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# Clinical redbook: 1999-2000

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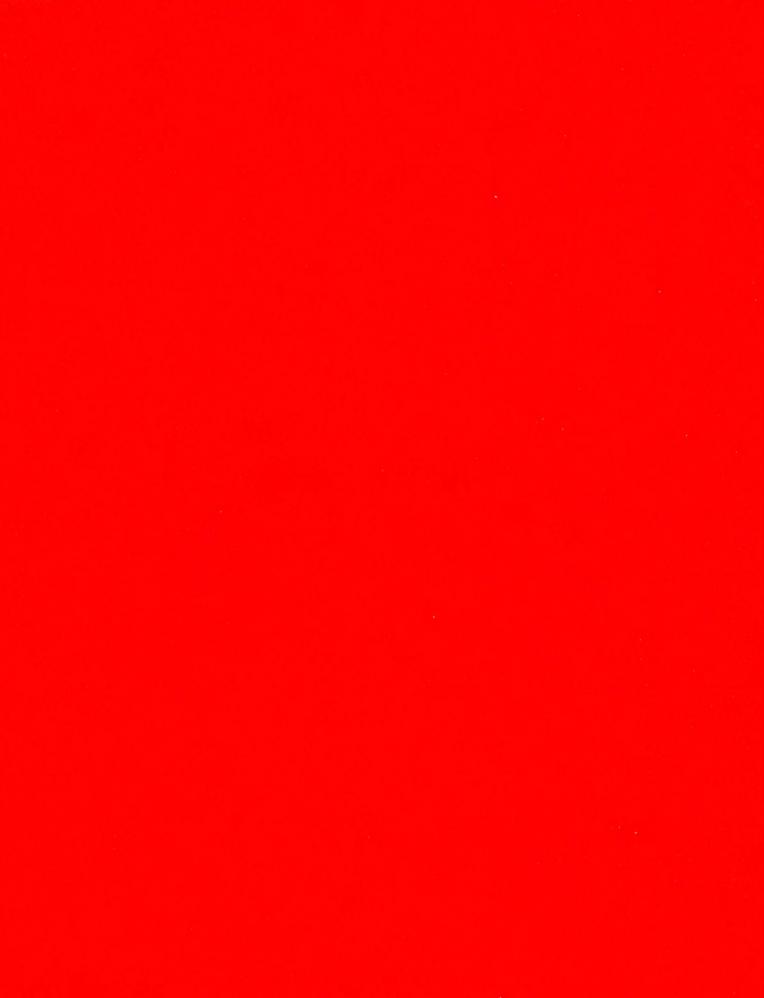


Boston University School of Medicine

# Clinical Redbook

1999-2000

A Guide for Third and Fourth Year Students



# Introduction

This is the fourth edition of the 3rd and 4th Year Redbook. The best source of information about the rotations at BUSM and how to get a residency is available from other students; now BU students have an easy way to get that information.

This book is intended as a work in progress, something started by the Classes of '96 and '97 to be continued by and for those who follow. There are many missing courses, specialties, and sections that could be very useful to future generations of BUSM. Also, rotations change considerably from year-to-year and will need to be updated. Hopefully those of you who have ideas for great new sections or who want to update and inform other students about rotations will write them up and submit them to the Office of Student Affairs for inclusion in next year's edition.

Please note that there are many changes that will occur in the third year schedule over this next year. Surgery and medicine will both become 12 week rotations, while psychiatry, ob/gyn, pediatrics and family practice will be 6 week rotations. Therefore, some of the information in this edition may be obsolete. However, there is still plenty of invaluable information.

I would like to give a special thanks to everyone who contributed to this book; that so many very busy third and fourth years were willing to donate their time to future classes speaks very highly of the character and dedication of BU Medical students.

I hope you find this 3rd and 4th Year Redbook useful!

#### Fatema Azam '99

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Opinions expressed in this edition are not a reflection of the administration or the entire student body of Boston University School of Medicine.

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### **General Descriptions of Hospitals**

East Newton Campus (ENC): This hospital is located at 88 E. Newton and is the former University Hospital (UH). Most patients are a combination of private patients whose primary care attendings have their clinic in the Doctors' Office Building (DOB) or in neighborhood health centers and unassigned patients who do not have an attending at BMC. There is a wide variety of pathology you will see here.

Harrison Avenue Campus/Pavilion (HAC): This is the former Boston City Hospital (BCH) where mostly free care patients go for care. This hospital is committed to serving the city's indigent population. Sixty percent of all department chairs of medicine in the country trained at one point in their careers in this hospital. Students and residents from Tufts and Harvard used to train at City, but now only BU students are there. Therefore, it is very well known and you will see an amazing variety of pathology here.

Boston Veterans Administration Medical Center (VA): The BVAMC is located on South Huntington Avenue in Jamaica Plain, and is easily accessible by public transportation. You will see mostly elderly males with chronic diseases. The VA has aspects that can be viewed as positives or negatives depending on your perspective. There is not an extensive network of ancillary services. This means that you start IVs, draw bloods, transport labs, perform Gram stains, and other assorted jobs that are often covered at other hospitals by support staff. You also will get a chance to do more extensive procedures, especially if you are there later in the year. The people you will work with are generally helpful.

Roger Williams Medical Center: This is a community hospital located in Providence, RI that BU became affiliated with a few years ago. The patient population is diverse and the residents are great in both medicine and surgery. You will live in a house across the street from the hospital. You are given meal tickets to use when you are on call, but you can actually use them anytime. The food at the hospital is cheap, and is very good. The house is actually very nice, and you will have your own bedroom, living room with cable TV, a good size kitchen, and access to a laundry machine and dryer. They provide pots, pans and dishes, but you will need your own towels. Definitely explore Providence! It's a beautiful city (some parts anyway). One downfall of this rotation is that you can easily feel removed from the BU community. It is difficult only because you cannot make trips to the Office of Financial Management or Office of Student Affairs. The residents there understand this and you can make arrangements whenever you need to. However, to stay up-to-date on school affairs, e-mail is accessible on the computers in the library. Also, it is highly recommended that you have a car while you are there. There is no subway system like in Boston, so buses are the main way to get around the area. There is a supermarket almost a mile up the same road where the hospital is. Definitely visit Warwick Mall if you like shopping and try the restaurants on Hope Ave, by Brown University.

There's a lot to do in RI, contrary to current popular opinion, especially if you're around in the summer. Try to make it to Waterfire in downtown Providence during the summer. It's along the river, held every other Sat. night from 8-12. You can walk along

the river or rent boats to go out on the river. Also try to head down to Newport. There are a lot of restaurants and bars there. If you're there on a Sunday, make sure you head out to Castle Hill for the best view of a sunset you'll ever see. Also there are awesome beaches in RI – you could go to any of them, as you really can't miss.

### Getting a Beeper at Boston Medical Center

Fill out a request form in Operator Services, F-5, Preston Family Building, East Newton Campus. They will do a credit check on you. You must be able to make a year's commitment. Cost is \$15 for a one-time activation fee and \$7.95 a month, billed monthly Contact: Joe Delponte, Telecommunications Department, 638-6894.

Note: If you do Surgery at BMC, the Department of Surgery will provide you with a beeper if you don't have one. Also, at Roger Williams Medical Center in Providence, they will provide you a pager.

### **General Tips Applicable to All Rotations**

When you finish your work, always ask the intern if there is anything you can do for him/her. They will always appreciate this, even if it is scut, but ask them to teach you something in return. The more scut that you do, the more they should be teaching you. When your intern has nothing for you to do, always ask the other intern if he/she needs your help. These are signs of true teamwork! Residency directors, no matter what field you go into, like to see that a student is a team player and your evaluation will reflect this! You are not done for the day until your team is done for the day! Read as much as you can on all your patients and the patients on your team. If you hear about an interesting patient on a different team, ask that patient's intern or medical student to introduce you and show you any physical findings. Attending rounds is an opportunity for you to shine. Know everything you possibly can about your patients! Know what each of the drugs they are on and why they are on it! Know everything about their diagnosis, including epidemiology and pathophysiology. Look up recent articles, review or otherwise, and make copies for your team members. The best and fastest way to an attending's heart is with useful journal articles (that is what a pediatric attending told me once).

# Third Year Rotations.

### **MEDICINE**

### **Boston Medical Center**

NOTE: Students will be choosing between BMC and the VA as sites for the medicine rotation. If you are selected to rotate at BMC, your 11 week rotation will be divided into a 4 week block, a 3 week block and another 4 week block in that order. Two of the blocks will be spent doing inpatient medicine while the third will be spent in an outpatient setting (i.e., CCHERS, ACC Clinics, Lowell VA, DOB Clinic, and Roger Williams in Rhode Island.)

#### Harrison Ave Campus

The medicine rotation at HAC provides the student with exposure to a wide variety of disease entities. The patient population is quite diverse representing many different cultures. In the past, there have been an abundance of older, nursing home patients. Students are expected to pre-round on their patients at 7:00 am and be ready for work rounds at 7:30 am. Rounds generally last approximately 2 hours during which students present their patients and the resident conducts informal teaching sessions. Be prepared for light pimping on your patients, but pay close attention because your resident will frequently turn to you and ask questions on someone else's patient. Every morning at 9:30 am the residents have morning report, and students are sometimes welcomed but rarely encouraged to attend. Many students felt they learned a lot from these sessions if they had the time to attend. Most of the time you will not have time because you will be doing work for your patients, i.e. calling in consults, writing notes. Attending rounds are Monday, Wednesday, and Friday from 10:30am-12:00pm. The attendings at BMC are generally very good about teaching. Be prepared to present an interesting patient you recently admitted or a topic at Attending Rounds. This is an opportunity for you to shine. There are also bi-weekly clinical problem solving sessions, physical diagnosis rounds, and professor rounds that have now been integrated for students at both HAC and ENC. These are all very useful!

Students do not take overnight call and usually determine on-call hours with their particular intern. The medicine rotation requires that students come in on Saturdays for rounds. Dr. Levin, the Clerkship Director at HAC, says that students should be able to leave weeknights by 6:00 or 6:30 p.m. and Saturdays by noon, but this is highly variable depending on the residents and attending for a particular team. Dr. Hershman insists that one weekend day off should be expected every weekend. So if your team is on call Sunday, you have Saturday off. If your team is not on call over the weekend, you should still expect to come in on Saturday or Sunday morning to write notes on your patients. Notes need to be written on patients six days a week. Try to pick up at least one patient each time you are on call. Do not make the mistake of picking up four or five patients, just to impress your resident, because you will spend a lot of time filling out paperwork and not enough time learning about their particular condition. Students at BMC are required to keep a log of their patients and to plot the natural history of a particular disease.

The exam in this rotation contributes little to your grade. In fact, I know someone who almost failed the exam, but still managed to honor the rotation because they were so impressive on the wards. That does not mean you should not study for the exam, but never sacrifice your clinical experience for reading time. You can only strengthen the knowledge you gain from a patient by reading a book!

#### East Newton Campus

The medicine clerkship at ENC is very similar to the HAC schedule. One difference is the ancillary services. This means that when you are at ENC you will write orders for a blood draw; whereas at HAC you will actually have to fill out the paperwork, send it to the lab the night before and hope that it gets done (meaning that you often have to draw blood from patients yourself). Dr. Hershman, the clerkship director at ENC, is superb and is a strength of the clerkship at this site. There is no overnight call.

### **Boston Veterans Administration Medical Center**

Seven of the eleven weeks are spent on the wards, the other four weeks are spent in Ambulatory Day Treatment Center at the VA (ADTC), Causeway clinic in the North End or Roger Williams in Rhode Island. In the ADTC, you will see one patient per day and present them at teaching rounds the next morning. Causeway Clinic can be a good experience seeing patients in your own office with a different attending each day, and the food in the North End is incredible. There is also free food on the wards. Overall, the strength of the VA is the fact that the patients are generally pretty sick, and need lots of care and you are integral to their receiving it. They also stay in the hospital much longer than at conventional hospitals, so you can see the course of their disease and treatment. Medicine is very much resident dependent. If you have a resident who is interested in teaching and well-organized, you will learn a lot. Dr. Caslowitz does a great job coordinating teaching sessions.

I personally never saw a student/resident do a gram stain (let alone be able to interpret it). The patients at the VA are also generally good for students to work with because they are used to having students work on them and tend to be very patient (although some are uncooperative just as you would find at any hospital).

#### Suraj Kurup, BUSM III

The experience at the VA was the best part of the internal medicine clerkship. Dr. Joel Caslowitz, who is the student coordinator at the VA, does an outstanding job teaching pathophysiology of many of the common disease processes. He meets with all of the students on M/W/F. On Monday, Dr. Caslowitz usually discusses a particular topic ranging from EKG interpretation to fluid and electrolyte balance. The Wednesday discussion is centered on several case studies. There are 2-3 case studies per discussion and focuses on one of the internal medicine subspecialties. There is also a case study discussion on Thursday that is conducted by one of the two chief residents assigned to the VA. On Fridays, one of the third year students will present a patient case encountered on the wards. The student assigned on that week will present the case and write the relevant problem list on the board. A discussion of the problem would follow. The learning curve for these discussions is very steep. Almost every student who has been assigned to the VA enjoyed these discussions and found the breadth and depth of Dr. Caslowitz's knowledge to be quite impressive.

### Roger Williams

There are great things and not so great things about Roger Williams. First of all, practically everyone agrees that your experience there is what you make of it. The inpatient team is made up of one resident and one intern. There are six teams and two will have one medical student apiece. Therefore, you have no worries about competition and you are free to pick up whichever patients you want. Patients tend to be older and from nursing homes. The housestaff is very excited about teaching students. Dr. Macko is the coordinator of the rotation and he is very accessible and eager to help you. Dr. Macko runs the once-a-week EKG sessions that, for some students, made life a lot easier.

### **SURGERY**

#### **Boston Medical Center**

Ron Gerald Landmann, BUSM III

Students will be choosing between BMC and the VA as sites for the surgery rotation. Electives are done in three-and-a-half week blocks at an outside hospital and one week blocks in surgical specialties and anesthesiology. The remaining weeks will be spent on the inpatient service. If you are located at BMC, your time will be further subdivided approx. 50-50 between ENC and HAC. You will rank your elective choices when you make your hospital rankings. You will not find out which elective and which outside hospital you are doing until approximately one month prior to starting your surgery rotation. Mary Stafford, the Medical Student Education Administrator, managed to give everyone either their first or second choice this past year. Understand that each elective has a different number of spots available - therefore, rank your electives wisely and be realistic in your chances of getting your "top" choice. For example, the Cape Cod elective has three spots available during each three week block, thus 9 total spots/rotation. On the other hand, Pediatric Surgery only has one spot available/three block, thus only 3 Therefore, when you rank your electives, rank wisely and be total spots/rotation. realistic. If you have any strong desire for a particular outside hospital or elective, let Ms. Stafford know in advance via email at mary.stafford@bmc.org as she is very accommodating.

#### Harrison Ave Campus

At HAC there are two teams, A and B, each with two interns, one fourth year resident, and one Chief. One of the fourth years will be a Tufts resident who is doing a trauma rotation. The teams trade off admitting patients every other day, but sometimes you will have one team admitting for two or three days in a row. Call schedule is dependent on the number of students (e.g. one student/team/night--i.e., two students total/night) on both teams and what the Chief decides--usually works out to be q3 to q6.

When on call, the student should be with the fourth year resident (this rarely happens). To maximize the learning experience, the student should be involved in admitting/operating at night rather than "floorwork" with the Intern (a guideline, not a strict rule). Call provides an opportunity for the most one-on-one teaching from the residents/attendings if the student is assertive and asks lots of questions. Call can also be

a lot of fun, so just get into it and always remember that you are part of the team. Be prepared not to sleep when you are on call if you are on the team that is admitting. It is not uncommon to be woken up at 11 pm for an emergency appendectomy, at 2 am for evacuation of a subdural hematoma, and then barely make it to rounds on time because of a gunshot wound. Rounds start at 6:45 am sharp! Always be on time, residents notice this!

In the OR you will see many simple surgeries (lipomas, hernias) and emergency trauma. There is plenty of trauma at HAC, and because there is no dedicated trauma service, both teams see their share. There are some complex cases, but not as many as there are at the ENC. There is limited exposure to many of the attendings, with very little exposure to Drs. Menzoian and Becker. However, the new residency director, Dr. Millham, is in Critical Care at BMC and operates primarily there, so you may get more chances to work with him. Every Friday morning at 7:30 am, Dr. Hirsch, Chief of Surgery, has Gorilla Rounds in the SICU. This can be one of the most terrifying experiences of your surgery rotation, but also one of the most educational and rewarding. A resident presents a patient from the SICU in what may seem to be excruciating detail. Dr. Hirsch asks the residents and students questions ranging from equations used to calculate lung volumes to why certain steps were taken in the care of the patient. You can learn so much in this one-hour session so pay close attention. You will never know when Dr. Hirsch will call on you next!

Every afternoon (except Wednesday) there is Surgery Clinic from 1:00 pm-4:00 pm in the ACC building. This is an excellent opportunity for students to evaluate new patients, follow-up established patients and perform minor surgical procedures. You will probably see about 3-4 patients/afternoon. The downside to clinic is that you have to present your patient to a resident or an attending and finding one or the other can often be like finding a ghost. Overall, clinic is a good experience but very tiring. Try keeping a good attitude, it will make it more fun. Every afternoon, except Friday, there will be a conference from 4-5 pm. These are educational and required, and once every 3-4 weeks they may have food.

#### E. Newton Campus

The surgery clerkship at ENC is an excellent site to learn the basics of General Surgery. The majority of time in the OR will be spent on "bread and butter" cases. You will see little to no trauma cases at this site. There are three services at ENC: Smithwick (Vascular), Mozden (Oncology), and Chief (General). You will be assigned to one of the teams and will work under a chief resident, senior resident, and intern. There is ample opportunity to participate in OR cases of services other than the service you are assigned. The student has a position of responsibility. You will carry your own patients, present them to the team during morning rounds, and follow them pre- and post-operatively. The call schedule varies depending on the number of students on service. It is overnight call, and you share a call room with the Sub-Intern. You will rarely be woken up during call! The students are expected to be at morning and afternoon rounds, morbidity and mortality conferences, Grand Rounds, and the didactic sessions specifically for students. Students also have faculty preceptors assigned by the department. There are scheduled meetings with the preceptor, in which students present and discuss patients. The faculty at the ENC

is excellent, and overall is very interested in teaching, both in and out of the operating room. I can only speak from my own experience, but in the Spring-Summer when I took surgery, there were too many students and too few cases, so there was not ample opportunity to observe cases. This may not be the case in the fall/winter when there are more surgeries scheduled.

#### Boston Veterans' Administration Medical Center

During your surgery rotation, you have the luxury of your choice of parking spots, because you get there so early. Hours for students average 6 am to 6 pm. Students will become proficient in minor procedures, including peripheral venous blood draws, arterial sticks, and minor wound debridement, and will gain experience with central lines. There is a variety of general surgery performed at the VA; however, bowel resections and revascularizations predominate. Students see approximately 2-3 cases per week in the OR, and spend the rest of their time on the floor doing patient care. There is a surgery clinic once a week and several sessions of pig lab. In pig lab, students perform surgery and practice suturing and tying. The attending takes pig lab very seriously, and so should you! Your call schedule will vary depending on the number of students on service. Students will rarely stay up all night. There is no air conditioning in the call room (which is not great in the summer), yet it is a large room with a telephone and a computer. Meals are free for students on call, but the main cafeteria is closed on the weekends. There is a paucity of didactic teaching sessions for students.

### Surgery Electives and Community Hospitals

### Roger Williams Medical Center

Daniel Oates, BUSM III

This is a good rotation, and it gives you a nice chance to get away from Boston for a bit. There will be four of you here and you will live in nice housing that is a block or less from the hospital. Two of you live in one house and two in the other (you'll share the house with the students down there for medicine).

A typical day starts with pre-rounds at about 6:30. We tried to get our notes written before rounds, but your resident (who will be a PGY 3) will tell you what they want from you. Rounds start around 7:00 and you will only round on the Surgical Oncology patients. After this you will spend you day either in the OR or reading in the library. There is very little scut here, as it is a private hospital and the nurses do most of the work. As a side note, the nurses on 4 West are probably the best nurses you will ever see in your medical career. All of us were amazed by how much they cared about their patients and how good they were at what they did. They will treat you nicely as well, which is a bonus!!

Picking up patients is a bit confusing here. There are patients that belong to the surgical oncology service and the fellow will tell you about their arrival. These are the patients you will round on as a team. There are also general surgery patients who usually come in through the ER. Picking up these patients is a bit of a hit or miss, as often one of the surgeons will run into you in the hall and tell you to see a patient in the ER. We found that usually it was the person on call who would pick up these patients, as the PA who

staffs the ICU would get a call about them and pass the info along to the on call student. However you will not round on general surgery pts. as a team. You will see them and write a note, which will be co-signed by the attending at some point during the day.

Overall everyone has found it to be a good experience down at RWMC. Make an effort to work with Drs. Vito and Koness, as they are quite nice and will teach you. Also be forewarned about Dr. Wanebo's clinic on Tues and Fri. afternoons. It can literally run until 8 at night, with some patients waiting three hours to be seen. Dr. Koness has clinic on the first floor on Tues. afternoons, so you may want to work in his clinic instead. In the OR you will get a chance to see lots of lap choles, appys, A/V fistula creations and some very unique surgical oncology cases with Dr. Wanebo. Beware, however, as some of his cases can be long (i.e. taking more than one day!!!).

### Roger Williams Medical Center

Ron Landmann, BUSM III

As in the Medicine Rotation, there are great things and not so great things about Roger Williams (RWMC). RWMC is most well known for its Surgical Oncology procedures performed mostly by Dr. Wanebo. He performs some procedures that no one else in the world does. One of these procedures is a 2-3 day affair - but you may never see anything like this ever again. If you are genuinely interested in general surgery (and liked watching M\*A\*S\*H re-runs), this is definitely an experience not worth missing. Students perform up to 10 surgeries per week. The range of cases spreads between appendectomies and hernias to head & neck, plastics, and major surgical oncology cases. At RWMC, your experience is also what you make of it. You can work as much, or as little, as you want. Some students chose to concentrate on their readings, while others dove into doing as many surgeries and procedures as possible - in fact, at RWMC, you will have the most opportunity for placing central lines, arterial lines, Swann-Ganz (Pulmonary Arterial) catheters, and broviac and Port-A-Caths. Some students also got the opportunity to be 1st Assist or primary surgeon on major cases - from appendectomies and hernia repairs to hemicolectomies and pericardial windows! (Alas, Whipples are still the domain of attendings and residents). You will be working with a PGY-3 Surgical Resident from BU and a Surgical Oncology fellow from RWMC's own program. This gives you a tremendous amount of responsibility in the management of your patients. A typical day starts at 7:00 AM with rounds (pre-rounding before), and ends at 7-8 PM depending on when Dr. Wanebo's clinics end. However, there is some down time when you can catch up on readings for the exam or for the presentations at conferences that students actively participate in. There are Head & Neck conferences, Radiation Oncology, Breast, M&M, and thoracic conferences - all of which students are encouraged to present in. There is also a weekly literature review with just the students, the BU resident, fellow, and Dr. Wanebo that is totally student-driven. Additional teaching is provided by Drs. Koness, Avradopoulos, and Weaver. Call is Q4, however, students rarely got called into the hospital at night. Depending on your scheduling, students may only have to be down at RWMC for 1 weekend the entire month. An additional plus for those students tired of "scut" - the ancillary staff at RWMC is great - you never have to draw blood unless you want to (or it's an emergency, of course). In all, I had an excellent rotation down at RWMC where I gained lots of hands-on experience in general and oncologic surgery - with great teaching to boot!

### **Brockton Hospital**

The Brockton elective is a three week general surgery elective that can be chosen by students doing their third year general surgery rotation. Brockton is a community hospital that is a 35-45 minute drive from Boston. I would recommend this rotation to any student interested in receiving a very strong general surgery background regardless of their field of choice. The hospital performs many of the "bread and butter" surgeries that we as third year students should be exposed to. There is a minimum of 6-8 general surgery cases scheduled per day, which allows for ample time in the OR. The surgeons there are very interested in teaching, especially Drs. Corey, Paulson, and Ambrosino. During my rotation there, I stayed at the hospital on weekdays to avoid the daily commute and would return to Boston on the weekends. Overall, I had a very positive experience during that rotation and learned nearly all of the basic procedures there thanks to the large and diverse caseload. If you choose to go to Brockton Hospital, you can expect outstanding teaching, a terrific caseload and most importantly ample OR time. I enjoyed my rotation there and think is a good choice for those interested in a sound general surgery background.

### Cape Cod Hospital

The Cape Cod Hospital is located in Hyannis and has the nickname of "Camp Surgery." When you arrive on your first day, expect to scrub in first thing. Upon your arrival, you will get a brief tour of the hospital, be shown how to scrub (if you don't know how), then be thrown right into the OR. The housing for the rotation consists of a renovated house across the street from the hospital that may house 4-6 students. It was redone in the summer of 1995 so it is very livable, although somewhat bare. Linens are available at the hospital. There is no need to bring an extensive wardrobe, since you are advised to wear scrubs throughout the day. You will need to bring one set of decent clothes to wear one morning a week for conference. A bonus of Cape Cod Hospital is that food for medical students is free.

A typical day starts at 5:30 am with rounding on patients and writing daily progress notes. You will see patients by yourself, write progress notes, and report to your intern or resident any important patient issues. Breakfast is usually from 7:15-7:30 am and surgeries begin at 7:30 am. You can scrub into as many surgeries as you would like on a given day, typically 2-5 surgeries per day. You may be asked to write H&Ps and/or work-up patients in the ER. Call varies according to the number of students, usually it is every third or fourth night. Since the house is across the street and only a two minute walk away from the hospital, you can go home between surgeries or when you are on call. Your weekends are free unless you are on call, but all students are required to attend the Saturday teaching conference at 8:00 am and Grand Rounds at BMC regardless of call status. There is some teaching by various attendings at the Cape, although sessions are often canceled due to the high volume of surgeries, especially in the summer. Overall, the Cape is a good rotation for great exposure to community surgery, with the opportunity to scrub into 20-50 surgeries over the three week rotation.

#### Otolaryngology

As a third year clerk in Otolaryngology (ORL), your main responsibility according to Dr. Fuleihan is to learn how to perform the head and neck exam. You will participate in clinic two days a week. Depending on your skill level, you will be allowed to examine patients and write notes. Concise oral presentations are highly valued. You will spend several hours a week in the OR. The type of cases you will see depend on whether you are at BMC or the VA. In general there are three areas of surgical interest: head and neck, otology and pediatric. You can prepare for cases the night before the surgery.

Which book you use depends on what you are studying for. A good head and neck surgical atlas will save time but are hard to come by in our library. For head and neck cases, Netter will suffice. For information about the diseases, Cummings edited a 4 volume treatise on the topic of ORL. Remember that otology and pediatric ORL are specialties unto themselves and require specialized books. A pocket book on the wards was valuable for me in every rotation. In this specialty it is very difficult to find one book with all the meat in it. If you plan on entering the field on ORL, I would recommend that you look at the "Essentials of Otolaryngology" by Lucente, or the book by DeWeese. Your goal in the third year is to understand what the field is about, find out if this is what you want to do, and prepare yourself for the general surgery exam. Continue to read NMS for your general surgery exam in the evenings, as the days can be very long. There was no call during my rotation.

#### Josh Kessler, BUSM IV

Otolaryngology is an excellent choice for an elective in your third year no matter what field you plan on entering. You will be exposed to many aspects of the ENT regardless of where you do your elective.

At BMC, you will have the chance to work with all of the attending staff, who are generally pleasant and interested in teaching. You will round with the residents in the morning around 6:30 AM at HAC and then, depending on the day, spend your time in clinic or the OR. In the clinic, you may need to be aggressive but you will be allowed to see patients on your own and present them to the attendings. This is an excellent time to learn about common ENT problems such as otitis media, tinnitus, vertigo, tonsillitis, and hoarseness. These are all problems that you will encounter no matter which field you enter. In the OR, you will observe common procedures such as endoscopy, adenoid/tonsillectomies, myringotomies with tube placement, etc. You will also scrub in on larger cases, such as parotidectomies, neck dissections, and other complex procedures. Finally, on Tuesdays, you will observe otology cases and learn about middle and inner ear anatomy.

At the VA hospital, you will work primarily with the residents, rounding around 7 AM and then going to the OR, or to their very busy clinic. You will see many vets with hearing problems and head and neck cancer and work them up on your own. Most of the OR cases are endoscopies, otology cases, functional endoscopic sinus surgeries (FESS), and head and neck oncology cases. The attendings at the VA are also very nice and will teach you when you present to them.

Above all, this is the time to see if ENT is a field that interests you and to study for the general surgery exam. There is no call at either location, so study at night for surgery and enjoy your weekends.

### **Orthopedics**

The elective in orthopedic surgery provides the student with a broad overview of the field. Starting usually around 7:00 am students will round with residents and attendings. Generally students do not carry specific patients but help out with writing brief daily notes on patients while rounding. The rest of the day is usually spent in the OR or in clinic. In terms of teaching, the assertive student will benefit most by asking questions about physical exam techniques on rounds and in clinic. In the OR the student is expected to know all the anatomy (muscles, bones, innervation, and blood supply, etc.). Usually the residents and attendings will allow students opportunities to operate some of the "heavy machinery" that is unique to orthopedics. Students at the VA will work with Ortho residents from Tufts, but the experience is much the same as at BMC. Overall, this elective presents a different aspect of surgery, and the student who pursues clinical teaching will fare the best.

### Orthopedics at the VA

Daniel Oates, BUSM III

This was a really great elective, especially in terms of its time commitment. However it isn't for someone really interested in Ortho for a career. The typical day lasts from 7:15 until about 2:00. OR days are M/W/F mostly just in the morning. There is usually one big case, a total knee or hip replacement and maybe another smaller one. Clinic is Tues and Thurs mornings from 9-12, where you will shadow the residents. You really can learn a bit from clinic, especially if you ask questions. You may also get a chance to do some smaller procedures, joint aspirates, etc., depending upon your chief resident. There are three residents and they pretty much do everything as a team. The service is not very busy (to say the least) and it's a great opportunity to get a lot of reading done and actually have a life, even if just for a little while!! If you want to be assigned here, make sure to ask Mary to assign you here, as BMC is a totally different situation (it's the other extreme!).

### **Pediatric Surgery**

This is a three week elective that students can take during their third year surgery rotation. The team consists of a third year student, a surgical intern, a senior surgical resident, and the attending (Dr. Moulton). Rounds are at 7:00 am and surgery is scheduled for M/W/F mornings. Pediatric surgery clinic is Tuesday and Thursday afternoons. In addition to these scheduled patients, the team covers all surgical patients under 21 years of age that present to the ER, as well as consults on pediatric patients on the wards. Each week, Dr. Moulton assigns a few chapters to be read from a pediatric surgery text and gives a lecture to the team after they have read the assignment.

This was an interesting elective for students, whether or not they are interested in pediatrics. Dr. Moulton expects that students will scrub into every case and assist as much as possible. By the end of the rotation, Dr. Moulton wants each student to be able to first assist at a simple procedure. The weekly lecture by Dr. Moulton is excellent and students learn a great deal about the topics assigned.

Students did not have a lot of responsibility on the floor as the intern and resident wrote most of the notes, but students could take on this responsibility if they are motivated to do so. Dr. Moulton does "pimp" students while on rounds, so it is helpful to keep up on the reading about the patients. In general, this rotation was an excellent learning experience and students were given as much responsibility as they wanted.

A different perspective: The pediatric surgery rotation is awful. Basically, students who rotate through are expected to stay late (till 10 PM in order to do operations). In addition, pedi surg also has so few patients on service (average of 1-2) that the student is bored out of his/her mind. However, the student has to be ready at all times to round (from 7 to 9:30) and will have to wait around aimlessly. However, the attending does try to teach, which always makes things better.

#### Urology

One student is assigned to each of the primary hospitals (ENC, HAC, and BVAMC) for the three week urology rotation. As a third year student you are able to participate in all departmental activities and function as an integral member of the urology team. A wide variety of clinical problems are encountered, including urologic oncology, male infertility, erectile dysfunction, urinary calculus disease, neurourology, urodynamic evaluation, female urology, and reconstructive urology. As a member of the team you are expected to round with the residents in the morning and with the attending physician in the evening, assist in the OR, consult other services on urological problems, admit patients, write progress and post-op notes, perform H&Ps, and participate in all departmental conferences. This three week rotation is recommended not only to students who are interested in a urology residency (they should definitely do a fourth year Sub-Internship in urology), but also for students who are interested in other areas of medicine. Urology is a rapidly changing and exciting area of medicine and rotating on the urology service is highly recommended for every future physician, especially those interested in primary care. Avoid the VA because the patient load is a lot less and you don't see the cool stuff!

### **PEDIATRICS**

### **Boston Medical Center**

Pediatrics at BMC is run by Dr. Ben Siegel and consists of three weeks on the inpatient wards, one week in the newborn nursery, and three weeks in the outpatient clinics. All students who are in CCHERS are required to do their pediatrics rotation at BMC so that the three weeks of outpatient work can be done in their respective clinics. Those students who are not in CCHERS rotate throughout the BMC specialty clinics and the Pedi ER. Clinics include lead, hematology, GI, pulmonary, cardiology, growth and

neurology clinic. Exposure to these specialties provides a unique opportunity to see specific pediatric pathology, but some students complain of a lack of autonomy and teaching in some of these clinics.

One week is spent in the newborn nursery at BMC. This week provides the opportunity to learn the newborn physical exam and the Dubowitz exam to determine newborn maturity. Expectations from the students vary according to the attending physician. At the least, students are expected to follow one newborn from birth to discharge including an interview of the mother. Students then give a presentation to the attending physician at the end of the week.

These are then followed by radiology rounds and various conferences throughout the day for medical students. Students work most closely with their interns, but have lectures by the attending physician and Chief resident throughout the week. The inpatient ward day usually ends at 4:00 p.m. with a clinical lecture by various attending physicians. Thursday is unique with a developmental lecture series and a physician development series run by Dr. Siegel which involves an hour discussion by students about their experiences on the wards. Sister Claire also attends these sessions along with a few other people. We spent most of that time talking about experiences during medical school, good and bad. Many students enjoy this session while many feel that it is a waste of time. Go into it with an open mind and you will get the most out it!

There is a significant amount of writing that must be handed in by the end of this rotation. Three to four patient write-ups, including the pathophysiology of disease must be turned in, five reaction papers (a few paragraphs) to the developmental series readings, a problem list, and a "critical incident" paper. You will also have to do a presentation on a child using the Denver Development Screening Test. One more requirement for the BMC rotation is either attendance at three follow-up ethics seminars (most people do this), a paper, or a presentation. The paper is due by the exam day, and the presentation must be given on the day of the exam.

### Carney Hospital

Carney Hospital is a 382 bed private hospital located in Dorchester, operated by the Daughters of Charity of Saint Vincent de Paul. There is a 12 bed pediatric ward, but it is rarely full. Carney is a good choice for students who want a strong outpatient experience. The inpatient experience is more limited but you will still see the bread and butter of pediatrics like asthma, pneumonia, dehydration, etc. There are no residents at Carney so you work one-on-one with the attendings. This also means that there is very little scut work and what you are asked to do is for your learning purposes only.

Mornings begin at 8:00 am and are generally spent on ward rounds from 8:00-9:00 am, and then writing progress notes on your patients, reviewing x-rays, and formal didactic sessions (the reading packet for these session is excellent and yours to keep). In the afternoon, you will be assigned to the outpatient clinic, the ward (where you will pick up any new patient who is admitted), an outside clinic, ENT clinic or reading time. Call is 1 in 3 until 9:00 pm, and you will spend your time seeing patients in the outpatient clinic and work-up any new admissions. When you are on weekend call, you will be in

the outpatient clinic all day. There is also a newborn nursery experience, (possibly at Quincy Hospital) for one week during the clerkship, which was excellent!

The major disadvantage of this clerkship site is that you will have to return to BMC for ethics seminars, child development conferences (for which you have to turn in 5 reaction papers and do tons of reading), and a few other times. You will find that these trips occur in the later part of the afternoon and interfere with the most productive part of your day. If you are on call you will then have to return to Carney after the session and miss part of your clinic time in the evening as well. Parking is in the garage in the rear of the hospital and is \$1.50/day.

### Framingham Union Hospital - MetroWest Medical Center

Framingham Union Hospital-MetroWest Medical Center is located approximately 30 minutes west of Boston. This may be the only negative aspect. This is an extremely strong rotation. There are four students assigned to MWMC. There are three faculty members that supervise the students. The teaching is outstanding, there are two residents, one from Children's and one from MGH. One is in charge of clinical care and the other is the teaching resident. There are daily didactic sessions with the faculty and separate sessions with the residents. These sessions are well-organized and attended, and teaching is done in a positive manner. It is a busy rotation, but very organized. Students spend half the rotation on the pediatric floor and half in the special care nursery. From these base assignments, students are assigned clinic times and time in the Emergency Department with Pedi. E.R. doctors. This is the only pediatric rotation with overnight call, but the room is nice, and it is usually not so busy that you cannot sleep, or spend time studying. You will be on-call every 4th night including weekends, but students arrange call amongst themselves and there is considerable flexibility. This rotation will prepare you very well for the oral and written exams, and the faculty will know you very well when it is time to write your evaluation and assign grades. Many students decide to go into pediatrics based on their positive experience at this site.

### Franciscan Children's Hospital

The pediatrics rotation at FCH is an interesting one, although probably better suited for the student not interested in pediatrics, as it does not represent the typical cross-section of pediatrics. Students round on the wards each morning from 8:00 am until 10:00 or 11:00 am. The patients are typically seriously ill children; most of them are on ventilators, so this provides an opportunity to become familiar with their use. Each afternoon from noon until 4:00 pm there are outpatient clinics in general pediatrics and specialty clinics for cerebral palsy, cardiology, pulmonary, orthopedic, and rehabilitation patients. There are no officially scheduled lectures. Students must schedule lectures with various attendings. This often presents a problem as schedules conflict. Lectures are the worst part of this rotation. The attendings are excellent about making themselves available to students. Most are very willing to answer questions. The patients themselves are amazing but heart-breaking. The work is sometimes exhausting.

#### Rubeen Israni, BUSM IV

The pediatrics rotation at FCH is an interesting one, although probably better suited for the student not interested in peds, as it does not represent the typical cross-section of peds. Students do sit down rounds with physicians and a team that includes RNs, physician assistants and a nutritionist. The patients on the wards are typically seriously ill children. The student's time is split-3 wks on wards and 3 wks in outpatient clinics. Lectures are mediocre, and unlike other locations, a presentation is required of all students. Some attendings are generous with their time while others are difficult to find when on the inpatient wards. Another thing to remember is that you will have contact with attendings only because there are no residents or interns. This has its pluses-learning from attendings but on the other hand sometimes it is difficult for attendings to fathom the level of knowledge/understanding of students. Finally, FCH has a reputation of being hard graders.

### Norwood Hospital

I can almost guarantee you that you will not be disappointed with your 7 weeks at Norwood Hospital. My only complaints were transportation and the lack of a diverse patient population. Norwood Hospital is located on Washington Street about a 40 minute drive from the medical center depending upon traffic. I was able to take public transportation from the medical center (#10 Bus from BMC to Back Bay station to orange line to Forest Hills to #34E bus to the door of the hospital.). However, it takes about an hour and 15 minutes.

As far as the patient population, you'll see asthmatics, RSV, pneumonia, otitis media, and rotavirus like you've never seen before. It sounds boring, but in the end you'll know a big chunk of pediatrics better than most. What makes the Norwood experience so valuable is the one-on-one teaching from the attendings. There are three attendings that switch off working various days of the week. They are all very nice, extremely knowledgeable, and more than willing to give you their time. Another big positive is the fact that by the end of the rotation you will feel like a pediatrician because of the autonomy you will have with your patients. The attendings let you decide what you want to do with the patients, and if they disagree with your treatment they will let you figure out what a better treatment plan would be and discuss why you were wrong with you original plan. The rotation is more like an emergency medicine rotation in pediatrics. You will not see the chronic disease in patients that you would see at the city hospitals. But you will see enough to make you satisfied.

In addition to the ER experience, you will spend time in an ambulance going to an emergency, cardiology, genetics, ophthalmology, GI, dentistry, pulmonary/allergy clinic, and one day a week in a private pediatrics office in the community. By the end of the rotation you will feel that you learned an enormous amount. There is some down time to read in the morning hours or you can go and see pediatric surgery, spend time with the staff or whatever you feel would make your experience more beneficial to you. This was one of my favorite rotations.

### **OBSTETRICS & GYNECOLOGY**

NOTE: Everyone in the OB/GYN rotation is required to do a case presentation for Dr. Stubblefield (OB/GYN Chairman), which is 20% of your grade. The rest of the grade is 20% USMLE-type exam, 20% oral exam, 20% evaluations and 20% practical exam. The practical consisted of 7-8 stations set up in the clinic that required you to read ultrasounds, identify gross pathology, interpret fetal heart strips, interpret hysterosalpingograms, etc....and then answer questions. Therefore make sure you take the opportunity to see all of these things before the exam.

#### **Boston Medical Center**

This rotation was excellent at BMC. Each group divided into four groups, and each group rotates about 10 days each through labor and delivery, gynecological surgery, Dr. Brown's Clinic, and other specialty clinics (High Risk, Colposcopy). Call is q4 for labor and delivery (overnight) and for GYN Surgery (overnight), and there is no call when you are in the clinics. The day begins at 6:30 am on the wards and 7:00 am in clinic.

Dr. Brown's clinic is a highlight of the rotation. You will become very comfortable with the pelvic exam, pap smear and cultures, sizing the uterus (make sure he brings out the different sized balls--they really help!), and many other issues. You will have a one-hour interactive/didactic session in the morning with Dr. Brown, after which you will have breakfast as a group, then start seeing patients at 9:00 am. You may be asked to present a topic that came up in regards to one of your patients during the morning sessions. The one drawback to clinic is that you will not have time for lunch, so if you get cranky without food, make sure to bring something to munch on while you are working on charts.

On Labor and Delivery, most students get the opportunity to deliver many babies taking call only q4, depending on the census. During GYN surgery you will see patients in the ER, see cases in the OR and follow patients on the floor. This is very similar to the general surgery rotation. Throughout the rotation, there are daily didactic sessions from 4:00-5:00 p.m. on the major topics, and a weekly cancer lecture in the evening.

### Framingham Union Hospital - MetroWest Medical Center

Framingham offers an excellent experience in OB/GYN with few drawbacks. The average number of deliveries per day was 10-12, of which 1-2 are by C-section. Students participate in patient care from the time of admission, through labor, delivery, and discharge. Almost all of the patients are the private patients of the attending staff and are more than willing to let you participate in their delivery. The attendings are adjunct faculty from Beth Israel Hospital/Harvard Medical School and are outstanding teachers. Once you have worked with them a few times, they will let you do more during the delivery and almost every student has an opportunity to deliver a baby on this rotation. Dr. Blanchette who organizes the program is an excellent teacher and does a good job of making sure that the basics of OB-GYN are covered.

The GYN experience is fair, with students and residents running a free clinic twice a week. Clinic visits are mainly for prenatal check ups and routine pelvic exams. The

surgical experience was comprised of routine hysterectomies, laparoscopic surgeries and D&Cs. There were very few GYN-Oncology cases.

The drawbacks are the commute (30-40 minutes from Boston, tolls, gas, etc.) the late-night clinic (Tuesday Clinic runs from 6:00-9:00 p.m.), and the faculty are not BU faculty, which can be a problem for students who want to go into OB/GYN. The residents are comprised of both a second year from BU (Obstetrics) and a third year from Beth Israel (GYN). Call schedule is q4 to q3 depending on the number of students (there is usually a UMASS student on the rotation as well). Overall, this is a well-rounded experience where a student will learn the basics of OB/GYN.

### **PSYCHIATRY**

### Bedford VA Hospital

The hours at the Bedford VA for psychiatry are longer than at most other hospitals but the experience is great. Hours are generally 8:00 am-4:30 pm, but this will vary depending on your team. There are no weekends and call only twice in the BMC ER (and you get the day or morning off the day after you are on call). You will either be assigned to the acute ward or the longer-stay unit and you will be assigned to a preceptor there with whom you will work one-on-one for your entire rotation. The preceptors are very interested in teaching and everyone is nice and helpful (including the nurses). If you are assigned to the longer stay unit, you will have the opportunity to visit family care homes in the community. One advantage at Bedford is that you do a videotaped interview with a patient you don't know, and critique it as a group with one of the psychiatrists. It does not count toward your grade and is a good opportunity to see what your interview style is and how you can improve. One disadvantage of the Bedford VA is that you will have to do four case write-ups on patients on your team. These write-ups are generally 4-7 pages There are several formal didactic sessions every week, and some are helpful. Parking is free right in front of the hospital. Overall it is a very good rotation and you will learn a lot.

### **Boston Medical Center-HAC**

The psychiatry rotation at HAC is a consult service where students assess psychiatric components of illness in-patients on the medicine, surgery, and OB/GYN services, as well as in the units. The hours are 8:30 or 9:00 am-5:00 p.m. Two evenings, one until midnight and one overnight, are spent in the HAC ER where students experience aspects of psychiatry in the emergency setting. Two mornings a week are spent seeing patients in the psychosomatic clinic; most students really enjoyed this part of the rotation. Students spend one hour a week presenting and discussing papers on such topics as personality characteristics of different patients and dealing with the difficult patient. The attendings enjoy teaching, and they schedule lectures with students at times when the service's patient volume is relatively light. Each Friday afternoon (N.B.- although the schedule says 4:00-5:00 p.m., it's actually 4:00-6:30 or 7:00 p.m.!) students have a child

psychiatry session which entails watching through a two-way mirror while a child interacts with his mother, the psychiatrist, etc. and then discussing the findings. In addition to writing consults on patients and daily notes on those who require follow-up while in hospital, students are asked to write an 8-12 page research paper on the biopsychosocial aspect of any disease entity. The psychiatry rotation at the HAC provides students with valuable experience in evaluating the psychiatric aspects of medical and surgical patients and is therefore good for those students not interested in pursuing careers in psychiatry per se.

### Boston Medical Center - ENC

The psychiatry rotation at the ENC is most appropriate for the student who wants a broad overview of several different treatment settings. Most of the student's time is spent on the consultation/liaison (C&L) service at the ENC where she/he will make the initial evaluation and subsequent follow-up visits on patients for the Medicine, Surgery, rehabilitation, spinal cord, and oncology services. This work includes charting progress notes as well as formal write-ups on patients. Each student will present one case per week to the C&L service. The student will also spend one afternoon per week in an outpatient clinic. There the student will perform the initial evaluation of new clinic patients and, when possible, follow their own patients on a weekly basis. Additionally, the student will spend two afternoons each week following an adolescent patient in the Solomon Carter Fuller "IRTP," which is a locked, long-term, inpatient treatment facility for patients in the 13-19 year age group. This part of the rotation requires a detailed, extensive case write-up to be submitted at the end of the rotation. On completing this rotation the student will be proficient with interviewing techniques, the Mental Status Exam, and organizing information into formal case write-ups.

### **Boston Medical Center**

Daniel Oates, BUSM III

Psych at BMC involves working as part of the consult and liaison (C+L) service. Two students will work at HAC and two at ENC. The C+L service receives consults from Medicine, Surgery, OB/GYN, etc. that have patients who seem to be "depressed", are "difficult" or have issues involving psych meds. Students are informed of new consults by the resident or fellow and may generally see the patients on their own or with the resident/fellow, whichever they feel more comfortable with. It was definitely helpful to see patients with the residents for the first few weeks to get an idea of how best to conduct a psych interview and write up the mental status exam (the psych equivalent of a physical exam.)

The two students assigned to HAC will also get to follow an adolescent patient in the "IRTP" at the Fuller. This is a long term, locked facility for patients in the 13-19 yo range. Generally this is a well liked part of the rotation, although it requires a long write up at the end. Those assigned to ENC get to see outpatient psych with Dr. Burns, who really is just a wonderful person. He has very interesting patients (who do not always show up) who will tell you everything about themselves. Dr. Burns will teach you a bit and you'll have the opportunity to see how patients are managed on an outpatient basis. It's only for two hours a week, though.

There is also a didactic lecture schedule for med students and you get to attend the resident lectures on Fridays at noon, which were generally very good. The BIG downside to the rotation here is that you must write an approximately 10 pg. research paper that you present to the group on the last Wednesday of the rotation.

This is a very good rotation for those who want to do medicine, as you get to see how psych issues are handled on medicine patients. You will also learn a lot about using antidepressants and anti-psychotics, both of which are frequently used by medicine docs. It's also excellent if you want to do psych as a career, as you get lots of exposure to residents and especially attendings. I suggest if you're really considering a career in psych, make an effort to work with Dr. Berenbaum. He makes himself very available to students, teaches very well and is an excellent psychiatrist. Overall the service isn't too busy and you'll find you have time to run errands and do other stuff during the day.

#### Boston Veterans' Administration Medical Center

The Veterans' Administration Medical Center is an excellent place to do psychiatry. Very simply put, you WILL enjoy psychiatry here, even if you want to go into orthopedic surgery. The psychiatry experience is a good one, but students will likely put in more total hours than at some of the other sites.

The call schedule is a total of 4 times on call until 10:00 pm. Food is free when you are on call. The hours are 8:00 am-4:00 or 5:00 pm everyday, and there are lectures, time working on consult and liaison, inpatient psychiatry, and in the emergency room. As a student, you get to manage a wide variety of patients with many psychiatric problems, substance abuse problems, as well as other social problems. The attendings are there all the time and spend time talking to students. You will work directly with attendings who have their offices on the floor above the ward.

There is free parking at the VA, although you have to get there early to get a spot in the lot and the street is only marginally safe. You have to come back to BMC on Wednesdays for all-day conferences, so be prepared to travel, but there is a shuttle that runs from the med school to the VA.

### Carney Hospital

Carney has both locked and unlocked wards, and the students can work on either. Most of the patients on the unlocked ward were suffering from depression. Supervision is by attending only, since there are no residents. The amount of teaching varies from attending to attending, but the quality is pretty good overall. You are required to hand in 2-3 write-ups for the rotation, and there is a patient interview test at the end. You are also responsible for writing notes on your patients everyday. Hours are generally 8:30 am to 5:00 pm with some early days if you want.

### Human Resources Institute (HRI)

HRI, a smaller mental health facility located in Brookline, provides the opportunity to learn, depending on your individual interests (and motivation).

Students spend time on a locked admissions unit seeing patients with schizophrenia, unipolar and bipolar depression, etc., and an unlocked women's unit learning about issues such as alcoholism, depression, eating disorders, and PTSD.

My experience at HRI was a good one. The environment was low-stress and mostly relaxed, and I was able to learn quite a bit from a general psychiatry level and from interacting with the patients themselves.

### Westwood Lodge

The Westwood Lodge is a private psychiatric hospital located 35 minutes southwest of Boston. You will need a car; there is adequate parking. There is no weekday call and no weekends for students. You may purchase food in the cafeteria with meal tickets (sold in the front office), however the food is horrible! The hospital has open and locked adult wards, as well as a children's and an adolescent ward. Most days begin about 9:00 am and end no later than 3:00-4:00 pm. There is a tremendous amount of autonomy in this rotation where students may choose their patients, scheduling meetings with them on their own. Students do not write in patient charts, but do have daily group meetings with the hospital medical director, Dr. Arkema. The WWL offers exposure to a wide variety of clinical psychiatric pathology as well as addressing academic and social issues of patient diagnosis and management.

# Fourth Year Rotations

# **REQUIRED ROTATIONS**

### Sub-Internships

### Advanced Acting Internship in Medicine

Last year, this was referred to as the Super-Sub-I. The Advanced sub-internship in medicine is a different experience than the regular medicine sub-I in that the medical student is on the team with one resident, one intern and another sub-I. 2 Subs = 1 intern and you will both take call as one intern on the admitting schedule. You take call with the other sub and divide the admissions between you. You also cross-cover for other residents when on weekend call.

Generally, you will be carrying between 6 and 9 patients and spending long hours in the hospital. The advantage to doing this rotation is that you will get a more realistic experience doing the job of an intern. You will be responsible for all aspects of your patients' admission, management and discharge, and work directly with your resident. You will feel much more capable in handling larger patient loads.

The disadvantages are the long hours, and not having much time to read about your patients or go to conferences. This rotation is worth the time and effort to get excellent experience in patient management. Few of the fourth year rotations give you that much responsibility. It is less strong with respect to learning or reinforcing disease pathophysiology.

### Subinternship in Medicine

#### BMC-HAC

The Sub-Internship at HAC is very similar to the third year medicine rotation there, except that you will be an acting Intern. The four week block is spent on one of the five general medicine teams on the inpatient service at HAC. You will be responsible for picking up patients for your team, and you will be on call with your team. In some blocks the system was set up so that the Sub-Interns sign out to each other and when you are on call you cross-cover all the other Sub-Interns patients. When on call you would sign the Sub-I patients out to night-float. You will work almost every day, including weekends, attend as many of the conferences available as possible, have attending rounds three mornings a week, and meet several times with Dr. Levin to present and discuss cases.

If you are interested in medicine and did your third year clerkship elsewhere, I would highly recommend doing your Sub-Internship at HAC. You will be exposed to the sequelae of HIV, complications of drug and alcohol use, asthma, and possibly some international medicine. The patients are fascinating and the attendings are generally outstanding and very dedicated to inner-city medicine. You will also get exposure to outstanding social workers and translators and have the opportunity to do plenty of procedures.

If you have a choice, try to avoid doing your Sub-I before July. Not only was Dr. Levin on vacation for much of it, making a letter from him less useful (no exposure=weak

letter), but Grand Rounds are canceled for much of the block and the interns and residents are about to graduate to the next level and are pretty burned out and less likely to teach. You also have no third years on your team so you miss out on the opportunity to get experience working with students behind you (a skill you will need in your internship). There are three positives to doing a Sub-I before July: 1) because the interns have been around for a full year, they are happy to have you do all the procedures, 2) the grade will definitely appear on your transcript, and 3) you prove to yourself early that you can handle a Sub-I and can bring that confidence to your away rotations.

#### Boston Veterans' Administration Medical Center

A Sub-I at the VA is a very worthwhile experience. The patient population is different from the those seen at HAC or ENC. In general, the patients are older and predominantly, though not exclusively, male. There is a great variety in the pathologies seen, often in one patient. As with other medical Sub-Is, you will be a part of a ward team, with an intern, junior or senior resident, and an attending. You will act as an intern, and be responsible for upwards of five patients at any time. This, of course, depends on the complexity of the patients and your comfort level. There is no overnight call, and you pick up patients from the admitting intern. The daily conferences tend to be very good, and the attendings enjoy teaching and are very supportive of you.

#### Surgery

#### General Surgery Sub-Internship

The surgery Sub-I is a requirement if you are planning on a career in surgery. The biggest issues surrounding this rotation are when and where to do it. You should be strategic when planning this. If you can manage it, the Surgery Sub-I should be done within the first four or five blocks, so that the grade will get on your transcript. More importantly, you will need a letter from your preceptor, and it is important to be able to ask for one in a timely fashion. Blocks six, seven and eight might be used for a Sub-I at an away site — particularly one you are interested in for a residency. Deciding where you should do the Sub-I is up to you. The majority schedule it at ENC because they feel it is the best place politically speaking to get a letter of reference. However, the other sites of HAC and the VA are also advocated by some because they each have their unique characteristics and good teachers that will prepare and advise you well. No matter where or when you do this rotation, working hard and reading, reading, reading are the best ways to make a good impression.

#### Surgical Intensive Care Unit (SICU)

This rotation a popular one for those interested in either surgery or emergency medicine. Why? Well, because it is a month of treating very sick or injured people, and as such one can learn a great deal about the acute phase of illness and injury. Call is rigorous, being every other day. That is the worst part of this experience though, and for one month, it is well worth the time. Regardless of which hospital you are assigned to, you will be busy. Granted, there is more trauma at BMC-HAC, but there is a greater diversity of surgical patients in the ENC SICU. During this time, you will serve as an integral member of the Critical Care Medicine team, a service that is consulted regarding

the peri-operative management of surgical patients. You will learn much about the pathophysiology of surgical disease, and the risk factors associated with operative care. Additionally, you will be well trained in the monitoring and treatment of critically ill patients. One of the most attractive parts of this rotation is the chance to learn and perform various procedures such as arterial and central line placements. The majority of the learning is achieved at the bedside, and the attendings and fellows are excellent. There is a weekly conference on topics or cases of interest in critical care. This is a fantastic rotation for anyone interested in a surgical or emergency medicine career. This was one of the best rotations I had in my time at BUSM, and I hope that you find it rewarding too.

#### **Pediatrics**

#### Inpatient Pediatrics, BMC-HAC

During this rotation, students had total responsibility for their patients. Students admit their own patients and are responsible for all aspects of patient care. Morning rounds are from 8:00-9:30 am. During morning rounds, students present any patients that were admitted the day before and are responsible for discussing with the team the plans for their patients. At 10:30 am every day, the entire team attends X-ray rounds that provide a daily opportunity to correlate physical diagnosis and disease patterns with radiological findings. Attending rounds are scheduled three times each week at 11:15 am. There is often an hour-long lunchtime conference at noon. The afternoon is spent completing the work for the day and admitting patients. Students are on call q4 (students are paired with a 2nd year resident) and call lasts until 10:00 p.m. Students are guaranteed at least one day off each weekend. The rotation lasts a total of four weeks.

This was an excellent opportunity to learn about the care of the pediatric patient. Students were involved in all planning regarding their patients and, in contrast to the third year rotation, were usually expected to devise their own plans. Sub-Interns usually carry three or four patients. The conference schedule is much less time demanding than that of the 3rd year pediatrics rotation at HAC so students that were frustrated by the seemingly endless amount of conferences during the 3rd year rotation need not worry as much about this problem. In general, this Sub-I provides students the ability to have more responsibility for their patients and to learn a great deal about the care of inpatient pediatric patients.

#### Pediatric Emergency Medicine, BMC-HAC

This Sub-I exposes the student to outpatient pediatrics. More than 50% of your time is spent in the Pediatric Emergency Room. You assume full responsibility for each patient you encounter. You work on the non-acute side of the Pedi ED with Pedi residents, Emergency Medicine residents and Pediatric Emergency medicine fellows and attendings. This is a great setting for learning how to manage acutely ill children and adolescents. You will also be invited to participate in traumas. Your shifts in the PED range from 5 to 12 hours depending on the day. You are expected to attend the PED conferences as well as Grand Rounds and "Case of the Week."

You will spend the rest of your week rotating through pediatrics outpatient clinics that include hematology, neurology and allergy, immunology and respiratory (AIR). You

will often see patients on your own, both new patients and follow-ups. You will be expected to do a 20-minute presentation during the ED conference. This should be something relevant to the ED. Your call for this rotation consists of spending two nights per week in the PED until 10 pm.

Overall this is a great rotation which offers the student a broad exposure to pediatrics. It is a great opportunity to sharpen your skills in history-taking, physical exam and differential diagnosis.

#### NICU, BMC-HAC

The NICU is a great rotation if you are interested in pediatrics, emergency medicine, or intensive care training. The average daily census is 12 infants with a gestational age ranging from 28-36+ weeks. The neonates are in the NICU for a variety of reasons such as prematurity, hyaline membrane disease, etc. As a Sub-Intern, you will be responsible for 2-4 patients depending on your comfort level and the census. You will be working with a neonatology fellow from NEMC, two pediatric residents, two pediatric interns, and one emergency medicine resident. The call schedule is every 4th night, overnight. Do not expect to sleep, but you can expect to participate as part of the team. Attending rounds and radiology rounds take place every morning. The attending rounds usually focus on core topics or relevant topics in neonatology. Both of these are excellent education opportunities. Morning rounds begin at 8:00 am and you will be expected to pre-round on your patients. The day usually ends at 5:00 pm unless you are on call. You are allowed and encouraged to wear scrubs during the rotation; things can get messy at deliveries.

The neonatologists, Dr. Alan Fuji and Dr. Elizabeth Brown, are excellent. I cannot comment on Drs. Mirochnick or Corwin since I did not work with either of them. While in the NICU, you will attend all of the high risk deliveries and be allowed to take an active role in the resuscitation with the exception of intubating the infants. You will be encouraged if not expected to take part in the Neonatal Resuscitation Program that is the equivalent of ACLS, but for neonates. Mock codes are also a part of the weekly teaching. The rotation overall is a great experience. The resilience of the neonates is truly amazing. Enjoy!

### Family Practice

Although this is a required rotation you have a lot of flexibility in how and where you'd like to spend your time. This is a nice, relaxing, 9-5 rotation where you really learn a lot about how other factors (social, economic) play a role in a patients health care. There are several sites at Boston Medical Center as well as sites in the Greater Boston Area and Cape Cod.

#### Indian Health Service

A rotation with the Indian Health Service (IHS) is a fantastic experience that will also fulfill the primary care requirement. The rotation may be done at any of the hospitals or clinics within our system. Each case must be presented to an attending, and all notes and orders must be counter-signed. The second is that all you will see is alcoholic people

with gall bladder disease. While it is true that there is a high incidence of both within the Native American populations, they are not that much more common than in the patients seen at ENC or HAC. All of the sites provide a excellent experience in general medicine, and more importantly, the opportunity to learn more about a different culture. The physicians at these sites tend to be younger, and very dedicated to the work they do. Additionally, they are excited to share their enthusiasm with students. While there, take some time to learn about the people living around you, and to explore the region!

Rotations within the IHS system are very popular, and thus must be sought early. It is recommended that an interested student start researching the opportunities early in the third year, so that you may be assured of a spot in your fourth year. Call the Indian Health Service Office in Washington, DC, and request a listing of sites.

#### Maine Ambulatory Care Coalition

This can be a great experience, especially depending on what you make of it. Talk to Dr. Shaw early about doing a rotation in rural Maine, because these are very popular and there are not too many spots available. The Maine ACC periodically publishes a newsletter entitled "Bruit Rurale" which gives information about the electives that are available in family practice through their program. You should have received this publication in your mailbox. Even if you are not interested in family practice, this is a great rotation to do. Much of the diseases you see are similar to what you would see in Boston, however, it is quite a different experience to not be able to order bloods or an MRI emergently like you can in most other hospitals. The patients are all very nice and welcoming. You will occasionally do house calls. The experience is very different depending on what site you do it at, as there are many. There is so much to do in Maine, no matter what time of year it is, so be sure to explore as much as you can!!

### Radiology

Evan Mair, BUSM IV

Radiology is a required clerkship during your fourth year run by Dr. Blickman and his assistant, Ginette. The schedule is such that during the morning hours, you are supposed to be reading films or observing radiological procedures at either HAC or ENC with the radiology residents. At lunchtime, there is a conference that is truly for residents but medical student attendance is required (Consider this a safari with many chances to spot zebras!). You are also supposed to view the famous Lucy Squire series, which consists of tapes and slides to help you learn Radiology. By and large this is a very useful tool. Also, later in the afternoon there are lectures with attendings, most of which are informative. At the end of the clerkship there is a computerized exam which consists of true/false and multiple choice questions, along with films with simple identification and differential questions. The basis for this exam is the Lucy Squire series and the attending lectures. It is not extremely difficult and you need not knock yourself out preparing for it. Simply pay attention and you will do fine. As well, all students will give a presentation at the end of the rotation on any topic in radiology. It must not be more than five minutes in length and should be accompanied by an outline, NOT A THESIS. Dr. Blickman will provide a list of topics you can choose from. He will eventually make your outlines available on the BU radiology website as part of a teaching file. The most frustrating

issue concerning this clerkship is the lack of teaching by radiology residents. You must be aggressive if you want them to actually teach you.

#### Home Medical Service/BU Geriatrics Service

The Home Medical Service rotation is required, and intended to give students exposure to both geriatrics and home care. The experience can be a valuable one, contrary to the rumors. The newly combined department has three teams, Red, Yellow, and Blue, each with its own coordinating nurse and secretary. Be nice to these people!! As will be true in practice, it is the people who keep things running smoothly who have the power to make your experience wonderful or miserable. Susan Cleaver is the person who coordinates the entire rotation, and is extremely friendly and accommodating if you have any questions or problems during your 4 weeks.

During the rotation, you will usually go to patients' homes throughout Boston with another student on your team, with or without an attending. You will also have occasional didactic sessions about geriatric topics, and a weekly case presentation conference (be prepared) with the Chief of Service. There is a considerable amount of time spent alone with geriatricians—they are generally very knowledgeable and enjoy teaching. In addition, you may choose to go out on GYN visits with Dr. Varakalis, Social Work visits with Ellen Harrington, visits with your team nurse practitioner, or (on the Yellow team) nursing home visits with Kate DiDonato. These people are very good at what they do, and love to teach. Take advantage of every opportunity you have to see how other members of the health care team fit into the big picture of medical care. Especially if you are going into medicine or surgery, it is very helpful to have an understanding of what VNA, social workers or PT really can do in the home. The patients are also fascinating, and can tell you incredible stories.

The down sides of Home Medical are the volume of paperwork, and the occasional feeling that your purpose there is to keep the service running, rather than to learn. Some attendings are worse than others on this point. However, you don't have to do a tremendous amount of work or paperwork, or necessarily have to work very hard and still do well. If you feel you are being taken advantage of, let Susan know. You will do a lot of work during this rotation, but you should be learning from most of your patient visits. Also, if you feel your safety is jeopardized by any visit, leave, and let your coordinator know about it.

### **Neurology**

BMC-ENC

At ENC, half of the students are assigned to the consult service and half are assigned to the wards. On the consult service, two students work primarily with a fourth year neurology resident evaluating patients on the medical and surgical services including the SICU, MICU and the PCU. Students usually work from 8:30 am to 4:30 pm, but this can vary, particularly since the service tends to be rather disorganized. New patients are presented to the attending, which is Dr. Carlos Kase, but follow-ups may not be presented at all. Dr. Kase is an excellent teacher but there is not a great deal of time allotted for teaching during rounds, however, Dr. Kase's Monday Stroke Conference is one of the best

conferences. There is little time to get reading done as there is no real set schedule. Often the same case will be discussed many times, each time with a different attending. Although the cases are interesting, this gets to be quite repetitive and adds to the disorganization of the service. Learning a good physical exam is formally covered on the first day of the rotation with the clerkship director.

On the wards, the students assume care for several inpatients, and work similar hours to the students on consult. Rounds begin around 8:30 am and can vary considerably in length (up to four hours), since they are interrupted by multiple attendings, each wanting to return to his patient. Generally, you will see patients with Parkinson's, strokes, Multiple Sclerosis, and the occasional zebra. Unlike the consult service, you will have ample opportunity to practice your neuro exam on your patients, especially if you have one of Dr. Feldman's Parkinson's patients, since you will be expected to write multiple notes each day comparing changes in the exam. Depending on your resident and PGY-2's, you may need to be assertive about getting teaching.

There is usually one didactic conference per day that all the students attend, often in combination with the HAC services as well. Conferences include Radiology, Grand Rounds, Stroke, Sleep, and attending rounds twice a week. In addition, Dr. Romanul occasionally does a brain cutting down in the basement morgue. These are very interesting--attend them if you can!! Students may also have a weekly conference with an assigned attending. Grading is based on evaluations by the resident, an analysis of a case vignette, log book, and patient write-up.

#### BMC-HAC

As with the Neurology rotations at ENC and the VA, here the students are assigned to either the ward team or the consult service. In either case, your learning experience is relatively dependent on the census of the team. You will work with a junior or senior level neurology resident, and will see an average of two to three new patients a week. In addition to your team assignments, you will see patients in several different clinics. There is a good variant in the pathologies encountered, and you will have ample time to hone your neurologic examination skills. Without an exception, the attending physicians are excellent. They will challenge you, but in a good way, and they are excited to teach students. Overall, the neurology rotation provides a good opportunity for the student to become more comfortable with the neurologic exam, something that we all will need to know regardless of our career choice.

#### Boston Veterans' Administration Medical Center

The student rotating through the VA for neurology will spend the month as a member of one of three services: general neurology, stroke service, and consults. The consult service varies considerably from week to week with respect to patient volume. The type of neurologic pathology is varied as well, often with less severe presentations. The stroke service provides a strong basis for managing cerebrovascular pathology. Attending case discussions are generally very good, but this service is narrow in focus and provides little exposure to other aspects of neurology. The general neurology service is usually busy, and the student obtains a good overview of the field. The hours for all

services are generally 7:00 -8:00 am to 4:00-5:00 p.m., although this varies. Overall, the VA provides good clinical experience and teaching for the student.

### **POPULAR ELECTIVES**

### Cardiology

Cardiology is a rotation that is well worth your while, because you will encounter cardiac problems no matter what specialty you plan on entering. For this reason, and the fact that there is otherwise little exposure to cardiology in any other rotations this is a very popular elective. During the rotation, you will be assigned to the VA, HAC, or ENC. You will hear many opinions as to which hospital is the best place to be, but it is the residents and fellows who will make or break your rotation.

You will be asked to do consults and read EKG's no matter where you are located. To aid in your learning, the department has compiled an EKG packet, which you will go over while on the service. You may need to be assertive in letting your fellow know that you want to take the time to do this. Many times they do not know that this packet exists, so you should tell them that it does and try to set aside time each day to discuss these EKG's. It is a useful tool and you will have a much greater understanding of this fundamental skill. Since this rotation is popular, there may not enough consults to go around. If this is the case, you should make your own schedule (provided that you tell your fellow). You may wish to spend time on the arrhythmia service, in the CICU, or watching procedures such as angioplasty or stress tests. All are worthwhile and you can decide if you wish to do this. Cardiology can be a great rotation provided you are proactive in learning the fundamentals of this discipline.

### **Dermatology**

Alysa R. Herman, BUSM IV '99

In addition to those who wish to enter the field, dermatology is a great rotation for anyone interested in primary care or emergency medicine; the rotation exposes you to many common skin conditions and gives you a better understanding of the basic derm meds (topical steroids and antibiotics). You will learn both the nomenclature and how to describe lesions in a way that will be useful if you ever need a derm consult. The schedule is as follows: clinic at the HAC runs from 9:00 am-12:00 pm every day except for Wednesday, when the morning is spent in Grand Rounds and other conferences, and every afternoon from 1:00 pm-4:00 pm. Because this is a combined Tufts/BU residency, the Wednesday mornings alternate between BU and NEMC. In addition to clinic, students may also accompany the derm resident who is assigned to the consult service. The consult service will enable you to see many acute and often complicated dermatologic diseases. Do not skip the resident teaching-the residents are excellent teachers. Finally, you will be

expected to give a presentation on a topic of your choice; the residents will assist you in obtaining slides once you have chosen a topic.

The clinic has some down sides. You will never see a patient by yourself. The derm residents see the patients, present them to the attending (and everyone else), then the group sees the patient together. Unfortunately, because there are so many people (usually 3-4 students and 2-3 medicine residents as well as several of the derm residents not in with patients), as many as ten people can enter the exam room to look at the lesion, making the patient uncomfortable and the students feel like they are at the zoo.

### **Emergency Medicine**

We may be biased, but we honestly believe the rotation in Emergency Medicine is not only consistently one of the best run rotations in the fourth year at BUSM, but also integral to further training regardless of the field you have chosen. The faculty in emergency medicine is vibrant and very diverse. The pathology encountered is fascinating and includes both adult and pediatric trauma exposure. The fourth year clerkship director, Dr. Judy Linden, to her credit, has created a structured and very relevant didactic teaching schedule which complements the clinical experience.

The nuts and bolts of the rotation include approximately 5 to 6 shifts per week, an ambulance "run," a daily didactic schedule, and both an exam and a case presentation at the end of the rotation. This rotation is rigorous and you can expect to work. Having said that, do not be put off by the exam or the presentation. The exam is not too difficult, nor is it weighted heavily in the determination of your grade. Also, the case presentation is an excellent opportunity to learn about the initial presentation and evaluation of various pathologies, from the common to those dreaded zebras! Remember, we will be doing these presentations throughout most of our residencies (if not careers), so why not start polishing off the old public speaking skills? The shifts tend to be 8 hours long, either 7:00 am - 3:00 pm or 3:00 pm - 11:00 pm. Anyone interested in doing an overnight shift is certainly welcome to do so.

You will rotate through HAC, primarily, as well as ENC. Despite what you may have heard, the time at the ENC is worthwhile, as you will see more, on average, cardiac patients there than at the HAC. Also, since it is a smaller ED, and there are fewer residents on each shift, you have a greater chance to work closely with an attending. While at HAC, you will be assigned to either the "acute" side or the "non-acute" side. The acute side, as one may expect from the name, has patients with more serious problems triaged to this area. This does not mean that you will not see really sick patients unless you are on the acute side, as many patients on the "non-acute" area are really "acute" patients.

At either site, if it is quiet, take the chance to do some reading. One text that you may find helpful is Secrets of Emergency Medicine. Equally good, and markedly cheaper, is the handout from the department given at the beginning of the rotation. This handout covers all of the material you will be tested on at the completion of the rotation, and is one that anyone will find helpful. You will also find the ACLS course which you complete at the end of your third year to help tremendously and it may also benefit you to review this material both before and during the rotation. Emergency Medicine is a "high yield" fourth year rotation and we would encourage anyone to consider taking this elective.

# Otolaryngology

Highly recommended for people going into Otolaryngology (ORL), Pediatrics and Internal Medicine. This is a region of the body that medical school somehow missed. For pediatricians, I recommend trying to do 4 weeks at Children's hospital. They have an excellent staff, friendly fellows, and will teach you much about middle ear infections. Considering much of your career will deal with this topic, spending 4 weeks learning about the surgical management of the disease is reasonable. Further, the atmosphere and array of diseases at Children's is amazing.

If you are entering ORL, your electives should be arranged with the help of your advisor in the field. Your goal is to gain exposure to the field and verify your choice. In addition, you need to earn letters of recommendation. The rotations are HAC-ENC or Children's-VA. ENC allows you more exposure to Dr. Fuleihan, the chairman, while the VA allows you more exposure to Dr. Vaughn, an excellent instructor and respected figure in ORL. The subject matter varies with hospitals and you should adjust your reading accordingly. On your rotation, try to give a presentation--usually they are assigned at HAC-ENC. Be concise and insightful.

## Josh Kessler, BUSM IV

If you decided that you liked your ENT elective in third year or did not have the chance to do one and want to see what it is all about, you should do a fourth year elective very early on in the year. If you are considering an ENT residency, please see the section on applying for ENT residency for more advice on planning your fourth year schedule.

You have several options here at BU for an elective that you may tailor to your needs. There are two specific rotations, one at BMC and one at the VA/Children's Hospital, however, people have spent 2 weeks at BMC, then 2 weeks at Children's or all 4 weeks at Children's, etc.

The rotation at BMC is very much how I described it in the section on the third year electives. The advantages to doing a rotation at BMC are many. You will get great exposure to all of the attending staff. The acting chairman, Dr. Grillone, is very nice and approachable. For obvious political reasons, you should get to know him if you are interested in the field. Dr. Stram loves medical students and will teach you a great deal and you will get to work with a fellowship-trained otologist in Dr. MacDonald.

The VA/Children's rotation is also a rewarding one. You will work with Dr. Vaughan, a respected and friendly figure in Otolaryngology, and with Dr. Gooey, a young and energetic surgeon. While I have never rotated at Children's, I am sure that you will see many cases and get exposure to big names in the field, including Dr. Healy, the chairman of pediatric otolaryngology at Harvard.

At any fourth year rotation, you should ask to give a presentation on a topic suggested by the residents or attendings. This will help you express your interest and get you noticed by all. For textbooks, I suggest <u>ENT Secrets</u>, De Weese and Sauder' Otolaryngology, Lucente' <u>Essentials of Otolaryngology</u>, and the flexiform series' <u>Ear</u>, <u>Nose</u>, and <u>Throat Diseases</u>. For preparing for complex cases, Bailey edited the big head

and neck surgical atlas. For more detailed information on any ENT topic, refer to Cumming's four volume work, Otolaryngology-Head and Neck Surgery.

# **Pathology**

The Pathology rotation at the Mallory gives an excellent opportunity to dredge out all that second year path material you wish you remembered, and the chance to see how it applies to your future practice. The most valuable part of the rotation is the daily sign-out rounds which run from about 8 am to 11 am or 12 pm. You will be at HAC for at least a week and ENC for at least a week, and depending on how many students are rotating through at the time. The most common procedures are conizations and loop excisions for cervical dysplasia. You can also get good exposure to pap smear reading in cytopathology. Future surgeons will also benefit from seeing how specimens from the OR are dealt with. For those entering all fields, the pathologists at the Mallory are extremely knowledgeable (make an effort to work with Dr. O'Hara if you can) and generally very willing to teach.

Overall, I found this a very informative rotation, although one autopsy was about all I could stomach. (If you find them fascinating, you can spend time next door in the Medical Examiner's office). The downside is that there is no teaching specifically for students, and the residents' conferences are often very technical. However, there is little demand on your time (another good interview season rotation), and you will feel much better about your histopathology skills once the rotation is over. Not only will you be able to identify the organ, but you may actually be able to give the diagnosis by the end!

# Renal Medicine

This is an excellent rotation. Actually, this and cardiology should be included in the required rotations, as opposed to some of those already there. Regardless of the field you enter, from medicine to psychiatry to neurosurgery, you need to understand the function of the kidneys and the heart. I will now get off of my soap box and write of the renal elective. First off, it does not matter where you are assigned for this rotation. The faculty at each institution is outstanding, and the diversity of pathologies are remarkably similar. At each hospital, you will be a part of the consult service, and you will, alone, see and work-up an average of one patient a day. You present your findings and plan to the fellow and or attending, and then make the appropriate recommendations to the requesting service. So, you may ask, what will I learn. Well, for starters, you will learn a tremendous amount of electrolyte physiology, and also of the complications of hypertension, diabetes, cardiovascular disease, auto-immune disease (start to see why this may be a better choice for a required rotation than say, HMS?), etc. Not to mention the renal effects of various medicines. In short, you will learn a great deal of medicine. By the end of the rotation, you will have a much better understanding of renal disease, dialysis, and all of the associated complications. If you have the time, schedule this one in!

# **OUTSIDE ELECTIVES**

Outside Electives are a great opportunity to see another institution where you might be interested in being a resident. They are also a great opportunity to travel and see parts of the country and the world that you may not be able to see again. Students are allowed to do three outside electives during your fourth year. Almost every fourth year student does one outside elective. You will need to balance your budget with the possible rewards of working at another institution. See your specialty in the next section for more info.

Now you're asking, "How do I start?" There are several resources for info. You can start in the library. There is a section of elective guides to several institutions in the country. Ask the librarian where to find these. Another strategy is to use the big green book (NRMP) to get the phone numbers and addresses of institutions you are interested in. You can request that they send their elective guide along with an application for an outside elective, sometimes referred to as an externship. There are also an ever increasing multitude of internet sites, some of which are listed in Appendix A. In addition, if you search for "residency" in your specialty you should come across more.

Be cautioned that some programs will not confirm your acceptance until MAY as they need to give their fourth years the opportunity to fill them. So, it's good to plan early, but you may still spend a lot of time waiting around.

For more information about fourth year rotations, please check out the BUSM Website, at http://med-www.bu.edu/main.html. Open "School of Medicine"  $\rightarrow$  "Office of Student Affairs"  $\rightarrow$  "4<sup>th</sup> Year Schedule Info."

#### International Rotations

I would highly recommend a rotation in a foreign country if your schedule allows it. I was able to do two rotations, one in Bangkok and one in Honduras, during the earlier part of fourth year. Dr. Sarfaty is an excellent resource in finding places to go and for obtaining general knowledge about how to set up a rotation. She arranged the rotation in Honduras for me and helped me to get in contact with other people who were going. Also, check the internet for electives, and the Office of Student Affairs is always sending out emails about different programs. BUSM also gives \$400 to any student who does an international elective, provided they turn in a short summary on their experience there. Many students do this and everyone agrees that it is an invaluable experience to do a rotation in a country that does not have the same resources that we do.

# Ophthalmology at Massachusetts Eye & Ear

Demetrios Vavvas, BUSM IV

I have done an outside rotation in ophthalmology. Thus I cannot describe the one at BU. However anyone can do an outside elective in ophthalmology. The Ophthalmology rotation at the MEEI where I did mine is targeted not only to people that would like to go in ophthalmology but also to students who would like to know about the general eye exam. I would highly recommend it. I had a very nice time.

The rotation involves a morning lecture and the rotations through the different subspecialties of ophthalmology. There you initially observe and then with time you might

also perform exams. The residents and faculty are superb and are willing to teach. In the afternoons you have lunch time, then library time and then a 1.5 hr of a case discussions that were assigned for that day. By 4:30 pm you are done for the day. A 20 min presentation about a topic of your choice in ophthalmology at the end of the rotation is required. The level of the rotation is towards the education of a general physician about the eye rather than making you an ophthalmologist in 4 weeks. The grades are generously given. The rotation is offered three times a year (September and I think April and January.) They can accommodate 16 people each time, thus it is not difficult to get a position.

# **Applying for Residency**

As with any application process, apply early and apply often. One of the first rules of this process is: If you don't want to live there, don't apply there! There are plenty of good programs across the US, so you do not need to take the chance of matching at a program in a city where you will be miserable! Iserson's book Getting into a Residency is a great resource. Get a list of the programs from either the Green Book or FRIEDA (the computer listing available in the library) and make a list of those programs that interest you. Next, take the list to your advisor and go through it with her or him. He or she will be able to help you eliminate programs that may not be the best for you. Once you are down to a manageable number, send off for the applications. You will soon be inundated with information about the programs, and now you can make the next cut. Read the brochures carefully, and with a critical eye, remembering that these are the program's marketing tools. If there is something that makes you question the program, ask around, or just do not complete the application. After making the second cuts, fill out the applications, and gather the appropriate supporting data.

After writing to programs and receiving brochures, you should be asking for letters of recommendation. As a rule, it is best to have one to two letters from attendings in your field, and another from the attending from your Sub-Internship. The most important aspect of the letter writer is that he or she knows you as a person as well as a potential house officer. If you did not get along with your Sub-I attending, but really hit it off with someone from an elective, by all means, ask the person from the elective rotation to write your letter. We realize that this seems to be common sense, but it is worth stating. As for the Sub-Internship, this should be done early in the year. Work hard, show interest and present yourself in a professional manner. If you do this, you should get a strong letter. If not, think long and hard before asking for that letter.

As for a structured time table for the application process, and what to expect and look for on the interview trail, each field is different. Best of luck!!

# DERMATOLOGY

Alysa R. Herman, BUSM IV '99, Amy Kim, MD '98

If you have selected Dermatology as the field of medicine that you wish to pursue, you have an exciting path ahead of you. Dermatology is a subspecialty, which combines medicine, surgery, and pathology all into one field. Dermatologists diagnose and treat benign and malignant conditions of the skin, recognize cutaneous manifestations of systemic diseases, perform cosmetic procedures, and are trained to perform a range of dermatologic surgical procedures including biopsy, cryotherapy, laser surgery and Mohs surgery.

As a medical student, when do you encounter Dermatology? Unfortunately, most BUSM students do not have the opportunity to experience clinical Dermatology until their fourth year when the rotation may be taken as an elective. However, if you have an interest, you can gain exposure to this field much earlier. How? One way is through either

basic science or clinical research (in the Boston area, both BU and Harvard are at the forefront of dermatologic research).

The opportunities are there... you just have to have the drive and desire to pursue them. If you are planning to perform laboratory research, be aware that basic science research requires learning a variety of lab techniques, thus you should expect to devote at least three months at a time. Ideal times for research are during the summer after the first year and during late third/early fourth year. In the past, some students have split fourth year into two years or taken a year off to accommodate their research endeavors.

Currently, there are approximately 90 residency programs with 221 residency spots available. Dermatology is therefore a competitive field to enter. So what are programs looking for? Programs are looking for enthusiastic people who are committed to dermatology and who want to contribute to the field. Therefore, grades/AOA status, board scores, research experience, letters of recommendation, and dermatology rotations are all taken into consideration. During you third year, doing well in both medicine and surgery is important. Regarding research experience, many applicants have a range of 3 months to five years cumulative research time. Through research, applicants demonstrate their interest in the field and often obtain letters of recommendation (some students feel it is difficult to receive an excellent letter of recommendation from a one month clinical block). In terms of rotations, you can do your clinical or research rotations here at BU or rotate at a program you are seriously considering. Away rotations allow you the opportunity to shine at that program, and to have the faculty get to know you.

With this little scoop on Dermatology, don't be shy. If you really have the enthusiasm and desire to pursue it, start now. Good luck!

# **EMERGENCY MEDICINE**

Sam Lam, M.D. '98, Jonathon Epstein, BUSM IV, Joachim Gruber, BUSM IV

So, you have decided that you want to go into Emergency Medicine. Congratulations on choosing an exciting and dynamic field...then again, we are biased! Seriously though, EM is a great field that is growing in popularity each year. This is both good news and bad news. The good news is that the recognition of EM as a true specialty is increasing, the bad news is that so is the applicant pool! With good planning and a bit of hard work, you too can match at a program of your choice. As others before us have stated, the book by Iserson is essential reading. This may be more true in that he is a residency director for a program in emergency medicine! To those of you interested in emergency medicine, the rotation at BUSM is a must. It is essential to connect with faculty from your institution in the field in which you plan to apply, and this is a great opportunity to work with the faculty, choose an advisor if you have not already done so, and to do well in order to get strong letters of recommendation. You want to do this rotation EARLY, most importantly to confirm that emergency medicine is right for you, and that you are right for emergency medicine. BU has a very respected and established residency program in emergency medicine. Thus, you will not only be taught by very capable faculty and residents but you can also get an insiders view into the BU program and the collective residents' experience. Additionally, if you like the BU program, and

shine in the rotation, your matching potential at BU will definitely increase. Finally, by completing this rotation early you may do an away rotation later and stun the faculty there with your great knowledge and skill. Both of these should also be done in a time allowing for your evaluations to be included in your Dean's Letter, i.e. before October.

There are 3 ways to complete an EM residency program: PGY1-3, internship plus PGY2-4, and PGY1-4. Most programs are PGY1-3 and the 4-yr programs are often older (more established) and they have a greater emphasis on academic medicine than other programs. It is important to consider though that an extra year in residency translates into about \$100,000 lost in potential salary when compared to 3-yr programs. Furthermore, there is always the option of a fellowship after 3 years. Another important factor to consider when searching for the right program is to determine which learning style is best for you. EM programs can be categorized into two basic styles: 1) Do and learn as you are doing. These programs do not place a great emphasis on didactics as opposed to practical training. Such programs often serve a high patient volume (i.e. 100,000 patients per annum). 2) Other programs place more emphasis on didactics. Residents might not see as many patients as in the former program, but they might come away with an extensive list of differential diagnoses for a given presentation. The kind of program can easily be determined during the interview.

If you are thinking of emergency medicine before you finish third year, you may want to try and "hang out" in the ER when time allows. Consider asking the faculty or one of the residents if you can "shadow" them for a shift or two. Not only will you get to experience the life of an EM physician, you will be able to meet some of the faculty and perhaps find an advisor. If you are not sure of how to arrange this, try and contact Dr. Judy Linden. She is the student coordinator for the department, and she is an enthusiastic supporter of students. She can help you find an advisor, and will happily arrange for you to do some shifts in the department. She is a great resource, and is very supportive of students' efforts to match in emergency medicine. Another person you should consider talking to is Todd Rothenhaus, the clerkship director who has also served as an advisor in the past for many fourth years.

The average number of programs applied to is around 15. After writing to programs and receiving brochures, you should be asking for letters of recommendation. As a rule, it is best to have one to two letters from EM faculty, and another from the attending from your Sub-Internship. Whether it is a medicine, surgery or pediatric Sub-I is less important than how you perform. Work hard, show interest and present yourself in a professional manner. If you do this, you should get a strong letter. If not, think long and hard before asking for that letter.

As for a structured time table for the application process, and what to expect and look for on the interview trail, we again refer you to Iserson's book. It is all laid out there in a easy to follow format, and with much more information than we could ever supply. Best of luck, and we look forward to seeing you in the Emergency Department!!

# **FAMILY PRACTICE**

Family Practice is slow to become popular in Boston, however, it is thriving on the West Coast. My advice is to decide on your principle location and start researching programs as early as possible. Use the summer between first and second year to spend some time with family docs associated with a prospective residency - Dr. Shaw is a good source of information. Set up your fourth year schedule to include one or two months at potential programs. Aside from electives, most residencies will encourage spending a week or even a day with a resident for real exposure to their curriculum. This is time well spent. You will come to know first hand what life would be like in a certain program and whether or not it meets your expectations and needs. It also affords you the opportunity to become a familiar name and face for the people involved in the selection process. Relax and be yourself in any and all encounters-family practitioners are some of the most down-to-earth people in medicine. Good luck!

# **GENERAL SURGERY**

Joshua M.V. Mammen. BUSM IV

General surgery is the field which allows you to experience the full range of the best that medicine has to offer. A very technical experience is available in the operating room, but, additionally, one's medical management skills are exercised pre and post operatively. The full set of medical skills will have to be learned and used. Finally, the general surgical residency allows one to later specialize in a wide variety of areas, if one so desires. The application process for any residency appears bewildering at first glance, but can be navigated. Certain academic standards are certainly necessary since a fair amount of competition exists for the available categorical positions, but more than one person from BU who did not honor his/her surgery clerkship matched a categorical position over the last couple of years.

#### Advisors

One of the first steps that you should take once you decide that general surgery might be an area you would like to pursue is to seek the help of a faculty member. It is never too early to ask someone to be your advisor. Initially, you may need to only ask general questions about surgery, but later on, your advisor could become critical. A number of areas exist in which an advisor could be useful. Prior to your fourth year, an advisor can provide information about useful electives (some interviewers specifically ask you to list your electives for the fourth year.) Surprisingly perhaps, the advice is sometimes to fill your schedule with medical rather than surgical electives. Also, you can discuss with your advisor the pros and cons of an away rotation. An away rotation almost always guarantees an interview at that institution and allows you to demonstrate your abilities and interest, but your advisor may be able to provide further insight. Early in the fourth year, your advisor can help you to decide to which programs to apply. Finally, your advisor may, at your request, call your number one choice to further indicate your interest. Many students choose either Dr. Becker, Dr. Beazley, or Dr. Menzoian as

his/her advisor, but others have chosen Dr. Millham, Dr. Kavanaugh, Dr. Woodson, or other members of the surgical faculty as an advisor. Additionally, you can have more than advisor.

## 2. Applying

Deciding where to apply is perhaps the most difficult part of the application You initially need to set your parameters such as geographic limitations, academics vs. community programs, etc. A complete list of programs can be found in the "Green Book." Additional information, though of limited usefulness, is found in the book, "So you want to be a surgeon . . . " The most useful source, though, is your advisor since he/she will often be able to provide you with the "inside scoop" on programs which is often politely not listed in books. No, there is no rank list of programs, so asking faculty is really to only way to find out how sound a program is. Additionally, an advisor will help to personalize the list to your own career objectives. Once you have a list of programs, begin to request applications by sending postcards to programs (addresses are found in the "Green Book.") Most general surgical applicants seem to apply to thirty plus programs. Request applications in early July. Do not be surprised, though, if the applications do not arrive until September. If the application has not arrived by September, call the program to ensure that you have not been lost in the paper shuffle. In July, you should ideally begin to ask three faculty members (many programs specifically ask for surgical faculty) to write your letters of recommendation. When you ask, be sure to bring along your CV as well as your personal statement (part of the application which states why you want to be a surgeon.) Applying early has many benefits, so try to minimize the turn around time of your applications. Even if your application is not Additionally, do not wait until you have received all of your complete, send it in. applications prior to handing in address labels to your letter writers. Just let them know that you will probably turn in another set of labels.

#### 3. Interviews

Hopefully, you will have chosen an appropriate mix of programs so that more than half grant you interviews. Most surgical applicants seem to interview at approximately fifteen programs. Interviewing at such a large number allows you to have strong basis for comparing different programs and allows you to interview at programs which you consider "reaches." Most programs interview in December and January, though some interviews may be in late November or early February. Programs will tend to interview on Saturdays (due to the lack of scheduled surgeries on the weekend), so be prepared to pick and choose between programs which grant you an interview. The interviews for general surgery programs are truly more than formalities. Though some programs may already have created a short list of desired residents prior to interviewing anyone, your interview can significantly affect your application. Dress conservatively. Almost everyone wears dark suits, so showing one's individuality is probably not useful. Be prepared with intelligent questions that are both general in nature and specific to the institution to ask both faculty and residents. Asking the residency director about the ease of obtaining university football tickets, as one applicant did, will not help you to obtain a position. Also, be forewarned. The residents will often frankly answer your questions, but sometimes they report back to the program director of their impressions of the applicants. In addition to opportunities to speak with residents (be suspicious if only a few are present), tours, and lunch, you will interview with between two and nine members of the faculty and occasionally a chief resident. The interviews are often not social events like those of other specialties, so be prepared to answer difficult questions. Chances are that you will be "pimped" on at least one of your interviews. Be prepared to present an interesting patient from your surgical clerkship or sub-I. Also, be able to state realistic future goals. Almost every interviewer will ask you which sub-specialty you intend to pursue, but ignorance due to a lack of exposure is an accepted answer. If you are interested in academic surgery, be clear as to what that entails. Additional questions often pertain to outside interests, the last nonmedical book you read, and (though supposedly not legal) plans for a family. Finally will come the opportunity for you to ask questions. Do not ask questions which place the program in a poor light, but rather allow the interviewer to stress strong points of the program (you should have read up on the program prior to interview day.) Ask the harder questions to residents outside of the interview. Residents also are an invaluable resource prior to each interview since they will give you information about the interviewer's interests and specialty. Following interview day, try to send out thank you letters the next day to each interviewer. Some programs will assume that you are no longer interested unless you write! If you are particularly interested in a program, make a second visit to round with a surgical team for one or two days.

Good luck in the application process. BU has done well in placing students in categorical general surgery positions over the last couple of years, so the status quo is in your favor. If you have any further questions, track down the members of your senior class.

# INTERNAL MEDICINE

## **Primary Care vs Categorical**

Although most of what you need to know about the process of applying for residency can be found in Iserson's book Getting Into a Residency, there are a few things that are more specific to internal medicine that can help you get the residency of your choice. First of all, after you've made the decision to apply for internal medicine, you need to decide whether to apply for a Primary Care or a Categorical spot. Many programs have both, and several have separate match numbers for the different programs. Categorical positions are the "traditional" track for internal medicine. The majority of people in these programs specialize, although many choose to practice general medicine. Many people apply for both tracks, and this is actually a wise strategy if you think you are still undecided, or unclear which type of program will better suit your needs. Primary care tracks differ considerably from program to program, and can be very difficult to assess from the promotional literature you receive. Make sure to ask exactly how the program diverges from the categorical. They vary from simply doing all your electives as ambulatory blocks to as much as spending your entire residency in an HMO with 10 months of your second year in an outpatient setting.

Whichever one you choose, be sure that your personal statement reflects that choice. If your personal statement discusses your love of bench research, the primary care folks may question your dedication to generalist practice. Having separate personal statements may be a possibility for some programs, but be careful! In some places the same committee meets for both programs; it is also easy to get yourself confused.

#### Find an Advisor

The ideal advisor is someone you know and knows you, who has a good working knowledge of internal medicine programs, is known in the field, and has time to spend with you. Needless to say, this is not an easy person to find. At the very least, the best people to go to for advice are the residents, who have recently been through the process. Definitely speak with Dr. Battinelli and/or Dr. Barber about your fourth year schedule and programs that you are interested in. As program directors at BU, they hold invaluable knowledge and can answer many of your questions. See them early!

#### CV and Personal Statement

Internal medicine differs from many of the other specialties in that each year there are more positions than there are applicants. Some programs (even very competitive ones) have as many as 50 spots available in their internship class, as opposed to 5 or 8 in most of the surgery and OB/GYN programs. You WILL match in internal medicine, as long as you have a few programs on your list that are "safeties." This also means that, although you need to have relatively good grades and good letters to get into a "competitive" program, people who are not AOA have a chance at getting into the "best" programs in the country. Of course, everything you can do to differentiate yourself from the rest of the crowd will help you get interviews (extracurricular activities, research, away rotations), but don't be intimidated. Apply to the reach programs; you may be pleasantly surprised! Send everyone your CV and personal statement.

#### **Away Rotations**

The most important thing you can do to get into the program of your choice is to do an away rotation there. If you think you know which hospital you want to train in, make every effort to go there and do a good job. If there is more than one, make sure you go to as many as possible. All programs prefer to take a known quantity. If they have seen you work and like you (and BU students tend to be very well-received at other hospitals), you increase your chances considerably. Usually the best thing to do is an ICU, CCU or Sub-I, since that gives you the most exposure to both residents (who may also have a say) and attendings. If you want to do an away rotation at Harvard, make sure to get your application in 90 days before the block starts, and submit an extra piece of paper requesting as many different rotations for that block as you would be willing to do. There is no limit, although there are only 2 spots on the form.

#### **Letters of Recommendation**

Although many programs request a letter from the department chair, BU instead sends a letter from their designate. You should get a letter from either your sub-I or third

year clerkship director (Hershman, Levin or Caslowitz). Be sure to request that they include a line stating that they are the Designate of the Chief of Service.

The best letters are from people who have seen you work and have given you good evaluations. Do not limit yourself to BU. You may be able to get a letter from one of your away rotations; this proves that your skills translate well, and will be very beneficial if that hospital turns out to be a top choice.

## **Choosing a Program**

When you are interviewing, be sure to talk to the residents in the program. People who went to BU are especially helpful, because you have a common frame of reference. There will be many things you look for in a program, but try to prioritize. If you are not sure how you felt about a place, go back for a "second look" and spend a day on the wards, seeing how things work there and what the environment is like. Try to pick a place where you feel comfortable. If you know you won't be happy at a program, don't rank it. You may be working therefor the next three years, so you want to be at a place where you like the people.

## **MED-PEDS**

Courtesy of Brown University Med-Peds Program

#### **A Few Facts**

Med-Peds is a four-year program where you divide your time evenly between internal medicine and pediatrics. At the end of the four years, you are board-eligible in both fields. Started in 1967, there were very few programs until the late 1980's, when these programs dramatically increased in popularity, number and capacity. For the 1997 Match, there were 102 programs offering 442 positions. Almost all of these are in the Midwest (36), Northeast (29) and South (29). There are very few in the West.

Given the dual nature of med-peds, many applicants would most likely be happy doing any of the three options (med, peds, family). The question remains, are you convinced that med-peds is how you must spend the rest of your medical career? If the resounding answer is "yes," than it may be best to apply only to med-peds programs and save yourself the added hassle and confusion of looking at other types of residencies. However, know that the caliber/reputation of med-peds programs vs. straight medicine or pediatrics programs is very different (with very few exceptions..) Many med-peds are places where either the medicine or pediatric program may not be spectacular. This means you may have to sacrifice program quality for the chance to actually do the med-peds option. Some say this doesn't matter because place of training is irrelevant in the face of type of training. For others, it is a choice between getting top-notch training in medicine or pediatrics vs. training at a so-so institution that happens to offer med-peds. If, after much soul searching, you decide med-peds is your destiny, I suggest doing a three-tiered search - look around at the med-peds programs (Green Book is best), and then scrutinize each institution's medicine and pediatrics residencies. Your safest bet is to give a go at both roads; it's a lot more work and interviewing, but you will sleep better knowing you explored all of your options.

# How Many Applications Should Be Sent and Where

This, of course, depends on your needs and how you did in med school. But, because med-peds programs are small (average number of spots is 4.3 per program), it gets tricky even for the best applicants. In general, you will need to file more applications than if you were applying for categorical programs offering 20+ positions. Be receptive to programs you have never heard of, many are new and this isn't necessarily bad. Be receptive to areas of the country that aren't perfect or places you never imagined you would live. There aren't many places with more than one med-peds program, so you will be doing a lot of traveling, making the cost of interviewing somewhat higher than other programs.

## **How Many Recommendations Are Suggested?**

Most programs ask for recommendations from the Pediatrics Department Chair, the Medicine Department Chair, a Medicine faculty member and a Pediatrics faculty member. Plus, an extra "other" recommendation from any attending would also be very handy to have This may sound excessive, but each program asks for different combinations of the above and since you can stuff your own application packets, it's best to tailor them to each institution. I strongly suggest calling these offices early to avoid the last minute crunch of trying to schedule a meeting for your letter. In addition, they will often offer to read over your personal statement and give you suggestions - remember: these people read tons of statements for their own residency programs.

## What to Look For in a Med-Peds Program

- 1) Good medicine and pediatrics departments you can't build a solid whole if one-half is rotten.
- 2) Approximately comparable medicine and pediatrics departments and thus mutual respect between the two unfortunately, there are some places where one department looks down on the other and if you are a med-peds resident in such a place, you will experience a lot of unnecessary friction in your life.
- 3) Commitment to the med-peds program in the person of a director, faculty, clinic, or specific programs for the med-peds resident.
- 4) Good communication between departments and evidence that they will work together on your behalf.

These are in addition to the usual things you should look for: Are the residents happy? How's the teaching? Etc.

## **Final Thoughts**

Just take a big ol' breath, put on a suit, and forge on with a smile. If it's any consolation, you'll meet extremely nice and interesting people from other schools during your interview trail, and everyone is in the same boat. It ultimately becomes therapeutic to commiserate with fellow interviewees, as well as get their opinions of what they've seen.

Anyone who has more questions, nightmares, etc, is welcome to call either of us before we further suppress this Match experience from memory.

# **MILITARY MEDICINE**

Disclaimer: The following is biased towards the Army. Navy and Air Force requirements may be somewhat different. We will try, however, to relate general information. All definitive information can be found in your HPSP handbook and through your HPSP counselor.

#### The Third Year

By the middle of third year you should have an idea of what specialty interests you. You should also be thinking about the locations you are most interested in spending your next several years.

We recommend back to back rotations between third and fourth year with your most desired location done second. Use the first as practice so you'll shine by the time you get to your second hospital. This will give you two Sub-Internships in military hospitals early enough for match consideration. Remember the ADT application deadlines!

NOTE: These Sub-Internships do NOT count towards your Sub-I requirement for fourth year, you will still need to do a Sub-I within the BU system.

## Before you get to your ADT site

- 1) Get an evaluation form for each ADT rotation from the BU registrar so you can hand-carry it to your ADT hospital.
- 2) Plan to interview! Get your CV ready, as some hospitals require a CV for interviews.
- 3) Get pictures (they do not need to be military) to give to the residency directors after you interview.
- 4) You will need Class A's for interviews and Class B's for daily wear. Make sure your uniforms fit properly, are clean and all the insignias, tags and ribbons are in order. Part of the interview is your appearance.
- 5) Some hospitals require a presentation on a relevant topic of your choice. Some hospitals like you to take the initiative and ask to present. Prepare before you go and take slide materials with you. The hospitals can make slides but it may take up to two weeks to get them back to you.

#### On arrival at your ADT site

- 1) Have with you many copies of your orders and your CV, a picture and an evaluation form for each ADT site.
- 2) Within the first few days, arrange for interviews. You may have as many as seven at each location.
- 3) Consider asking your primary evaluator/Attending for a letter of recommendation.
- 4) Turn in slide materials for presentation.

#### What to expect during the rotation

1) Paperwork is similar to that in the VA. In some hospitals "paperwork" is all on the computer. Wherever you go you may need to take a training class in order to use the computer.

- 2) The hospitals are generally efficient, with good ancillary services. The residents are helpful and relatively laid back.
- 3) You will have a lot of independence but no more than you can handle. Residents know you are still a student. You are expected to work as an acting Intern but you will not be over-burdened.
- 4) Call schedules range from every third to every fifth night depending on the rotation. Daily schedules include rounds, morning report, teaching conferences and teaching rounds.
- 5) You are expected to wear Class B's to the hospital. You may be permitted or required to wear scrubs (provided). You may be permitted to wear civilian clothes on the weekends.
- 6) You will have a good time, so relax and enjoy the rotation. You are there to learn. Don't be shy. Speak up and ask questions. The Attendings and residents love to teach and everyone works together very well as a team.

#### The Fourth Year

Turn in your application ON TIME or your stipend may be suspended. *NOTE:* The original application MUST be submitted by the first deadline. For those applying to OB/GYN Internship, a regular application must be submitted in addition to the ERAS application.

Arrange to have your military photographs and physical done early in August. Allow extra time to order appropriate insignia. Sometimes the uniform shops are out, so call ahead.

The physical is taken at the Military Entrance Processing Station (MEPS) in South Boston. You are Chapter 3. Chapter 2 lists the standards for new recruits and the Chapter 3 standards are slightly different, and they will probably ask YOU what chapter you are. You will need to give supporting documents for any medical conditions you tell them about.

NOTE: Every year the MEPS doctors find a medical reason (such as a history of childhood asthma) to send a disqualification letter directly to an unlucky candidate. NO ONE except the Surgeon General can disqualify you from the HPSP for medical reasons. So if you receive one of these letters (probably one week before USMLE Step II) DON'T PANIC. You WILL get a waiver. Call the HPSP office and let them know.

IT IS IMPORTANT that you enter the civilian residency matching program (NRMP) because not everyone matches in the military. **DO NOT disregard the NRMP**. The deadlines for the Dean's letter and registering for the NRMP come before you find out about your military match status. If you do not match in the military and you have not applied to the NRMP, you will find yourself in an unfortunate position.

#### The Match

If you match in the military, CONGRATULATIONS. Notifications will come sometime in December. BU students have a good reputation throughout the military and

have a history of matching in their desired specialty and location. Once you match in the military you MUST withdraw from the NRMP immediately.

#### **Final Notes**

Your stipend will end on graduation day and you will not be paid again until your first day of active duty. Your orders will be set to start on the day you are to report for active duty which will be two or three weeks before the start of your Internship (1 JUL). This time will be used for orientation, in-processing and other requirements.

You cannot do anything without your orders, which will show up between March and May. You will need your orders to arrange for moving and housing. Your match hospital will send a welcome letter, a welcome packet, questionnaires (with deadlines) and arrange for a sponsor to answer your questions. You can call the Housing office at your match hospital to find out about housing options.

It is never too early to start getting back in shape. You will need to take your PT test during or soon after orientation

# **NEUROLOGY**

Sam Frank, M.D. '98, and MingMing Ning, BUSM IV

Neurology is an evolving specialty with tremendous potential for diagnosis and therapies. Patients present with fascinating diseases, providing a constant challenge and a hugely varied experience for a lifetime. If you are seriously considering neurology, you should try to do your rotation early in the fourth year (preferably blocks 1,2, or 3) to confirm your decision. I found it very helpful to do my medicine sub-I early in the year as well. However, the experience for a rotation on the wards is very resident dependent and you may not get enough exposure to the attendings for a recommendation. A 1-2 week shadowing experience at one of the outpatient clinics with an attending who will be your advisor will be very helpful. And if you are not sure who to ask as an advisor, you can also do a week or two of outpatient, spending time with a different attending everyday. This way you can also see what each neurological subspecialty is like, since most academic neurologists sub-specialize. If you already have a field of interest, it will narrow down your residency selection considerably.

It is not necessary, but it is very helpful to do an outside rotation. Since our institution has a relatively small inpatient facility and a very clinically oriented service, we do not have our own neurology floor or neuro-intensive care units. These extras add a very different flavor to neurology as a more intensive specialty. Other institutions also have larger research facilities, whereas we are more clinically oriented. So whether you want to stay in the academic arena or go into private practice, a different perspective is invaluable. If you are going to do one, keep in mind that there are other rotations that may be listed under other fields but interact with neurology, such as pain management, rehabilitation, ophthalmology, or some aspects of pulmonary (sleep).

In addition to general adult neurology, there are a number of combined specialties: pediatric (child) neurology, medicine/neurology, neurology/rehabilitation medicine, and neurology/psychiatry. Fellowships in neurology include cerebrovascular, epilepsy,

movement disorder, clinical neurophysiology, behavioral neurology, neuromuscular, neuroimmunology, neurologic intensive care, neuro-infectious disease, neuropathology, pain management, sleep, and a few super specialized fields such as neuro-otology, experimental therapeutics (U. Rochester only), occupational neurology (BU), and research.

## **Applications**

Applications are not yet on ERAS, and the easiest way to obtain information and applications is to register with the Neurology Matching Program through the Office of Student Affairs in the spring of third year. They will send you a complete catalogue of all neurology programs and how to get in touch with each one.

Begin requesting applications in June or July. The applications are usually very easy: name, address, name of recommenders, a CV, a photo, and a personal statement. SO PLEASE DON'T WAIT UNTIL AFTER OCTOBER! UCSF, for example, will only interview applications that are complete by early October. As it is an early match, most applications are due by mid-September, but some programs have later deadlines. Some programs will not evaluate your application until it is complete, including all letters of recommendation.

You should try to get one letter from Dr. Feldman, as he is the chairman and is well known in the field of movement disorders. You should discuss neurology with him, but I recommend that you also talk about your career with Dr. Carlos Kase, who is well-known and well-respected in the field of cerebral bleed and is currently the residency director at BUMC. Another resource is Dr. Janice Weisman, the fourth year clerkship director. Some institutions require a letter from internal medicine, and you might find it useful to use that letter as one of your three for all schools.

#### **Interviews**

Interviews begin in October and run through mid-January. You should expect to be interviewed by 2-6 people at each visit, and you will meet the program director and Neurology interviews are LONG, especially at the more chairperson everywhere. competitive residencies (it May be trivial, but life-saving to wear comfortable shoes and suits). You can interview straight for up to six hours and then go for a tour of the campus. This is in part due to the fact the neurology departments are usually small. They want to make sure most of the attendings have a say in choosing you and like to work with you in the future. However, the most useful time is usually the night before the interview, where many programs invite you to an expensive restaurant with its residents. where you can ask all the questions and get a great meal. So make sure you go! This is also where you meet your future classmates and see how happy they are in the program. In general, the program where more residents show up for dinner is a good indication for amore cohesive group of residents. There are places that offer a good meal, but only have two residents show up because the others are too busy on the wards or they can't find enough residents to give a positive view of the program--yes, it's true, and beware. All in all, take everything with a grain of salt because people have different, if not inaccurate views of everything. What helped me the most is to interview the programs back! Talk to BU grads at that particular institution or more importantly a second look or even a third

look if distance permits. One day of interviewing is usually a day of "song and dance" put on by the residency for you. So select a random day to go back because it is more difficult to be rehearsed. You can have a second look at more than one institution to compare. This way you do not have the performance anxiety of interviews and just see what a day in your future is like. Also note the number of foreign medical graduates (FMG'S), both in the program and interviewing, as that is an indication of how well a program has previously performed in the match. Some programs would rather go unmatched than fill with FMGs, although these programs are usually mediocre programs. You should realize that a lot of the pioneers of neurology are from other parts of the world, and that neurology is a very international field. For example, the most noted book on the anatomy of the brain is from Germany. So top programs in the United States bring applicants from all over the world to interview at their institutions and try to foster intellectual exchange that way. Vice versa, a lot of top residency programs encourage residents to go all over the world for electives and collaborate with other countries in research. For example, MGH has a strong tie with South America, Johns Hopkins has a major project in China. These extras are what make the residency more attractive. So keep an open mind when you see your fellow foreign applicants.

## **Programs**

Obviously, you need to find the program that fits your needs best. Some things to keep in mind when looking at programs are:

- 1. Number of residents (ranging from 2 at Dartmouth to 10 at MGH-Brigham).
- 2. Any specialty well-known at that institution and number of staff in each subspecialty.
- 3. Fellowship training. Generally, a better program will keep about half of its residents for further training. Some clinical neurophysiology fellowships simply prepare people for private practice.
- 4. Any well-known individuals at that institution.
- 5. Amount of neurosurgery, psychiatry, and rehabilitation training required.
- 6. What percentage of graduates eventually end up in academic vs. private practice?
- 7. Is there a serious research requirement?
- 8. All the other things to look for in residencies (affiliated hospitals, patient populations, outpatient time, other specialties of the hospital, call, location, why residents leave, "significant other" satisfaction etc.)

Currently, the programs generally regarded as the best are MGH-Brigham, Columbia, Johns Hopkins, and UCSF. Others include Wash U. in St. Louis, Mayo Clinic, Cleveland Clinic, and many others However, if you want to go into private practice, it may be more beneficial for you to do your residency in the location you want to practice to get to know the area and be affiliated with the local hospital when you practice. What make the top residencies "top" and research dollars and a wide range of sub-specialties to do your fellowship in. If you are clinically oriented and want to be a generalist, "name-brands" may not be very helpful. Generally, people chose either an academic or private track, and programs are geared for one type of training or the other.

Also, remember that you need a year of medicine or a transitional year with at least 8 months of medicine. It is helpful to find a program, which guarantees a preliminary medicine year or at least will arrange a medicine interview while you are visiting the neurology program. Some preliminary and transitional programs are on ERAS. year, 1,752 applicants applied, 538 positions were offered, 465 matched, and 399 went unmatched. This is in part contributed by the fact neurology programs are more flexible than larger fields such as medicine or surgery. They would rather go unmatched than take the right number of applicants to spread the work load. And likewise, applicants would rather match at a neurology residency of their choice or will rather go unmatched, or go into another field. But from my experience, if you are serious about neurology, applying to more programs will not hurt you. There is no fee, and you have more choices to select from. The only steady trend is that the number of average applications by a student has almost doubled from a few years ago. (1991: 10 per student; 1999: 18.9 per student.) Look up www.sfmatch.org and make up your own mind about the numbers. applicants are considering neurology (1991: 704 applicants; 1999: 1752 applicants) as a thriving specialty and you should prepare yourselves for a more competitive residency selection process and in the end you will do spectacularly.

# **OBSTETRICS AND GYNECOLOGY**

Eva Pickler, M.D. '98, Deborah A. Chong, '99

In recent years, the field of OB/GYN has become increasingly popular and therefore more competitive for residency applicants. As with all residencies, the more impressive your grades, board scores, and extracurricular activities, the stronger your application. By no means does this require you to be AOA or have extensive research experience to be selected for a residency position in OB/GYN. Many programs look for a well-rounded individual, so tailor the application to reflect this. Highlight your strengths, no matter where they are.

#### Fourth Year Considerations

If you are strongly interested in a particular residency program, then definitely apply to do a rotation there before interviewing begins (interviewing begins November-December for most programs and continues through January). This allows the house staff and faculty the opportunity to get to know you and gives you an advantage over others when applications start rolling in. Most programs have a significant input from residents as to who will be chosen for residency, and the rotation offers the chance to let the residents get to know you more than is

possible in a single day interview. This may also give you the added benefit of a letter of recommendation from an attending at an away rotation, which is another point that residency directors notice. Any of the electives offered at BU would be great to do, too. Try to schedule these earlier in the year if possible; again, this gives a faculty member a chance to get to know you and offers the possibility for a great letter of recommendation. However, your fourth year need not be inundated with OB/GYN electives. Take electives that interest you or may be beneficial for the beginning of residency. Now that all OB/GYN residency programs are required to provide six months of primary care training,

interns and residents need to know more than just obstetrics and gynecology. You might want to consider medicine subspecialties such as cardiology, GI, endocrinology, ID, etc., but you don't have to limit yourself to these electives. Besides, this is one of the last opportunities you will have to do something fun that you won't get the chance to do once residency begins.

## Letters of Recommendation

As for letters of recommendation, most programs expect one of the letters to be from the department chair or residency program director. In the case of BU, Dr. Stubblefield fills both of these positions. Let Dr. Stubblefield know early that you are interested in OB/GYN and ask for his input during the application process. He is extremely supportive of students and puts you as a priority. He is more than happy to advise students and write letters for students, and the better he knows you, the more personal that letter can be. Other letters of recommendation may come from other OB/GYN faculty who know you and your abilities (most programs want a second letter to be from another OB/GYN faculty member), the director of one of your rotations (e.g., your sub-I, third year medicine or surgery rotation), or any other physician that you feel comfortable asking. When asked for letters of recommendation, most writers will request a copy of your CV and personal statement. Although you don't need to prepare a CV for your official application, it would be a good idea to prepare one for those who have agreed to write you a letter.

## The Application

OB/GYN residencies are applied for through the computerized ERAS application system. The diskette and instructions will be made available to you through the Office of Student Affairs during the summer. This means that you will be able to type a single standard application on a diskette and send the information to as many programs as you like, but at a fee that increases significantly with increasing numbers of programs applied to.

Choose your programs wisely. OB/GYN is extremely competitive and applying to at least forty programs is not unreasonable to ensure an adequate number of interviews. Also, most programs only have three or four interview days that more often than not overlap with other program interview days - thus, even though you may be granted an adequate number of interviews (approximately 10-15), you may not be able to go to all of them. Being offered more than twenty interviews ensures that you will be able to make ten to fifteen of them.

This last year, OB/GYN was probably one of the most competitive years ever and even AOA candidates were being turned down for interviews. Thus, even if you are an extremely competitive applicant you need to apply to some "safety" programs. Alternately, do not sell yourself short if you think your grades or board scores aren't that hot, programs look for other unique qualities and they want their applicants to "fit in" with the residents already there. For example, if you are more research oriented, some programs value that very highly, whereas to others it does not matter so much. It is expensive to apply through ERAS, especially after 30 programs. However, it is a small

drop in the bucket compared to the amount you pay for medical school and a small price to pay to ensure the appropriate number of interviews and a GOOD MATCH!

Keep in mind that most programs want ONLY the information contained on the ERAS diskette and will not accept any additional paperwork through the mail or in person at interviews. The only exception to this is the application photo. Sometimes the photos do not transmit well, and programs will request an additional one when you arrive for the interview, so it's a good idea to keep a copy of your photo with you. A good suggestion for the application is to list all Honors/High Pass coursework (i.e., beginning with first year) in the Honors and Awards section of the application as well as your shelf test score from your third year OB/GYN rotation if it is notable (some programs request shelf test scores regardless of performance). This will help buff your application, although many programs will not consider an application until an official transcript has been received. You will receive confirmations via e-mail when programs start downloading your application information. Nevertheless, be sure to call the programs that you are really interested in after receiving e-mail confirmations to ensure that all of your information to date has indeed been received — the ERAS system is great, but it is not foolproof as yet.

As for timing of the application, September or early October is a good time to shoot for. Despite getting your diskette submitted and into the ERAS system very early, many programs may not download information until late September or October (my disk was submitted in August, but no program downloaded my information until the last week of September). Furthermore, many do not offer interviews until the Dean's letter is received, so an extremely early application has little advantage. On the other hand, some programs may fill all interview slots before the application deadline, so it does not pay to wait until the last minute. The bottom line is that while OB/GYN is a competitive specialty, it is not impossible to acquire a residency position. When interviewing begins, you will see a wide variety of applicants. Don't sell yourself short, and be confident in what you have to offer.

# **ORTHOPEDICS**

Michael Grafe, M.D. '98 and George Naseef, M.D. '98

Fear. This is a common emotion that one feels while applying for an orthopedic residency position. Nothing is certain until you have the paper in hand saying that you have been accepted into a residency. This is the case unless you are the number one student in your class, have an Olympic medal, or have competed in professional athletics. (It sounds funny, but it is true). Is orthopedics really this competitive? Yes. Will it be getting easier in the foreseeable future? No. Why is orthopedics so popular? For those of us who have been around the field for a while, we feel it is the best field in medicine. Period. Students are attracted to the field for many reasons including: lifestyle, financial rewards, patient population, and the biomechanical principles related to orthopedic surgical procedures.

#### When to Start

But, if you're reading this, you want to know, "How can I get in?" Well, the best advise is: Start early. (Like your first year of medical school.) This provides you with an opportunity to start research projects and make valuable contacts within the field. This will help to protect yourself if you don't make AOA.

#### Advisors

Getting an advisor is also good idea. Dr. Foster is the best advisor in the department. Unfortunately this is not a secret, and it is almost impossible for him to take on new students. Dr. Sledge is a new, young attending at the HAC (the institution formally known as BCH). His interests are spine, trauma, and total joint replacement. He is very excited about teaching, and he would be a good person to approach for advice. Dr. Schepsis is excellent but is extremely busy. He usually has 3 – 4 sports related research projects going on at any one time. Dr. Einhorn is the chairman of the department and is extremely busy at the present time. He is internationally renowned for his basic science research and is a strong proponent of student and resident education. If you have a strong background or interest in basic science (bench top) research, it may be wise to make an appointment with him. The department at BU is rapidly changing. By the time this is published, others may have joined the staff. A key thing to remember is that new or young attendings want and need to publish and can always use the help of a motivated student.

#### Grades

Grades in ortho are extremely important. If you honor everything, beautiful. We believe that the most important classes to honor are medicine, surgery, and your BU ortho elective. Other classes that are important are your surgical sub-I, anatomy, and pathology. If you don't honor all of your classes, your ship is not sunk. There are still other ways to succeed.

## **USMLE Step 1**

Do well on the boards. At a minimum, you have to get over 200. Better yet, you should get over 220. If you want a reasonable amount of interviews, you need over 235.

#### **AOA**

AOA is helpful but not essential. You can still get a spot without it.

#### Research

Research is very helpful if you are academically challenged. It gives you a chance to prove your interest in the field and allows the attendings to know you on a more in-depth and long term basis. One option is to do your research while you are in medical school. Another option is to take some time off from school (1 to 2 years). If you get some strong publications off during this time, it can make you a much stronger candidate.

#### Third Year Rotations

It is not imperative that your third year schedule be created in one specific manner. However, many people suggest that you do your medicine and surgery rotations early. The advantage to this schedule is that your surgery rotation is done early enough so that you can send your surgery grade to away-rotations that require it as part of their eligibility requirements. Second, it also allows you to get some fourth year rotations completed during your vacation block in the spring. Sign up to do an orthopedic elective during your surgery clerkship. It can either be done at the HAC or the ENC. We suggest that you use your third year vacation block to get some fourth year rotations completed in order to maximize the amount of orthopedic rotations you can do in your fourth year.

## **USMLE Step 2**

This is a gray area in the application process of orthopedics. If you did great on Step 1, you definitely do not need to take this exam until March. However, if you did poorly on Step 1 or even average, you may consider taking Step 2 in August. If you get a great score on Step 2, it probably can help you to get some more interviews. However, an average score on Step 1 (220 in the ortho world) with some honors and some research can still get you ten or more interviews. If you take Step 2 in August, you should schedule a vacation block around that time.

#### **Fourth Year Rotations**

Everyone should do a fourth year orthopedic elective at BU (preferably, at the institution formally known as UH) and at least 2 away rotations. You should petition the promotions committee to have all three count for credit (which will equal extra vacation time). However, some of you will be DENIED and you will have to do one of these rotations during a fourth year vacation block.

When choosing away rotations you should be realistic. One elective should be at a program where you stand a legitimate shot at getting in. The other program can be a bit of a reach. It is a good idea to discuss these choices with your advisor. You should contact the places where you want to do your away rotations by February of your third year.

Other rotations that you may want to do early are neurology and radiology. These rotations may help to prepare you for your away rotations. If you really had a good rapport with the surgery attendings, you can also think about doing your surgical sub-I early (before September). Some candidates claim that a rotation with Dr. Menzoian is very helpful because it allows you to review a lot of your extremity anatomy. I (M.G.) did mine with Dr. Beazley and had a great time. So, the choice is a personal one.

There are two more things to keep in mind. One is that you should take a vacation block during late December and early January. This is when a majority of your interviews will be. Second, you should plan an easy rotation for late February / early March because this will give you plenty of time to study for the USMLE Step 2.

#### Letters of Recommendation

Letters of recommendation should be from attendings that know you well, especially orthopedic surgeons. Give them PLENTY of time to write your letters. Ask them to write your letter in June/July at the end of your third year.

## **Personal Statement**

Start writing your personal statement early; we suggest in June at the end of your third year. Write it several times. Try to focus on things that will not be in your C.V. (medical résumé) or application. Use your personal statement to separate you from the other candidates and to describe your goals. It is important NOT to include past athletic experiences (After benching 500 lbs. for the last five years, I knew ortho was for me.) or personal medical experience (After they repaired my ACL, I had to do ortho). Also do not use autobody talk, i.e. "I built this 1964 Porsche from the ground up when I was seven." Have your advisor go over it with you by August.

## **Applications**

Most of the programs, by the time you are applying, will be on the ERAS system. Contact all of the programs you wish to apply to by May at the end of your third year by mail, even if they are on ERAS. This is important because some of these programs may have special forms to fill out, or they may still require a paper application. Program addresses can be obtained by using the Green Book or using the FRIEDA computer system. We recommend applying to programs in areas that you can tolerate living in for five years. We are not advocating that you apply to every program in the country, but apply to a lot of programs. The range of programs that the 1998 BU ortho candidates applied to was between 30 and 80. The weaker your grades, the more programs that you should apply to.

Apply to programs early! The Dartmouth application is due by September 1. Obtain your SATs, MCATs, and undergraduate transcripts. As scary as it may seem, some programs require these numbers. Some programs on the ERAS system require material that is not standardized for the ERAS program. They usually tell you to include these things as an additional letters of recommendation. We advise sending each unique addendum by mail. If you have a strong CV or publication, it may be helpful to send it by mail to all of the programs that you apply to. You may want to discuss this with your advisor. Some previous candidates advise calling each of the programs they applied to in order to confirm successful arrival of their application material. Some of the secretaries may get annoyed at this approach, so you have to decide what is best for yourself.

#### **Interviews**

DO NOT BUY LIME GREEN SUITS FOR YOUR INTERVIEW. Dark blue suits are pretty much run of the mill. (Brooks Brothers suits are pretty cheap at the Kittery, ME outlet). It is a good idea to obtain practice questions provided by the Office of Student Affairs before you interview. Follow up your interviews with thank you letters to the residency director and department chairman.

#### When It's All Over

After your interviews, you need to decide what are your top choices. You should ask Dr. Einhorn to call your top choice. It is also a good idea to send a letter to your top program advising them that you will rank them number one. Dr. Culbert will also call a program for you. You may want him to call your number two program. If Dr. Culbert knows you very, very well, this may be a good option to take advantage of.

In the end, try the best that you can. Although trying to achieve all of these goals is quite daunting, if you don't meet all of them, an ortho slot is still a possibility. In fact, we know of several people with board scores below 200, or those who have only had two interviews, and still matched. So, don't get discouraged too quickly.

We wish you the best of luck in your endeavors.

Special thanks to Dr. Tim Foster for his advice and support over the years.

George tried to discourage me from writing on many points in this article, yet I resisted his pressure in order to bring the best information to you.

# OTOLARYNGOLOGY

Josh Kessler BUSM IV

Otolaryngology is a field that offers many attractive opportunities and challenges. The typical otolaryngologist divides his or her time between the clinic and the operating room to suit his or her needs. It is a common thing to hear that ENT contains components of both medicine and surgery and I have never met an otolaryngologist who is unhappy with their decision to enter the field.

With that said, Otolaryngology is a very competitive field to break into. There are relatively few spots in the country and they are in high demand. This is partially the result of the Academy's determination to keep the numbers of otolaryngologists down to prevent job saturation. In the January 1999 match, 573 registered with the match, 389 submitted rank lists and 252 matched. 75% of graduating US seniors matched this year.

Otolaryngology is an early match, with the deadline for having your rotations, application, and letters of recommendation completed in the second week of September, however it behooves you to get yours in even earlier, like mid-late August. There are many components that programs use to evaluate who to select for an interview. These include letters of recommendation, third year grades, board scores, AOA status, and research. Some programs place high emphasis on research, while others may want only applicants with high board scores.

- 1. Letters. I cannot emphasize enough how important it is to have a letter from someone well known in the field. You will soon realize that everyone knows everyone else and that having a letter from a well known chair will help you greatly. This means doing at least one or maybe two away rotations at a large academic institution with a well-known ENT department. I know personally and from others that UCSF, UPENN, and Hopkins are excellent places to do away rotations with attendings that will write letters. It is very important to work hard on these rotations and impress people so that they will recommend you highly. Other programs with excellent reputations include Michigan, Miami, Univ of Washington, Iowa, UCLA. It is also wise to get a letter from someone from BU or another well known Otolaryngologist, and another letter from an attending in third year or from your surgery sub-I.
- 2. Third Year Grades: I believe that it is very important to do well in your third year. Honoring surgery and medicine go a long way and honoring the majority of your clerkships demonstrates interest and motivation. This is not to say that you should rule out ENT if you have not honored many third year courses, but you may consider a back up plan if this is the case.
- 3. Boards. You will hear that you need 235 on the boards to get into a surgical subspecialty and you will hear that you only need to break 200. What is the truth? Who knows, but great board scores can only help you. I think that one should aim to break at least 220 and any score below 210 is probably a sign to prepare a back-up plan. Any score in the middle (like mine) may cost you some interviews but won't count you out. If you don't do well on the first step, take a vacation block in August and take step two in the fall if you think you can improve. This will allow you to

bring your scores to interviews and you'll be very happy in the spring while your classmates are studying.

- 4. AOA. Ah yes, the big mystery of AOA. You will hear that AOA is essential in surgery and surgical sub-specialties and this is false. Of course, having AOA places you at an advantage above those that do not, but this is by no means essential. Many people without AOA get top spots at academic institutions in ENT and there are definitely people with AOA who do not match at all.
- 5. Research. Many programs want to see some research, and I believe that it is an important complement to one's application. It is very easy to get involved in case reports and some basic science research if you seek it out EARLY. You don't want to do 10 months of bench work and not have your name on the paper. I suggest finding an attending you feel comfortable with in first or second year (preferably in ENT or surgery) and asking him/her if they have any small projects (case reports are cool, easy, and easy to publish) for you to work on. You may even get the opportunity to make a poster out of it and present it at a national conference in a cool city. While those without research still match, I believe more and more that research will really boost your chances.

As I've repeatedly said, elements of the match regarding who does and who doesn't are very hard to comprehend. You should never count yourself out but at the same time you should never think of yourself as a shoe-in. Although it is very difficult to have a back-up plan, unless you are willing to not match at all in 2000, I would suggest setting one up in a less competitive field if you have doubts about the strength of your application.

## How to apply:

- 1. Visit <a href="www.sfmatch.org">www.sfmatch.org</a> to log onto the matching program's web site, and request an application to register. The OSA will also have these forms in the spring. Register with the match in the spring and write to some programs that interest you. Most programs have links in the web site as well so that you can print out their info rather than mail 50 different places.
- 2. You should set up your fourth year schedule to do two ENT electives before September. If you can fit a sub-I in surgery, you may want to do that as well. I was able to do my sub-I in May, take step 2 of the boards, and do two rotations in ENT (one away) before I had to complete my application. You should also be preparing your CV and a personal statement in the late spring in order to give to your letter writers. Expect that it will take each writer 3-4 weeks to finish the letter. This way you won't get caught waiting for a letter in order to mail in your application. Remember, it is essential to do all of this ASAP, and if you don't get a schedule that allows you to, you must go and fight it out with the registrar to get one that allows you to have the best chance.

- 3. Fill out the application in plenty of time to spare and show it to as many people that will look at it. Feedback only hurts if you take it personally, so don't. It is important to get as many opinions as possible before you submit the final product. The personal statement should say how you got interested in ENT, what you do in your spare time, and what your goals are. While these do not need to be masterpieces, people do read them and a bad one may hurt you.
- 4. Where? Apply to any place that you would consider going to. Now is not the time to hold back on your money. The average number of applications was 37 this past year, and it seems to go up every year. When people asked me why I applied to so many programs, I always said it was nice to turn down interviews rather than wishing I got more. I would advise applying to all of the big programs, but don't only interview at the best places unless you are really outstanding. Go to a few places that you feel you have better shot at, as well. I think 10 interviews is enough, and over 15 gets to be a lot, but if you have the time and money, go for it. You will find that you may be canceling interviews to go on another, because many programs only interview on 1-3 dates and will not make exceptions.
- 5. The interviews are arranged from late October to early December, many on weekends. You will spend a lot of money and get little sleep. You'll also miss a lot of school, so don't do the sub-I here. The vast majority of interviews are very laid back. You'll see the same applicants at many different places. You will be asked how you got interested in ENT, what you like to do, where do you see yourself in the future, etc. Very, very few places will pimp you and only one make you carve the infamous soap. Just be calm and be yourself. You are on the same footing as everyone else at the interview. Always write down the names of those who interviewed you and what you talked about and write thank you letters as soon as you get home.
- 6. Rank your programs according to your preference, not theirs. So you don't think you'll match at Hopkins but you get an interview? Rank them number one, and don't be afraid to let them know that you intend to do so. Programs want people who want to be there, and writing them to tell them that you are very interested is perfectly legit. And don't rank any program that you don't want to go to, but don't drop any that you would go to just because you feel confident. Also, don't assume that just because you think your interview didn't go as well as you wanted that your interviewer felt the same way. Many times I have heard people get into the programs that they felt they interviewed horribly at.

Finally, enjoy your fourth year!!!! And don't be afraid to seek out myself or Scharukh Jalisi next year if you have any questions.

# **PEDIATRICS**

If you are considering a career in pediatrics but are not certain, you should try to schedule an early pediatric Sub-I or pediatric specialty rotation. An early Sub-I is also useful in terms of getting to know what aspects of a residency are important enough to impact on where you'll spend your residency, as well as for obtaining a letter of recommendation from an attending. Residencies seem to expect applicants to do two to three rotations in a pediatric field (this includes the Sub-I). Once you decide to do pediatrics, the next step is to decide in what kind of environment you want to train. Consider such things as:

- 1. Size of the program how many residents, how many attendings?
- 2. Location where in the country do you want to /have to live?
- 3. General hospital with children's ward vs. Children's hospital
- 4. Fellowship training programs or no fellows present
- 5. What specialties are available at the hospital, which are emphasized?
- 6. Patient population
- 7. Outpatient vs. inpatient training time
- 8. Primary care teaching vs. specialty teaching

A great resource to tap into is BU's pediatric attendings. They can be really useful in helping you sort out different pediatric programs. Often they are aware of the reputations of the programs, their strong points and weak points, and the "atmosphere" of the program. They may know attendings with whom you can speak or BU alumnae that are current residents at the programs. Talking to an attending about this early on helps you get an idea of where to look.

The next step is to request materials from the programs. You get more details in the brochures about what's available to you and what's expected of you. Timewise, starting your personal statement at the beginning of the fourth year will give you a good head start - with time to have two or three different people (docs and peers) critique it for you. The same is true for your resume. The checklist in the fourth year manual is good for keeping track of where you are in the process of applying. Concerning numbers of programs to which students apply, the number varies widely, but many students burn out by the tenth interview. Even though the interview process can be stressful, take time to enjoy the different cities you will visit.

# PHYSICAL MEDICINE AND REHABILITATION MEDICINE

Andrew Chan, M.D. '98 What is it?

Physical Medicine and Rehabilitation Medicine (PM & R) is a relatively new specialty that arose to address the functional needs of patients. The main focus of the field is to help patients achieve the highest level of function that their impairment/disability/or

handicap will allow. The specialty addresses many different issues and aspects of patient care, allowing for the development of long-term doctor-patient relationships. Physiatrists also work closely with other specialties including orthopedics, neurology, neurosurgery, Rheumatology, anesthesiology, and internal medicine as well as with PTs, OTs, neuropsychologists, speech therapists, and athletic trainers.

A PM & R doc or physiatrist can be thought of as a combination of a non-surgical orthopod as well as a functionally oriented neurologist. On the orthopedic side, we address issues such as arthritis, amputations, limb fractures, orthotics and prosthetics, sports medicine, and general musculoskeletal medicine. On the neurology side, we address issues such as traumatic brain injury (TBI), spinal cord injury (SCI), stroke, and pain management. Other areas that are addressed include cardiac, pulmonary, pediatric, cancer, and burn rehabilitation. Routine procedures can include nerve blocks, EMG, facet joint injections, botulism toxin injections, epidural steroid injections, and trigger point injections.

## Why would I ever want to do that?

PM & R is a young, dynamic, and relatively undefined field which offers a wide variety of practice choices (e.g. sports medicine, cardiac rehabilitation, spinal cord injury, etc.), patient populations, diagnostic and therapeutic modalities. Opportunities to do research, and to develop novel, innovative treatments and diagnostic techniques abound. Continuity of care is a factor, unlike the prevalent McDonald's style health care currently seen in many outpatient clinics where a patient may never see any one physician more than once. Also, the vast majority, if not all, patients tend to be self-motivated individuals who want to get better and will work with the physiatrist toward that goal. Finally, jobs still readily exist in both academic and private environments, and the lifestyle is quite enticing (regular hours, average salary \$150,000, and relatively few emergencies).

#### How do I find out more?

BU has a PM & R department and fourth years are welcome to rotate through. Dr. Shanker Nesathurai is the acting chairman and is probably the best person to contact. Boston also has two other PM & R programs, including Tufts and Harvard (Spaulding). A good intro text is Susan J. Garrison's Handbook of Physical Medicine and Rehabilitation Basics (about \$35).

## Residency options?

PM & R is a PGY-2 program that requires either a Preliminary Internal Medicine year or a Transitional year. Top programs include (in no particular order): University of Washington in Seattle, WA; University of Colorado in Denver, CO; Baylor/ UT PM & R Alliance in Houston, TX; UMDMJ (Kessler) in West Orange, NJ; Harvard (Spaulding) in Boston, MA; Northwestern in Chicago, IL; University of Michigan in Ann Arbor, MI; and Mayo in Rochester, MN. There are 91 programs and 347 positions across the country available this year in 1998. For further listings, consult the green book in the library.

#### What should I look for in a residency program?

Availability and quality of faculty and facilities; location; elective time; schedule (balanced vs. mostly inpatient (SCI, TBI, etc.) vs. mostly outpatient

(musculoskeletal, sports med., etc.); call schedule; didactic schedule; research requirements; allowed conference time; and, of course, how happy the residents are. Good luck with your match whatever you decide to do! Please feel free to contact me if there are any questions. My number/ e-mail should be available in the Office of Student Affairs.

# RADIATION ONCOLOGY

Derek B. Chism, BUSM IV '99

Radiation Oncology is a field that you probably have heard very little about. It is similar in a sense to surgery. The patients you will see have a very real illness and you will be able to offer them a very real benefit. This is because the patients have already been diagnosed by a pathologist and are coming for either curative treatment or palliative treatment. For most patients, radiation offers the definitive local control after surgical excision, it eliminates micro-metastasis that can not be identified at the time of surgery and for many patients (esp. breast cancer) spares them a disfiguring surgery. It is important to note that for many patients a cure is an unrealistic goal and the intent of treatment is palliation. Even here radiation offers a real benefit in improving the quality of life at the end of life. For these patients you may not add years to their life, but you will add life to their years. As a radiation oncologist you will work both independently and collaboratively because most cancer patients receive multi-disciplinary treatment. Finally, if you love making the diagnosis, playing the hero in acute situations or preventive medicine then this is not the field for you because the diagnosis will already be made, acute situations are rare and it is too late for primary prevention in the patients you will see.

Most programs have similar schedules involving resident lectures, tumor boards, or case presentations in the morning and then four types of patient visits. The initial visit: this is a very directed H&P to stage the tumor, identify risk factors for the disease and side effects of treatment, and then to educate the patient about the treatment. Simulation: this is the real nuts and bolts of defining the treatment fields, making sure the tumor is within the treatment fields, and limiting as much dose as possible to the important structures. On treatment visits: these occur once a week to monitor the development of side effects from radiation, and provide treatment for these side effects. Finally, the most rewarding visits of all are the follow-up: again these are very directed to the disease for which the patient was treated. Any patient with a diagnosis of cancer deserves to have two doctors. Frequently, it is the radiation oncologist or the medical oncologist who monitors the patient for recurrence.

Radiation Oncology is a small field so a glowing letter of recommendation from a program director at an academic institution goes a long way. Obviously high marks in the third year is helpful, but honest enthusiasm for the field during a rotation and good letters are probably the most important. At BU Dr. Delaney who splits his time between BU and MGH runs the department he is an excellent resource for advice. Some excellent institutions to visit are: The Joint Center for Radiation Therapy, MGH, UPENN, Fox Chase, Sloan Kettering, U. of Michigan, St. Louis (malignant), M.D. Anderson, U. of Chicago, and UCSF. There are other great programs, of course but the attendings at these programs are the ones writing the books that residents are learning from at other

programs. A letter from an attending at these programs will be recognized everywhere. Some other great programs a little smaller in size include, Baylor, U. of Wisconsin, UNC, Duke (malignant), Seattle, U. of Utah, Emory, and U. of Florida.

Radiation oncology relies heavily on physics and technology so these are the tangible things to look at when evaluating a program (I won't comment on intangibles like location, atmosphere, etc). Do they have 3-D treatment planning, do they have Multi-Leaf Collimation, and how much Brach-Therapy do they do? These are all fairly important. Other things to consider: do they use intensity modulated radiation therapy (IMRT is very new and unproven but may be important in the future)? What do residents do during the required 6 mo.-1 yr. of research time (bench work, clinical projects, MPH degree)? How many kids do they see per year (peds is always the smallest patient population thankfully)? Do they run multi-disciplinary clinics (path/radiology/surgery/medicine/rad onc all in the same clinic, these are a great learning experience)?

## RADIOLOGY

John Kim, M.D. '98

Radiology used to be one of the most desired and competitive residencies until approximately 1995. At that time the number of applicants dropped due to a fear of the lack of jobs once out of residency. Although the applicant pool has been increasing since then, it is still less competitive than it was 5 years ago. This is good for those who just want to get into any program (you will match if you apply to enough programs). On the other hand, positions for the top-tier programs are still fiercely competitive, and will probably be even more so due to anticipated reductions in the number of positions.

If you know you want to go into radiology, find an advisor (the earlier the better). Dr. Blickman, the radiology course director, is the best resource for mentoring, being your advisor, and directing you to other members of the staff. You should also introduce yourself to Dr. Ferrucci, the chairman, since he is well known in the field and is a great guy. He is very approachable and student friendly, and has great words of wisdom. He will, however, defer most of the nuts and bolts advising to Dr. Blickman.

Do your radiology rotation early in your fourth year so it will be in your deans letter, and honor it. AOA, strong board scores, a good academic record and research are all pluses that will make you more competitive for the higher tier programs. Probably the most important thing programs look at are letters of recommendation. Try to get letters from people who know you very well and will really go to bat for you (at least one of whom should be a radiologist).

Although experiences will vary, most programs don't look at applications until the deadline, usually Nov 15. So it's not essential to have everything in by September. Most programs participate in ERAS, so get all that stuff from the Office of Student Affairs. Otherwise, relax, have fun, and good luck.

Jennifer Murray Lynch, MD '98

For those of you who are considering a career in radiology (or haven't ruled it out as a possibility) here are some words of advice.

First of all, plan your radiology rotation early in your fourth year (preferably before your Dean's letter goes out). Of the 10 people in my class who matched in radiology, 5 had not made their final decision until this rotation. Don't worry if you make your decision early in your fourth year, this is not unusual. As long as you get your applications in on time you are not at a disadvantage.

Next, find an advisor within the department. Drs. Blickman, Eustace, Cranley, and Ferrucci were all excellent resources and very willing to talk to students. You will probably want at least one letter from a radiologist, therefor it is a good idea to get to know your advisor as early as possible. Other letters can be from just about any department, as long as they are strong. It is a good idea to have at least one letter from the department of medicine because some preliminary and transitional programs require this.

A common question that I have been asked is how important are grades/USMLE and research experience. The general feeling from the students in my class going into rads was that the stronger your academic record the better. However, radiology has been somewhat less competitive the last few years because of a decrease in the number of applicants. There is a wide range of programs out there, some very competitive and others less so. It really depends on what you are looking for. If you would like to match at a highly competitive, academic program, research experience is very desirable, as are strong USMLE scores. Luckily, it is very easy to get involved in research. Many of the radiologists at BU are currently involved in some form of research and most are very happy to have help from interested students. It is often possible to be involved without actually using up a rotation block. Again, it depends on what your are interested in. Research can help, but is not a requirement.

Finally, if there is a program you are very interested in, it is a good idea to do an away rotation there if possible but this is not a necessity. Very few of the students in my class matched at programs where they had done rotations.

Good luck!!

# **UROLOGY**

Mheir Doursounian, M.D. '98, Arthur Mourtzinos, BUSM IV, '99

Before you make a firm commitment to Urology, make sure that it is the right career choice for you. You can begin by reading several commercially available books that discuss how to choose a specialty. Iserson's book "Getting Into Residency" and Anita Taylor's book "Choosing a Specialty" are highly recommended and read by most students. If you are in your preclinical years, you may want to even shadow a urologist for some time. Our department at BU has several excellent attendings that are very receptive to students. If you are in your clinical years, spend time in urology during your surgery rotation, do an elective, or talk to residents. Review as much material as possible and ask a lot of questions to make an informed decision regarding your career.

Applying to urology residency programs took quite a turn a few years ago. As a result of Medicare and government budget cuts, residency programs have been forced to reduce the length of training and cut positions. The majority of programs have responded by dropping their research year or some combination of research and general

surgery training. This has resulted in a drop in the length of residency from 6 to 5 years at many institutions.

Urology is an extremely competitive specialty. Of 521 students who registered for the 1999 AUA Match, approximately 400 submitted rank lists and 223 matched resulting in a match rate of 56.8%. All residency positions were filled through the match. The match rate will most likely continue to drop given the decrease in the number of residency spots and the increased interest in the field.

What does it take to get it? There are several factors that programs use to select their candidates. AOA membership and research publications are helpful but not strict requirements. Grades, board scores, and research are only part of the formula. It helps to honor 3rd year clerkships (especially Medicine and Surgery) and 4th year Urology electives but not a must. There are no cutoffs for the USMLE Part I but doing well is a The majority of programs do not require Part II scores, but check with the individual programs. Some programs, such as MGH and UVA, request SAT and MCAT reports as well as undergraduate transcripts. Research experience is extremely valuable. This means publications, presentations, and abstracts that have been accepted at conferences. Many of the high-powered academically oriented programs may even require past research experience, although they will not tell you that outright. recommendation are extremely important as well; in many cases, the most important part of your application. Regardless of what you look like on paper, you must demonstrate that you are an honest, hardworking, mature, and stable person. Programs do not want an egotistical pain in the rear end! Programs have been selecting residents and know when they are dealing with a person with whom they would enjoy working with. Remember, Urology residency training last at least 5 years; programs are not looking for head cases even if they are the brightest individuals in the applicant pool.

The Urology department at BU is extraordinary and extremely supportive of students interested in the field. Unfortunately, Dr. Krane, the chairman of the department for the past 20+ years, is stepping down in July 1999. The rest of the attending staff, especially Dr. Goldstein, makes an effort to help you get that ideal residency. Dr. Babayan will be the interim chairman and you should set up an appointment and inform him of your intention to enter the field. Later on, you can meet with him to discuss individual programs and the final rank list. The residents in the program are very approachable and an excellent source of information.

#### 4TH YEAR SCHEDULE

You can get credit for up to two rotations of clinical urology. You should take electives as soon as possible because Urology is an early match. Do a rotation at BU early and then consider doing one away. Your "outside" elective should be chosen carefully. Some programs (due to their reputation) get a flood of medical students within a few months. This may lead to 5-7 medical students on the same rotation which will limit your experience and the exposure to the person you want writing your letter. The programs that only allow two students per month are the most rewarding, but these fill quickly so plan ahead. My suggestion is to do a rotation at a second tier program which has a well-known chairman if all else fails. If you have your sites set on a specific program, then you should do a rotation there. In either case, you need a reference letter from this

rotation so make sure the chairman has a good history of writing strong reference letters if you turn in a strong performance. As Iserson stated in his book, the gold standard is an excellent letter written by someone well known to the Urology community. Which programs are good to do electives at??? Ask both faculty and residents, although the residents will most likely offer the best advice.

#### APPLICATIONS

Remember, Urology is an EARLY match!! In the early spring around May, contact the AUA in Houston, TX to obtain registration material. You can try the internet to get more information about registration on the AUA website, which is www.auanet.org. Register and follow the timeline listed in the materials they send to you. These materials include a booklet that lists all the participating programs with their addresses and telephone/fax numbers. You will eventually have to contact each program individually to obtain application packets. There is no magic number but students typically apply to at least 30 programs and go to about 13-15 interviews. Make sure you send all materials by the deadline!!!! There is usually a residency coordinator or an administrative assistant who will not give your application to the committee until ALL THE REQUIRED DOCUMENTS ARE RECEIVED!! It is to your advantage to apply as early as possible. Try to have all applications out by the end of August since interview slots/dates are limited and fill quickly. Applicants who are invited for interviews early have a greater selection of dates and avoid being placed on waiting lists.

Most interviews are conducted during November and December although you may have some scheduled in October and January. The former two months is an ideal time to take a vacation block for interviews. The interviews are generally not very stressful and most are relaxed. Make an effort to be friendly to the host residents, secretarial staff, and other applicants. How you interact with others is observed. Following interviews, send individualized thank you letters to each program. They are not required, but it is generally a classy thing to do and all applicants send them. Following your interviews, it may be helpful to visit the program you are most interested in or will rank at the top of your list, the so-called "second look." Plan to spend a day at the program in the OR with the chairman and the residency coordinator. In your thank you letters, do not tell a program they are number one if they are not. Remember, Urology is a small community and you never know when a lie will come back to haunt you (fellowships, paper reviews, or even matching into a residency).

Deadline for submission of rank lists is in mid-January. Enjoy the entire process and your fourth year. The interview trail is lots of fun. You will meet interesting people from all over and see explore other parts of the country. Remember, when in doubt about something or a program, ask the residents...they give the best answers.

## **Late Spring-Summer**

Contact the AUA residency matching program and register for the match (applications in Office of Student Affairs). Completed application + fee = personal identification number for match and references containing the individual programs participating in the match. All applications require an applicant photo. Find a good photographer and have a portrait taken as soon as possible. You will need approximately

a 2 inch x 2 inch for each application. Get this done early; you do not want the lack of a photograph to hold up your application.

#### **Summer-Early Fall**

Using the information obtained from the AUA Residency Match Program, write or call the programs you are interested in and request an application. There is no magic number, but most students apply to at least 25 programs. Most applications are due in late September to early November but some can be as early as September 1 (University of Connecticut). It is to your advantage to apply as early as possible, interview slots/dates are limited and fill quickly. Applicants who are invited for interviews early will have a greater selection of dates. This will help you plan an interview tour that is most economical.

## Fall-Winter (October-Mid January)

Most interviews are conducted during this period so be prepared to take time out. November or December is an ideal time to take a vacation block for interviews. The interviews are not very stressful, and most are very relaxed. Make an effort to be friendly to the host residents and other applicants. I believe how you interact with others is observed. If you have participated in a research project, prepare yourself to answer questions concerning background, results, significance of results and how this is important to urology. Following interviews, send individualized thank you letters to the interviewers. Thank you letters are not required, but it is generally a classy thing to do.

#### November-December

Preference list forms are mailed from the AUA to the applicants and the programs.

## Mid January

Deadline for submission of rank list. Two weeks before submitting a preference it does not hurt to write to the programs you are most interested in and let them know where they stand on your preference list, but be honest. Do not tell a program they are number one if they are not. Remember, urology is a small community and you never know when a lie will come back to hurt you (fellowships, paper reviews etc.)

## Last week of January

Match results are faxed to the Office of Student Affairs and mailed to the applicant.

#### Participation in NRMP for preliminary surgery positions

Most programs require that you do the preliminary surgery training at the same institution.

Again, above all, enjoy the process.

