

## Advice From Students Who Received Honors In Surgery

- In terms of advice to other students, I think it is basically what you tell them, there is no magic potion.....work hard in your pre-rounds, and in carrying the scut bucket in the morning.....know your anatomy and be prepared for the various surgeries...it helps to know the surgeries the day before...READ, READ, READ!! everyday....I don't think there is any way around this for the final exam....I would also strongly suggest the Appleton and Lange Q & A book, as a good guide to practicing test questions, and the answers really do help in comprehending some of the fine points of surgical management..... (August 1999)
- You asked for "secrets" for success in the clerkship. Unfortunately, I'm not sure I really have any. I took the advice that you gave us during the clerkship orientation and just tried to help out the team as much as possible. I think that trying to stay busy, but being flexible and trying to help out the staff allows the student to learn a lot and even (occasionally) be useful. Obviously, making an effort to keep up with the reading/PBLs is also important.  
  
In addition, it is faintly possible that my undergraduate education at Dr. Morris's alma mater helped me in some intangible way. It's hard to say for sure. (March 1999)
- First off, you mentioned that you wanted to know what my game plan was for the course, and asked if I could email you to let you know so you could pass on the knowledge to other students coming in.

Test wise:

I studied harder for that test than any of the other tests for the clinical clerkships. I read Lawrence once all the way through, and then read surgical recall two to three times through (fast). I tried to have the reading done by the sixth and 1/2 week, so that I could take some practice tests from a red book Appleton and Lange puts out that I found very helpful. I know some people read NMS and Mont Reid, but I did not like the format in those. One thing I think is important is for students to figure out what they can read the best. If one is good at inputting the outline format of NMS, I think they should do that for every class. Didn't work for me.

In the clinic itself, I think the most important thing to demonstrate is a willingness to work for the team. One must always think ahead, and be thinking, what is the next thing that needs to be done, and if I can do it, I should just go and to it. I think one should try to put the team first, and themselves second. Obviously, one can go overboard, but I think that is the most important thing, particularly in tough rotations like the "b" or trauma.

I was also lucky, in that I spent a month at the VA. (and I also did two General Surgery months, which I don't think people can do anymore). The VA affords an ambitious student the opportunity to "shine". As many people say, everyone is promoted a level when they go to the VA. I was also lucky to have a demanding yet efficient chief in Joe Woo, who gave me the opportunity to sink or swim. Such challenging situations offer a real opportunity to show a chief you are capable of handling the rigors of a surgical service.

I think it is key to know your stuff at the PBLs. There is always another level of knowledge above that which we are asked in the questions themselves. If you know those things, you can answer questions that no one else will be able to answer. These are questions that are thrown out into the air, and an opportunity to show you have the extra desire to do the work.

Be on time

Don't kiss any butt

Work hard

Put the team's agenda first

I think those are the best ways to go about things (I'm sure you know all this stuff too).

One thing I would tell people who are interested in surgery is to take surgery LAST. I found that the test was very medicine based, and taking medicine before surgery was helpful in taking the test, I thought. (March 1999)

- I think my most important assets were being enthusiastic (but not in an over-the-top, superhuman kind of way) and having a sense of humor - just generally being pleasant to be around.

In terms of learning the material, I found that going through the cases/question sets before class (and then going to class!) gave me a good sense of the breadth of material on the exam. I read through Recall a couple of times, as well as Surgical Secrets. I also consulted various more complete sources about procedures scheduled for the next day (but honestly, Recall contained 95% of the answers I was pimped on).

I tried to preroound on 3-4 patients each day, and to write notes on them before rounds (I would put the notes in the charts, and carry around little summaries for my presentations). I also helped out with floor work in the late afternoons, which I think the residents appreciated because it helped us start rounds earlier.

A great opportunity for one-on-one interactions with my attendings was attending rounds. It sometimes took some initiative to find out when and where they were, but it definitely paid off to disengage from floor work to go to them.

- ...So I guess that brings me to my first "secret" (although it is not really a secret) for doing well in surgery, studying from day #1. I found it helpful to first read through Surgical Recall to get a quick overview of surgery in general and to gain ammunition for those wonderful OR pimpings. I also kept up with the PBLs. I felt the cases were very pertinent, and I learned a lot when preparing for them. I also read through NMS and went through Pretest, which was definitely helpful for the exam. I also think that having done all of my other core clerkships before surgery helped both on the floors and with the exam. Medicine was particularly helpful for general surgery and the exam.

As for the floors, my advice would be to work hard, treat everyone with respect (from the attendings to the patients to the nurses regardless of how difficult some people are to work

with/get along with), and help your team out anyway possible. And try not to feel defeated when you make a mistake or do not know an answer. Because it will happen, again and again and again...

- Concerning “secrets”, Lawrence’s Essentials of General Surgery and surgical recall were very valuable in providing fundamental surgical knowledge. In addition, Cope’s Acute Abdomen and the PBLs helped us think like a surgeon. (I did not find Blueprints in Surgery helpful. In fact, after reading Lawrence’s, I found Blueprints to be inaccurate and incomplete.) Also, I recommend attending every conference possible.

The OR was a lot like helping my dad fix the car or the house when I was just a pup. I watched how to do things properly, helped when I could, stayed out of the way when I couldn’t, and told mom to hold dinner if something broke. (One of those didn’t apply to surgery.) After I felt comfortable (after ~3 weeks), I found myself asking for and taking tools (suture scissors, stats, needle drivers, Bovie, suction) which I thought were appropriate. The worst thing that happened was the surgeon ignored me or took the tool from me. But mostly, I would be able to perform the task and learn by doing.

- The most important thing is to work hard and be enthusiastic. Always try to get involved whenever possible. You have to be careful, though, not to be too pushy. For a given service, it helps to have read that chapter or chapters in NMS, recall or both a few times such that the material is second nature. While a strong fund of knowledge is not required to receive honors, it does help. As for the exam-it is quite variable but I found reading recall early in the 12 weeks to gain a broad knowledge base and then reading NMS later in the rotation very helpful. If you only have time to read one book, NMS is better. As for questions, it helps to do as many as possible and Appleton and Lange, Pretest, and NMS are all good sources. While questions rarely repeat from the question books, topics surely will. The more questions and topics you see and do, the better your exam score will be. Enjoy, have fun, smile and ask questions if you do not understand things, residents and attendings are approachable and willing to teach students. Good luck.
- As far as advice to other students goes, I would say that the most important things are to be on time, to have a good attitude, to work hard, and to actually do the things you were asked to do or that you committed to doing...i.e. follow through. Pretty general stuff, but you’ll learn a lot (and be taught a lot) just by being there, being interested, and trying to be as helpful as possible. Try to learn as much about and from the cases you see on the wards as you can-from both an anatomy/physiology/pathophysiology perspective and a medical/surgical management viewpoint. Doing this made my reading/PBL prepping very relevant and more productive/memorable, as I had actual experiences in which to frame my learning.

For the test, I have to stick with tradition and continue to recommend the Appleton and Lange test book. Ultimately, though, I think that if you try to get the most out of every day (i.e. maximize your active learning while you’re at the hospital) it will facilitate your reading/didactic learning.

- I have thought a lot about how and why I did so well in Surgery200. After all, I don't consider myself to be anything special. The most important thing, for me, was to remember that YOU are in control of your education. Always ask questions, volunteer your services, make sure people know that you're interested, stay an extra hour past 8:00 if it means scrubbing in on an exciting case and learning something, take overnight calls even if not required, even if you're specifically told to go home! (that's usually when the best stuff happens), make it a point to learn 5 new things every day (I recorded them in a book daily), review anatomy every night, and don't kiss ass. Hope that helped. (March 2000)
- As for my "secrets" of success in Surgery 200, I'm not sure exactly what to say. I can tell you that since I had emergency medicine first and CHOP surgery second, I did not do much surgery studying per se until the last four-week segment. I guess the lesson to be learned from that is that having ER last is not a "requirement" for doing well, as many believe. More seriously, though, I read avidly during the time that I had, and completed Cope's (not a lot of help for a student with no surgery knowledge, I thought, since it seems that every disease can present in any way by the time you're done with that book), Lawrence General Surgery (good overview, short on details, but helpful as a framework; filled with good charts), Lawrence Specialty Surgery (good), NMS Surgery (dense, but pretty much a requirement for the exam), Surgery Recall (good for quick reads in the hospital, and good for a gestalt overview of important points after reading the major texts), and Surgery Secrets (pretty good at highlighting major points). (I guess I should not that I'm lucky to be a fast reader, so I was able to knock off that reading in limited time, and still sleep.) I did my PBL work the Sunday before the sessions, and usually took notes on separate notebook paper instead of in the small spaces in the packet (as many do). And, while I often felt that I "forgot" the details of the topic by the following Friday or Saturday, I was usually more comfortable in an overall sense with the subject than those who prepared the night or hour before. I typed all my H&P's and did some research on the differential diagnosis, so that I was getting a clear sense of linking problems with patients.

As for the rotations themselves, I just love being in the clinics and working with patients, so I enjoyed every moment (or at least reminded myself that I should in those tired moments). I guess I also find stimulating moments that others would not, and maybe that helps me be enthusiastic about this whole venture: I was as excited to hold a 9-month old's hands during a blood transfusion and talk to his mother as I was to observe revolutionary fetal surgery and help with a Roux-en-Y on a 16-month old with an insulinoma. I try to be very honest throughout the rotations, with other students, interns, residents, fellows, attendings, patients and relatives. I know a lot of people think that by saying they are interested in X when they are on X rotation, it will help their grade. I just like to tell the truth that I'm open to different things, but have a prior interest. (August 2000)

- As far as how to get honors in surgery, I think the most important thing is to work with your team. My other recommendation is not to be intimidated by being on a demanding service, doing surgery in the first block, or having ER during your first month of the block. You can still do well on the exam. As far as studying for the exam, I read Lawrence and tried to

answer the objectives at the beginning of each chapter. I also recommend preparing for the PBLs as I found these to be some of the most helpful sessions in all the clerkships. I also read Surgical Recall to review and did the Appleton and Lange questions which I found more difficult than the shelf exam but good preparation. (September 2000).

- In terms of what I did to get Honors, I think the most important thing is to recognize the fact that you are part of a team first and foremost. If you try not to be selfish and help others out, people really seem to appreciate that. It's also important to have a good sense of humor. I found that if I read a little bit each day, my fund of knowledge slowly got bigger. Reading before going to the OR is useful too. In terms of the exam, I read Lawrence and Recall in order to prepare for the PBL's and that was very useful in the end. I think the best thing to do is practice problems-get Appelton and Lange and do all the problems a couple weeks before. I think the most important thing is not to stress, take everything in stride and be enthusiastic. Hopefully that helps. (September 2000).
- 1. Surgery Recall. One of my interns on neurosurgery let me in on the "secret" that the order in which items are presented in Surgery Recall is important. For example, if Recall presents all the causes of lower GI bleeds, they generally place the most common first, so in the exam when they ask about the most common cause of lower GI bleeds, you know the answer.
  2. The cases in the surgery syllabus were excellent. If you can think through the management of all the cases, it helps tremendously for the exam and for taking care of patients.
  3. NMS surgery was fairly comprehensive in terms of the total information needed for the exam.
  4. The Appleton and Lange question book was a reasonable approximation of the test questions, but not really necessary unless you feel compelled to do questions before the exam.
  5. In terms of doing well in the subjective part of the clerkship, just be enthusiastic and try to have a good time. Recall is great for intra-operative pimping, but reading up on the surgeries the night before is the best way to be prepared. (Jan 2001)
- Success during the surgery clerkship requires motivation, endurance, and a good attitude. While it is important to read as much as you can (I recommend Lawrence, NMS, and Recall), it is also important to be a team player. What I mean is, you should pay attention to the goings on of all the patients on the service. Gather the relevant information on the patients for whom you are responsible, and THINK ABOUT IT! Of course you need to know the vitals, but an occasional suggestion from you to benefit patient care is often appreciated. Although it can be exhausting retracting for 5 hours in a row, stay excited. You never know when you will be asked a question, or better yet, asked to bovie or tie a knot! Finally, the best advice I can give you is actually very simple, pay attention. Much of medicine is an exercise in human interaction,

between yourself and patients, and between yourself and the rest of the team. Learn to take everything around you in and to act appropriately.

(Jan 2001)

- You wrote a while back and asked if I could share my Surgery 200 “secrets”. They are the following:

1) I read Lawrence for a general overview of general surgery. I then went through NMS surgery twice and used Surgery Recall pre-op. The Washington Manual is another great resource. PBL sessions are great (PREPARE FOR THEM), a lot of the same scenarios occur on the exam. Make sure you have a couple of hours every night to read (when you are not on call).

2) I would tell people that during the clerkship, they are part of the team, which includes being on time for everything and to help out with the scut as much as possible. Being prepared for the surgeries the next day (e.g. read up on the pertinent anatomy) makes the OR time worthwhile. Don't expect to be asked too many questions, it your responsibility to ask questions during the surgery. If you don't know how to do something, don't worry, ask for help because if you don't you will not learn how to do it right the next time.

3) The surgery clerkship can become frustrating at times but if you work hard and show enthusiasm, you'll end up learning a lot in the end. Remember, you are there to learn.

4) There are really no “secrets” to doing well - just put in you best effort and work hard.  
(2/01)

- Suggestions for SU200:

I have only two suggestions for you as you start your surgery clerkship. The first, be mentally prepared even before you start to spend long hours each day, every day in the hospital. If you are, then you will never be disappointed by staying a little late to see a case, or waiting for rounds to begin. Remember, the housestaff are on call about twice as often as you and have to pull much longer hours. It's true, you are “just a medical student” but if you pretend you are an equal, albeit very junior, member of your team you will be automatically be given a lot more responsibility in the operating room and on the floors. Your surgery rotation is probably the only time in your core clerkships where you will actually get to “do” anything. If that appeals to you, you need to have a good relationship with your residents if you're going to get to “do” anything.

Secondly, be helpful, eager, and above all respectful at all times... it is not that hard to do really but it is surprising how much these simple things can make up for lack of preparation and inadequate knowledge. The most important person you need to be respectful of is yourself and your fellow classmates. Get sleep when you can and help out the other students on your service.

SU200 is a very fun but important rotation. You'll learn a ton of medicine (almost as much as you learn on medicine) and a lot of very practical skills. To get the most out of it, remember all the “people” skills you learned in Kindergarten: “share”, “be nice”, “nap time”, “drink your milk” and you'll be fine. And, don't forget, you never kissed up to anybody in Kindergarten... now's not the time to start. (2/2001)

- Per your letter, I can describe my own “secrets for success,” though I’m not sure how helpful they will be to others. I have to admit that I am not much of a “tool”, in the sense of reading and re-reading all the different review books. I guess I am pretty lucky in that I can read something once and remember it fairly well. I read the NMS Surgery book, and a little bit of Lawrence at the very beginning. I also used Surgical Recall sparingly for the PBL’s. Mainly I learned by paying attention to what was happening around me, and by asking lots of questions, all the time, even when I was on call and very tired. Of course I quickly learned to be judicious about when to ask questions - not too much in the OR, not on rounds, not when my resident was very grouchy. But it worked out ok that I risked being a little annoying in order to learn a lot. And I made up for being a bit of a pest by always pitching in and helping out the team. We had a very busy clinic at the VA, and the residents were appreciative that I worked hard and saw a lot of patients. This was a mutually rewarding experience, because I also learned a lot and felt like I was truly part of the team. At HUP there were two weeks when we had only one intern for 30 floor patients, and I was always ready to stay late and come in early to help him with the scut work; this also proved to be a valuable learning experience, and the team appreciated my help. So I guess the moral of the story is to be interested, stay curious even when you are tired (tall mochas from Jazz and Java are helpful in this regard), and help the team do what needs to be done in order to take care of your patients. (Plus, as a future pediatrician, I have to throw in that I found my box of 64 Crayola Crayons extremely helpful for coloring in various anatomical diagrams in NMS! :) ) March 2001
- the course was run very well, i tremendously enjoyed my time on the A service and at CHOP, and the residents and faculty were hospitable and responded to my enthusiasm. i also found the problem-solving sessions good learning opportunities. the basic science talks on saturday mornings were either excellent or not useful. but i don’t think those are your territory.as for my secrets, they have been the same for most rotations-

  - 1) be nice/fun to work with. i think this is the most important factor for success in any rotation.
  - 2) be enthusiastic and ask questions, especially in the OR- even the crankiest, sleep-deprived resident/attending never yelled at me for asking a question. it shows you are interested. don’t confuse these things with enthusiasm- touching instruments when not told to do so, ask “can i make the incision/put in the chest tube/close the fascia/etc”, or complain about not getting to do stuff in the OR.
  - 3) buy “mont reid surgical handbook” and carry it around and not “surgical recall”. it is an excellent resource for reading up on cases/surgical problems, management, and also very good for PBL stuff. if you care, i was told by several residents “i hate it when students carry that recall book around”.
  - 4) forget about getting “pimped”, just have fun with it, they aren’t part of your evaluation. you will realize that no one expects you to know most of the answers that you are asked. i think it is their way of keeping you involved as you hold the retractor.
  - 5) the technical aspects of the operations aren’t your concern- you need to learn presentation, diagnostic work-up, and management. don’t lose site of this- this is what is on the test and pbls. as such, ALWAYS read the patient chart before the case, and if

possible, the night before the case or while waiting for the patient to come in the room (use the mont reid). this maximizes your learning.

- 6) a word about the shelf exam- it is mostly internal medicine, post-op complications, that kind of stuff. i read nms surgery- most of the time i thought “this reads like the nms medicine, not surgery”- but that is what the exam is. that is one of the great things about surgery- you need to master and utilize knowledge from all medical fields AND you get to operate.
- 7) surgery is all about the team- be a part of it. help the other student/the intern/ the resident get their work done. don't show up other students or shout when you know the answer. most people view these things with disfavor. (March 2001)

- Oh, and as for the “secrets”:

It seems to me that the real secret for honors must be just to work hard, not be a complainer, try to see as much as possible, and always remember that the patient is more important than anything else (including whether or not you get honors). Those items are what I put 80% of my effort into doing. Also, it was important for me to recognize that every instance where I didn't know the answer was the perfect opportunity to learn the answer (i.e. I welcomed those little pimping sessions with open arms- it was certainly better than being bored, and it eased the stress usually associated with them.) (August 2001)

- Regarding the secrets, I must admit I was surprised to see my grade, since I never got much feedback about how I was doing, and since I often felt that people were harsh towards me. I think one of the points is to not take things like that personally, and that you really have to understand what they're going through and how that may make people react more impatiently. I never had any 'secrets' as to how to do well in surgery... I was earnestly interested in what I was doing, and in learning, so I think that mattered. As far as reading goes, I actually never had that much time to read because of the busy schedule we had, so that reinforces my thought that my role as a team member must have been more important in how well I did ultimately in terms of a grade. I used the same books everyone else had, Recall, some NMS, some Lawrence. I think that a good student must be willing to work hard even through the times of frustration and fatigue. It's kind of like an ant or bee colony-you should always keep the concept of working for the team in mind, and that you're all in this together in a way. Most importantly, I think (as for any rotation), if you like what you're doing, it will show. (August 2001)
- General: Be there and on time even if others are not. Work your butt off. If you put in a good effort you will get a LOT back. Smile and laugh. On some days you may be the only one. .Floors: Pre-round as efficiently as possible but make sure you know ALL the numbers Keep the bucket/pockets well stocked and be ready for all dressing changes. Be nice to the nurses, know the omnicell. Be observant and learn quickly in the first few days. Earn the trust of the over-worked interns early and help them out-they will really appreciate your help and will want you to do as much as you are willing. They can also give you helpful hints about the OR, impressing the chief/attending etc. If a topic comes up that the residents

don't seem to know a lot about, prepare a 1-2 page outline and distribute before you're asked! It may actually be helpful. OR: Be polite, show careful but eager initiative and get to know the scrub nurse and circulator (the one who is not scrubbed). Figure out your glove size and pull your gloves (give to scrub nurse) before each case. Review pt chart and films, studies. Learn how to prep and drape and how to insert foley. Know your anatomy (especially blood supply). Brush up right before the case. Stay alert and be eager (ask intelligent questions, quick to help out, be ready for first knot or stitch) but not aggressive (taking instruments when not asked, trying too hard to anticipate) and you MAY be rewarded with the scalpel or the closing needle. Write the brief op note unless told otherwise. Follow pt to recovery and POC (post-op check and note) them if you're still on. Shelf exam: Read everyday unless you're passing out. Recall, A&L, pre-test I personally didn't find NMS or Lawrence helpful (others did) but rather sections of Sabiston (MD consult) or Up To Date if you have the time. (Sept 2001)

- As for "secrets"- I started reading right away and used Lawrence a little bit, all of NMS, and finally lots and lots of questions (pretest, Appleton etc.) I got the most out of doing questions and then reading on what I did not know. So basically, starting early and doing questions helped me I guess. (August 2002)
- Unfortunately, there aren't too many secrets to doing well in surgery. There is virtually no way of doing well without putting in a whole lot of work. For me, doing well on the shelf was a matter of pacing myself. I used Lawrence's Essentials. Take advantage of the more lax schedule on emergency medicine to get some of that reading done. Also, be aware that there is a substantial amount of subspecialty surgery on the shelf, so Lawrence's Essentials of Surgical Subspecialties or something like it is absolutely necessary to get honors on the exam. I used Appleton and Lange, which I think is better than Pretest for two reasons. I think the questions were more challenging. Also, whereas it is organized overall in sets of questions by topic as is Pretest, it also has an integrated exam at the end with a bunch of questions from different topics jumbled up. I took that exam quite early in the block to get a sense of the level of difficulty on the shelf (for which Appleton and Lange is a reasonable guide) and how I was going to have to target my studying. I then would read a chapter in Lawrence's and then take the corresponding chapter in Appleton and Lange. That made the learning more active and kept my eyes from glazing over too much. I also found it useful to have a larger textbook on hand for reference, when I had more detailed questions. I used Greenfield's Surgery: Scientific Principles and Practice, but Sabiston's and Schwartz's are also good texts, I hear. Sabiston's is available on the web through the library's e-books section if you have a good web connection. Go to the biomed library home page and pick "Reference Shelf." You should see the link to Sabiston's by Townsend there.

As for doing well on the wards, work hard, be nice to everyone from nurses to docs, and try to let the everyday annoyances inherent in the surgical hierarchy roll off your shoulders. Though inexcusable, it should not surprise you when your residents and attendings ask you do the unreasonable or treat you harshly. You have to make a personal decision about how much you're willing to take, but don't make the decision to snap back in haste or anger. You'll lose. As you've probably heard, Surgical Recall is very useful preparation for pimping. Be nice to the nurses, because it's generally the decent thing to do, and also because their

help in finding things and getting the nitty gritty everyday things done can be invaluable. Good luck. [\(Sept 2002\)](#)

- The most important thing in the clinics is to work hard. If a resident asks you to do something, try and expend as much effort as possible to get it done correctly before going back and asking for help. A tenacious attitude will show that you are competent, and the busy residents will appreciate that you are able to lighten their workload. Be calm, confident, humble, interested and happy at all times. Keep a positive attitude, and appreciate the opportunity to contribute to the team whenever possible. The other members of the team will likely not coddle you and may even pay very little/no attention to you, but don't take it personally, they are just busy and probably treat all med students that way.

In terms of the test - start studying early. A fact known in the first day will not only be as useful on the test as one known on the last day, but will also allow you to look good when asked in the OR or on rounds. Use Recall first, know it well, but go for Lawrence if you want to do well. Appleton and Lange questions are surprisingly good (save yourself a good week to do them). Be able to diagnose early on in the block (eg Charcots triad) so that you can learn a bit of management for the test. The shelf exam will rely heavily on "classic" presentations (eg carcinoid, pheochromocytoma, MEN, spontaneous pneumothorax, etc) and will have questions on management of typical surgical emergencies and/or complications. My test did NOT have a single question on specific surgical procedures - you really don't have to know the difference between billroths (though dumping syndrome may appear), repairs of hernias, types of sutures or incisions, surgical history, or anything like that. It's all medical diagnosis/management. And I wouldn't recommend buying any other books than the ones mentioned above to study subspecialties - there will be a few questions, but you are way better off knowing the above books better and will still likely get those questions right (I got 99<sup>th</sup> percentile with only those 3 books).

Important (as important as studying for the test) - In the OR (but very rarely on the test) you will need to know the anatomy - brushing up on the anatomy beforehand and a quick recap of the relevant chapter in Recall (keep it in your white coat, it's worth it for sure) will take you from looking stupid to looking like a total genius, and will require pretty minimal effort. The questions you will be asked are almost always the same for a given procedure. [\(March 2003\)](#)

- Clinics: Do everything you are asked to do and ask for more and never complain. I felt my biggest problem was that I did not ask for more opportunities in the OR. That is after about a week when you get familiar with the members of your surgery team you should actively ask to do stuff such as help closing skin or just letting them let you tie some knots. Unfortunately as I found out if you don't ask for it you may not get it.

PBLs: I found all that I needed for the PBLs was in the Washington's Manual of Surgery, [uptodateonline.com](http://uptodateonline.com), and in Lawrence. You should start with Lawrence and then look up more specific details as far as treatment goes in the Washington manual and/or on [uptodateonline.com](http://uptodateonline.com).

Exam: For the exam I started by reading Lawrence. Then I did the questions in Pre-test and Appleton & Lange and used NMS for quick reference.

Make sure to do the extra-credit presentation. (March 2003)