

So ... You Want Clinical Experience

Keith Bradley, MD
Director, Research Associates Program

Writing monographs to help those interested in the health professions is how I support my part-time work as an Adviser. I believe in the value of this component of my medical practice. As you will rightly do in your practice, I ask to be compensated for my work. I also trust in the honor system, especially among those of us who are committed to the health professions where such trust is essential

Think of this monograph as being on the shelf in a book store. If you read this material, I ask you to please send \$5.00 (more if you think it is worth it!). It can be cash or a check made out to me and sent to 66 Lilalyn Drive, Fairfield, CT 06825. In addition, if you include your e-mail address, I will put you on a list for future monographs about the health professions, admissions and other aspects of advising. I hope you find this interesting, maybe a bit funny, but, most importantly, helpful for your journey to your vocation. Feel free to pass it along to your friends or, if you decide to switch to law school, to your future targets. *KB*

Five years of formal pre-med advising, twenty-plus years of experience teaching medical students and residents as an academic emergency physician and my own struggles to get into medical school have given me some insight into the process of medical school admissions. I have seen the value of clinical experience for pre-meds and some ways that folks have gone about getting it. I'd like to share some of that insight and experience with you.

- For the medical school class of 2001 just over 17,000 men and women were accepted to allopathic schools in the U.S.
- In 2000-2001, there were about 17,000 men and women who swam on college varsity swimming teams.

If you were a high school student who came on a campus interview and spoke to the swimming coach about trying out for the varsity swim team, wouldn't reasonable questions be "Have you ever been in a swimming pool?" and "What were your times in the 100 freestyle?" If medical school is something you are considering, getting experience in a clinical setting is similar to finding out if you like it in the swimming pool and are you good enough working with patients to be on the "varsity medical school team?"

When should I get clinical experience?

As soon as **you** want. Remember, you are in charge of your career.

However, I suggest you look to get this experience early in your college career. You do not want to waste a lot of time, effort and tuition money taking courses required for medical school if that is not where you really want to go. Organic chemistry is not of much value if you ultimately become a high school history teacher.

Hey, medical school is an expensive \$200,000 investment only to find out you do not like being around sick people!

What kind of clinical experience should I be looking for?

Since you should be using clinical experience for your career discernment, choose the setting that gives medicine its best shot. Ask yourself: “If someone waved a magic wand, and I could be a physician today, what kind of doc would I want to be?” Then, try to find someone in that specialty who will take you on and show you what that type of work is like.

Obviously, you are not held to this decision. But, by looking at a specialty you could see yourself doing, you will have stacked the deck in favor of clinical medicine. If you don't like what you see, it ups the probability that this path is not for you. However, if the kind of work you observe looks exciting and potentially fulfilling, you could be off to the races with medicine as your career of choice.

Several kinds of clinical experiences are good fits depending on where you are in the discernment process and what you want to get out of your time commitment. Let's look at the options from the most basic to the most advanced.

If you want to test the waters, seeing what medicine is all about, **shadowing** may be right for you as a good first step. Shadowing is following a health practitioner around to see what the job entails. It is great for you because it lets you concentrate on observing without having other responsibilities. While you can probably ask some questions, your only task from the doctor's point of view is to stay out of the way. Not much of a letter of recommendation is likely to come from this kind of experience.

Research is the next step up. As a health professional, one of your challenges will be to stay current with the medical literature. If you have been in the research environment and are conversant with research methodology, that is important. The details of the exact type of

research you actually do are relatively unimportant in the long run of a career. Basic science, **bench research**, can give you this training and background.

Bench research may be on campus as part of the requirements for your major or as an opportunity afforded by scholarship. It could be in industry where you can make some real dollars. But, if you are looking to optimize, consider basic science research for a clinical department in a hospital, especially one that is associated with a medical school (... particularly, at a school where you might want to go!).

For example, the Division of Neurosurgery at Iwannagothere U. may be working with a head injury model in rats. You wind up cleaning the cages for the “study subjects” over the summer. Terrific! In addition to learning all there is to know about what goes in and out of rats, there are three opportunities this most basic of basic science work can afford you.

First, you want to **listen** to anyone and everyone who is talking about the research. What are the ideas behind the research? What references can you read that will get you up to speed as quickly as possible about what they are doing? Can you sit in on any meetings about planning (good), progress (better), and/or writing up results (best)? At the end of your time working with them, you should be an expert on the issues pertaining to the research for which your little, four-legged friends are being bopped up side of the head.

Second, it is likely that your supervisor, or someone that your supervisor might link you up with, will be seeing patients on rounds in the hospital before or after your work day in the lab. Ask if you can accompany them. Make it part of your daily routine. You will be getting patient contact and will also get a fair idea of what life is like for medical students on clinical rotations, for residents and for academic physicians.

Third, most academic clinical departments have a schedule of didactic sessions that residents and medical students on that rotation are required to attend. Sometimes it is for an hour or so each day, or it could be for the better portion of one day. These teaching sessions go by various names: Grand Rounds, Didactic Day, Daily Conference.

Ask your supervisor if you can attend **in addition to** your lab work. Nine times out of ten, they will say "yes." The more warm, awake bodies there are at such sessions, the more impressive it is to the person who is presenting. You will be warm, and awake, compared to the tired residents who are post overnight call. Not to worry that you might not understand what the speaker is talking about; go to enough didactic sessions and you will! Introduce yourself to the

speaker, or, better, have your supervisor introduce you to the speaker. You never know who might be on the admissions committee!

Another activity that will very much help you decide about medicine is **significant service** in a medical setting. These are relatively hard to get.

Why? To get those entry level, orderly/nursing assistant jobs that you will hear older physicians reminiscing about, you need training, usually many hours of it. What hospital or medical facility is going to put the time and effort into training you when, at the end of the summer, you head back to college and they are without a worker?

Face it, as a college student headed to medical school, you have little, if any, clinical ability. Unlike your colleagues in the School of Nursing who have all kinds of useful skills, undergraduates in Arts and Sciences have not learned much about medicine. After medical school, your day will come. But, what are you going to say to a patient now: “How are your aldehydes today? Would you like one of Shakespeare’s sonnets for your pain?” However, ask around, cruise the Internet; you never know what you might find.

One real possibility, however, is to invest your time and effort into becoming a certified nursing assistant. With the nursing shortage, “sitters,” someone who stays with hospitalized or bed-ridden patients generally providing comfort care, are at a premium. Getting paid right handsomely to study organic chemistry while your patient sleeps on a night shift is not a bad deal. If you really want to see how a hospital works, keeping your eyes and ears open at 2 AM can be an education unto itself.

There is a category of work that can make use of your talents right now. In fact, it is “top of the pops,” when it comes to both your discernment and career building. That is **clinical research**. This is most likely going to be in a hospital or clinic associated with a medical school residency program, but industry also sponsors clinical trials, especially of pharmaceuticals.

What do you bring to the table? You are dedicated, personable, motivated and used to working hard. You are willing to do entry level work. You are looking for a position where you are helping to enroll subjects in clinical studies.

But, in order to get there, you need to be willing to do “anything” to get your foot in the door. College students who have worked on clinical research projects with me have stapled

papers, sorted files, transferred data from paper to databases, mopped the floors ... well, OK, maybe not mopped the floors, but you get the idea. No matter what the clinical researcher asks you to do, remember, they have the cookie that you want: access to patients in a setting where you have a responsible task to perform. You have only one answer to all they ask of you and that is said with enthusiasm: “Sir/M’am, **YES**, Sir/M’am!”

You are willing to do the scut work of clinical research because you get several bangs for the buck. First, you get patient contact. This can be substantial in both numbers and content. Second, in gathering data from patients, you are mirroring the process of history taking, physical examination and laboratory assessment that doctors actually do. Also, depending on the time and effort that you give to the research, you can have a goal to ultimately contribute enough that you are an associate author on a published paper in clinical medicine. How do you think that would look on an AMCAS application?

Now, don’t expect this authorship as the reward for entry level work over a single semester or summer. But, right away, you want to get involved in as many aspects of the research process as possible.

In addition to the daily rounds and didactic sessions that were introduced in the section on bench research, ask if you can attend any meetings related to the research from planning through publication. The more you are around and willing to work, the more likely you are to be asked to do something. The better you do something, the more likely you are to be asked to do more responsible tasks ... all the way up to completing the requirements for authorship.

If you want to accomplish this goal, plan on returning to the same clinical site over several years.

How do I get these positions?

Ask.

As part of our Hippocratic Oath (“I will impart a knowledge of the Art to my own sons [and daughters], and those of my teachers, and to disciples bound by a stipulation and oath according to the law of medicine”), physicians promise to help those who want to follow them in the profession.

That is you! Academic physicians, those who teach in medical school or residency training programs, have this as part of our jobs. But most non-academic doctors would love to help as well... but only if they know you want the help.

Remember, “Those who don’t ask, don’t get!”

Here is a way to start. Everyone knows at least three doctors: their pediatrician, their family physician or internist and their or their mother’s obstetrician/gynecologist. If you know more, terrific, make contact with them as well.

Schedule an appointment with them. A good timetable is to make calls to their offices on the Friday of Thanksgiving vacation for appointments over the Christmas intersession.

Tell their secretary you would like to meet with the doctor

- To talk about your interest in a medical career
- At his/her convenience
- After office hours so that it does not interfere with their work.

Many doctors will agree to see you. They will often be thinking that you may have seen something in their work that has stimulated your interest in medicine. That may be just the positive reinforcement a doc needs after a bad day of battling with insurance companies and HMOs. If you want to confirm this, ask your pediatrician about who on their corkboard of patient photographs (found in every Kiddy Doc’s office!) has gone on to medical school. See if their face doesn’t light up with a broad smile and their voice take on a register of pride when they point out their patients then in diapers who are now physicians themselves.

When you go to the appointment with the doctor, treat it like a practice interview.* Be ready to answer those inevitable questions, like “Why do you want to be a doctor,” “What kind of doctor would you like to be,” and “Briefly outline the Krebs’s Cycle for me” (just kidding). Wear your “interview suit,” dark, conservative, boring, serious.

* See the monograph, “How to Succeed at Interviewing by Really Trying.”

Bring copies of your curriculum vitae (CV).** Have a notepad and pen. If you are at all nervous or not adept at “winging it,” write down your questions and leave room so you can also write down the answers. Doctors (and just about everyone else) love it when someone thinks what they have to say is important enough to write it down.

Your meeting can go something like this:

“I am thinking about going into medicine. I have watched you take care of me and my family and would like to know what advice you might have for me. [mouth closed, listen, write]

“One of the things I think I need to know in order to decide if medicine is for me is to see first-hand what taking care of patients is all about. [mouth closed, listen, write]

If shadowing is your goal and it is offered, a common scenario, accept for a relatively short period of time, e.g., during the winter intersession, over Spring Break, during the semester if their office is local to your college.

If you want more, you may or may not want to accept the shadowing offer on the same short term basis, but add:

“I am looking for that next step, getting involved in clinical research. Is that something that you have ever done?” [mouth closed, listen, write]

- Since most physicians had to fulfill a research requirement during their residencies, it is certainly possible that your doctor has done or is doing some kind of research. Be ready for war stories.
- Then, *“So, are you still in touch with any of those folks you did research with?” [mouth closed, listen, write]*
- If they say that they did not do research themselves, *“Did any of your friends in medical school or residency go into academic medicine? Are you still in touch with them?”*

Any “yes” → *“Can you think of any way I could get involved? I know it will be entry level, but I will do anything, data entry, chart review, stapling papers. I don’t care what it is, I just want to get my foot in the door.”*

** Don’t have a curriculum vitae (CV)? It’s time to make one. Go to your computer’s START menu: New Office Document: Other Documents: Professional Resume or Resume Wizard.

- If your doctor says that he/she doesn't know anyone who is doing clinical research, ask if they are faculty at a medical school (often community physicians have "clinical appointments" in their specialty's academic department).
- If they are clinical faculty, ask *"Would you be willing to make a phone call to your Department's Chair, Residency Director, and/or Research Director so that I can go to meet them personally to make my pitch for a research position?"*

If the answer is "no" to all this, not to worry. You have had a chance to articulate your plans and motivation for medicine, just like you will do at a medical school interview. You have probably gotten some valuable information and advice about becoming a doctor, even if it is in the vein of "don't do it." And you know that you have at least two and possibly more opportunities with the other physicians that you know for this strategy to work.

Another way to get a clinical research slot takes a bit more "chutzpah." Again, put on your interview suit, make 20-30 copies of your CV, hike on over to the nearest medical school or hospital with residency programs and knock on doors. Most residency programs have a mandate to perform research in order to maintain their accreditation. You will be following Sutton's Law* by looking for clinical research where it is most likely being done.

Before you go on your field trip to the medical school, a little research of your own is a good idea to make your time as efficient as possible.

- Visit the medical school's website on the Internet to get the building's floor plan to map out your route.
- Make a list of the specialties that interest you most and plan on visiting them in that order.

* You will hear this quote many times during your medical education in reference to choosing diagnostic tests that are most likely to give positive results. Willie Sutton was a bank robber in the 1930's who, when asked why he robbed banks, was purported to have said, "Because that's where the money is."

There is no record he ever actually said it, but veracity in medical teaching sometimes takes a back seat to a good story when making a point.

- If you have no clue about your preference, then any order will do; start in the Department of Anesthesia and go all the way through to Urology!
- In order of preference, you would like to talk with each department's 1) Research Director, 2) Residency Director, or 3) the Chair.
 - If you are lucky, the secretary will mistake you for a medical school or residency applicant (the only people under the age of 30 in a medical school wearing suits are applicants).
- If that doesn't work, ask for the Chief Resident, and then any other senior resident. These last resorts, the senior residents, are closest to the deadline for completing their research requirement in order to graduate from the residency. Just like when they were college students, they probably put this task off to the last minute. They may be the ones in most need of your help!

Again, your line is: *"I'll do anything, data entry, chart review, stapling papers, to get my foot in the door to be involved in your clinical research."*

Now, you may hear, "Of course, you can come work with us. We have your corner office waiting for you. We have the funding for you to start this afternoon. May I get you a cup of coffee?" If they offer something this good, be sure that you are not volunteering to be a subject in their toxicology study.

More likely, you will hear some variation of this: "We would love to have you come and work with us, **but we can't do it because we don't have enough money to pay you.**"

Yihah! You have dangled delicious bait in front of the big fish and the hook is set! Your reply is: *"That's no problem. In order for me to get clinical experience and be involved in your research, I would be happy to volunteer my time. I am sure that there are some routine tasks that you or your associate investigators have to do that you would prefer were done by someone else; someone who was smart, assertive and motivated. I am smart, assertive and motivated. I'll do them. And it won't cost you anything. [mouth closed, listen, write]"*

Now you are saying to yourself, "Whoa, wait a minute. I have tuition, loans, a wardrobe to maintain, a social life to attain. I can't work for nothing."

Recall that when you met with your pre-med adviser, you did say that you would do “**anything**” to get into medical school.

OK, so we are all forgiven a little hyperbole. I am going to offer you can make more money by not getting paid to do clinical research than if you do get paid. Before you throw down this monograph as being totally nuts, hear me out.

In looking at formal, funded summer research opportunities, the routine compensation is about \$2500-\$3000. Assuming about ten (10) weeks for the college break, including some time off for yourself (4 weeks in June, four in July and two in August), that stipend averages out to \$250/work week or \$50/day. Doing 40 hours per week on the research is going to leave you little time for outside work. In fact, many formal programs preclude extra work or courses.

In contrast, a routine commitment for volunteering is about twenty (20) hours per week. With this time commitment, you can still get work for real money in addition to the research.

For example, find a job waiting tables, especially during the evenings so your days are free for the research. From talking with students who have been waiters and waitresses, you can definitely clear more than \$50/night, most often a lot more.

Another suggestion has been to work with caterers on the weekends. All those weddings in May, June and over the summer! Think of it as hustling up at a money job now so that you can have a research position that will get you where you want to go for the rest of your life.

Here is another idea. For each academic department that you target, you should check out what the research interests are for each attending physician and the program as a whole. If there is an area that particularly interests you, that researcher becomes your number one priority.

Let’s say, for example, that Dr. Jones in the Department of Psychiatry is doing a study on alcohol use in college students, a topic with which you happen to have some particular expertise. Read up on the topic, particularly from any bibliography that is included on the website. Be a real gunner, look up and read abstracts of Dr. Jones’ papers on the Internet at Pub Med.

When you telephone Dr. Jones, think of it as a tennis match:

“Mr./Ms. Secretary, I am calling to speak with Dr. Jones about his/her paper on alcohol use among college students. Is he/she available?”

You are ready for your first serve

“Dr. Jones, my name is _____ from _____ University (no need to tell them up front that you are a student; hey, over the phone, the chair of the chemistry department and the janitor all *look* the same!).

I was reading about your study on alcohol use among college students. I think there are very interesting research issues on that subject.” [Have one or two intelligent "issues" to talk about.]

Clinical researchers are never more pleased (and often shocked) that someone has actually read their work.

You have full extension on your serve.

“Are you continuing investigations along those lines?” [mouth closed, listen, write]

Wow! Clinical researchers really love it when someone actually wants to know where their research is headed. Your first serve has landed solidly in play.

Wherever their future work is going, the clinical researcher is going to hit to your forehand.

If it is: *"I am a college student looking to get involved in clinical research about that topic."*

[mouth closed, listen, write]

Volley is back to him/her.

The clinical researcher may become wary.

- they may be thinking: Is this a college student hitting me up for a job?

I'll be nice, but offer the obvious reason why working on my research is not possible: there is no money to pay you!

He/she thinks that they have hit a shot that is impossible for you to return.

Little do they know they have lobbed one right to your strength!

You should respond just as you would in the prior example,

“That’s no problem. In order for me to get clinical experience and be involved in your research, I would be happy to volunteer my time. I am sure that there are some routine tasks in your research that you would prefer someone smart, assertive and motivated were doing rather than having you or your associate investigators doing them. When would be a good time for us to meet to talk about what I might do that would make your work easier for you?” [mouth closed, listen, write]

-You have smashed a passing shot for the score!

Now, remember, well as you score each point with all of those you ask in all these scenarios, most of the time these strategies will **not** result in a clinical research position. Nine times out of ten you will hear “no.” That's terrific! You are bound to get more rejections than acceptances to medical school and this exercise just gets you ready for that experience.

More importantly, just like medical school admissions, you just have to hear “yes” once! The more times you try, the more likely it will be that someone will actually give you a chance.

Hey, you are offering free work that can make their lives easier; who can resist that? Besides, how many clinical researchers have read this monograph and know what you are up to?

Another possibility is to work with a Research Associates (RA) program. There are a growing number of these programs that bring pre-med college students into clinical settings working with patients as data collectors for clinical research.

Our RA program At St. Vincent's Medical Center in Bridgeport, Connecticut has had over 600 students enrolling over 25,000 patients in the emergency department as subjects in our clinical research. Depending on the studies at a given time, our college student RAs usually see 50-150 patients per semester with real responsibility that can be tracked and assessed by the physician researchers.

During the summer, we combine the weekly four-hour shift with a course, Medical Decision-Making and Clinical Research, which opens up housing opportunities for RAs from outside our immediate area, as well as the potential for academic credit.

Any college within 30 miles of a hospital can develop one of these programs in conjunction with the medical staff.

If working with us in Connecticut or developing a program through your school is of interest, please check out our web site, www.RAProgram.org .

Even if these strategies are never successful, you will have had the opportunity to speak with many academic doctors at the medical school(s) where you may be applying in the future. Your interview techniques will be honed. Wouldn't it be an interesting Personal Statement on your AMCAS application to outline how hard you tried to get a clinical position ... before you were ultimately successful? Try often enough and hard enough and you will very likely be successful!

Always keep in touch with your pre-med adviser and see what that excellent resource might have available for you. But, don't sit around waiting for them to come up with something for you to do. Remember, "God helps him/her who helps him/herself ... but God help him/her who gets caught helping him/herself!"

Lots of students have been successful with these strategies. Some have not. Send me your experiences, especially if they are insightful or, better, funny. I'll look to include them in future editions of this monograph.

A large part of the joy in reaching a goal comes from the journey getting there.

Good luck.

Keith Bradley, MD

KeithBradleyConsult@gmail.com