look with the scope and there’s blood obscuring your view. What will you do next?

**Candidate:** Well, I’d stop the attempts at a fiber because of the blood, but I would prepare a Glidescope for an awake oral video intubation. Even with a nosebleed, I expect the glottis view to be adequate for intubation as long as my topical is good.

Critique of scene 2. These answers are characteristic of a strong candidate. Each answer contains an action-focused answer to the question posed by the examiner, as well as some applied knowledge relevant to the question. For example, the candidate mentions that SBO increases the aspiration risk with induction, something the first candidate does not mention. The candidate demonstrates adaptability in the response to the nosebleed. Finally, the organization and presentation is much more concise and direct, allowing the examiner to address the examination topics with fewer follow-up questions or interruptions.

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Preparing for the SOE begins with your study for the ABA written exams, since foundational knowledge is critical to answering questions effectively. You will need to practice the question-and-answer format of an oral exam, since the typical interactions you have with faculty in the clinical setting will not be as detailed or in-depth. You can begin practicing with fellow residents, or faculty and fellows who have taken their oral exam. The most authentic practice will be with our faculty who are current board examiners, since they are most familiar with the nuances of the process. I would suggest the first practice session 2-3 months before your exam date, with a possible follow up practice 3-4 weeks prior. If your first practice with an examiner is very close to your exam date, there may not be enough time to implement all the advice you could be given. Despite the stress associated with this process, your skills as an anesthesiologist will undoubtedly improve. Best wishes in your journey to becoming a board-certified anesthesia consultant!

- Manuel Pardo, Jr. MD

"Preparing for the SOE begins with your study for the ABA written exams, since foundational knowledge is critical to answering questions effectively."

- Manny Pardo, ABA Board Examiner

Innovations and Inventions

How does one “invent” something? Well, the first thing I would say is that rarely is something really new. Things are an improvement on an older version or many older versions. I came up with a new idea for the Seldinger technique, when I looked up the patent at USPTO.GOV, I realized the Roman legion had used the same approach. Most ideas are “used” or “older ideas”. It is really rare to make version 1.0 of a idea. The next point is that it is really important to find a pain point or problem. Don’t solve a non-problem, no one needs your “solution”. The basic approach is to identify a problem and then figure out a solution. When we developed perioperative beta blockade it was the progression of many years of work by many people.

First there was the identification of the problem of perioperative cardiac risk, then epidemiology to see who was at risk, then the collection of more data identifying myocardial ischemia as a risk factor, which was preceded by tachycardia in 30% of instances, leading to increased risk. Then people tried to do testing to predict who was at risk, which didn’t work, then the idea of controlling heart rate through pharmacology was developed, then we tested 20 therapies.

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“Science without implementation is lost to time and benefit to few.”

- Art Wallace, MD, PhD
Then and this is a really important point, if you identify a life saving therapy, and you publish it, a few people read the paper and complement you, but one must then build an implementation strategy to have the innovation implemented and widely used. Science without implementation is lost to time and benefit to few.

Scientific discoveries are made over, and over, and over, and then someone figures out how to popularize the idea and gets credit. Rarely are they the first or last to “discover” the innovation, they are the one who figured out how to implement the idea. Darwin didn’t discover Evolution, Alfred Wallace did, Darwin wrote the book that explained and popularized the theory. Now another important point about invention. Most science is focused on understanding the natural world, testing the hypothesis about how it works, and then either validating the hypothesis or invalidating it and developing a new hypothesis. Science is a method to test hypothesis. Engineering is different, engineering sees a problem and tries to fix it. In engineering, understanding the details of the mechanism is less important than solving the problem. Invention is more related to engineering than science.

The next important point is simple. I can come up with an idea about once an hour; I can come up with a good idea about once a week; I can figure out how to pay for development or testing of that idea about once a year, sometimes once a decade. So, make sure the thing you want to invent is worth working on, solve a real problem, that effects real people, with a real solution. Most things don’t work. I work on reducing the chance of death, why? Because death is bad and people care about it. In venture capital there is the 10, 6, 3, 1 rule. Venture capitalists review 1000 ideas, they invest in 10 sure fire winners, 6 are complete failures, 3 sort of break even, and one makes money. Nine out of 10 businesses fail. So, make sure you are willing to fail. The next step is really important. Since failure is so common, test the idea as quickly and cheaply as you can. It is much less painful to fail quickly after a small investment of time and money rather than after decades of work and gazillions of dollars. Fail fast and move on to the next idea.

(continued on page 7)
The next point is really important. If you think you should keep your idea a secret because someone will steal it from you, think again. There are many, many really great ideas, it is really hard to find the capital, people, time, and structure to develop an idea, you have to involve other people and they have to share your vision, and the project. 100% of nothing is nothing. You must share because it is impossible to do it all, alone. The next rule I call the Penguin rule. When you see pictures of ice flows in Antarctica, and there are a bunch of penguins standing around looking at the water. They push and shove each other until one falls into the water where two things can happen, one, the penguin is eaten by a killer whale or two, the penguin surfaces and says to his buddies, hey jump in the water’s fine. There is a similar practice with funding, no one wants to be the first investor, someone jumps in and then others follow, so don’t give up, find the first penguin.

I’ve worked on many projects including: CT scanning to replace coronary angiograms, perioperative beta blockade, anti-ischemic agents, selective coronary vasodilators, off-pump CABG, off-pump LV aneurysm repair, surgery for heart failure, audiovisual distraction for sedation, ECOM, remote, non-contact patient monitoring, checklist tool, VA_AnesQIP, monitor of depression, identification of medications to treat COVID and long COVID. Somethings succeed, somethings run out of money, they all were great ideas. Money to fund development was the major limitation to all of them. Drug development is vastly more expensive and less fun than device development. In drug development, you have an idea, you test it in a large number of people and it either works or it doesn’t. It is one binary idea per decade. Drug development is a logistics and finance problem. In device development, which costs 1% as much as drug development, you have many ideas per week to get the device to work. Device development is vastly more intellectually interesting because you need to solve many problems every week.

So, how do you invent? Find a problem you and likely society really cares about. Go on vacation and think about it, find a solution, which usually comes from borrowing an idea from another domain, or understanding what others don’t see, or reading something, or asking really stupid questions, like why do you do that? Then test the idea, quickly, cheaply, and fully. If it works, figure out how to pay for development and testing. Finally, there is the 90% of the effort to identify the problem, followed by the 90% to find a solution, followed by another 90% to make the solution work, then there is another 90% to pay for it, followed by another 90% to make the solution really good, then another 90% to implement and market it (hint, it’s a lot of work and most ideas fail). Best of luck in science, discovery, invention, and implementation of your ideas. You are going to create the future and it is a tremendously enjoyable but prolonged, process.

- Art Wallace, MD, PhD

“So, how do you invent? Find a problem you and likely society really cares about... find a solution... Then test the idea quickly, cheaply, and fully.”
- Art Wallace, MD, PhD
Dear fellow residents,

We are half-way through this academic year! We are grateful for all that you have done and for the incredible positive energy you continue to bring to our program. Your team player mentality makes UCSF a fun place to be. Please keep it up!

Here is a recap of what we have accomplished thus far, and what we are still working on in the remainder of the year.

- **Diastole Days** – with the implementation of this program, residents who step up to help out with staffing needs receive an extra day off of their choice.

- **Resident Moonlighting** – residents were given opportunities to sign up for extra shifts at Mt Zion to earn extra cash. We started this program in May 2022 and have filled almost all of the shifts, as soon as they are released, up to March 2023.

- **Family Dinner** – residents from each class (interns, CA1s, CA2s, and CA3s) were assigned to a “family.” Our department allocated funding to support a family dinner.

- **More Regional Experiences** – we advocated to restart an away rotation at the Hospital for Specialty Surgery in New York. This year, 5 CA3’s will have the opportunity to experience how regional anesthesia is practiced outside of UCSF before they graduate in June.

- **Class Retreats** – the CA2s had the opportunity to gather in September 2022 for their class retreat. We are currently working on a Senior Skip Day for the CA3s who will be graduating in June!

- **Chief Townhalls** – we started class-specific townhall meetings for folks to share their concerns and ask questions, in addition to improve transparency to the scheduling process.

- **Call Burden Data** – we recently shared with all the residents the call burden distributions among the classes. This information provided residents a rough idea where they stand in terms of call contributions. Again, this was for the purpose of improving transparency.

Again, thank you for all you do and for supporting us! We would not have been able to accomplish the above without you! We remain open to feedback and always want to hear how we can continue to improve.

Best,
WAM

“[C]oming out into practice, few things approach the level of complexity as at UCSF.”
- Justin Teng (c/o 2019)
Class Reps’ Corner

The class reps have been lucky to work closely with the chiefs and leadership to bring back the CA2 retreat, monthly socials, and create new programs such as family dinners and post-ITE socials. We also want to thank all our fantastic fellows who generously gave up time from their busy schedules to help with ITE review sessions.

This year’s CA2 retreat was held at Casini family ranch. We had a number of activities including water sports and relay races where CA2s put their acquired skills to the test and raced to resuscitate in “MTP”, demonstrated expert laryngoscopy skills in “DL”, and maximized efficiency in “I/Os” all while taking care of their assigned surgical “ego” eggs. As reminder, each anesthesia family can obtain reimbursement for a family dinner up to $50 per person. See details to the right!

- Kit, Mary, Sivan

Big Sib/Little Sib Dinners

All anesthesia families are encouraged to organize a family dinner at a restaurant of your choosing. You may invite a faculty or staff member to join you, but it is not mandatory.

Food (but not alcohol) will be reimbursed up to $50 per person. Restaurants can be indoor or outdoor seating.

Reimbursements should be sent to reimburseme.anesthesia@ucsf.edu and include a list of all attendees. Please take pictures and email over them over to kit.wu@ucsf.edu to be featured in future newsletters or the UCSF Instagram.

Residency Shoutouts

Shout out to all the residents who continue to work hard every day caring for our patients! Shout out to the CA3s who have recently signed job offers! Shout out to Mike Bokoch for always being such a delight to work with! Shout out to our fellows who hosted ITE review sessions!

Thanks Dr. Markley for the great teaching, and always making sure the residents are fed! Thanks Dr. Hemati for letting us vent to you!

Shout out to Jannot for always putting out fires. Shout out to the interns that are more than half way through intern year!
Alumni Spotlight

Justin Teng (c/o 2019)

1. Trauma & Acute Care Surgery Anesthesia @ ZFGH

2. TPMG at Kaiser South Sacramento

3. My favorite time was running as a team on nights at ZFGH. This team of residents, who you know what each other’s’ skills are, and what you’re comfortable with each person doing, is an amazing group. Residency was tough- but in retrospect, excellent. You see the epitome of complex cases such that coming out into practice, few things approach the level of complexity as at UCSF. You take 24 hour call, 30 hour call in ICU, and work with so many experts in the field. As an attending, I have seen applicants from other institutions – they have nowhere near the experience, CV, fortitude or strength as those coming from UCSF. Another UC (which I will not name), does not have 24 hour call. This is a rude awakening for those residents when they exit to practice on their own.

4. Perspectives from various leadership positions

• Management of physician / CRNA relationship

• Pay attention to processes as every site varies in how they do things. As they say, someone had to make the decision for a process to be what it is. Assuming you start taking leadership positions in your new group, you will need to come up with process improvements, and its good to remember what others have done!

5. Every Kaiser site is different, with different financial setups, clinical challenge, and personnel and work relationships. Be willing to look around at the various practices. The TPMG (physician group that all Kaiser doctors are part of -if you are employed by “Norcal Kaiser” you are actually employed by TPMG) contract may all look roughly the same, but there are many nuances that alter your setup. It’s important to consider your workplace environment – the relationships between physicians and CRNAs can be very important when considering your longevity at a practice. In my opinion, it is risky to be at a location that could have its contract bought out by another group at any time. You want to be at a place where there is mutual respect between the physicians and CRNAs and not be expendable.

Lastly, CA-3s, alumni, please message me to join the “UCSF Anesthesia” facebook group. There are conversations that need to be had between the latest generation of anesthesiologists, and I hope this will be one forum for us to use!
What, when, where?

**DE-CODING THE SCHEDULE:** for those who are still unsure what each abbreviation on QGenda means and the exact time for different call shifts, please refer to the tables below:

### #Quick Reference for QGenda Codes

<table>
<thead>
<tr>
<th>Shift</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>M-IAC</td>
<td>Advanced adult card</td>
</tr>
<tr>
<td>M-CTA</td>
<td>Moffitt cardiothoracic (adult)</td>
</tr>
<tr>
<td>M-E</td>
<td>Moffitt call shift</td>
</tr>
<tr>
<td>M-HB</td>
<td>Moffitt hepatobiliary</td>
</tr>
<tr>
<td>M-IUC</td>
<td>Moffitt ICU</td>
</tr>
<tr>
<td>M-NORA</td>
<td>Moffitt non-OR anesthesia</td>
</tr>
<tr>
<td>M-NS</td>
<td>Moffitt neurosurgery</td>
</tr>
<tr>
<td>M-OR</td>
<td>Moffitt OR</td>
</tr>
<tr>
<td>M-PAC</td>
<td>Moffitt PACU</td>
</tr>
<tr>
<td>M-PN</td>
<td>Moffitt Acute Pain</td>
</tr>
<tr>
<td>M-PRE</td>
<td>Moffitt Prepare Clinic</td>
</tr>
<tr>
<td>M-SR</td>
<td>Moffitt senior rotation</td>
</tr>
<tr>
<td>M-VAC</td>
<td>Moffitt vacation</td>
</tr>
<tr>
<td>M-VR</td>
<td>Moffitt vascular rotation</td>
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<table>
<thead>
<tr>
<th>Shift</th>
<th>Interpretation</th>
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</thead>
<tbody>
<tr>
<td>CHO</td>
<td>Pedi OR Oakland</td>
</tr>
<tr>
<td>K-CT</td>
<td>Kaiser Cardiac</td>
</tr>
<tr>
<td>K-OB</td>
<td>Kaiser OB</td>
</tr>
<tr>
<td>D-ORT</td>
<td>Orthopedic Institute</td>
</tr>
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</table>

### #Call Schedule

<table>
<thead>
<tr>
<th>Call Shift</th>
<th>Hours</th>
<th>Where to Report</th>
<th>Tasks / Expectations</th>
</tr>
</thead>
<tbody>
<tr>
<td>M-E 1/2 AM</td>
<td>7AM – 7PM</td>
<td>Moffitt OR front desk</td>
<td>Sunday or holiday day-time call for OR</td>
</tr>
<tr>
<td>M-E 1/2 PM</td>
<td>7PM – 7AM</td>
<td></td>
<td>Sunday or holiday evening, week of OR nights</td>
</tr>
<tr>
<td></td>
<td>6PM – 7AM</td>
<td></td>
<td>Monday through Friday evening, week of OR nights</td>
</tr>
<tr>
<td>M-E 1/2 (WE)</td>
<td>7AM</td>
<td></td>
<td>Saturday 24hr call</td>
</tr>
<tr>
<td>M-E 3/4</td>
<td>12PM – 3PM</td>
<td>Moffitt OR front desk / E1 board</td>
<td>Mid-day call shift – give breaks, take over ORs End time determined by # of ORs still running</td>
</tr>
<tr>
<td>S-E_AM</td>
<td>6:55AM – 6:55PM</td>
<td>ZSFG OR front desk</td>
<td>Sunday or holiday day-time call for trauma activations, OR, OB</td>
</tr>
<tr>
<td>S-E_PM</td>
<td>6:55PM – 6:55AM</td>
<td>5:55PM – 6:55AM</td>
<td>Sunday or holiday evening, week of nights for trauma activation, OR, OB</td>
</tr>
<tr>
<td>B-E1 (WD)</td>
<td>4PM – 7AM</td>
<td>Pain office in MB PACU</td>
<td>Monday through Friday evening, week of nights (same as above)</td>
</tr>
<tr>
<td>B-E1 (WE)</td>
<td>7AM – 7AM</td>
<td>OB Anesthesia Office</td>
<td>Weekday 24hr call (start in OR in AM) OB backup, pedi OR, adult OR, code/ airway pager, acute pain (adult), pedi pain</td>
</tr>
<tr>
<td>B-OBE</td>
<td>7AM – 7AM</td>
<td></td>
<td>Saturday or Sunday 24hr call (same as above)</td>
</tr>
<tr>
<td>V-E1 (Fri)</td>
<td>4PM – 7AM</td>
<td>SFVA OR front desk or VA ICU</td>
<td></td>
</tr>
<tr>
<td>V-E1 (Sat)</td>
<td>7AM – 7AM</td>
<td></td>
<td>Friday PM call; airway pager (start in OR in AM)</td>
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Special thanks to all who took the time to contribute to the newsletter. If you have comments, suggestions, ideas for future editions, and/or want to get involved, please reach out to Kit!

2021-2022 Editors: Wilson Ly, David Corpman, Abby Howard, Joanna Haight
2022-2023 Editor: Kit Wu