A female medical professional with dark hair, wearing green scrubs and a blue earring, is focused on using a handheld ultrasound device on a patient's knee. The patient's leg is in the foreground, and the professional is leaning over it. The background is a blurred clinical setting with warm lighting.

# A Student's Guide to Matching in Emergency Medicine

The American College of  
Osteopathic Emergency Physicians Student Chapter

Cover Photo Courtesy of Andy Little

# A Student's Guide to Matching in Emergency Medicine

Made for you by the  
The American College of Osteopathic Emergency Physicians  
Student Chapter

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# Why Emergency Medicine

By Tanner Gronowski, DO and John Casey, DO

At some point every medical student has to ask themselves what specialty fits them best, and most likely if you are checking out this handbook you are considering emergency medicine as your specialty. While some medical students are familiar with the emergency department through past careers or family members (or a personal series of unfortunate incidents), many students have little exposure to the always open, always ready to serve gateway to the hospital.

There are many reasons to be an emergency medicine physician, and no single one is paramount in making that decision. Below is a list of reasons emergency medicine may be for you, as well as the converse view with reasons that may steer you in another direction. These are not hard and fast rules, but are recurrent themes that many in the profession recognize as part of a happy life in emergency medicine.

Emergency medicine may be for you if...

- you are the person who runs TOWARD the place where &!\*# hits the fan.
- you have self diagnosed ADD because.... hey look a squirrel!
- sitting in a clinic feels like you're sitting in cell block 9.
- someone on the plane collapses and they ask "Is there a doctor on board"...and you want them to mean you.
- you would rather work with a team.
- acute management of problems is your thing.
- you hate routines

Emergency Medicine may NOT be for you if...

- you like treating patients based on their insurance status.
- you enjoy thinking about a board question for a ridiculously extended period of time.
- pagers beeping outside of work is pleasurable.
- you like a steady schedule and hate shift work.
- you have to have an answer.
- you want to choose what kind of patients/pathology you want to see.
- you are annoyed by someone coming to see you at 3am for a cough.

There are many pros and cons to working as an emergency medicine physician, and each student considering Emergency Medicine needs to look at all aspects of the job to decide if it is a good fit for them. Some reasons why more and more students are pursuing emergency medicine include the lifestyle, the work schedule, the variety of patients and pathologies seen, and the adrenaline rush experienced when someone's life is in your hands. Don't force a specialty upon yourself, but rather embrace the ones that seem to make you excited to go to work every day and get you curious about learning more. The happiest physicians are the ones that follow their heart and not prestige, pocketbook, or power. Obviously, since you are reading this handbook you are interested in the emergency room being your domain, so the best and fastest way to see if the specialty is for you is to check it out! Get in the emergency department, read some material, go to conferences and club meetings. The more you check it out, the more you will know if the fit is right!



# The First Two Years

by Brent Arnold and Jim Turner, DO

The average medical student, by definition is Type A, extremely competitive, and sub-clinically OCD. These qualities are actually beneficial when it comes to developing a study plan in medical school. It was easy for most to “study” and earn top scores in college, but few were truly prepared for the first day of medical school. Being competitive, Type A personalities, we felt like we must memorize everything and know every answer on the exam or somehow we wouldn’t become great physicians. However, the truth is, the first two years are simply meant to familiarize the student with medical concepts.

Mastering every biochemical pathway, every genetic marker, or every “insert your least favorite subject here” the first two years is impossible. So, what does that mean? It means that the first two years should be spent learning as much bookwork as possible in a relatively non-pressured environment. There will be ample time to readdress these medical concepts that are clinically relevant throughout your medical career.

First things first, we must understand that studying in medical school is just different. Simply memorizing and regurgitating information might be enough to pass an exam but will fail you as you progress in your medical career. You must work to understand, retain, and apply complex information. This transition is often what’s most difficult for first year students. It is best to be disciplined and develop a consistent study plan early on. This is the key during the first two years and while every school’s curriculum is different, the concept is the same and can be

applied to virtually any situation. The following are some of the most common questions medical students have about developing a personalized study routine.

### **How should I study?**

That's a loaded question! Studying should be broken down into pre-class, class, and post-class studying. Pre-class studying involves completing the assigned reading and making your own notes on what you've read before the lecture. This is important because it's the first exposure to the material and will give you a good idea of what to expect during lecture. However, this should not take more than 30 minutes or so per lecture because most of your study time will be spent in the "post-class" section.

Class time, if applicable, should be spent taking LIGHT, if any, notes and actively listening! One of the well-known pathologists, Dr. Goljan, is a big fan of putting the pen/pencil down, and simply listening. If you've done the pre-reading, you are already familiar with the information and can then pay attention to what the professor has to say. Frantically trying to write down every word isn't really helping you comprehend the material.

Lastly, and most importantly, is post-class studying. In post class studying, you review the information you read and the material you hear in lecture. By this time, you should be better able to identify areas of weakness in understanding the material, so that you can more narrowly focus further study.

### **How many hours per week should I study, outside of class time?**

On average, medical students spend about 50-60 hours per week studying. A good rule of thumb is that the student should spend one to two hours of independent study for every hour of class time. This gives the student enough time to cover areas of weakness and understand the material.

## **How often should I take breaks?**

This is a big one! It is just as detrimental to your learning to study for hours and hours without a break as it is not studying at all! A good rule of thumb that has worked well for many students is to spend 50 minutes studying followed by a 10-minute break OR spend 2 hours studying then a 15-minute break. This fits perfectly with the schedule mentioned above (2 hours of independent study per hour of class time). This break should be spent doing something not related to school, maybe starting a load of laundry, preparing lunch for the following day, making tomorrow's to-do-list, meditating, etc. We all know how hard it is to listen to someone lecture for 2 hours without a break. It's exhausting! Don't assume you can study for that long and not have trouble concentrating. Take breaks, your brain, your memory, and your grades will thank you.

## **Should I prepare for an exam alone or in a group?**

Both, with the caveat that everyone is different. While data show that studying in groups improves student learning, there is still the need for individual study time. Studying with other students during medical school proved to be extremely helpful. Studying in a group is beneficial because you'll be working with other students who remember different facts about the same subject and have different ways of remembering those facts that may help you remember it better. Groups also provide a great environment to quiz each other before exams. On the other side, If group study is all you do, you should consider spending some time alone to better absorb the information and quiz yourself without the groups help.

## **Can I just cram?**

No! Research has shown that students who study longer but do not stay up late cramming before the exam

do better. Period. In addition, this study found that better exam performers arrived early for the exam.

### **What about sleep?**

Studies show that well-rested students tend to be more successful. It is more difficult to pay attention and think critically when you are tired. At a minimum, 6-8 hours of sleep is recommended. It takes at least 4 hours of sleep to convert information into short-term memory and about 7 to convert to long-time memory. Without adequate rest, the information you studied the night before will be lost. Remember, a well-rested student is more successful!

### **What do I do if I still feel like I don't have enough time?**

Realize, that it's normal and every medical student experiences that feeling, but begin to examine how your days are spent.

1. Take an honest look at your daily schedule, or get a friend to help and **WRITE IT DOWN**. How much time do you spend on grooming, watching TV or YouTube, and finally the "F-word", yes FaceBook? These types of activities take **MUCH** more time away from our day than we think. If you find yourself spending too much time on these, set a limit. Consider only watching 1 hour of TV per day, or only checking FaceBook on your 10-minute break between study sessions, as mentioned above.
2. To save even more time, consider combining activities such as watching TV while cooking or eating, and exercising while your laundry is running, etc.
3. Learn to say "NO." It's easy for us to try to do everything at once and please everyone. It's in our nature. But remember, we are in medical school to learn and we need to put that first.

## **Can I still have a life outside of school?**

Yes, and it's critical that you do, but in moderation. Everyone has something that they like to do in their free time. It will vary from person to person but it's critical that you make time for yourself. Not only will it help relieve some of the stress from school, it will also help keep you mentally strong. Depression and suicide are huge problems for medical students. We all know medical school is difficult and challenging. It's important to find or keep a hobby that can help you remember who you are and why you want to be a physician. It's too easy to get caught up in studying and many students find that they "lose themselves" during school. Studies have shown that empathy drops significantly in medical students from entrance to graduation. Many people have suggested taking 1 entire evening off-per week. For those of you with a significant other, Friday night could be used as a "date-night." For those of you who are single, perhaps an evening to watch your favorite TV shows, catch up on laundry, chores, or spending time with your family would work.

At first, it may seem like there isn't enough time to take an entire evening off, but please remember that the more relaxed and well rested you are, the more effectively you study. Taking that evening off may be more beneficial for your learning than studying through it. That's just some food for thought.

## **How do I stay organized (Sub-clinical OCD)?**

Below are some basic organization tips that will help de-clutter your brain and alleviate some of the stress of managing all your "to-dos"

1. Keep a list. Don't clutter your brain with small details like groceries to purchase or errands to run. Keep a list and give your brain a break.
2. Use a calendar. As soon as something comes up, write it down or put it into the calendar on your phone, and keep it updated.

3. Get organized. When everything has its place, that allows you to easily find something when you need it...instead of wasting time looking for it.
4. Avoid crowds and high peak times. Go to dinner at 5 instead of a higher peak time like 6 or 7. Drive during non-peak commuter times. This will also help ease frustration and anxiety levels.
5. Make it a habit, a ritual if you will. Aka Repetition. Remember, it takes 21 days to produce a habit...so repeat, repeat, then repeat!

Medical school is meant to be challenging. If you implement some of these study tips, hopefully, they will better prepare you for your journey and will help you progress into a confident young physician.



# Getting Involved

by Kaitlin Fries and Ben Abo, DO

Over the past few years emergency medicine has continued to grow more popular amongst graduating medical students. This interest has caused an exponential increase in the number of residency applicants. If you are truly passionate about going into emergency medicine you should ask yourself, what is going to make your application stand out? While grades and board scores are important components to any application, they won't make you a unique candidate. By becoming an involved and engaged student, you will build your curriculum vita and also gain great insight into the specialty itself. Take advantage of every opportunity to show how committed you are to the profession by joining organizations, taking on leadership responsibilities and attending conferences to make your name known amongst the emergency medicine community.

## First Year

Start off by joining your school's emergency medicine interest group and any other specialty groups you have an interest in. Most first years do not have their entire life planned out and you aren't expected to. Being a member of different groups can give you exposure to the specialties and help you narrow down what you ultimately want to go into. Also consider joining the Student Osteopathic Medical Association, the American Medical Association and any other organizations that you may have a personal interest. There is no golden number of organizations to join. However, keep in mind that the transition

to becoming a medical student takes time and it is not a good idea to start out by spreading yourself too thin. Being involved is an important component to your future but so is excelling in the classroom. Until you have a good grasp on how much time you will need to study each week it is a good idea to limit yourself to joining 2-4 organizations. There is a misconception that the more organizations you join the better your CV will look. This is not the way to go, anything on your CV needs to be something you are able to talk about in an interview. It is much more beneficial to be involved in less organizations but have more to say about each.

Most students say they went to medical school to help people and give back to the community. What better way than volunteering in your local community throughout medical school? Most schools have numerous opportunities and programs available to students and their classmates. Volunteering in the local community is a great way to learn more about different lifestyles, it can provide students insight into why patients choose to do some of the things they do, as well as the struggles they face when trying to see a physician. Interactions with members of the community through outreach projects can help you become a much more compassionate and well-rounded physician. Taking a break from your busy schedule to serve others can help remind you why you are chose to come to medical school in the first place.

## **Summer**

Depending on how your school has laid out the overall scheduling for your medical education, the summer between first and second year is what many refer to as your "last" free summer. So what are we supposed to do? Hopefully during your first year of medical school you have started to hone in on what interests you – EMS, didactics, social interactions, wilderness medicine, emergency orthopedics, international medicine, public health...

If this is not the case, there is nothing to worry about as it is just as important to hone in on what you do not find interesting. The beauty of emergency medicine is also one of the things that make all of this quite daunting – it is such a diverse and broad field. For this reason, the summer between after your first year can prove to be a critical one for you to learn about yourself.

## **Research**

This is a prime time to be able to partake in research that interests you. If you have already found a mentor, ask for some guidance on who to turn to conduct your own research interests or partake in research already being done. This is a big block of time to really devote to reflecting and really put in strong work hours to conduct solid research that not only can strengthen your curriculum vitae, but also forward our field.

## **International Endeavors**

There are many opportunities for medical students to partake in learning or helping others all over the world. Some of these require some sort of experience or work on your part, while others are set up so that they just need a medical student body and offer you things beyond great memories like language classes and further practice by immersion. Some are emergency medicine related; others are not emergency medicine related. Shadowing, not only provides a feel for what emergency medicine is all about, but also gives you the opportunity to sense if it is the right pathway to embark on. Once again, we come back to this summer being a great time to really discover a lot about yourself, how you can grow and give back to the field.

## **Second Year**

By the beginning of second year most students have settled into a good routine and have figured out how much studying is required for them to excel in the class-

room. This frees up some time for leadership opportunities and increased extracurricular involvement. Consider running for a leadership position in your local emergency medicine interest group. Continue any community service or organizational involvement you may have started your first year. Attend a national conference to gain more insight into the field of emergency medicine and network with physicians if you haven't already. This is also a good time to start looking for a mentor.

### **Leadership Positions**

As an emergency physician you will be expected to work with and lead other healthcare providers while providing quality patient care. What better way to show programs you are a great team player than being involved in leadership roles? This will also give you the opportunity to work with local physicians and residency programs to set up lectures, skills labs, journal clubs, and other great activities for your members. Having the ability to work with these people will increase your networking base and potentially yield a life-long mentor.

### **National Involvement**

Being involved at the national level can give you a huge edge over your fellow classmates. Conferences provide students with educational advancement, hands on skills labs, exposure to residency programs and invaluable networking opportunities. There is no better place to get advice regarding your future than talking to residents from across the country that were not long ago in your same shoes. Not to mention that being a conference regular will allow residency programs to put a name to your face long before you rotate at their program. This can be key to the interview process.

Looking to go beyond just attending conference? Why not run for a national leadership position? Give your CV that extra boost with a position that few other residen-

cy applicants can add. Sharing your passion for emergency medicine with other students is a gratifying experience. You will be in a position to make a national impact while providing other students with opportunities to explore the field that you enjoy so much. If leadership isn't your thing why not get involved with one of the many national committees. The ACOEP Publications committee is made up of students who submit articles for the quarterly Fast Track publication. If you enjoy writing this a great opportunity to get your work published! Other national organizations that provide committee seats for students include the AOA, AAEM, and EMRA.

### **Third Year**

Third year brings on new challenges, for most students this means moving to a new city, becoming acclimated to the hospital and applying medical knowledge in a clinical setting. Just because you have moved away from campus doesn't mean there aren't plenty of ways to get involved.

### **Conferences**

If you haven't started attending the ACOEP national conference you should definitely start now. Your ACOEP-SC provides you with an agenda packed with lectures, labs, and panels about emergency medicine. The social events each night are an opportunity to talk one on one with program directors, physicians, residents and other students from across the country. In addition to being great exposure for residency, you can also get invaluable advice from 4th years on rotations and setting up auditions. By fall of your third year you will also need to be thinking about where you plan to apply to residency. With audition rotations in the near future it would be a great idea to attend the ACOEP Student Residency Expo to help figure out where you may want to rotate. Instead of skimming websites you would have the opportunity to meet

with a program's staff, residents, and program director in person. This is an invaluable opportunity to get face time with a program and can give you a real leg up in your future.

### **At Your Rotation Site**

The hospital you are working at can provide you with a vast number of opportunities. If your hospital has an EM residency program consider attending their didactics when your rotation schedule allows it. Not only will you get a chance to learn more about EM topics but your dedication to the department will show. Ask around and find out if anyone is working on a research project. Most attendings and residents are eager to allow students to assist them. Even if you haven't been a research junkie in the past, give it a shot, chart reviews and case studies aren't like your typical undergraduate lab bench research (for more on research see later section). If you are interested in community service talk to your school's site coordinator about available opportunities in the local community.

### **American Osteopathic Association**

Most regions have a local American Osteopathic Association that holds quarterly meetings open to the public. Students are always welcomed at these meetings and it is a great opportunity to meet other osteopathic physicians in the area. It might even be a good opportunity to find a local mentor!

### **Fourth Year International Endeavors**

An international emergency medicine rotation can prove to be a truly life-altering and priceless experience. By rotating outside of the United States, medical students have an opportunity to expose themselves to different medical practices, health systems, and cultures even if one never plans to work outside the US. Learning how to grow and practice in a culturally sensitive manner can prove be

to very helpful.

International rotations can be clinically based, research based, public health based, or any combination of the above, and many have included language components also. Choosing what to do and where to go can be a daunting decision alone however beyond safety and experience the student really needs to reflect on his or her motivation. International student electives are created mostly for living and learning experiences; students who go expecting to have an immediate large impact on patient care often return disheartened. To be able to find the right type of experience it truly is up to the student to search and find what possibly is the best fit for them. Talking to other students, internet searches and being in touch with residents and others can help give them information to digest and decide.

Overall, the clinical rotation can be in emergency medicine or any other specialty. Any choice can be appropriate for future emergency medicine physicians. Being involved with groups such as ACOEP or EMRA are great ways to find people to point you in the right direction to find international rotations. AMSA and EMRA also host popular and highly rated directories of various international electives. The decision of when to go on an international rotation is another self-reflective one. While an international experience can be a self-defining one providing amazing experiences to bring to your audition rotations, waiting until later in the last year of medical school provides that the student will have a greater amount of clinical experience, not to mention being done with the interviewing and matching process.

## **Conclusion**

There is no set itinerary for how and when to get involved as a student. However, becoming an active leader in the field is sure to set you apart from the pool of other emergency medicine residents. As the field of Emergency

Medicine continues to grow in popularity it is becoming more and more important to be a well-rounded applicant. The most important advice we can give you is to find an organization that you are passionate about and become involved. Find a leadership opportunity that allows you to be a member of a team and more importantly grow as a student. Even if you aren't 100% sure what specialty is right for you it can never hurt to be engaged. Program directors in any field will still appreciate your dedication, initiative, and commitment to an organization. It is never too early to be involved, attend a conference and find out what you have been missing out on!



## Mentorship

By Joseph Sorber, DO and Greg Christiansen, DO

Smart people learn from their mistakes; brilliant people learn from the mistakes of others (adapted from Otto von Bismarck). This phrase succinctly offers perspective for why you need a mentor. It is analogous to the ship captain who plots a course to reach a faraway port. He can plan a route on his own and may have a chance at getting close to the destination. However, he is more likely to encounter rough seas as the horizon drifts from view. He can easily be discouraged by the disorientation and lose his way. If he is lucky enough to find landfall, he still needs to find a harbor master to pilot the ship through the inlet to get to safe harbor. The harbor master knows the sea-scape and tidal areas. This knowledgeable pilot of the sea can steer the ship through the treacherous waters and avoid running aground. It's a good bet the ship captain will not be able to navigate his ship through the sand bars and changing tides without having the knowledge and experience of the harbor master. At best his ship will run aground. Getting towed at sea is a slow and arduous process. At worst he will sink and lose the ship!

The road map to success is really no different than the preceding analogy. You can plot a course to navigate your career. But if you lack the assistance of a harbor master/mentor, then it's not likely you will be able to get through the obstacles quickly and efficiently. There are simply too many things to learn to efficiently navigate the hazards that could ground a career. You need the help of someone who is experienced in navigating the waters of your profession. Two heads are clearly better than one,

especially if one already knows how to help get you there. If you accept the preceding analogy, then you are ready to discover the tools to keep your career afloat and successfully navigate the rocks.

Mentoring differs from coaching or counseling in that it is a personal, professional relationship not bounded by remuneration. There are no strings attached. It is more than just an advisor who typically assists with schedules and referrals. It is beyond the concept of a role model which serves only as an example to pattern a career. A mentor develops a bond and rapport for a safe and supportive environment to test ideas. A mentor fosters professional development and professional maturity. A mentor imparts wisdom, values and vision to support a fulfilling career. It is a dynamic and highly personalized process requiring the participation of both parties. The mentor shares in your success. It is the means by which the mentee can 'leap frog' and advance a career beyond what could be expected if one were to develop on one's own. The acronym **MENTOR** summarizes what a mentor should be. A mentor Motivates, Empowers, Nurtures, Teaches, Orients and Raises the bar (adapted from Scouba). Mentees who have mentors tend to have more success in research endeavors, personal development and professional fulfillment.

If developing a mentor/ mentee relationship were easy, then there would not be a need to write this article. There are barriers to consider and persistence is required to achieve one's goal in having a supportive mentor. As in any relationship, there is risk in the affiliation which takes time and energy to build. The relationship is a partnership which requires trust, nonjudgmental sensitivity and honest feedback. The relationship requires confidentiality, patience and respect. Additionally, mentors have to be sought. The more specific your criteria in finding a mentor, then the more likely your relationship will be a rewarding one. Mentors who are accessible are likewise more beneficial than those who have less availability. Mentors who

are geographically available tend to have an easier time in developing the relationship for success. Mentors who are within the profession have goals and perspectives more closely aligned with those of the protégé.

Do not take the rejection personally if a mentor is unable to support you. Your go-to person is only demonstrating the professional maturity it takes to recognize his or her limited ability to devote the resources necessary to be a successful mentor for you. This person is supporting your success by telling you up front so you do not lose valuable time. Be considerate and appreciative of the wisdom because this person understands mentorship. The future is unpredictable and you may develop a mutual relationship in the future. Keep an open mind and you will see the open door ahead of you.

Successful people reached their trajectory by seeking the help of key individuals who can address their weakness. You have to recognize your weakness and then disclose it. Once you are able to open yourself up and humbly seek assistance, then it is time to find a mentor. Mentors can be found within the faculty of a medical school or residency program. Often mentees can latch on to a project or research endeavor as a means to start the relationship. Professional societies are a wonderful resource to access mentors. In fact, this is probably the best place to access a mentor. A boss or supervisor can have conflicts of interest by the very nature of the relationship. However, professional societies have a common goal "advancing the profession". Since it is easy to belong to such a group, all you have to do is participate. Professional societies can offer the exact support you need and are a great reason to join and belong. Every major emergency medicine organization now offers virtual mentorship systems to connect mentees with mentors. Connectivity is bridging communication gaps allowing for electronic exchanges to become the norm. Social media outlets like Facebook and LinkedIn support the communication necessary for a suc-

cessful mentor relationship. Electronic video interfaces like ooVoo, Hangouts, Skype or Facetime are excellent means to gain one-on-one opportunities with a mentor.

Your ability to take advantage of this knowledge will pay dividends in building and advancing your career. The Great Wayne Gretzky adaptively said, "100% of the shots you don't take, don't score." Likewise, Fredrick Wilcox said, "Progress always takes risk. You can't steal second base and keep your foot on first." Take the next step and find a MENTOR.

## Tests and Timing

By Judd Shelton and David Levy, DO

Grab a paper bag and take some nice deep breaths, in and out... and now let's talk about the board exams. Currently there are two different board examinations the Comprehensive Osteopathic Medical Licensing Examination (COMLEX) taken by all osteopathic medical students and the United States Medical Licensing Exam (USMLE) taken by all allopathic medical students and some osteopathic students. Both exams are broken up into three parts taken at different times during your training. The first exam COMLEX Level 1 and/or USMLE Step 1 are an extremely important part of your application to residency. Every applicant will have taken at least one of these exams making your score one of the main features that residency programs review when selecting which applicants to interview. With the current changes concerning a transition to a single accreditation system for all residency programs there are a lot of questions about what the future holds, but for now we will focus on the current climate.

Whenever boards are discussed the question is always asked, "Should I take the USMLE?" In order to answer this question you have to go back and look at what residency programs you are interested in applying to. The biggest reasons for taking the USMLE are to have more options and make your application more appealing. Currently there are 50 osteopathic emergency medicine residency programs with the majority located in Michigan, Ohio and Pennsylvania while there are 167 allopathic programs throughout the United States. There is nothing written in stone that in order to apply to an allopathic program you

must take the USMLE as there are many allopathic programs that will accept only the COMLEX. There is nothing written in stone in order to apply to an allopathic program. Some allopathic programs will accept the COMLEX exam but many will only accept the USMLE. Do your homework to find out which exam programs prefer or require

One advantage of taking the USMLE is that it allows allopathic programs to more easily compare you to other applicants without having to rely on a conversion formula. Because of the differences in grading between the two exams the conversion equations tend to have a high degree of variability and usually make this comparison unreliable.

Whether you take one or both board exams it is imperative to perform well as the score is an important part of the process that residency programs use when screening applicants. This is not to say that if you underperform you will not get into the residency of your choice, but it is a hurdle that you do not want to have to face if you can avoid it. Program directors like to see scores that are at or above average (average being 500). Let's face it, if you were a program director, how many less than average scoring residents would you want?

The best plan is communication. Speak with the program you are applying to and find out what they want. Keep in mind a recently published study that asked, "Should Osteopathic Students Applying to Allopathic Emergency Medicine Programs Take the USMLE Exam?" The authors found that DO students who reported USMLE scores were more likely to match. So their conclusion was that DO students applying to allopathic EM programs should consider taking USMLE to improve their chances of a successful match.

## Timing

Schedule your COMLEX Level 1 exam according to your school's recommendation. Studying for boards is intense, grueling and demands your full attention. You will

want to take your boards before you start on your third year clerkships, and in many schools that is a requirement. Pick a date and stick to it, but choose that date wisely. Select a time in which you have opportunity to prepare in advance and be well rested. It is likely that as the day approaches, you won't feel fully ready, but trust that you gave it your all in preparation, take a deep breath, and take the exam.

COMLEX Level 2 is comprised of two parts, the Cognitive Evaluation (CE) and the Performance Evaluation (PE). As with Level 1 you will want to get your Level 2 – CE done sooner rather than later. Again, choose the timing wisely. There are a couple of advantages to getting Level 2 done and out of the way. First, it allows you to focus on your audition rotations. Second, if you underperformed on your Level 1 exam, you will have your Level 2 score to prove your worth by the time you begin submitting applications. Third, some programs are now requiring Level 2 to be considered for an interview. Your application will be mixed in with hundreds of others at each program. If it does not stand out it will fall to the wayside.

The PE portion of Level 2 is challenging to schedule because there is only one location where the exam is conducted and every third/fourth year osteopathic medical student in the country needs to take the exam. You will want to schedule as soon as the NBOME allows so that you can take the exam before you begin your audition rotations. If you are unable to schedule before the start of your audition rotations then schedule them afterwards. You want to make the best impression you can on your audition rotation and you want to maximize your time there physically and mentally. The last thing you want to do is to leave for a couple of days to take your PE Exam. When you are on an audition rotation - from the day you start to the day you finish - you are on an interview

Now let's say you are one of the few who do not score well on both Level 1 and Level 2, what do you do?

First, be honest about your scores. When asked (and you will be asked), take ownership, but truthful, and be ok with the awkward silence that will most definitely come. Be ready to explain what you did to “fix things” and how you’ll approach testing in the future so you won’t fail the in-service or board certification exams. Now, does this mean that your dream of being a Emergency Medicine Doctor is over? The short answer is no, but maybe. Some programs are willing to overlook a low step score (usually not on both) when there you bring other attributes to the table. If you’ve taken the time to rotate at a program, are well known at a program or your other score leaves no doubt then you might be lucky enough to still be able to match. The problem is finding these programs. So when you find that program be sure to what you can, proving to them why you are worth taking a chance on.

No need to worry about COMLEX Level 3 right now, since that is taken sometime during your first year of residency. You will be given more direction on that from your program when to schedule level 3.

# The Role of Research

by Danielle Turrin, DO and Sherry Turner, DO

There are many aspects that go into a student's application to an emergency medicine training program ranging from board scores, to letters of recommendation, clerkship grades, research awards, etc. Students commonly wonder how great of a role research plays in their application. The simple answer is that there is a good deal of variation among programs regarding how much emphasis is placed on research when considering an applicant. It has become a challenge to distinguish yourself from all the other applicants. Many residency directors give the application the once over and place it in one of three stacks, absolutely invite, may take a second look and the absolutely no way ever pile. Each director has their own focus. Keep in mind research is a requirement during residency, making applicants who already have background experience somewhat more attractive.

In both 1999 and 2009 surveys were sent out to program directors of all specialties around the country asking them how they value various elements of a residency application. The top five selected criteria were (1) grades in required clerkships, (2) Step 1 scores, (3) grades in senior electives in their chosen specialty, (4) number of honors grades, and (5) Step 2 scores. With the exception of Step 1 scores, top selection criteria are all based on clinical performance. Studies have shown that step 2 scores tended to rank higher in less competitive specialties, where research experience tended to rank higher in more competitive specialties. Another survey done in 2000 looked specifically at criteria used by Emergency Medicine residency selection

committees when choosing their residents. The results of this survey were similar to that of the previously mentioned general survey. The criteria ranking highest among selection committee were EM rotation grades, interview performance, clinical grades, and letters of recommendation. Moderate emphasis was placed upon electives done at the program director's institution, Step 1, awards and achievements. The least emphasis was placed on national honor society status, medical school attended, extracurricular activities, basic science grades, research and publications, and the personal statement. Overall, the big thing to remember is EM is quickly becoming much more popular and thus more competitive.

So the question now becomes, how do I distinguish myself? Not everyone can be the top of their class with outstanding grades and board scores. Many of us fall somewhere in the middle. Although grades and board scores are important, an applicant must also demonstrate their interest and involvement in the speciality of emergency medicine. Again the question becomes, how do I demonstrate this?

In looking for opportunities to get involved in research start by looking at your school. All schools have research departments of some kind and these are always looking for students to help with research projects. If research is something you decide to pursue look for summer programs (done between the first and second years of medical school) offered by your school or by other neighboring institutions. Know that the majority of these opportunities are bench type (in the lab) projects, with few clinical studies available (which are usually harder to get, so start early).

Once you are out in the clinical setting, know that this is another great way to get involved with research. Checking with your clinical preceptors or residents at your clinical site to determine if research is being performed at your site and if it is ask to participate. Also don't be afraid

to come up with your own research question and then pursue it. You can do this by presenting your idea to a resident or a preceptor, and then writing your protocol, collecting data, etc. Something to remember is that if you take a major role in a project with a resident or preceptor is that it is more than reasonable to ask to a second author.

Another often overlooked portion of research is case reports. During your 3rd and 4th years of medical school you will see an extremely rare or cool case. You'll probably be told to "write that up", the key thing is to take full advantage of this and just do it. Once you've written it up and have had it critiqued (by your preceptor, your significant other, your mother, the homeless guy who lives outside your apartment complex), consider taking it to the next level. This can be done by presenting it, submitting it for publication to the Fast Track or even a major journal. These are all things you can place on your CV and will be line items on your ERAS applications.

When considering where to present your case think of this as a progression. Start by presenting it at your hospital's research day, then your state's osteopathic conference, or another state medical conference. Once you've done this you're probably ready to take it to a national conference. This can be done by presenting your case at the ACOEP Spring Seminar, the AOA's OMED conference held each fall, or any other national emergency medicine conference (AAEM, EMRA, etc.). Know that program directors attend these meetings and most make a point to meet the students who present. It can be nerve racking to present to a group but the experience is invaluable.

When looking for additional resources (particularly funding) to help you with completing your research or traveling to conferences to presents. Again, begin by looking to your school, your state osteopathic associations, then think of national organizations like the AOA. But remember the Foundation Osteopathic Emergency Medicine (who works closely with the ACOEP) has grants

and competitions to assist in the research endeavors. They have competitions at both the fall and spring ACOEP conferences and they encourage students to participate.

The biggest obstacle to beginning research is the belief you don't know what you're doing. No one does until we step up and ask the question. Research is just trying to find the answer. Go for it, but remember don't neglect grades, rotations, and board examinations. Without the diploma, research really won't matter.



# Rotating Right

By Megan Koenig, DO and Nilesh Patel, DO

Each medical student spends their first two years just trying to keep their head above water, keeping up on all the reading and passing all their tests. All that hard work finally pays off when you get to start working clinically the final two years.

Every medical school is different but for the most part all third year medical students rotate through a set regimen of specialty months, leaving fourth year slightly more flexible for audition rotations and electives. Some schools even allow you to basically dictate your own schedule the entire fourth year. For some students this can present quite an obstacle to organize your life.

## Preparing to Schedule

1. Decide what areas of medicine you are interested in pursuing.
2. Research the programs you are interested in and the regions of the country you would like to be in. When is the application deadline? When are interviews held. Who at the site schedules clerkships? Is there a clerkship director? (name, email, phone#). Contact them to see how far in advance do they schedule rotation.
3. Think about a travel plan when scheduling. Try to set yourself up to not crisscross the country.
4. Use the following timeline to assist in scheduling your rotations around the important events:

Timeline			
3 <sup>rd</sup> year		4 <sup>th</sup> year	
	Important Events		Important Events
July	Begin clinical rotations	July*	ERAS can be submitted by July 1
August	Start reaching out to programs to set up rotations for 4th year	August*	
September		September*	Interview season begins
October	Work on CV, personal statements and letters of recommendation	October*	ACOEP Residency Fair
November		November*	
December		December*	DO Interview Season ends
January		January	DO rank list due
February		February	DO Match , MD interviews end
March		March	MD Match
April		April	
May	Register and prepare ERAS application, register with NRMP	May	Graduation
June*		June	Moving/Orientation

\* optimal audition months

### What if You Havent Chosen a Specialty

Many students go into 4th year unsure which field of medicine to pursue. The key is to keep an open mind and rule out those things you know you definitely don't like to do.

If you are still undecided, try finding hospitals that have multiple specialties that you are interested in to rotate at so you can at least decide if you like the hospital and area.

If people ask, be honest that you haven't yet decided. The medical field is small and honesty is always your best policy. We all understand that 3rd and 4th year fly by and it isn't a lot of time to choose exactly what you want to do with the rest of your life.

If you happen to be lucky enough to know that Emergency Medicine is the one and only career you are pursuing, you should also be honest with your preceptors. Often, if you tell your attending on any subspecialty that you are interested in EM, they will likely cater the education to your interests and maybe even let you run down to the ER for consults or when things get slow.

### A Strategy for Scheduling

During the fall and winter months of fourth year,

students try to travel to residency sites they are interested in, also known as the audition rotations. Some start as early as July and go as late as January or February.

It is suggested that students pick the top 3 or 4 programs they are most interested in and try to get these clerkships scheduled early in the fall of their 4th year. Some of the more competitive sites will require you to set up rotations a year in advance.

Make sure to leave time for interviewing. Ideally, November through January should be rotations that allow you the flexibility to schedule interviews. Some people even take a month off in order to complete all interviews as well as take second looks and rotate for a few days through hospitals they couldn't get a month rotation at.

Once these important interview months are solidified, make sure to schedule your school's specific 4th year rotations early to prevent scrambling to graduate. You may want to do electives that expose you to things you won't see in residency or fields commonly dealt with in the ED like toxicology cardiology, orthopedics, critical care, trauma, radiology or anesthesia.

### **Tips For Setting Up a Clerkship**

For some of you, this is the first time you've had to call and set up a clerkship. Here are some helpful tips:

- Use school or local hospital days, national conferences and colleagues as opportunity to research programs
- Once a hospital/program has been identified, use the web to locate contact information
- Send an email to each site coordinator as soon as you know you are interested to express your request for a rotation and to determine when they start taking requests officially
- Rotation length varies from site to site, so be sure to ask about the schedule while talking to the scheduling person (ie. 2 week, 4 week, 1st-31st, etc)

- Ask the residents at a program if they ever accept students who didn't rotate there. Some programs won't even look at your application if they didn't see you on the floor! This will help you narrow down which programs you actually have to set up rotations at!
- If you have run out of Emergency Medicine rotations, ask around at that hospital for a rotation that will allow you the freedom to play in the ER as much as possible...whether it is just through interactions on admissions, or shadowing. Good rotations at most hospitals are those that have favorable hours with no call (ie. Radiology, anesthesia, cardiology, infectious disease, toxicology).
- Once assigned to a specific site, keep following up closely until they have received all your paperwork. Medical schools are notorious for leaving something out of what they send as they have numerous students asking for similar requests. So take full responsibility and ownership for your own future and your own paperwork. Where possible, try to get copies of the items that most schools want (ie. Immunization records, proof of malpractice coverage, etc)
- Interchangeable/confusing terms during this process include; Clerkships are known as: clinicals, electives, externships, preceptorships, rotations or selectives. While departments that schedule clerkships may be referred to as: academic affairs, externship coordinator, medical education, medical staff services, program coordinator, student affairs. Also, sub-internships (Sub-I's): rotation where the student will perform the role of an intern or PGY-1

## Surviving Spotlight Rotations

You will spend the majority of the time in the fall of your 4th year traveling around to various locations to rotate and interview at multiple programs. It can be a very stressful and exhausting few months; below are some tips

that may help you along your journey:

### **Packing your bags:**

1. Clarify what type of dress is acceptable for shift work and for lectures. Some programs are perfectly okay with scrubs and no white coat, while others require professional dress and pressed white coat. You might as well pack both!
2. Bring a professional suit. Even if you have not been offered an interview, you never know when someone is going to offer you an on the spot interview!
3. Buy some comfy shoes and get them broken in. This is your chance to show off all you got, you should be on your feet every minute...no sitting! There is always a bed to be changed, a patient to be checked up on or a nurse that needs some help. If you are sitting make sure it is for charting or researching something related to a patient.
4. Download some e-books and/or get familiar with good websites with free online libraries of medical books. The last thing you want on a several month journey across the U.S. is heavy books weighing you down...utilize technology!
5. Pick 1 or 2 EM reference books that you prefer and bring them with you. You can always find an opportunity or time during or after a shift to read up on a specific patient you had.
6. Find good pocket reference guides or good phone applications that you feel comfortable with so you always have a resource in your coat for quick help!
7. Bring copies of your CV, personal statement, application, and research. Most attendings and even the program director do not always have your application in front of them. Being prepared with these resources will make you look like a rock star!
8. Buy a box of professional thank you cards and stamps.
9. Bring pre-addressed and stamped envelopes for po-

tential letters of recommendation to be returned to your school's registrar or whoever your schools designates to organize your letters.

10. Clean up, privatize or close your Facebook or any other publicly accessible web pages that programs could access to learn about you. Make sure your contact email is professional (ie. Avoid bigpimpin@aol.com).

### **Upon Arrival**

1. Try to touch base with the program director or clerkship director. Let them know your intentions early (ie. Interview, letters of rec, research).
2. Ask for a definition of your role. Every program and every physician functions a little differently. Know how you are supposed to fit into the teamwork.
3. Try to set up your interview during your rotation month so that you don't have to travel back and forth. Most programs are aware of time and money constraints and will do what they can to fit you in.

### **Hard at work**

1. Never be late! As a rule of thumb during these months, assume 15 minutes early is on time!
2. Inform your preceptor if this is your first EM rotation so they can know to orient you to certain details or what level of training to expect
3. Be the first to pick up a new chart or know when a new patient is arriving. Never look at a chart and put it back unless you have been told not to see a certain type of patient (ie. Level 5). If you are uncomfortable with a specific case ask the attending or resident to help you.
4. Never have more patients than you can handle. Every ED is different but as a rule of thumb, a student should have 2-3 patients at a time.
5. Pick an interesting patient and read something each night, even if you only have energy for a page or two.

Then bring up what you learned on shift and ask a question of your attending or resident. For instance, when you have a free moment just say " I was reading about arrhythmias last night and I was a little confused on XYZ, can you explain that to me?". Even if you are not confused, this at least breaks the ice and lets them know you have the motivation to read and learn! Don't be afraid to ask questions!

6. Don't lie! If you don't know the answer to a question or forgot to ask the patient something...it is ok! You will be caught sooner or later and loose all credibility and chance at that program. Then, in the future, learn from your mistakes.
7. Admit if you have never done something, but convey your excitement to learn new things. You will never be faulted for never having done something, but, you will loose all trust if you attempt a procedure by yourself that you have never done before. You are practicing under someone else's license – not a time to be cavalier.
8. Know where the is equipment and how to set up common procedures. There is no better way to get to help with a procedure than to show that you know what tools are needed, have everything at the bedside and know how to use it properly. Most of this can be found on YouTube, Google or books!
9. Remember that, nurses and techs can be your best friends! If it gets slow for you and the physician, ask a nurse what you can do to help, or ask someone to show you how to start an IV or put in a Foley.
10. Participate in every aspect of your patients care. If they need a Foley, you put it in. If they need an IV, you put it in. If they need a pelvic, you track down the equipment and set it up for the attending. If they need a CT, you take them.
11. Assist in patient flow. Make sure that labs are drawn and sent in a timely fashion; if a nurse is busy, offer

to help them! Follow up on labs; almost everything should come back within an hour at most. If it has been longer, call the lab. Try to look at your patient's X-rays and interpret their EKGs.

12. Communicate with the patient and re-evaluate them. Keep the patient informed of what you are waiting for, any delays or what the plan is. This is also a great way to look good to your attending, because you can say you just checked on that patient and they are feeling better/worse, need more medicine or are ready to go home.
13. Play well with others. Programs are looking for people that will get along with the residents they currently have. If you are abrasive, arrogant, or rude to other med students, residents, nurses or staff then your chances might be slim.
14. At the end of a shift ask for advice. Ask if the resident or attendings felt there were any areas of weakness or room for improvement.
15. Never leave early and always be willing to stay late to wrap up a good case or do a procedure. I would always wait to be asked to leave. Do not watch the clock.

### **Wrapping things up**

1. Be prepared for any exit interviews, exams or presentations that might be required of you.
2. Write personalized thank you notes to each resident/attending that took time to teach you and/or just write a generalized one to the program. I would usually bring two bags a of treats on my last day with two general thank you cards, one for the residents and physicians and the other for the nursing staff.... brownie points ;)
3. If you feel comfortable with a specific attending and would like to ask for a letter of recommendation, approach them near the end of the month with a per-

sonalized thank you note, resume and pre-addressed/ stamped envelop to your school. Thank them in person for all of their support and guidance over the month and ask if they would feel comfortable writing a letter (if not, just give the card and walk away...if so, give them the thank you note, resume and envelope).

4. Make sure to follow up with your letter of recommendation writers in a polite but not pushy way to encourage them to complete and submit in a timely fashion.
5. Keep in touch. The interview season can be a long time, and programs see a lot of faces. Keep reminding them of you through brief emails that re-state your interest and express your excitement for their program.

### Other Words of Wisdom

- Attend as many National ACOEP conferences, hospital days and residency fairs that you can. Program Directors, residents and administration will remember your face!
- Get involved nationally. This is the best opportunity you can find to meet numerous residents and attendings who can help you network.
- Submit your application on the first day that the application system opens. You can actually start filling out certain details of the application ahead of time. And when you initially submit, you don't have to have everything complete. So, if you are still waiting on some letters of rec or to finalize your personal statement...DON'T WORRY! This at least stamps your application with an early date to make you appear to be on top of things. This usually also allows you to get first pick at interview dates. All the various pieces don't have to be complete until the day you interview or the deadline, whichever comes first.
- When it comes to the match, rank list your programs

in the order YOU feel is best in YOUR heart. DO NOT let their emails, phone calls, or hints to your position change your mind...people lie and things can change!

**Last but not definitely not least:** The world of medicine is **very very small** and intertwined. Do not act up or make a bad name for yourself, it will stick with you. No matter what rotation you are on or how badly you hate a certain specialty...always work your butt off...people talk!



# Personal Statements and Your CV

by Leigh Hylkema

## Personal Statements

The personal statement is the portion of the residency application in which you 100% control of the content. It is the only part of the application that is unique to you and does not follow a pre-defined format.

The purpose of the personal statement is:

1. To introduce yourself to the program
2. To state your case
  - Who are you?
  - What brought you to this point?
  - How have you overcome flaws?
  - Why are you a good candidate?
  - What sets you apart from all the other applicants?

There is no correct way to write a personal statement; however, the most effective personal statements are honest, direct, and tell a story.

The opening paragraph is the most important. It is the introduction that sets the tone and the framework for the rest of the essay. First impressions do matter. The introductory paragraph should grab the reader's attention and make him/her want to read more.

In the body of the personal statement you should discuss the details of what brought you to this point in your life.

- Discuss the history, people, or events that influenced you.
- Discuss what obstacles you overcame and how.
- Did you have some sort of epiphany that led you to this point?
- Discuss what led you to your choice of medical spe-

cialty to pursue.

- Discuss what you can bring to the residency program, what sets you apart from other candidates
- Personal characteristics
- Skills.
  - Discuss your career goals.
  - Discuss what you want to get out of residency training.

The body of your personal statement is also the place where you can explain or justify issues in your application that may be considered deficits or weaknesses. For example:

- Why did you take time off or repeat part of medical school?
- Why you have a low board score, class rank, or rotation grade on your transcript?
- Why you have a negative comment in your dean's letter or letter of recommendation?

The personal statement allows you to discuss how you have overcome the obstacles in your life and gives you the opportunity to turn a negative into a positive.

The conclusion of your personal statement should reaffirm your interest in the specialty and the program to which you are applying.

The personal statement should not be a restatement of your curriculum vitae in paragraph form. It is your opportunity to tell the reader something about yourself that cannot be found anywhere else in the application. Avoid redundancy, avoid clichés, and – most of all – do not define what the specialty is for which you are applying. Avoid terms such as:

- Emergency Medicine is....
- Emergency Medicine is like....

Your reader, presumably, is a practitioner of the specialty and therefore does not need a definition. The reader wants to learn about something he/she does not know, you.

Your personal statement should be honest. Do not be overly profound or clever or funny. Do not write fiction or fantasy. Be yourself. A good personal statement is truthful, specific, and tells a story.

The Electronic Residency Application Service (ERAS) limits the personal statement to 28,000 characters or approximately eight pages. It is recommended, however, that you keep your personal statement of no more than a page and a half. Very few writers can hold the reader's attention for little more than a page.

It is also recommended that you create your personal statement in a plain text format. Do not use special characters or formatting such as bold, italic, or underlining. This will not translate into the ERAS software and may result in the insertion of unwanted characters into your essay.

ERAS allows you to create more than one personal statement and to give each one a distinctive, descriptive name. Only one personal statement can be assigned to a program. Programs do not see the names you assign to your personal statement. This allows you to tailor your personal statement to the program to which you are applying such as including ties to the program, institution, or location.

Proofread your personal statement before submitting it to ERAS. Have others who can be objective proofread it as well to spot issues that you overlooked such as misspellings or omitted words. Your proofreader can also help you with the tone of your personal statement to assure that you do not come across as offensive or humorous.

Remember, the personal statement is just that, personal. It is your story. Use it to your advantage.

## **Curriculum Vitae**

As the saying goes, you have just one chance to make a good first impression. Often the first impression in your professional life is your curriculum vitae (CV).

The purpose of a CV is to:

- Introduce or market yourself
- Supplement an application
- Obtain an interview
- Apply for awards, scholarships, or grants
- Be considered for a promotion
- Provide biographical information

Your CV is a summary of your academic and professional history and job qualifications. A CV is different from a resume in that it is more extensive and encompassing. The term curriculum vitae comes from the Latin curriculum meaning "course" and vita meaning "life." A resume, on the other hand, is brief, focused, and seldom more than two pages.

The components of a CV are:

### **Name and contact information**

Your name should be at the top of the first page of your CV. It should be in bold and in a larger font than the rest of the document. Your name and page number should be in the top right corner of each succeeding page.

### **Residency**

Include program name, institution, location, and dates. You should also include institution designations such as emergency department volume, trauma center, chest pain center, stroke center, etc.

### **Education**

Include all degrees, institutions, locations, and dates. Indicate if you graduated with honors.

## **Licensure**

Each state license you currently have should be listed as a separate entry.

## **Certifications**

You should include all relevant courses, certifications, conferences, or additional training.

## **Honors**

Include all honors, awards, and scholarships. If the title of the honor is not self-evident of why the honor was bestowed, include a descriptor.

## **Appointments**

You should include clinical, academic, administrative, and political experiences. Include committee work, special projects, policy development, or focus studies/groups. Elaborate on relevant experiences that are not self-explanatory.

## **Research**

Include the principle investigator/supervisor/advisor, topic or title, institution/organization or department, dates, and your title and/or role in the project.

## **Publications**

You should include all published work, use bibliographic citations, and use appropriate notations such as "in press" if accepted for publication or "submitted" if received by the publisher.

## **Presentations**

Include all major or relevant presentations including posters, papers, and lectures and include the title, conference, location, and date.

## **Scholarly activities**

Include competitions, curriculum development, question writing, or other activities of a scholarly nature that do not fit into other CV categories.

## **Professional society memberships**

You should include all society and club memberships and the active dates.

## **Committee involvement**

You should include the committee name/purpose, institution, location, and level of involvement.

## **Volunteer activities/community service**

Include location and dates. Use descriptors if not self-explanatory.

## **Optional**

Items that you may choose to include are hobbies/interests, marital status, children, citizenship, or visa status

## **Formatting your CV:**

- Your CV should be printed on plain white paper with one inch margins all around.
- Use consistent formatting throughout including fonts, spacing and punctuation. Use a clean, basic font. Bold section headings and double space between sections. Do not use underlining. Each page should be visually balanced and easy for the reader to scan.
- Do not use a standardized word processor resume template in that these are not designed for a comprehensive CV format. Block, bulleted entries are the easiest to read and visually pleasing.
- Your name should be at the top of every page.
- Entries should be listed in descending chronological order – current to the past.
- You should include page numbers and a revision date.

- Do not include pictures or graphics.
- Avoid abbreviations or acronyms.
- Your CV should be comprehensive, yet void of any redundant information. The exception to this rule is scholarly projects that can fall in multiple categories such as a research study that became a paper, a poster, abstract, or presentation.

You should keep an electronic version of you CV. The file should be labeled "Last Name, First Name – CV." Should you ever email your CV to someone, this format will save your recipient time in cataloging your document.

### **The ERAS CV**

For your ERAS application, you will include all the information from your CV plus additional – more detailed information.

- Gender
- Birthdate
- Birthplace
- Couples match participation and, if so, with whom
- Visa information (if applicable)
- Self-identifiers – race, ethicality
- Military service obligation or any other service obligation
- Felony and/or misdemeanor convictions
- Limitations
- Identification numbers – social security, AOA, AAMC, NBOME/USMLE, match number
- DEA registration
- Licensure action – suspended, revoked, voluntarily terminated
- Malpractice history
- Medical school training extended or interrupted
- Experiences – supervisors, time spent in activity, reason for leaving
- Language fluency – degree of proficiency
- Hobbies and interests



## Choosing a Residency Program

By Andy Little, DO and Bruce St. Amour, DO

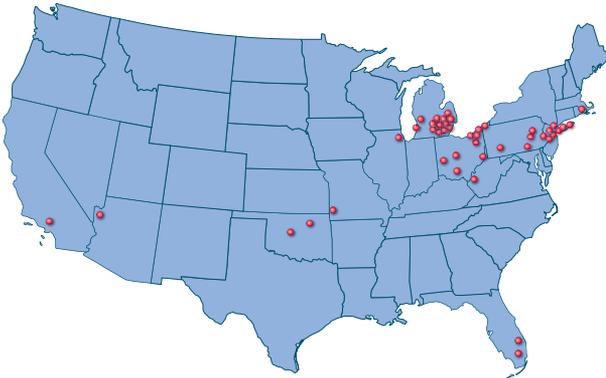
There are some decisions we face our lives that we have to make without fully understanding what the outcome of those decisions might be, these decisions include marriage, parenthood and our career path. As far as career goes, the two most life-altering we have to make are "Should I go to medical school or not?" and "Where do I do residency?" Whether you know it or not choosing your residency may alter your life and possibilities as an emergency medicine (EM) provider.

When choosing a residency, there are a lot of different approaches. You can make charts, create tables, ask dozens of people, or rack your brain for hours. You'll probably do a little bit of "all of the above", as you should. There are many questions that you might be asking yourself about choosing a program. What should you consider important about a program? Luckily, you are not the first person to ask these question. In 2010, the ACOEP sent a survey to students asking them what they thought was important when considering a residency program. The results showed that students (just like you) found the following to be important (listed from most important to least important): location, perceived program quality, trauma level, department volume, academic setting, fellowships, program size, family atmosphere, duration of training, name recognition, and research. What follows is an explanation of how each of these factors may play a role in how you choose a place to train in Emergency Medicine. There are several studies asking residents the same questions but we will use this study as an outline. Think of residency as a four-year marriage. There is no best partner but there is

one that is the best for you.

## Location

There are emergency medicine residency programs in 41 of the lower 48 states and 1 in Puerto Rico. Their distribution is such that they are primarily located in the Midwest (Ohio, Pennsylvania, and Michigan), and if they were located based on weather you'd have an 83% chance of snow. Why is location important? Consider, where is my support? Where is your home base; your parents, in-laws, siblings and friends. This is important because hopefully you will have a social life outside of residency and you'll want to have your support available. This is much more important when you have or plan on having a partner or family moving with you. Also, location can be important based the kind of town your residency is located in. It may be nice to go to a grocery store or restaurant and not run



Map of AOA approved Programs. Provided by the ACOEP.

into your patients.

Although this was ranked as the most important we should remind you of a few things. First if there is an airport close you can get almost anywhere faster than driving. Secondly it is good to experience new things, new cultures and diversify your life. And finally you need to think about the fact that you have a significant chance of practicing within 100 miles of where you trained, so it may

be good to get a list of where graduates of a particular program now practice to see if this works for you.

### **Perceived Program Quality/Name Recognition**

These factors are hard to quantify or measure, as they are mostly based on personal preference rather than solid data. It may be based on whether the hospital is accepted well in the community or if a specific residency program has graduates practicing in impressive institutions post training. It may be related to how well known the program is to faculty at your medical school. Trying to answer these questions may play a role if you are looking to practice in an academic setting, do a fellowship or plan to run for political office, but if your goals are to be a regular EM physician, this may not be very important at all. All EM residencies are held to exceedingly high standards compared to most other residencies and you will get good training anywhere, but the style of that training may vary considerably.

### **Trauma Level**

First, a trauma center designation, impressive as it may sound, does not equate to a quality training program. Think about what it takes to be a trauma center (levels I, II or III). It means more specialists, more consulting, less hands on and sometimes less pathology you get to see as a resident. Also in most trauma centers GSW, stabbings, MVC, etc are handled by surgery, not EM. Look for hospitals that are well rounded and may have you spend extensive time at a trauma center, but still allow you time to practice and learn in a community hospital. Additionally less than five percent of all EM jobs are at trauma centers.

### **Department Volume**

When you visit program websites or watch promotional videos, every program will list how many visits their respective emergency department sees per year. They

know that when you see a high number you'll think: "The more patients they see, the more I'll learn." Now it is true larger volume centers do have a chance of seeing a wider breadth of pathology but you don't want to just rely on this thought. Also consider that larger volume centers typically have more residents. I look at it by doing some simple math. Program A sees 80,000 visits per year in their emergency department, and they take 8 residents a year into their 4-year program (32 residents total). If you take 80,000 and divide it by 32 ( $80,000/32$ ) you get 2500 patients for each resident to see. Versus program B whose emergency department sees 60,000 patients per year (maybe not as good as 80,000 right?), but they only take 4 residents per year (16 residents total). So if you divide 60,000 by 16 ( $60,000/16$ ) you get 3750 patients for each resident to see. Now this math is not specific or 100% accurate because you have to factor in things like how many residents are scheduled in the ED at a time, how many other ED's do they have their residents work at, etc. But it can give you a simple way to do an apples to apples comparison of programs when looking at Department Volume. Another important consideration is the other training programs at an institution. Ortho and general surgery are likely to be your competition for procedures where as radiology, OB/GYN and IM are not.

### **Academic Setting**

All emergency medicine residencies have some form of "academia" regardless of what kind of hospital the program is located at. Now, some are more academic, not only by being a true "university hospital", but by how much emphasis the program places on publications, research, journal clubs, mortality and morbidity conferences, etc. It is important to know that training at a more academic program does not necessarily increase your chances of being hired, as the majority of jobs in EM are in non-academic, community settings. You will need to figure out what set-

ting you like.

## **Fellowships**

There are few fellowships stemming from emergency medicine. Notable ones are emergency medical services, toxicology, ultrasound, pediatric EM, wilderness medicine, research, administrative, international medicine, sports medicine, critical care, hyperbaric (how we got this one is a mystery to me) and a few others. It is important to know that most graduates from EM programs do not do fellowships. The main reason behind this is that most EM fellowships do not lead to a pay increase at time of completion. Also many of these skills and certifications can be obtained without completing fellowship training (Wilderness Medicine, Ultrasound, etc.). However, if there is a specific fellowship you are interested it may be of benefit to go to a hospital that sponsors this program. But remember you'll have elective time as a resident where you can spend time in these areas to increase your exposure without doing a fellowship.

## **Program size**

Know that the size of the program is a double-edged sword. Being apart of a small program can mean that you get one-on-one teaching while in the ED, smaller didactics sessions, increased hands on experiences in the ED and on other rotations, etc. However, your presence in the department plays a bigger role in staffing of the ED where you train. So spending time away for vacations, conferences, etc. may be limited or harder to come by.

## **Family Atmosphere**

Although this was lower on most peoples list, one could argue this is as important as anything else. Think for a moment that when you are choosing a residency you are committing to a program for 3-4 years. This is not something you can get out of easily, and without derailing

your future as a trainee in EM. This 3-4 year commitment is as long as most have had a significant other. Plus, think back to experiences in your life where the people around you made things better or worse. You'll hopefully notice that when surrounded by people you enjoyed, even the worst obstacles in life were bearable, and when surrounded by people you dislike, even the best things could have been ruined. A good strategy is to look at the nurses while on interviews and rotations. Do they seem happy and easy to get along with or grumpy and bothered by everyone? This is a view into your future.

### **Duration of training**

Historically AOA programs are 4-year programs and ACGME programs are 3 years. This is not always the case. Several ACGME programs are 4-year programs. Many people have thought the reason why AOA programs are 4 years was that they are inferior programs versus their 3-year ACGME counterparts. But over the years many ACGME programs have converted to 4-year programs. In reality, we believe that 3 ½-years is the perfect length for a program, but I bet you won't find one out there.

### **Research**

The important thing to know is that research is now a graduation requirement for ALL EM residents. What you want to look at is the ease and resources put forth to fulfill this requirement. Does the hospital have a designated faculty member over research (other than the program directors), do they have in-house research staff (Statistician, Grant writers, data collectors, etc.). And if the hospital does not have these, where do they get them (are they part of a consortium that shares these resources, are they from a third party, etc.). Another good thing to think and ask about is what research projects have they recently completed.

Overall choosing a program is a very individual thing, and regardless of what you've read above, you need to figure out what is important to you and go with it. We would encourage you to do your homework, make site visits, speak with residents, attendings, and other people involved with the training programs you are interested in. This decision should not be taken lightly, but the process should be enjoyable. Don't think, "What is best?" Think, "What is best for me?"



## Finishing Strong

By Andrew Kalnow, DO and Mark Mitchell, DO

Its the morning of Match Day and you open your email reading "Congratulations, you have matched!"... You are about to begin your career in emergency medicine, the most exciting, exhilarating and rewarding career in medicine (at least in our humble opinion).

We will talk more about Match day and beyond, but lets rewind for a minute. Medical school rotations don't end the day you match, and how you finish off the end of medical school is something you should put some thought into. First, if at all possible, take Match Day off. Most preceptors are understanding and will be happy to let you off of rotations for the day. This way, you can celebrate your match or, in the worst case scenario, you can spend the day focused on the scramble. Second, instead of just filling the end of your year with "vacation" rotations, this is the last time for you to truly be able to do a rotation in anything you want. Maybe you have always wanted to experience transplant surgery, spending a month with EMS or even want to get extra experience with procedures in a critical care rotation. This is the time to enjoy your clinical rotations without overly focusing on a grade. The last few rotations of medical school are 100% about you being able to learn and experience rotational opportunities that you may never get again. All that being said, be sure to take some time off, spend time with your family and friends, and RELAX for a change.

Now that you know where you are headed for residency, there is still a lot of work to do. You are now faced with the prospects of moving and establishing yourself in a new city and program. The very best resource is your

new residency program and your soon to be co-residents. The current residents will have a good feel for where the best places to look for housing are and often the program will have resources available for you. Don't be afraid to reach out to both your incoming intern class and current residents, they will be happy to help. Over the upcoming years you will be a team and there is no better time to begin to develop those crucial relationships than before you even start.

Depending on your social situation, there is a lot to consider. Are you moving by yourself and looking for a roommate or just an affordable place for one? Do you have a significant other or even a family that is moving with you? There are lots of variables that will affect your final months of medical school and transition into residency, be sure to pursue all available resources.

Equally important to relocating and settling in for residency is to prepare yourself for the journey ahead. No, we don't mean you should spend the last months before you start as a resident buried in a book. Rather, you should do the opposite! You have an entire career to spend learning emergency medicine, this is not the time to try and cram more in. Take a vacation, read a book, and spend time with family/friends because come July 1st, it is back to the grind and much more.

### **Resources to Consider**

- Visit your new home: If you are not very familiar with where you are about to move, take a trip or two in order to become more acquainted with your next home. Explore the different neighborhoods, look at a few houses, apartments, etc and get the lay of the land.
- Realtors: Most hospitals and programs will have a realtor or two that can aid you in finding a house, apartment, or other living arrangements. The realtors can help with more than just buying, they are often

very intune with the rental markets too and usually will provide their services for little or no cost. They are building good will in case you stay in town and eventually are looking to buy. They are also great resources for schools and potential work opportunities for your spouse or significant other.

- Rent vs buy: This can be a tough decision and depends on your financial situation, how long you plan in living in the same place and what you are looking for in a residence. Generally, if you think you are going to spend more than 4 years in one place, buying is a reasonable option. This is another reason why reaching out to a realtor may be a good idea.
- Spouse/Partner Group: There is most likely a spouses/partners group for residents to join, particularly at larger programs. This may be a formal, hospital sponsored group or an informal group, but either way, it can be a great resource to help you get settled into your new home and provide a good source of advice if you have someone relocating with you. Remember, you will be busy at work but your spouse/partner may not have that initial connection to people in your new location.
- Your Intern Class: You are about to spend the next 3-4 years with this group, many of them will become close friends and only this group will truly know what you are going through day to day. Find time right before or during orientation to get together as a group. This may seem like a minor point but you will be amazed how quickly you connect with your fellow interns! You will also be amazed how difficult it will be to get everyone together once residency starts.
- The ACOEP Resident Chapter: This group of your soon to be peers has recently gone through the transition from student to resident and will be happy to help you along the way!

Finally, as the days tick down to orientation and your first days in the hospital as a doctor, prepare yourself for the adventure that is about to begin! You are going to have moments of amazing success, even early in your intern year, but you are also going to have many days where you feel that you cannot get it right. If you knew all the right answers now, you wouldn't need an emergency medicine residency. Remember that there have been MANY who have gone down the same road as you. You will feel as if you are learning more in the first weeks and months as an intern than you learned in all of medical school, and in some ways it may be true. Take a deep breath, stay calm and carry on... You are now an EM resident!

# Appendix

## The First Two Years

- Secemsky, M.D. Brian. "Health Care 101: Survival Tips for Medical Students." The Huffington Post. TheHuffingtonPost.com, 22 Oct. 2012.
- Nofsinger, John R., and Glenn Petry. "Student Study Behavior And Performance In Principles Of Finance." JSTOR. Journal of Financial Education, Spring 1999.
- Study Tips. OSU-CHS, PDF.
- Kelman, Eugenia G., and Kathleen C. Straker. Study without Stress: Mastering Medical Sciences. Thousand Oaks, CA: Sage, 2000. Print.

## Mentorship

- Frei, E., Stamm, M., & Buddeberg-Fischer, B. (2010). Mentoring programs for medical students--a review of the PubMed literature 2000-2008. BMC Medical Education, 10, 32-6920-10-32.
- Healy, N. A., Cantillon, P., Malone, C., & Kerin, M. J. (2012). Role models and mentors in surgery. American Journal of Surgery, 204(2), 256-261.
- Riska, E. (2011). Gender and medical careers. Maturitas, 68(3), 264-267. 010
- Zier, K., Wyatt, C., & Muller, D. (2012). An innovative portfolio of research training programs for medical students. Immunologic Research, 54(1-3), 286-291.
- Coates WC, Ankel F, Birnbaum A, Kosiak D, Broderick KB, Thomas S, Leschke R, Collings J. The virtual advisor program: linking students to mentors via the world wide web. SAEM Undergraduate Education Committee. Acad Emerg Med. 2004 Mar; 11(3):253-5.
- Macaulay W, Mellman LA, Quest DO, Nichols GL, Haddad J Jr, Puchner PJ. The advisory dean program: a personalized approach to academic and career advising for medical students. Acad Med. 2007 Jul; 82(7):718-22
- Hauer KE, Teherani A, Dechet A, Aagaard EM. Medical students' perceptions of mentoring: a focus-group analysis. Med Teach. 2005 Dec; 27(8):732-4.
- Souba WWJ. Mentoring young academic surgeons, our most precious asset. Surg Res. 1999 Apr; 82(2):113-20.
- Garmel GM Review Mentoring medical students in academic emergency medicine. Acad Emerg Med. 2004 Dec; 11(12):1351-7.
- Parina D. Menotring skills for faculty. Council of Emergency Medicine Residency Directors. [www.cordem.org/download/mentor.pdf](http://www.cordem.org/download/mentor.pdf).
- Society for Academic Emergency Medicine. Virtual Advisor Home page, Medical Student Advisor Program. Accessed 4/15/2014. <http://saem.org/advisor/index.htm>.
- Hindiyeh R, Larkin GL Mentorship in Emergency Medicine. In Kazzi AA. Schofer JM (eds) Emergency Medicine: AAEM's Rules of the Road for Medical Students: The Guide for a Career in Emergency Medicine. Milwaukee, WI: American Academy of Emergency Medicine. 2003: 371-6.
- ACEP Find a Mentor. Accessed 4/15/2014. [http://www.acep.org/\\_sports-Medicine-Mentorship/Find-a-Mentor/](http://www.acep.org/_sports-Medicine-Mentorship/Find-a-Mentor/)

ACOEP Mentor Program. Accessed 4/15/2014. <http://www.acoep.org/pages/mentor>

Quotations accessed 4/15/2014. <http://www.quote garden.com/risk.html>

## Research

Crane JT, Ferraro CM. Selection Criteria for Emergency Medicine Residency Applicants. *Acad Emerg Med*. January 2000; 7(1): 54-60

Green M, Jones P, Thomas JX Jr. Selection Criteria for Residency: Results of a National Program Directors Survey. *Acad Med*. March 2009 ; 84(3): 362-7.

Lamberg, J. "Getting Into Residency: What Medical Students Need to Know." *KevinMD*. May 24, 2011. Web. <<http://www.kevinmd.com/blog/2011/05/residency-medical-students.html>>

Overton, DT. "Advice for Emergency Medicine Applicants." *WMed*. Web. <<http://med.wmich.edu/education/internship/residency/emergency-medicine/advice-emergency-medicine-applicants>>

## Tests and Timing

St. Amour BA. Factors Important to Applicants to Osteopathic Versus Allopathic Emergency Medicine Residency Programs. *Western Journal of Emergency Medicine*. March 2014; 15(2):184-187

Weizberg M, Kass D, Hussains A, et. al. Should Osteopathic Students Applying to Allopathic Emergency Medicine Programs Take the USMLE Exam? *Western Journal of Emergency Medicine*. February 2014; 15(1):101-106

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Welch S, Hellstern R, Seay T, et. al. We're Failing Our Residents: Training ED Docs for the Real World. *Emergency Medicine News*: February 2010; 32(2): 5, 24, 25, 26

Gonzalez J. Selecting Your Residency Program. Web.

[http://www.ama-assn.org/ama/pub/about-ama/our-people/member-groups-sections/minority-affairs-section/transitioning-residency/selecting-your-residency-program.page?](http://www.ama-assn.org/ama/pub/about-ama/our-people/member-groups-sections/minority-affairs-section/transitioning-residency/selecting-your-residency-program.page)

## Notes



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