KU SCHOOL OF MEDICINE

The University of Kansas

Kansas City

CLINICAL STUDENT ORIENTATION MANUAL

2009-2010

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Alpha Omega Alpha
Kansas Alpha Chapter

I want to take this opportunity to congratulate you on completing your first two years of medical school. Third year will be very exciting but can be a little bit overwhelming at times. The hope is that this booklet may help with some of the uncertainty you may have as you navigate the next phase of your medical training. Over the course of the next year, you are sure to experience a good deal of stress, exhilaration, frustration and fatigue. But in the face of the emotional rollercoaster that is the third year of medical school, I want to encourage each of you to foster the ideas of altruism and compassion that drew you to a career in medicine. I also wanted to take the opportunity to describe Alpha Omega Alpha. National Alpha Omega Alpha was established in 1902 at the College of Physicians and Surgeons in Chicago, with the Kansas Alpha Chapter receiving its charter in 1931. Its raison d'etre can be expressed in a phrase: to recognize and perpetuate excellence in the medical profession. As stated in the society's constitution, "Alpha Omega Alpha is organized for educational purposes exclusively and not for profit, and its aims shall be the promotion of scholarship and research in medical schools, the encouragement of a high standard of character and conduct among medical students and graduates, and recognition of high attainment in medical science, practice, and related fields."

To fulfill the role it has set for itself, Alpha Omega Alpha elects outstanding medical students, graduates, alumni, faculty and honorary members to its ranks and offers its membership important national programs such as: Alpha Omega Alpha Visiting Professorships, a quarterly journal - The Pharos, Student Research Fellowships, and two Distinguished Teaching Awards in collaboration with the Association of American Medical Colleges. In addition to national programs, the Kansas Alpha Chapter has several local programs which include: The William Root Lecture Series, the KUMC Clinical Student Orientation Manual, and Residency Information programs.

Election to Alpha Omega Alpha is a distinction that accompanies a physician throughout his or her career. Especially for the younger physician, the society provides a forum for the exchange of ideas as well as a source of valuable contacts. Members can be elected as students, house officers, alumni, or faculty of an affiliated institution or by virtue of distinguished achievement in any field related to medicine, on an honorary basis.

Elections in the first four categories are carried out by the individual chapters. Chapters elect undergraduate members from students in their last two years of medical school. Scholastic excellence is a key criterion, but not the only one for election; integrity, capacity for leadership, compassion and fairness in dealing with one's colleagues are also to be considered. Students who are in the top academic quartile of their class are eligible for election, but the number elected may not exceed one-sixth of the graduating class. The Alpha Chapter at the University of Kansas has two separate elections in which undergraduates may be voted into Alpha Omega Alpha. The first opportunity is in the Spring at the end of junior clinical clerkships when the top 12.5% of undergraduates are eligible, and the second opportunity for election is during the Fall of the senior year clerkships when the top quartile is eligible. The students elected to the society are men and women who have compiled the requisite high academic standing and who, in the judgment of the members of the local chapter, have shown promise of becoming leaders in their profession. As noted above, opportunities exist for later election to the society of those not selected as undergraduates.

Respectfully,

Luke Spencer-Gardner
Kansas Chapter President, 2009-2010

UNIVERSITY OF KANSAS SCHOOL OF MEDICINE - KANSAS CITY

CLINICAL STUDENT ORIENTATION MANUAL

2009 - 2010

SPONSORED BY:

THE UNIVERSITY OF KANSAS ALPHA CHAPTER
ALPHA OMEGA ALPHA NATIONAL HONOR MEDICAL SOCIETY

Original Author:
Curtis R. Maslen, M.D., 1985

With contributions from the classes of 1990-2010

NOTE: Due to curriculum changes effective on 6/29/09, some information in this manual may not accurately reflect course information. As upgrades to O2 (electronic medical records) continue, changes will be incorporated into this manual.

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INTRODUCTION

Welcome to your clinical years! This orientation manual represents an attempt to assist in the transition from basic sciences to the wards and to make that transition as painless as possible. Since each person's medical school experience is unique, it does not pretend to foresee everything that will be encountered on the clinical wards. It does, however, present the kind of information that we would have liked to have seen before we suffixed our names with MS3 for the first time, and we believe that it will be useful to most of you. Depending on your previous experiences, some of the material in this manual may be obvious. Nevertheless, since the first several weeks of clinics can, to a greater or lesser extent, be spent "learning the ropes," we present this material in hopes that it will help you to spend less time "on the ropes" and more time with "the important stuff."

It is our hope that this manual will prove to be useful, and not only that it will be continued from year to year, but also that it will be improved upon through your experiences. We ask you, therefore, to critically evaluate the information provided in this manual as you progress through the first several months of clinics, make note of important topics which were omitted as well as information which was unnecessarily included, and use that evaluation to modify this orientation manual so that it will be of even greater benefit to the class of 2012.

THE STUDENT

The following is a discussion of how the clinical student fits into the picture. Since much of the transition from basic science student to clinical student concerns itself with figuring out just exactly what it is that one is supposed to be doing on the wards, this section concerns itself with outlining some of the basic responsibilities and expectations placed on the clinical student. It should be noted first of all that student responsibilities vary tremendously from clerkship to clerkship, service to service, and attending to attending. Therefore, clinical students are well advised to define, as clearly as possible, their responsibilities early on in each rotation by consulting with the residents and attending physician. When new situations arise, "it never hurts to ask."

More specifically, a list of clinical students' responsibilities usually includes charting progress notes, doing admission H&P's, writing orders on the chart, attending rounds, lectures, and conferences, presenting patients to residents and attendings, studying when they have time, and, of course, "scut work." Order writing is the most variable of these since on some services you will be expected to write virtually all of the patient care orders, while on other services your attempt to do so may result in the loss of life or limb. The specifics of writing orders, charting progress notes, and a few basic items of scut work are discussed later on in this manual. Scut work, as we're sure you've already heard, includes such things as drawing blood, filling out requisitions, consults, and a multitude of other paperwork, inserting foley catheters, starting IV's, placing NG tubes, and virtually anything else that residents or attendings insist that you do as they wave your clinical evaluation form over your head. For virtually all clerkships, **demonstrating a commitment to your patient**, **showing interest along with being enthusiastic, helpful and hard-working is the single most important thing one can do** to maximize learning and enjoyment on the service.

PEARLS

Important Phone Numbers:

* **For KU extensions, always dial an 8**

KU Pathology	x1180
KU Laboratory	x1700
KU Radiology	x 7551
VA Radiology	52715
KU paging system	9-917, then number
VA paging system	5-BEEP and then follow directions
KU operator	0, or x5000
KU page operator	x5155
KU medical records	x2454
KCVA	816-861-4700

To put in consult at KU: Fill out request form. Call operator and ask for the number to put in a consult for whatever service you need. Call the number and have available the pt's name, age, room # and hospital #, attending, resident and pager #, and the reason for consult. All records are computerized at the VA, so this is done on the computer. At KU, the consulted service now completes the consult in O2.

To find an old chart at KU: Charts are supposed to come to the floors with the pts. Unfortunately, that doesn't always happen. Your best shot is to go to medical records yourself (ground floor, in the hall between cafeteria and main elevators) and request the chart. Be sure to take the pt's medical record number! If you are really nice to the med records people, your life will be much easier. Old charts are in the process of being scanned and stored in Chartmaxx. If you are unable to find patient information in O2, you should first check in Chartmaxx and then call medical records.

Cafeteria Hours

KU –6:30am to 8:00pm

VA – 8:00am to 2:30pm

LIST OF BOOKS

As you will find, reading time is valuable during a clinical rotation. You will need to select textbooks which are both accurate and complete yet readable in the relatively short time in which a clerkship lasts. The following list of books and comments is compiled to help you make a selection as well as to inform you about what is available. Also, see the book section for each rotation for recommendations on specific courses. Before you purchase a textbook, which you feel you may not use after you have finished your rotation, it is recommended that you check with the clerkship's education coordinator to see if you can get required texts from them on "loan." Some departments have limited copies available which you can use while you are on their rotation. **The counseling center has many review books that can be checked out for free.** Also check with your big sib or classmates who have taken the rotation already to get other recommendations.

HELPFUL HINTS on books and studying:

1. Select books you feel you can read cover-to-cover during the one to two months of a rotation. It is important to get an overall view of a particular clinical rotation. Your goal is not to become a world authority on Hematology or Gastroenterology during the two-month medicine rotation. You need to **get the whole picture**.

2. Once you have selected a book - **read it**. Don't attempt to read several different books on specialized areas. Basically, pick **<u>one</u>** book.

3. Use major textbooks (Harrison's, etc.) when it is necessary to have more detail. When you want to read about a specific problem on one of your patients – **Uptodate** is a fantastic reference tool. Other reference texts such as Harrison's can be utilized through Access Medicine.

4. NMS review books as well as other review books are available to check out from the Student Counseling and Educational Support Services Office, Room G116 Student Center (588-4688), at no charge. This is an excellent resource to save you $$.

5. Use the library. Many excellent reference books and atlases can be found there or online on AccessMedicine. Many of them can be checked out. If a desired book is not there, encourage the department to place one on reserve.

6. **<u>Read about your patients</u>** — Know their problems.

7. **Do Questions to prepare for the shelf exam**. Many students now use Pre-test books with questions which are meant to be significantly harder than the shelf, but are a good learning tool. On-line question banks include USMLEasy which you can access through Access medicine. You can select out different areas, but the disadvantage is that it does not remember the questions that have been asked previously unless you prescribe to the website. Probably the best website is USMLEworld.com which is the question bank most of you will use for Step 2.

GENERAL ESSENTIALS – The first 3 items are a must have.

1. <u>Guides to Antimicrobial Therapy</u>, Sanford: A must. Electronic version for handheld device also available with an annual subscription fee.

2. <u>EpocratesRx Clinical Drug Reference:</u> Over 2,600 drugs and tables, including adult and peds indications and dosing, contraindications/cautions, adverse reactions, mechanism of action, formularies, black box safety information and pricing. One can run a multi-drug check for up to 30 drugs (www.epocrates.com). **FREE**. Not pertinent to get Epocrates, but it is a must to have some sort of drug reference.

3. <u>Quick Medical Reference</u>, Maxwell: Easy place to get common things- everything from note writing and drug levels to dermatomes and mental status exam. Can fit in the front pocket of your white coat.

4. Pocket Pharmacopoeia, Tarascon: Updated every year. Helpful for writing orders and looking up meds. Electronic version for handheld device also available with an annual subscription fee.

INDIVIDUAL ROTATIONS

Title of course: Surgery

Course Director: Chris Haller, MD, x3254 office: 5th floor Sudler

Course Coordinator: Debra DeConink, x3173 office: 5056 Sudler

Website: http://classes.kumc.edu/som/surg900/index.htm

On the first day-
Meet: 5020 Eaton (5th floor Sudler) 8 a.m.
Bring: White coat, note pad, PDA phone
Preparation: Read over the website and be familiar with orientation materials. Dr. Haller usually gives some type of quiz.
Attire: Professional attire (ties for men, slacks/dresses for women) is required in most clinics. Scrubs can be worn in OR and in class. Scrubs are acquired in locker room with the scrub card provided during orientation. You get 3 pairs for the rotation. You must always wear a buttoned white coat over your scrubs unless you are in the OR area, the locker room, or the PACU.

Locations:
5020 Eaton: From the hospital cafeteria, take a left and follow the hallway to the first elevators (Sudler elevators) on the right. Take these to the 5th floor. Exiting the elevators, go straight through the hallway which ends in a T. Turn left and room is around corner.
Dr. Haller's office is on the right.
OR Locker Room: 2nd floor hospital, south side of building. Students should have card access. If you don't, pick up the phone, it will dial itself, and ask someone to let you in.
Surgery Clinics: Just past the OR locker room (Sutherland Institute)
Swamp: (Surgery resident's room) – Take the elevators to the 1st floor of the hospital. Facing the escalators, locate the Outpatient Laboratory to your right and walk past it. Follow the hallway to the end and turn right. You should pass the surgery resident call rooms before taking another right and quick left. At the end of this hallway, you will find a door and window through which you can see another door with a keypad. Knock and they'll let you in.
SICU: 2nd floor hospital, North side
Same Day Sugery: Double doors just left of men's locker room entrance.
Surgery Schedule: The OR core has the schedule on a large whiteboard. Paper schedules are available to browse in Same Day Surgery. To access the schedule on the computers, click Hospital Links on the desktop. Click SurgeryReport, and enter your novell username as kumc\yourname and your password. Then open the uokumc document. The system may deny access and ask you why you wish to view. Enter that you are a third year medical student and access will be allowed later that day. If this fails, ask your intern for help.

Helpful stuff: At some point in the rotation, fill your pockets with the following: pen light, plastic tape, 4X4 gauze, note cards, and a snack. Also, carry your PDA phone, a pen, and Maxwell's with you into the OR in case you have to write the post-op note.

Phone numbers:

Main OR Desk	x2880
PACU	x2100
Same Day Surgery	x2141

Books:

Loaned by the Surgery department:

1. Essentials of General Surgery and Essentials of Surgical Specialties by Lawrence: required text; okay for general surgery and for shelf. Good to read before lectures. There is also an on-line question bank (500 Q's) that is excellent.
2. NMS Review: Good review and quick reference book. Information is laid out in outline format. Questions are too easy and not in shelf format.

Books most used to study:

1. Surgical Recall: Question/answer book that is a great review. Highly recommended. Many of the commonly asked pimping questions are in this book.
2. Appleton and Lange
3. Case Files: Gives typical presentation of most surgical cases and questions about them.
4. Kaplan Step 2 Surgery Lecture Notes book – Part of the Kaplan Step 2 series
5. Blueprints Question Book

Helpful Books:

1. Mont Reid Handbook by Nussbaum: Excellent pocket book; contains information on major surgical problems; handy to use before rounds or pimping sessions.
2. Surgical Secrets: Recommended by lots of students; great to prepare for rounds.

Borrow / Check out in Library (do not buy!)

1. Sabiston: The Harrison's of Surgery. Somewhat more physiologic than Schwartz and a little more difficult to read.
2. Atlas of Surgical Operations: by Zollinger: Excellent for understanding specific surgeries or for making drawings for Dr. Thomas. Expensive; look in the library (can be found in resident room on Unit 51)
3. Schwartz: A medicine textbook for surgeons; used by many; recommended by the Surgery department; a reference book.
4. Fluids and Electrolytes for the Surgical Patient y Pastana: Excellent book; lots of pictures, easy to interpret diagrams, explains well acid/base disorder.
5. Manual of Surgical Therapeutics: The surgery version of the Wash manual; good information on fluid and electrolytes.
6. Companion Handbook to Schwartz: Similar to Companion Harrison's.

Hours: Expect to arrive at the hospital between 5:00 and 6:00 a.m. depending on service. Surgeries are usually scheduled to begin at 7:30 am. Be prepared to leave the hospital between 6:00 and 8:00 pm. You will not be leaving early on your post-call day. Keep in mind that some days you will probably have time for breakfast after rounds. However, it is hard to predict which days those will be, so eat breakfast before rounds.

Rounds: Most services round sometime between 6:00 and 7:00 a.m., but some will expect you to come see your patient before rounds. Allow 30-60 for this "pre-rounding" time, especially at the beginning of the rotation. Afternoon post-op rounds may be held by trauma on general services (usually not on specialty services). Take the initiative to see your patients prior to post-op rounds.

Weekends: If you are not on call, you will come for morning rounds and usually be done before noon. The on call team will handle emergency surgeries during the weekend. There are no elective surgeries on the weekends. **You will have to take call on weekends**.

Call schedule: Depends on the number of students, usually once per week. You will only be on call while on KU's general surgery rotation (about 4 times during the rotation). While on call, your team will cover the trauma room in the ER (1st floor of Heart Hospital). Page the intern on call, and you will follow him for the night. They usually have you come to the swamp (see above in "Locations" section). There is no call room, so if it is slow, you will probably be sent home.

Call Room location/code: At KUMC, KC VA, and Leavenworth VA there are no call rooms. No call is taken at the VA's.

Grading System; 90/80/70: 50% Clinical Evals., 15% presentation and 35% Subject Exam. Evaluations are done by attendings and chief residents.

Writing Notes:

Daily Notes:

1. Keep them short, no longer than length of pen
2. Include Post-Operation day number (ie POD#3) and what procedure they had done
3. Include the number of days on Antibiotics (ciprofloxacin #5)
4. Vitals including intake/output (I/O) and drain output

Pre-Op Note:

As a surgery student, it may be your responsibility to write pre-op notes before a patient goes to surgery. The pre-op note provides a brief yet concise description of what is wrong with your patient, what surgical procedure is planned, who plans to do it, and any historical information or findings that are pertinent to the surgical procedure.

Notes should be completed the day before a patient is scheduled to go to the OR; alternatively, they may be completed in the morning before the surgery starts. Ask your resident if he or she would like you to write pre-op notes.

Pre-Op Note

Hx:	This 48yo WF c NIDDM presented 3/24/84 c 2 day Hx of RUQ pain. Outpatient sono revealed nonvisualized gall bladder, and pippida scan was c/w cholecystitis.
Pre Op Dx:	Cholecystitis
Planned Procedure:	Cholecystectomy
Surgeons:	Dr. Smith(attending)/Dr. Jones(resident)/Yours Truly MS3
Labs:	(List preop CBC, Platelet Count, PT/PTT, ASTRA, etc. using the laboratory shorthand found in Maxwell's)
CXR:	Normal chest
EKG:	NSR, rate 80, nonspecific STT changes
Current Meds:	Tavist-1 prn
Blood:	2 U PRBCs typed, crossed, and available
Consent:	Signed and on chart

Post-Op Note: FORM in OR packet – Always offer to fill out for resident

You may also be responsible for writing post op notes on your patients immediately following surgery. Post op note is written while the patient is still in the recovery room, so always have pen in scrub pocket. The following sample post op note is self-explanatory.

Post Op Note

Pre Op Dx: Cholecystitis
Post Op Dx: Same
Procedure: Cholecystectomy
Surgeons: Dr. Smith/Dr. Jones/Yours Truly MS3
Findings: Cholelithiasis, cholecystitis
Anesthesia: GETA(General endotracheal, spinal, local, epidural, etc.)
Fluids: 500cc D5LR (list here the amount and type of fluids given during the procedure, eg. NS, blood, albumin, etc. You can find this by looking on the anesthesiology record or by asking the anesthesiologist or surgical nurse.)
EBL: 50cc (This is the estimated blood loss during the procedure, as shown on the anesthesiologist's record.)
Tubes/Drains: NG to low intermittent sxn, JP drain in RUQ
Specimens: Gall bladder sent to surgical pathology
Complications:None
Condition: To PACU in (good, fair, stable, poor, critical) condition

Post-Op Orders:

Offer to write and have resident look over the post-op orders…take initiative. Ask the resident for their format and follow that format throughout the month long rotation. Although the ADC VAN DISSEL (*see admit order page*) mnemonic can be used to write post op orders, you might find the following format equally useful and much less cumbersome.

Post-Op Orders

1) Procedure: (eg. S/P cholecystectomy)
2) Allergies: (eg. NKA)
3) Disposition: (eg. Return to 5120 when stable, admit to ICU, etc.)
4) Vital Signs: (This determines how often vitals will be taken after the patient leaves the RR, eg. Vitals Q15 minx 8, Q30 min x4, Q4 hrs x 6, then Q shift.)
5) Diet: (eg. NPO, advance diet as tolerated, etc.)
6) Activity: (eg. Bedrest, bedrest c BRP, etc.)
7) Tubes/Drains: (eg. NG to low intermittent Gomco, foley to DD, etc)
8) Resp. Care: (eg.TC&DB Q2 hrs x 24 hrs, incentive spirometry, 02, etc.)
9) Meds: (eg. Reorder patient's pre op meds if appropriate, Antibiotics, IV fluids, etc.)
10) Call HO if: (eg. Call HO for temp >38.5)

Remarks: Residents and staff appreciate initiative. This means being an active seeker of knowledge. Things you can do to help the team include: search for path reports and x-ray, print extra copies of rounds reports, gather charts before or after rounds, and recognize that the flow of information is from you to the intern, intern to the chief resident, and chief to the attendings. It is recommended to be in surgery or with your residents when not in lecture (don't say you have lecture when you don't). Also, it is considerate when scrubbing out of a surgery for lecture to always check back after lecture to make sure the surgery has ended or you are excused to go home.

Advice:

- On your first day, talk to your chief resident about what duties he/she expects you to perform.
- One of the keys to a good clinical performance evaluation is teamwork and helping things run smoothly for the residents.
- If you know you are going to scrub out of a case early for class, let it be known at the start of the case.
- Keep the patient list up-to-date – ask resident about this on the first day as this is vital to rounding/chief resident.
- Always have an up-to-date list copied with current vitals for all team members when rounds begin.

__Title of course:__ **Neuro-Psychiatry** (beginning 6/29/09 Neurology and Psychiatry will be two separate 4-week rotations)

Course Director: Psychiatry: William Gabrielli, MD,PhD, x6401
Neurology: Heather Anderson, MD, x6970

Course Coordinators: Lesley Leive, x6401, office: 1st floor Olathe Pavilion-1006 (Psychiatry)
Paula Mengel, x6996, Landon Center on Aging (Neurology)

Note: Variations may occur based on the revised curriculum.

On the first day of the Psychiatry rotation -
Meet: Room 1020 Olathe Pavilion (Olathe is down the main corridor past Delp; it's the section of the hospital across the street from Kirmayer)

- **2 or 4 weeks rotating on Adult Inpatient Psych** either at the KCVA or KUMC. You will be assigned to one of three inpatient teams. You may have downtime in the afternoon at the VA-bring things to study. Faculty can be a bit harder on students at KU.
- **0 - 2 weeks selective on a subspecialty in Psychiatry.** Subspecialty options include: 1. Child Psych at KU (which is inpatient) or Children's Mercy Hospital (only one student spot, very good 2 weeks in their Child Psych clinic, do mostly shadowing but will learn a ton about child psych), or 2. Psych consult service-evaluating psych complaints in all parts of the hospital. Prior to the beginning of the rotation, you will receive an e-mail asking you to choose your preference.
- If you are working at the VA, you will be using electronic charting and will have orientation on using the VA software and charts. Try to get note "templates" from other students or residents to speed up your note typing. Every resident/attending has different preferences regarding notes, so ask for feedback.

On the first day of the Neurology rotation -
Meet: Landon Center, Room 145 at 7:30a.m.

- **4 weeks of Neurology** at the KCVA, KUMC or CMH (either on an inpatient service or consult service). Usually more relaxed at the VA than at KU. You will attend morning reports and some conferences at KU along with the residents even if you are at the VA. Usually some students go with residents doing consults and the other students go with the residents on inpatient (very relaxed). Page the Neuro resident if you are not sure

where to be. Hours may be longer for students on inpatient Neuro at KU. Students assigned to the VA will spend most of their time in the Neurology clinic.

Sites-

- KU Adult Psychiatry (inpatient ward): 3rd floor Olathe Pavilion (You must have key to get off floor, but not to enter via the elevator)
- KCVA Adult Psychiatry (inpatient ward): 10th floor at KCVA (but go to office on 9th floor). This is a locked unit (half on entire 10th floor). There is a student room to store your stuff outside of the unit (where everyone works and meets).
- Neurology at KU: Inpatient: Conference room in outside hallway used as home for inpatient Neuro.
- Outpatient Neurology at KU: 1st floor Landon Center on Aging
- Neurology at KCVA: 11th floor at the KCVA, Neuro Conference Room will be your home base. You will also help in Neurology clinics which are on the 1st floor.
- Psychiatry Liaison Service (PLS): Office located inside the KU Emergency Room area. Ask for the Psych Liaison at the ER main window. This is also where you go when you are on call.
- KU Child Psych: 4th floor Olathe Pavilion. Also a locked unit.
- Child Psych at Children's Mercy: Go to Developmental and Behavioral Medicine clinic located in the CMH Outpatient Center, 4th floor. You will need to get a badge and parking pass for your 2 weeks there.

Books:
Books actually used to study:

1. High Yield Psychiatry by Fadem & Simring- Williams & Wilkins: Quick read and covers most of the material **(all you really need)**.
2. Case Files Psychiatry
3. Pretest Psychiatry - many pretest questions are the same questions available for free at www.accessmedicine.com).
4. Pretest Neurology
5. Psychiatry by Appleton and Lange

Dr. Anderson conducts excellent lectures in preparation for the shelf.

Helpful books: (not usually necessary unless you plan to do psychiatry)

1. NMS Review: Required text; covers personality disorders and child psych in addition to reviewing the field. The shortest of all NMS books- easy to get through.

Optional/Borrow-

1. DSM IV: A good reference and can be found in most psych depts as well as the library.
2. Psychiatric Diagnosis by Goodwin: Recommended by the psych department.
3. Psychiatry by Tomb; A good pocket sized review of the field.
4. Pocket Handbook of Clinical Psychiatry, Kaplan and Sadock.
5. *Aminoff – borrow if necessary for Neurology, Clinical Neuro

Hours: **Rounds-** Will vary depending on if you are at the VA or KU. At the VA, the three teams usually round at different times, such as 8:30 a.m., 11 a.m. or even 1 p.m. depending on the attending. You usually need to allot 45 minutes to see your patients before rounds. At the VA, beware of patients using their "elevator pass" and going outside to smoke for extended periods of time. KU rounds are usually not before 8:00 a.m.

Typical Day: Usually about 7:30 a.m. (roughly, maybe earlier) until about 4 or 5 p.m. (Maybe longer if very busy on inpatient Psych at KU, maybe shorter if no new patients)

Weekends: Probably not, but there is a chance. If you are at the VA you can be almost sure you won't have any weekends. Students on KU Adult psych. divide up weekend duties.

Call schedule: Everyone will be on call twice during the clerkship. All call is taken at KU regardless if you are at the VA at that time. The call is usually with the PLS (psych. liaison service in the ER), and is from 6 p.m. to 10 p.m. Sometimes there will be NO patients at all (you might be sent to read) or could be busy with multiple psych patients in the ER).

Grading System: 90/80/70/60. Based on clinical evals, neuro paper, oral exam (a case presentation), and the two shelf exams. Opportunity exists for extra credit paper (2% of total grade).

Writing Notes: S.O.A.P. note format but will include more narrative on Psychiatry. Overall more "relaxed" than on Medicine, include more descriptions of what patient was doing when interviewed, mood, comments from patient in quotations. You may be responsible for contacting family members for documentation or additional history. Ask the residents for help on your notes since they are different from medicine or surgery notes.

- For Neurology, remember to include all aspects of complete Neuro exam in the objective portion
  (cranial nerves, strength, sensation, tone, reflexes, cerebellar function, gait, etc.)
- For Psych, the objective part of your note should include:
  *Mood/Affect, Speech/Thought, Insight/Judgment, Attention/Concentration, Hallucinations, Suicidal or Homicidal ideation
  *Assessment will include Axis (I, II, III, IV, V) – you will learn all about this part of the psych assessment

Title of course: Internal Medicine

Course Director: Isaac Opole, M.D., x6005

Course Coordinator: Angela Hampton (ahampton@kumc.edu), x7364

On the first day-
Meet: 4050 Wescoe
Bring: White coat, stethoscope, penlight, ID badge, notepad
Helpful stuff: Blank note cards are a great way to keep track of patient information, and many students also found downloads at www.medfools.com useful as well. At KU, papers can easily accumulate and some find it useful to use a clipboard. It's also a good idea to carry around blank progress notes, order sheets, consult forms, and antibiotic forms for easy access when needed.
Dress: Professional attire is required.

Books:
Books required and provided by the clerkship:
1. Medicine, Fishman
2. MKSAP 2 for Students
3. Internal Medicine Clerkship Guide, Paauw

Books most of the group used to study:

1. Step Up to Medicine, Agabebi and Derby: A thorough review book in bullet format with many good illustrations, charts, algorithms and mnemonics.
2. Blueprints in Medicine: A shorter review book that covers basics on most of the general topics.
3. Case Files Internal Medicine: Presents ~60 clinical cases/scenarios followed by discussion of work ups, diagnosis, differential diagnosis and a few questions. Very popular series of books for 3rd year medical students.
4. MKSAP for Students: Question series for medical students provided by the clerkship. Most popular question source used by students on this clerkship
5. Medicine Appleton and Lange
6. Medicine Recall

Other helpful references:

1. Pocket Medicine, M. Sabatine from Mass General: excellent, concise pocket-sized reference manual. You will see this used by many residents, but as students this is very useful for quick reference/learning on the rounds and while on the go. Fits nicely in white coat pocket.
2. Medical Manual of Therapeutics (aka The Wash manual): The classic reference book for the wards, a thorough book well liked by residents; helpful but not essential for medical students.
3. Practical Guide to the Care of Medical Patient, by Fred Ferri: Another pocket-sized handbook like Wash Manual, but with more procedures. Helpful but not essential for students.
4. Companion Handbook to Harrison's: Contains a lot of information in a short, concise, readable form; nice to have with you at the morning lectures.
5. Rapid Interpretation of EKG's by Dubin: Great for learning EKG's which you will definitely do while on the service.

Reference Texts:

1. Harrison's Principles of Internal Medicine: An excellent reference, the Gold Standard. It is big and expensive, but you will be able to use it during many rotations. Often available in residents' rooms, and always in the library. A worthwhile purchase if you can afford it.
2. Cecil's Textbook of Medicine: Similar to Harrisons, but some say easier to read.
3. DynaMed online database
4. Uptodate online database

Hours: Expect hours to be about 6:00 a.m. to 6:00 p.m., with occasional earlier days. Morning report is at 8 a.m. in 4050 Wescoe or 3015 Sudler for Grand Rounds. Noon conference is also in 3015 Sudler. **Attendance is strongly encouraged.**

Rounds: KNOW WHAT IS GOING ON WITH YOUR PATIENTS!
Be sure to read about your patient's diseases because that is where most of the questions during rounds will come from. For help formulating an assessment and plan, talk to your residents. Rounds usually occur in the morning and can frequently last most of the morning and extend into the afternoon at times. Most services require that you come in before rounds to see your patients (pre-rounding). Notes may or may not have to be written before rounds - just ask the residents on your team. Make sure you have all new data (labs, radiology reports, etc.) ready when in pt rooms-attendings will often ask for information when talking to patients.

Weekends: Students are required to see their patients every day. However, most services will provide you one day off a weekend, or allow one student to cover all the patients so the other students can be off. Students are usually allowed to leave the hospital on weekends after rounding and writing note/orders. Some students work out with their colleagues whole weekends to cover, then working all weekend every other week. Discuss a weekend plan with the other students at the beginning of each month.

Call Schedule: Students are required to take call approximately one time per week. Usually each student picks an intern and takes all call with that intern during the evening. Students are not required to take overnight call since the medicine service has a night-float team. It is a good idea to ask about call responsibilities on the first or second day of a clerkship.

Units: Medicine floors are on 4th, 5th and 6th floor of the hospital

Grading System:

Your grade will be based on the following:

Clinical evals	60 pts (30 ea month)
Shelf Test	40 pts
Total	100 pts

80% is a superior, with grades falling at 70-79, 55-69 and below 55. In the past, students have needed to perform observed H & P's as part of the clinical evaluation. Standardized patients are also seen in the skills lab during this clerkship. The medicine department is very clear that they will review point totals and set new cutoffs if necessary, so the numbers are approximate.

Writing Notes: This clerkship offers a great opportunity to learn to write thorough notes, identifying and addressing various problems each patient faces. It deserves mention that Medicine notes are usually fairly long, as patients typically have multiple problems. Students are expected to write H & P's on all new patients and daily SOAP notes on their patients. Your notes do NOT need to be identical to your residents-this is the time to work on your own skills, not become an expert at copying someone else's note. It's okay to look at your residents note to gauge your progress, but just copying their plans does not help your education. All progress notes are now electronically completed on the hospital EMR system. Do not hesitate to ask your residents for help in using the O2 system to write your daily notes.

Orders: Once again, this clerkship offers the student-doctor a good opportunity to learn how to write orders. The student should be responsible for writing orders on his/her pts both @ KUMC and the VA. A resident must cosign all student orders. Therefore, students should take the responsibility to make sure that their orders are cosigned in a timely manner so as not to delay patient care. Orders are still written in the paper charts.

Remarks: The Basic Medicine clerkship is one which students often consider the most valuable. It is a good place to learn the basics about the presentations and management of human diseases. The amount of material that falls under this heading is vast, so it is important not to get weighed down with obscure facts. The best learning experiences and the best test scores will come to those who learn broad principles of Internal Medicine while on this rotation, and read, read, read. The team dynamic is also in full effect in medicine, and finding one's role in the team and trying to help out wherever possible can make a big difference: volunteer to call in consults, page and talk with providers from other services and above all **show enthusiasm**.

Title of course: Obstetrics and Gynecology

Course Directors: John Calkins, MD, x6257

Course Coordinator: Lorraine Helm, x3244, office: 3009 Wescoe

On the first day-
Meet: Will be announced via email
Bring: White coat, paper and pen, your ID badge. L&D access through your ID card and 3 pairs of scrubs will be provided.
Helpful stuff: At some point through the clerkship buy/find an OB wheel (one should be given at orientation). These can also be found online and downloaded to your PDA phone.
Structure: 3 weeks obstetrics and 3 weeks of gynecology

Books:
Books highly recommended by the clerkship:

1. Essentials of Obstetrics and Gynecology by Hacker: Excellent basic textbook; can read the entire text in six weeks; gives an overall picture. Questions at back of book.
2. Clinical Obstetrics and Gynecology by Drife & Magowan: British spelling can be distracting.
3. Obstetrics and Gynecology by Beckmann, Ling, Laube, et al.

Books/references most of the group used to study in addition to above:

1. Stanford OB/Gyn: Little red pocket sized book. Excellent reference. Used by all of the residents.
2. Case Files: This book provides clinical vignettes for a variety of high yield topics and then provides a concise overview of the topic with directed questions.
3. Kaplan: Excellent and concise reference for shelf prep.
4. Pretest for OB/Gyn: Good question book with great explanations of the answers
5. Obstetrical Recall: Question and answer book, good for quick review.
6. NMS Review: Excellent; good to read through before the final exam.
7. Appleton and Lange: Question and answer book that is detailed, but not enough to stand alone. A good supplement to any text.
8. Blueprints: Basic overview; NOT enough for good shelf performance
9. Access Medicine has Williams Obstetrics online via Dykes library
10. Consider going to library for atlas on pelvic surgery.
11. Go to www.apgo.org for Ob/Gyn clerkship guide to success.

*Probably best to select one textbook and read it through and then choose one or more question books.

Hours: Rounds – On OB, Low Risk rounds start at 7:30AM and High Risk rounds start at 8AM. **You will be expected to pre-round and have your notes written before rounds.** Rounds vary on Gyn and depend on your attending/resident.

Weekends: Yes. Students are expected to round and write notes on weekend days. On OB, you will be given a schedule that will include weekends. On GYN, it depends on the resident/staff.

Call schedule: There is no call now, but there is a night float system. You are assigned to a few (3-5) nights in a row. You work a 6:30 pm – 8:30 am shift. You have the day off after your last shift. This covers weekends too.

OB Shift Structure: There are 3 types of shifts on OB. You will be given a schedule at the beginning of the rotation with your shifts.
*Low Risk Shift: from 6:30 am to 6:30 pm. You will cover the Labor & Delivery floor. For rounds, you will see the low risk patients, along with the night shift students. Wear scrubs.
*Night Shift: from 6:30 pm to the end of rounds the next day (around 9:00 am). You cover L&D floor at night and also see low risk patients for rounds in the morning. Wear scrubs.
*High Risk Shift: from 6:30 am until the end of clinic. You will see the high risk patients for rounds in the morning, then cover the clinics. Wear dress clothes.

Lecture: from 12:00 pm to 5:00 pm on Fridays. Attendance is required unless you are on night shift or busy on L&D.

GYN Pre-op Notes: Must write day before surgery. Can follow format in Maxwell. You will have to get the patient's chart downstairs on the ground floor across from the registration counter (Pre-anesthesia area). Most of the information needed to write the note should be in the chart, if not check O2. If all else fails, come early before the scheduled surgery, maybe 1.5 hours before. Otherwise, plan to be in same day surgery one hour before the scheduled surgery.

Call room location/code: The call room is located in the east hallway on the way to Unit 56. Call room code: Press 2 & 4 together, then 3. A shower is available in the locker room in Labor & Delivery. Currently, L&D is being remodeled, so the call room location has most likely changed. Just ask one of the residents or the clerkship directors for the new location.

Grading System: 90/80/70
40% Clinical evals divided between OB and Gyn, 10% Mid-term, 40% Final USMLE-style shelf exam (MUST get at least a 76 on exam for SUP and 56 to pass the course), 10% Projects (5 different ones – you will get a list and instructions during orientation). Clinical evaluations are done as a team of faculty and residents to give a fair overview rather than one limited interaction – but be prepared for every individual interaction. All staff and residents you encounter will grade you.

How to present a patient: Ms.________is a ___year old G__P__LC__(race)____ female with an EDC of ___(date)_____based on (LMP or Sono).
Ms. Jones is a 34 yo G5P4 LC4 white female with an EDC of June 18, 2006 by a 12 week sono.

Questions to ask Antepartum Patients (about ready to have a child)

Fetal Movement?	Vaginal Discharge/Bleeding?	Leakage of Fluid?
Cramping or Contraction?	Edema?	Especially facial edema?
Headaches?	Blurring of the vision?	

Writing Notes:
You will be provided with examples of many different types of notes such as H&Ps, Delivery Notes, and Postpartum Notes during orientation but here are some important things to know about notes.

Vaginal Delivery

Postpartum Day #1
*Pt may go home if>24 hours post delivery and if she is afebrile. Check Hgb.

Postpartum Day #2
Pt goes home if afebrile

*Check and report:
*Birth control plan
*Breast or bottle feeding
*Postpartum Hgb/Hct
*Rubella immune status: if non-immune, pt needs Rubella injection prior to discharge
*VDRL
*Blood Type: if Rh-, Aby screen-, and infant Rh+ pt needs Rhogam injection prior to discharge
*Any culture results or pending

Discharge orders
*Follow up: in _____ clinic in 6 weeks
*Activity: no tampons, douching or intercourse x 4 weeks
*Diet: regular
*RTC: if temp>101, foul smelling discharge, severe abdominal pain, bleeding more than a pad an hour

Discharge Meds
*Motrin 800 mg 1 po q 8 hrs prn pain, #30; no refills
*Colace 100 mg 1 po BID #60; no refills
*If Hgb<10.0, FeSO4 6 weeks worth; no refills
Hgb9.0-10.0, FeSO4 325mg 1po q day with meals
Hgb<9.0, FeSO4 325mg 1 po BID with meals
*If breast feeding, PNV 1 po q day #100; 5 refills

C-Section

Post-op Day #1
*Remove surgical bandage before rounds (if on > 6 hrs)

*Orders
Ambulate QID
D/C Foley & PCA
Heplock IV when good PO intake
Regular diet
Check cbc

*Meds
D/C IM/IV pain meds
Start Motrin 600 mg 1po q6 hrs prn pain (do not exceed 4 in 24 hrs), start 6 hrs after Toradol
Percocet 5/325 1-2 tabs po q 4-6 hrs prn pain

Post op Day #2/3
*Remove staples and steri-strip just prior to discharge
*Ask about plans for birth control, breast or bottle feeding
*Pt to go home

Discharge Orders
*Follow-up in _______ clinic in 4 weeks
*Activity: no tampons, douching, or intercourse x 4 weeks
*Diet: regular
*RTC: if temp > 101, foul smelling discharge, severe abdominal pain, or bleeding > 1 pad per hour

Discharge Meds
*Percocet 5/325 1-2 po q 4-6 hrs prn pain #30, no refills
*Motrin 600 mg 2 po q 4-6 hrs prn pain #30, no refills

*Colace 100 mg 1 po BIC #60, no refills

*If Hgb <10.0, FeSO4 6 weeks worth; no refills
Hgb 9.0-10.0, FeSO4 325 mg 1 po BID with meals
Hgb <9.0, FeSO4 325 mg 1 po BID with meals

*If breast feeding, PNV 1 po q day #100; 5 refills

Title of course: **Pediatrics**

Course Director: Mitzi Scotten, MD, mscotten@kumc.edu, x6203, office: 2006 Miller Building

Course Coordinator: Debra Heisler, dheisler@kumc.edu, x6310, office: 2013 Miller Building

On the first day-
Meet: 2001 Miller Building at 8 a.m.
Bring: Pen light, stethoscope, ID Badge (important for access to any pediatric unit)
Helpful stuff: At orientation, you will receive a folder with all of the information and forms you will need for the rotation.

Locations:
Peds floor - Unit 55 main hospital
Clinics - 1st floor Miller building. There is a tunnel that connects the hospital and the Miller building. It is located between the main elevator bank and the cafeteria on the ground floor.
PICU - Unit 44A of main hospital
NICU - Unit 56 of main hospital. Located on the east end of the unit, just past mother-baby.
Full-Term Nursery - Unit 56 of main hospital

Books:
Books provided by the clerkship:
1. Rudolph's Fundamentals of Pediatrics: 3rd edition, 2002, Appleton & Lange: Too long to get through during a 6 week clerkship. Use this textbook as a reference.
2. Platinum Vignettes: Pediatrics: Excellent, concise set of vignettes. Not comprehensive, but good to read when you have a few minutes of downtime.
3. Blueprints Q & A: Step 2 Pediatrics: Good question book and also small enough to fit in your coat pocket.
4. Blueprints Clinical Cases in Pediatrics: High-yield cases followed by questions. Covers very testable topics. Easy to get through.

Required Online:
1. CLIPP Cases: Required to finish all 31 cases by the end of the rotation. Fairly long and tedious, but these are an excellent review of all relevant material for the shelf. Get started on them EARLY, or it will be hard to finish them by the end of the rotation. Best to finish these BEFORE the midterm as these cases are what the exam is based on. http://clipp.instruct.de/player/app/homepage.html

Other study options: Check with course coordinator before purchasing extra books; she has a variety of review books available for students to borrow while on the clerkship.

1. Blueprints in Pediatrics: 3rd edition, 2003, Blackwell Publishing: Simply written with lots of good information. Blueprints alone is NOT enough for the shelf.
2. Pretest Pediatrics: Good question book. Many of the questions are vignette based (similar to those appearing on the shelf). Easier to get through than the Appleton & Lange question book.
3. Blackwell's Underground Clinical Vignettes: 2002, Blackwell Publishing: Another excellent, vignette book. Short and easy reading. Not comprehensive.
4. Appleton & Lange Review: Pediatrics: Overly detailed question book. Some consider it helpful. Many questions not in vignette format and tend to test obscure points.
5. Harriet Lane Handbook: Excellent handbook, especially for PICU. You can often borrow a resident's copy. Consider buying if you are going into Peds or Fam Medicine.
6. Pediatric Secrets: Very long, but found to be helpful to some.
7. NMS Review: Some consider it helpful for boards. Outline format. Long.

Hours: You will spend **3 weeks** on inpatient (2 weeks on PICU or Peds Floor and 1 week on NICU or Full Term Nursery, **1 week** in the specialty clinics, **1 week** in the urgent care clinics, (either at KUMC or the Health Department), and **1 week** in a community practice. In general, clinics are usually 8a.m.-5p.m. and do not require weekend time. Inpatient requires more time, and students get one day off per weekend for each of their 3 weeks on inpatient service. Students have call responsibility during their 2 weeks on the PICU/Peds Floor, which is shared/rotated among students on the PICU/Peds Floor service – usually on call every 3-5 nights. Weekends usually consist of seeing patients on your own, rounding with the team, and writing notes. You will be home by noon if all goes well.

Rounds: Usually a.m. rounds on inpatient service, but timing varies by attending on service at that time. No rounds in clinics.

Lectures: Attendance is mandatory except during your week of community peds. Lectures are an hour long and are held at 8 a.m. Monday-Thursday and at noon on Monday, Tuesday, Thursday and Friday. Attendance is encouraged at Grand Attending Rounds at noon on Wednesdays and Grand rounds on Friday mornings at 8 a.m. in Wahl Hall West (note: there are no Grand Rounds during the summer months).

Call schedule: Call starts the first day of the clerkship. Call schedule is determined by students during orientation.

Call room location/ code: 5014, main hospital. Code 2 and 4 together, then 3 (helpful to pull handle towards you before pressing code).

Grading System: Curved but based on the following system:

Sup	90-100
High Sat	80-89
Sat	70- 79
Unsat	0- 69

Clinical Evaluations are worth 50%, and the shelf exam is worth 50%. The shelf is considered to be fairly difficult. However, Dr. Scotten does an excellent job of preparing you for the exam. **Make sure that you attend her Q&A sessions toward the end of the rotation!!** The topics that she covers at this session tend to be very high yield for the exam. Finally, in addition to reading doing the CLIPP cases, you should make the effort of doing a question book (Pretest, Blueprints Q&A or Appleton & Lange) during the rotation.

Writing Notes: Clinic notes will vary. Inpatient notes consist of an initial H&P on new patients and daily S.O.A.P. notes on established patients. Students are required to complete three observed H&Ps during the 6 weeks; one while on inpatient, one while on outpatient, and one on a newborn. Be sure to have an H&P form filled out by a senior resident/attending after you have completed each of these H&P's.

Remarks: This rotation is a whirl-wind tour of pediatrics. There is much to be learned in each of the clinical settings, and the attendings are usually very good at teaching and directing students. Ask lots of questions. No one will expect you to become an expert. Finally, have fun with the kids!!

Title of course: Geriatrics and Family Medicine (as of 6/29/09 Geriatrics will become a 4-week course and Family Medicine will be an 8-week course)

Course Directors: Geriatrics: Dan Swagerty, MD, x1203
Family Medicine: John Delzell, MD, x1908, Hannah Maxfield, MD, x1908

Course Coordinators: Geriatrics: Katherine Krause, x1490
Family Medicine: Lori Haney, x1996

Note: Variations may occur based on the revised curriculum.

On the first day-
Meet: check email notifications
Bring: white coat, stethoscope, and anything you might use in an outpatient med clinic
Helpful stuff: Pharmacopia, Sanford's Guide to Antimicrobials, Maxwell's, PDA drug programs

Books used: These are good for preparing for the Family Shelf. Study the Geriatrics web modules for the Geriatrics exam. Medicine review books are also helpful.

1. Blueprints of Family Medicine: Good outpatient overview.
2. Essentials of Family Medicine (required text): Most students did not use this book to study, but those who did found it easy to read and helpful.
3. Blueprints of Medicine: Good Medicine overview, lacks Pediatrics and OB/GYN info.
4. NMS Family Medicine: Question book.
5. Family Practice Board Review Book: Expensive, past students have recommended buying this if you plan on doing FP.
6. Many students also read any pertinent sections of Boards and Wards and Step 2.

Hours: Rounds – Most students on these services will not ever round on inpatients, but it depends on whether your preceptor sees inpatients.

Weekends – rarely/never
Call: Family Medicine will require 24 hour overnight call with the inpatient team as well as a few shifts in the Emergency Department.
Daily hours, in general, are variable for each student based on assigned preceptors and community experience location. Especially during Geriatrics, each student may have many preceptors each week and a varied combination of different preceptors each half day. Certain days will be assigned for lectures. A schedule will be distributed.

Grading System:

Family Medicine:

Community Preceptor Eval	25%
KUMC FM Student Clinic	25%
Presentation	20%
Shelf Exam	20% (raw score: >68=SUP)
In-House Exam	5%
Comm. Clinic Eval (underserved pop.)	(Pass/Fail)
Patient Encounter Log	(Pass/Fail)
Professionalism/Participation	5%

* In order to receive a SUP in the course, a student must obtain SUPs in all of the following:

1) Either the Comm. Preceptor Eval **OR** the Student Clinic Eval.
2) Presentation
3) Shelf Exam

-- and the student must pass all Pass/Fail requirements

* Family Medicine will use a score of >76/100 on the in-house exam to lower the threshold for obtaining a good score on the Shelf exam by 2 points (e.g., a Shelf raw score of 66 would be a SUP).

* You will spend one half-day per week at a clinical setting serving a vulnerable population (e.g. Kansas City Free Clinic, Sunflower House, etc.). At the end of the 6 weeks, you will prepare a PowerPoint presentation with all other students who worked at the same clinic. Objectives will be clearly outlined in the syllabus.

Writing Notes:

Clinic Notes: Most are in the SOAP format. However, the student may have contact with multiple attendings, and should verify with each attending what format he/she prefers for the student notes. Some attendings may want full H&P's, some may want SOAP notes and some may have a fill-in-the blank type of form for the student to use (this will be the case for most private clinics). Notes at Student Clinic are written on Centricity, and you will become familiar with the new software during orientation. Some preceptors may allow you to dictate notes.

Outpatient Prescription Writing:

From time to time, you will be called upon to write outpatient prescriptions. The outpatient prescription includes the name of the drug, form in which it is to be dispensed, amount to be dispensed (Disp), patient instructions (Sig), number of refills, and signed by a resident or attending.

Outpatient Prescription Example:

Name (Augmentin 875 mg)
Disp #(20)
Sig: (1 po BID x 10 days)
Refills: 0

****

A note about resident work hours vs. medical student work hours:

In July 2003, the federal government passed legislation that restricted the number of hours that residents are required to work. The rules are basically no more that 24 hours per shift and no more than 80 hours per week, although there are a few exceptions. This has been a big change affecting how many services operate in the hospital. Many physicians are frustrated by the new rules as they often place greater burden on the rest of the team. As a medical student it is necessary to understand that these rules do not apply to you. Just because you were on-call with a resident the night before does not mean that you are free to go at noon when the resident leaves. There is a lot of variability between the services but it is very important to never assume that you are going to leave early post-call. This is especially relevant during peds, surgery, OB and medicine rotations.

CHART WORK

It is important for the new clinical clerk to be aware of some of the important issues regarding chart work. The first is **WRITE CLEARLY**! (With the new PHYSDOC system in O2, illegible writing may not be the issue but make sure any free text you enter is coherent and understandable). You will learn a great deal about O2 as you go so be ready to pick the nuances up on the fly. The second is anything you enter into a patient's chart has the potential to be used as a reference which may help to guide the patient's future health management. It is also a legal document which may become public record if used in court. It is absolutely imperative that clinical clerks do not write anything in the chart which is not true or not actually observed by you personally. If you are going to include information which was observed by others (i.e. a physical finding noted in the residents notes, but not by you) you must include this as part of your note. If you simply do not have time to fully examine a patient before 5:00 a.m. OBGYN rounds, you should probably not include this in your note. It is also unacceptable to photocopy any portion of a patient's record (including your History and Physicals once they are in the chart), as this is a breech in patient confidentiality. It is always a good idea to "ask before you do," and this will come in handy throughout your career in medicine.

HISTORY AND PHYSICAL

A topic not discussed elsewhere in the manual is the responsibility of presenting patients to residents and attendings. The verbal presentation of a patient proceeds in the same order as the admission H&P, from chief complaint through clinical impression and plan. The object of presenting a patient is to communicate enough pertinent information about the patient that someone who does not know the patient will be adequately informed and satisfied. The key words here are, of course, "pertinent" and "enough." We know you're tired of hearing this already, but what is "pertinent" and what is "enough" varies so much that it is meaningless to attempt to define it. Some attendings are satisfied with the patient's name, age, sex, and chief complaint, interrupt you shortly thereafter, and scurry off to the patient's room because you were taking too long. Other attendings expect you to recite the patient's entire history and physical from beginning to end in elaborate detail, and they will wait very patiently as you do so.

One way of beginning a presentation of an H&P is the following: "Mr. Doe is a 45 year old white male with a history of COPD, angina and an inferior MI in the past, who now presents with angina of increasing severity and duration." The first statement of the presentation is the most

important and by including the pertinent past history gives the attending and others present a brief synopsis of the patient's status. In general, it is wise to present only the pertinent findings in the H&P — laboratory work, x-rays, EKG, etc. Nevertheless, the most important piece of your presentation is the clinical impression and plan for the patient. This is where the attending will be able to assess your clinical expertise.

Further complicating any attempt to describe the art of presenting patients is the fact that some attendings will allow you to read your presentation directly from your admission write-up, others will allow you to carry 3x5 note cards for presentations, and still others, thankfully a minority, expect you to present your patients entirely from memory. Unfortunately, the latter category of attendings also usually happen to be the ones who insist that your patients are presented in elaborate detail. In the final analysis, you just have to get a feeling for what is pertinent and what is not, what is excessive and what is enough, and what your particular attending expects. The best thing to do is to ask your resident what to expect before you come under the gun, although occasionally attending physicians may actually tell you what they want. The importance of figuring out what is expected of you with regard to patient presentation resides in the fact that a good portion of your clinical evaluation by the attending physicians may be determined by your skill at presenting patients to them, since they are likely to observe you doing that more than they will see you doing anything else. To repeat the basic rule of thumb, therefore, "it never hurts to ask."

S.O.A.P. NOTES

Subjective:

This part of the S.O.A.P. note should briefly describe how the patient feels and any complaints he/she might have. Analogous to the chief complaint portion of a History and Physical, it should be stated in the patient's own words whenever possible. It should also contain, when pertinent, your own subjective observations about the patient, for example, his/her general mental state or appearance.

Objective:

This part of the S.O.A.P. note lists objective data including current vital signs, pertinent physical exam findings (which always includes cardiovascular, pulmonary and abdominal exam and only the other physical findings which are pertinent to that patient), and laboratory results. Some attendings like to have pertinent laboratory values circled, others do not. Many will also like to have ranges for vital signs as well as how lab values have changed from previous studies. Always remember the important phrase "one value is a point, two is a line, and three is a trend." Check with your individual residents.

Assessment:

In this part of the S.O.A.P. note, each of the patient's medical problems is listed, generally in descending order of importance, and basically conforming to the list which you generated in your admission H&P, with the addition, of course, of those problems which have developed or have been discovered since the patient was admitted. Each listed problem is updated according to evaluation of the current objective data which you listed under "Objective". In this problem-oriented format, the number of each problem is retained throughout the patient's hospitalization, with new problems added to the list as they arise and problems deleted from the list as they are resolved. You will find that with critically ill patients or those with many problems it may better serve you to divide your assessment into the various systems: CNS/NEURO, RESPIRATORY, CARDIOVASCULAR, GI, GU, HEME, etc. This will help you to formulate a plan that addresses the different systems.

Plan:

In this part of the S.O.A.P. note, diagnostic and therapeutic plans are listed as they apply to the patient's current problems and in the same order. Included are any new medications or diagnostic procedures which are added, changes or additions to nursing orders, and plans for discharge or transfer. Your responsibilities as a clinical student will include knowing your patient's current problem list, gathering and knowing the results of all diagnostic procedures, knowing the current status of all therapeutic interventions, and compiling all of this information into a problem oriented progress note in the S.O.A.P. format which you will record on the chart daily for all of your patients. This is the most important part of your presentation/note. Whether you come up with the correct plan is not as important as showing your attending that you are thinking through the process and formulating what you would like to do.

The following is an **example** of such a progress note:

S. "I feel just great today." The patient is without complaints this morning and appears much less SOB.

O. P.E.VITALS: BP 136/82 no orthostatic change, P80, RR18, T 37.0,
HEENT: unchanged
NECK: no JVD
CHEST: Fine insp. rales in post. bases, scattered insp. rhonchi., exp. phase prolonged, but decreased use of accessory muscles.
ABD: Obese, BS present, nontender to palpation, no HSM or masses
NEURO: CN II-XII intact, sensory, cerebellar, and motor exams WNL, DTR's 2+ and bilat. =. No tremors, seizure activity, or asterixis, patient is alert and oriented c intact short-term memory.
EXTR: no clubbing, cyanosis or edema.
LABS:

141 108 14
______ _________ ________< 89 See CBC with Diff
4.0 26 1.0

sputum culture - neg. @ 24 hrs.
stools occult blood positive 7.37/42/84 on 21/NC
4 units PRBC's typed and cross matched
Upper GI endoscopy revealed diffuse, erosive gastritis

A.
1) GI bleed. Stable further blood loss, although stools remain heme positive. EGD revealed erosive gastritis as probable source of blood loss.
2) COPD. The patient's pulmonary status continues to improve, with improved air exchange by P.E. and improved ABGs. Sputum cult. neg. so far.
3) Probable alcoholism. Patient continues without evidence of acute withdrawal.

P.
1) Continue Tagamet and antacids, monitor the patient's Hb, and continue to Guiac stools. 4 units PRBCs typed and crossed.
2) Continue Alupent aerosols, 02 at 21/NC, and IV Aminophylline. Taper Solumedrol and continue to monitor ABGs.
3) Thiamine IM, monitor for sx of ETOH withdrawal with Librium use as indicated. Transfer to ADTU when #1 and #2 are stable.

Laboratory Shorthand/Normal Ranges:
See Maxwell's

On-Service and Off-Service Notes:*
Some services will ask you to write **On-Service** notes on your first day. This note includes a brief history of illness and review of hospital course to date, as well as pertinent labs and results of studies. **Off-Service** notes are similar and should include all events up to the day you are leaving the service. These notes are considered common courtesy to your fellow students who will be coming onto the service following you. If you are not asked to write these notes, you should extend the courtesy of information to your peers in person. Just a side note, if your resident has to write these notes, it is a great idea to offer to help with these and it also helps you to better retain what you did with this patient. When it comes to test time, you will find that when certain diseases appear on the exam, it will be the patient you physically had that helps you more than anything else. ***(Most services do not require these)**

ORDER WRITING

Your responsibilities as a clinical student will include writing orders on your patients for admission, discharge, transfers, and daily changes in medications, therapies, and diagnostic procedures. The extent to which you are responsible for order writing will vary from service to service, attending to attending, and resident to resident. On some services, you will be encouraged and expected to write every order for your patients, while on other services you may not be allowed to write orders at all. The usual case is somewhere between these two extremes, and you will be sharing the responsibility of writing orders with your resident. It is a good idea to find out at the beginning of a clinical rotation what your resident's expectations are in this regard, since your aggressiveness in writing orders on your patients is frequently a factor in your clinical evaluation by the residents. Furthermore, it is much easier to keep track of what is going on with your patients if you yourself wrote the order for their care. It is always a good idea to write orders clearly, number each order individually, include the date and time in which the order was written, and always sign your name legibly.

Ex:
6/3/07 @ 1430
1) DC metoprolol
2) Norvasc 5mg PO qDay, first dose now
3) AM CBC, CMP, coag panel

Sign your name, MS3
Print your name, your PDA phone number

The nursing staff will not follow through with student orders until they have been co-signed by a resident or attending. It is also your responsibility, therefore, to see that the orders which you have written are co-signed in a timely fashion so that they can be carried out in a timely manner. Once the orders are signed, bring the chart to the unit clerk so they may be entered.

Admission Orders (ADC VAN DISSEL): **Maxwell has a great (short) example.**
The following format is useful for writing admission orders and is easy to remember using the mnemonic ADC VAN DISSEL. With some minor alterations, it is also useful for writing transfer and postoperative orders. The mnemonic stands for Admit, Diagnosis, Condition, Vital signs, Activity, Nursing procedures, Diet, Intake and output, Specific drugs, Symptomatic drugs, Extras, and Labs. Many physicians and residents have their own system for order writing. Find one that works best for you, is easy to remember and includes all of the important information/orders.

1. **Admit:** Floor, team, house officer, attending, etc. For instance, admit to 44C ICU, Med I Service, Dr. Smith H.O., Beeper #2222

2. Diagnosis: The diagnosis may be specific, for example acute appendicitis, or may be a symptomatic diagnosis if a specific diagnosis is not yet known, for instance, abdominal pain. For postoperative orders, include the surgical procedure which was performed, for instance, appendectomy. Always include under diagnosis the patient's allergies or lack of known allergies, for instance NKDA or allergic to penicillin. Note: "R/O"…is NOT a diagnosis!

3. Condition: The patient's condition on admission, transfer, or post-operatively is noted here as stable, critical, etc. Vital signs: This is technically part of nursing procedures, but is written separately by convention.

4. Vitals: Refers to the frequency with which the nursing staff will monitor and record the temperature, blood pressure, pulse, and respirations of the patient. Other specific monitoring, such as weight, CVP, PCWP, CO, neurologic signs, etc. should also be listed here. For instance, Vitals: Q1hr., daily weights, Swan-Ganz measurements Q shift.

5. Activity: This describes the activities allowed for the patient, for instance, up ad lib, bed rest, bathroom privileges, bedside commode, ambulate TID, up in chair QID, limited visitation, etc.

6. Allergies: List any drug allergies, and what reaction accompanies each (i.e. rash).

7. Nursing procedures: This consists of a variety of items including, but not limited to the following:

<u>Bed position</u>: For instance, elevate HOB 30 degrees, Trendelenburg position, etc.

<u>Preps</u>: This generally refers to preoperative patients and may include bowel preps, surgical preps, showers, etc.

<u>Dressing changes and wound care</u>

<u>Respiratory care</u>: Although respiratory care is generally provided by Respiratory Therapy rather than nursing, Respiratory Therapy orders that do not include medications are often included here, for instance, PD&C (percussion and postural drainage), TC&DB (turn cough and deep breathe), incentive spirometry, nasotracheal suctioning, etc.

<u>Notify house officer if</u>: This establishes parameters in vital signs beyond which nursing will notify the patient's resident for further orders, for instance, notify HO for temp>38, systolic BP<90, PCWP>20, etc.

8. Diet: NPO, regular, mechanical soft, clear liquid, 1600 cal ADA, 2 gm sodium restriction, tube feedings, protein restricted, etc.

9. Intake and output: This includes the frequency with which nursing will monitor and record I&O as well as any tubes, drains, or lines the patient might have, for instance:

Record hourly I&O
NG tube to low intermittent suction
Foley catheter to dependent drainage
Hemovac, surgical drains, chest tubes
Endotracheal tubes, arterial lines, central venous lines

10. Specific drugs: This includes all medications to be given on a specific schedule, for instance, antibiotics, diuretics, cardiovascular drugs, etc. Also include allergies to medications.

IV orders include simply the type of IV solution and the rate at which it is to be infused, for instance, D5 1/2NS TRA 50 cc/hr. When the patient has both central and peripheral lines, these are specified separately, for example, D5 1/2NS TRA TKO via peripheral line and D5 1/2NS TRA 100 cc/hr via central line. Inpatient medication orders are written with the name of the drug, dosage, route of administration, and frequency of administration specified, for instance, Digoxin 0.125 mg PO Qday.

11. Symptomatic drugs: This includes all drugs to be given on a pm basis, for instance, pain meds, laxatives, sedatives, etc.

12. Extras: This includes any diagnostic procedures to be performed, for instance, EKG, chest x-ray, CT scan, sonogram, etc.

13. Labs: Blood tests, urinalysis, etc. These can be one-time orders for admission lab work or can be standing orders for continuous monitoring, for example, daily CBC.

Discharge Orders:
At KUMC, O2 is used for discharge orders. The KCVA uses a different system. You use the same order form for discharges as you do for your other orders. Discharge orders should include the following basic information. (Note: most of the discharge paperwork will now be completed on the computer, but the information provided here still holds).

1. **Discharge:** Give location patient will be going after leaving hospital (i.e. home, nursing home). Specify what date and time.
2. **Follow-up Care:** Include with whom, when and what time. (i.e. Patient to follow-up with Dr. Meyer in Family Practice outpatient clinic, on Tuesday 7/23/07 at 1:00). You will usually need to call to set these up.
3. **Discharge medications:** When you are writing discharge orders, medication orders are written like outpatient prescriptions, and therefore include the name of the drug, form in which it is to be dispensed, amount to be dispensed, patient instructions, and number of refills, for instance, Ampicillin, 250 mg capsules, Disp:#40, Sig: 1 cap PO QID until gone, Refills: 0

ABBREVIATIONS

Below are some of the more commonly encountered abbreviations. Some abbreviations are not approved by the University of Kansas Medical Center regulations for use in the body of a patient's chart. These abbreviations, nevertheless, show up quite frequently on the charts, and it is nice to know what they mean. (The KUMC Formulary is published annually and has a complete listing of approved abbreviations, which clinicians are to use in charts.) These are free to medical students in the inpatient pharmacy and are also available at http://www2.kumc.edu/pharmacy/medabbreviations.htm. (Also, see list at end of this section of some abbreviations to **avoid**). As a general rule for abbreviations, **when in doubt, write it out**. Many rotations have their own list of common abbreviations, but these are rarely appropriate for use in the chart. Some will provide a list of common abbreviations during orientation.

INSTRUCTIONS

a (with a line over it)	before
ac	before meals
ad lib	as often as desired
ASAP	as soon as possible
bid	twice a day
BRP	bathroom privileges
c (with a line over it)	with

FSBS	finger stick blood sugar
gtts	drops
HOB	head of bed
qhs	at bedtime
IM	intramuscular, given intramuscularly
IV	intravenous, given intravenously
KOR	keep open rate
KVO	keep vein open
mmol	millimole
NPO	nothing by mouth
OOB	out of bed
pc	after meals
pg	picogram
po	by mouth, given orally
pr	by rectum, given rectally
prn	as needed
q	every
qd	every day *DO NOT USE – "Q Day" instead
qh	every hour
qhs	at bedtime
qid	four times a day
qod	every other day *DO NOT USE – "every other day" instead
q6h	every six hours
s	without
sig	label
SL	sublingual
s/p	status post
SQ	subcutaneous, given subcutaneously
STAT	immediately
tid	three times a day
TKO	to keep open
v.o.	verbal order
wnl	within normal limits
TRO	to run over
TRA	to run at

DESCRIPTION AND DIAGNOSIS

AAA	abdominal aortic aneurysm
A&B	apnea and bradycardia
A-aDO2	A-a gradient
A-a gradient	alveolar to arterial gradient
AAS	acute abdominal series
AB	antibody, abortion, or antibiotic
A/BI	ankle brachial index
ABD	abdomen
ABG	arterial blood gas
ACLS	advanced cardiac life support
ACTH	adrenocorticotropic hormone
ADC VAN-DALISM	mnemonic for Admit, Diagnosis, Condition, Vitals, Activity, Nursing procedures, Diet, Allergies, Labs, IV fluids, Studies, Medications

ADH	antidiuretic hormone
AEIOU TIPS	mnemonic for Alcohol, Encephalopathy, Insulin, Opiates, Uremia, Trauma, Infection, Psychiatric Syncope afebrile
AF	aortofemoral, or atrial fibrillation
AFB	acid-fast bacilli
AFP	alpha-fetoprotein
AI	aortic insufficiency
AKA	above-the-knee amputation
ALL	acute lymphocytic leukemia
AML	acute myelogenous leukemia
AOB	alcohol on breath
AP	anteroposterior, abdominal-perineal
ARDS	adult respiratory distress syndrome
AS	aortic stenosis
ASCVD	atherosclerotic cardiovascular disease
ASD	atrial septal defect
ASO	antistreptolysin O
AV	atrioventricular
A-V	arteriovenous
A-VO2	arteriovenous oxygen
BI&II	Billroth I and II
BBB	bundle branch block
BE	barium enema
BKA	below-the-knee amputation
BMR	basal metabolic rate
BP	blood pressure
BPH	benign prostatic hypertrophy
BRBPR	bright red blood per rectum
BS	breath sounds
BSC	bedside commode
BS&O	bilateral salpingo-oophorectomy
BUN	blood urea nitrogen
BW	body weight
bx	biopsy
CA	cancer
CABG	coronary artery bypass graft
CAD	coronary artery disease
CT	computerized axial tomography
C&S	culture and sensitivity
CBC	complete blood count
CC	chief complaint
CCU	clean-catch urine or cardiac care unit
CEA	carcinoembryonic antigen
CHF	congestive heart failure
CHO	complex carbohydrate
CI	cardiac index
CML	chronic myelogenous leukemia
CMV	cytomegalovirus
CN	cranial nerves
CNS	central nervous system
CO	cardiac output
C/O	complaining of
COPD	chronic obstructive pulmonary disease

CPAP	continuous positive airway pressure
CPK	creatinine phosphokinase
CPR	cardiopulmonary resuscitation
CrCl	creatinine clearance
CRP	C-reactive protein
CSF	cerebrospinal fluid
CTA	clear to ausculation
CVA	cerebrovascular accident or costovertebral angle
CVP	central venous pressure
CXR	chest x-ray
DC	discontinue, discharge
D&C	dilation and curretage
DDX	differential diagnosis
D5LR	5% dextrose in lactated Ringer's solution
D5W	5% dextrose in water
DIC	disseminated intravascular coagulation
DKA	diabetic ketoacidosis
DOA	dead on arrival
DOE	dyspnea on exertion
DPL	diagnostic peritoneal lavage
DPT	diphtheria, pertussis, tetanus
DTR	deep tendon reflexes
DVT	deep venous thrombosis
DX	diagnosis
EBL	estimated blood loss
ECG	electrocardiogram
ECT	electroconvulsive therapy
EDC	estimated date of confinement
EOMI	extraoccular muscles intact
ESR	erythrocyte sedimentation rate
ET	endotracheal
ETOH	ethanol
EUA	examination under anesthesia
FBS	fasting blood sugar
FEV1	forced expiratory volume in 1+ second
FHT	fetal heart tones
FFP	fresh frozen plasma
FRC	functional residual capacity
FTA-ABS	fluorescent treponemal antibody-absorbed
F/U	follow-up
FUO	fever of unknown origin
FVC	forced vital capacity
Fx	fracture
G	gravida
GC	gonorrhea (gonococcus)
GFR	glomerular filtration rate
GI	gastrointestinal
GSW	gunshot wound
GTT	glucose tolerance test
GU	genitourinary
GXT	graded exercise tolerance (cardiac stress test)
HAA	hepatitis-associated antigen
HBsAg	hepatitis B surface antigen

HCG	human chorionic gonadotropin
HCT	hematocrit
HEENT	head, ears, eyes, nose and throat
Hgb	hemoglobin
H/H	hemoglobin/hematocrit
HIAA	5-hydrozyidoleacetic acid
HJR	hepatojugular reflux
HPF	high power field
HPI	history of present illness
HR	heart rate
Hx	history
I&D	incision and drainage
I&O	intake and output
ICU	intensive care unit
ID	identification
IDDM	insulin dependent diabetes mellitus
IHSS	idiopathic hypertrophic subaortic stenosis
IM	intramuscular
IMV	intermittent mandatory ventilation
IPPB	intermittent positive pressure breathing
ITP	idiopathic thrombocytopenic purpura
IUP	intrauterine pregnancy
IVC	intravenous cholangiogram
IVP	intravenous pyelogram
JVD	jugular venous distention
KUB	kidneys, ureters, and bladder
LAD	left axis deviation or left anterior descending
LAE	left atrial enlargement
LAP	left atrial pressure or leukocyte alkaline phosphatase
LC	living children
LDH	lactate dehydrogenase
LLL	left lower lobe
LMP	last menstrual period
LP	lumbar puncture
LPN	licensed practical nurse
LUL	left upper lobe
LUQ	left upper quadrant
LVEDP	left ventricular end diastolic pressure
LVH	left ventricular hypertrophy
MAO	monoamine oxidase
MAP	mean arterial blood pressure
MAST	military (medical) anti-shock trousers
MBT	maternal blood type
MCH	mean cell hemoglobin
MCHC	mean cell hemoglobin concentration
MCV	mean corpuscular volume
MI	myocardial infarction or mitral insufficiency
MLE	midline episiotomy
MMM	mucous membranes moist
MMR	measles, mumps, rubella
MVC	motor vehicle collision
MVI	multivitamin injection

NAACP	mnemonic for Neoplasm, Allergy, Adison's disease, Collagen-vascular diseases, Parasites
NABS	Normal Active Bowel Sounds
NAD	no active disease/no acute distress
NAVEL	mnemonic for Nerve, Artery, Vein, Empty space, Lymphatic
NC/AT	normmocephalic/atraumatic
NED	no evidence of disease
NERD	no evidence of return disease
NG	nasogastric
NIDDM	non-insulin dependent diabetes mellitus
NKA	no known allergies
NKDA	no known drug allergies
NRM	no regular medicines
NS	normal saline or neurosurgery
NSR	normal sinus rhythm
NT	nasotracheal
OB	obstretrics
OCG	oral cholecystogram
OD	oculus dextra - right eye, overdose
OM	otitis media
OP	oropharynx
OPV	oral polio vaccine
OR	operating room
ORIF	open reduction internal fixation
OS	left eye
OU	both eyes
P	para
PA	posteroanterior
PAC	premature article contraction
pAO2	alveolar oxygen
paO2	peripheral arterial oxygen content
PAP	pulmonary artery pressure
PAT	paroxysmal atrial tachycardia
P&PD	percussion and postural drainage
P&C	panendoscopy and cystocopy
PCWP	pulmonary capillary wedge pressure
PDA	patent ductus arteriosis
PDR	Physicians Desk Reference
PE	pulmonary embolus
PEEP	positive end expiratory pressure
PERRLA	pupils equal, round, and reactive to light/accommodation
PFT	pulmonary function tests
PI	pulmonic insufficiency
PID	pelvic inflammatory disease
PKU	phenylketonuria
PMH	past medical history
PMN	polymorphonuclear leukocye (neutrophil)
PND	paroxysmal nocturnal dyspnea
POD	post op day
PP	postprandial
PPD	purified protein derivative
PRBC	packed red blood cells
PS	pulmonic stenosis

PT	prothrombin time, physical therapy
Pt	patient
PTH	parathyroid hormone
PTHC	percutaneous transhepatic cholangiogram
PTT	partial thromoplastin time
PUD	peptic ulcer disease
PVC	premature ventriculare contraction
PVD	peripheral vascular disease
PZI	protamine zinc insulin
Q	mathematical symbol for flow
RA	rheumatoid arthritis
RAD	right axis deviation
RAE	right artrial enlargement
RAP	right artrial pressure
RBBB	right bundle branch block
RBC	red blood cell (erythrocyte)
RDA	recommended dietary allowance
RDW	red cell distribution width
RIA	radioimmunoassay
RLL	right lower lobe
RLQ	right lower quadrant
RML	right middle lobe
RNA	ribonucleic acid
R/O	rule out
ROM	range of motion
ROS	review of systems
RRR	regular rate and rhythm
RT	rubella titer, respiratory therapy
RTA	renal tubular acidosis
RTC	return to clinic
RU	resin uptake
RUG	retrograde urethrogram
RUL	right upper lobe
RUQ	right upper quadrant
RV	residual volume
RVH	right ventricular hypertrophy
Rx	prescription, treatment
SA	sinoatrial
Sab	spontaneous abortion
SBE	subacute bacterial endocarditis
SBFT	small bowel followthrough
SBS	short bowel syndrome
SCr	serum creatinine
SG	Swan-Ganz
SGGT	serum gamma-glutamyl transaminase (AST)
SGOT	serum glutamic-oxaloacetic transaminase (ALT)
SGPT	serum glutamic-pyruvic transaminase
SIADH	syndrome of inappropriate ADH
SIMV	synchronous intermittent mandatory ventilation
SLE	systemic lupus erythematosis
SOAP	mnemonic for Subjective, Objective, Assessment, Plan
SOA	shortness of air

SVD	spontaneous vaginal delivery
SQ	subcutaneous
SX	symptoms
Tab	therapeutic abortion
T&C	type and cross
TAH	type and hold / Total Abdominal Hysterectomy
TB	tuberculosis
TBG	thryroid binding globulin
TBLC	term birth, living child
TC&DB	turn, cough, and deep breath
TIA	transient ischemia attack
TIBC	total iron binding capacity
TKO	to keep open
TLP	total lung capacity
TNTC	too numerous to count
TORCH	toxoplama, rubella, cytomegalovirus, herpes virus
TPN	total parenteral nutrition
TPR	total peripheral resistance
TSH	thyroid stimulating hormone
TTP	thrombotic thrombocytopenic purpura
TU	tuberculin units
TURBT	TUR bladder tumors
TURP	transurethral resection of the prostate
TV	tidal volume
TVH	total vaginal hysterectomy
Tx	treatment
UA	urinalysis
UGI	upper gastrointestinal
URI	upper respiratory tract infection
US	ultrasound
UTI	urinary tract infection
UUN	urinary urea nitrogen
VBG	Venous Blood Gas
VC	vital capacity
VCUG	voiding cystourethrogram
VMA	vanillymandelic acid
V/Q	ventilation-perfusion
VSD	ventricular septal defect
VSS	vital signs stable
WB	whole blood
WBC	white blood cell or white blood cell count
WD	well-developed
WF	white female
WM	white male
WN	well-nourished
WNL	within normal limits – attendings don't like this abbreviation, some say that it stands for "we never looked"
W/U	work-up
Y/O	years old

A few abbreviations to avoid:

Abbreviation/ Dose Expression	Intended Meaning	Misinterpretation	Correction
cc	milliliter	Mistaken for "00", two zeros when handwritten	Use "mL"
"o"	Hour(s), i.e. "q1°"	Mistaken for a zero when handwritten. i.e. every "10"	Use "Hr"
MgSo4	Magnesium Sulfate	Mistaken for Morphine Sulfate (MSO4)	Write out magnesium
MSO4	Morphine Sulfate	Mistaken for Magnesium Sulfate (MgSO4)	Write out morphine
ug, or µg	Micrograms	Mistaken for a zero when handwritten	Use "mcg"
sq	Subcutaneous	The "q" has been mistaken for "every"	Use "SQ"
SC	Subcutaneous	Mistaken for SL	Use "SQ"
"	Inch	Mistaken for "11"	Write out inch

MISCELLANEOUS WARD SURVIVAL INFORMATION

Telephone Use:
At the desk on every nursing unit, you will find a list of telephone extensions. This is a large sheet taped to the counter top next to at least one of the telephones. If you don't find the number you need on this list, you can either ask the Unit Secretary or call the hospital operator (Dial "0") and ask him/her. You probably already know that to reach an in-hospital number you need only to dial "8" and the four-digit extension, and to reach an out-of-hospital number, you need to dial "9" followed by the outside telephone number. Not all lines in the hospital "dial out", so if you can't dial out on the line you are using, try another line or try another phone.

To call a CODE BLUE, dial extension 5656. Tell the code blue operator the nursing unit (and room number, assuming the code is in a room) of the code, the extension from which you are calling, your name, and whether the person is an adult or pediatric patient. It is a good idea to wait for the code blue operator to hang up before you do, so that if he/she needs further information, you will not have hung up on them in your haste.

To call a CODE RED (fire), dial extension 5656. Tell the code red operator the nursing unit and extension from which you are calling, your name, the nature of the fire, and its location as precisely as possible. It is important to tell the operator the nature of the fire, since if you just smell smoke or hear the alarm going off, he/she will take one course of action, whereas if you actually see flames, he/she will take an entirely different course of action. Again, wait for the operator to hang up before you do.

Paging System:
Most of the residents and attendings at KUMC carry text pagers. To page someone with a text pager by phone, dial "9" and then their pager number (9-917-xxxx) if you are calling from a hospital phone. Next, wait for the beep and dial in the extension number that you want the person you are paging to call. Press the **#** key and hang up the phone.

You can also text page either the residents or attendings at KUMC using a computer. Go to www.kumc.edu and search for the resident or attending you'd like to page using the phone directory search engine. It will then give you the option to text page only if you are using a computer at KUMC. Another option is that can go to www.myairmail.com to send text pages from any computer with an internet connection. You will need to type in the entire pager number including area code without dashes (913917xxxx).

To page VA pagers dial 5-2337, wait for a new dial tone and then dial in the 3-digit pager number. Follow other instructions for voice pager as listed above. You can also text page at the VA. Opening the internet at the VA will take you to the VA website. From there, click on the text paging link and enter the 3-digit pager number along with your text page.

Requisitions and Other Paperwork:
In addition to the chartwork outlined previously, you will find yourself responsible for filling out a variety of lab menus, x-ray requisitions, consult forms, etc. It would require more space than is available here to describe all of these forms and requisitions. Therefore, only a few comments on the subject will be made here and the rest can be left for you to discover as you go along.

First of all, the Unit Secretary is your life-line when it comes to paperwork of all kinds. He/she will be able to tell you which form needs to be filled out, how to fill it out, where to find it, where to send it when you're done, which of the many requisitions, forms and menus are your responsibility, and which ones are his/her responsibility. One item of paperwork that will always be your responsibility is the **consult form**.
A consult form is simply the paperwork involved when the patient's primary physician requests an opinion from other physicians regarding that patient's treatment. For instance, you might consult Dermatology regarding that funny rash your patient developed, or you might consult Surgery when your Medicine patient develops acute appendicitis. The consult form includes some basic patient data, as well as a brief clinical history pertinent to whatever physician or specialty you are consulting. Again, you will get a feel for what to include here as you go along. A good rule of thumb is to carry a few consult forms with you at all times. Your residents might actually think you're useful if it doesn't take you 10 minutes to go search for consult forms every time one is needed.

After you fill out the consult form, unless you "call in the consult," nothing will happen. The list of hospital extensions on every unit also includes a list of consult numbers. If you can't find the number of the consult service you need to call, ask the Unit Secretary or call the hospital operator (Dial "O") and ask him/her. When you call the consult number, the secretary on the other end of the line will ask you for some information: Pt name, MR#, Room #, Service, Attending, Resident, Resident's pager #, and a BRIEF reason for the consult, after which he/she will inform the consult team. After the consult team sees your patient, they will write their comments and suggestions on the consult form that you filled out.

All residents may not want you to call in the consult and would prefer to do it on their own. This is a rare breed of resident… just be aware that they do exist. Before calling in your first consult, ask your resident if he/she wants you to call in the consult or not. Most of you will do this anyway because you will be afraid of making a mistake. Residents will appreciate you making their life easier.

Breastfeeding Resources for Third Year Medical Student Moms
Contributed by Teresa Orth, MD/PhD Class of 2008

It can be done! It is possible to breastfeed and get through your third year clerkships. Below are some resources to help ease the transition.

GENERAL TIPS

-Ask a resident the first day of your rotation (preferably right before you would like to pump) if there is a room (call rooms work great, just watch out for housekeeping during the day!) where you could pump.
-In general, don't ask the clerkship director or coordinator because they usually are not involved in the day to day clinical duties for med students and likely would not be able to answer your question.
-Let them know how many minutes you will be gone and make sure you return on time.
-Consider getting VPN client access so you can access hospital records from the university side, especially if you have one room in particular that you use to pump in. This allows you to use the computers while you are away from the university. I had Dr. Gary Doolittle on Internal Medicine sign my access form and it worked great. I had VPN access for the peds clinics too!
-Decide before you start your rotation when you would like to pump. It seems like around lunchtime works best (but this can vary from 11am to 3pm, so be sure to ask exactly when you want to pump and as soon as there is a lull in the day).
-Pump right when you get home and/or feed your baby right when you get home (BOTH sides).
-Consider co-sleeping to keep your milk supply up and to get more sleep.
-Start pumping well before you go back to clinics to build up your supply at home and to get used to the equipment.
-There is an Express Station room on the 2nd floor of Wescoe. It is for the purpose of pumping breastmilk. It has a sink, soap, paper towels, a chair, and a Lactina pump (you supply the attachments). There is only a blue emergency phone, so no way to answer pages unless you have a cell phone.
-Consider what type of breast pump works best for you. I had two - One manual and one set of Whisper Wear Hands-Free Breast Pumps. The manual was faster. The battery powered Whisper Wear pumps were good when I needed to work on the computer (especially at the VA). The Hands-Free pumps also allowed me to eat my lunch and/or read my textbooks while pumping as well. Electric pumps might be more difficult to accommodate because you also need a plug-in source, but I think they are probably faster than the Whisper Wear pumps.
-Consider how much breastmilk your baby needs. I had no clue since with nursing you can't measure it. I asked my daycare how much mom's brought in who were formula feeding their kids at my daughter's age and aimed for that. At 6 months, I tried to bring in a total of 16 ounces each day. This sounds like a lot, but she rarely drank all 16 ounces, so they usually had a few ounces frozen each day. But it was nice to have extra in case she was on a growth spurt.
-Generally you need to pump every 4-6 hours depending on your baby and your body requirements. Keep this in mind for night and weekend call.
-Drink lots of water. Take your prenatal vitamins. Eat lunch. Eat dinner. Sleep. Study. These are basics for anyone wanting to survive third year, but even more important for a nursing mother expending lots of calories!

SPECIFIC ROTATIONS:
NEUROLOGY:

-Neurology at KUMC on Unit 53 was very accommodating as well. There is a pump room/exam room that the nurses and residents use. It has a code to get in and make sure you put the trash can in front of the door so you don't get surprised in the middle of pumping. Also the room has a sink and an outlet.

PSYCHIATRY:

-Psychiatry at the VAMC was very accommodating. The call room on the 11th floor worked great and had a computer, sink and privacy (AKA a locking door). Ask a resident for the room number and make sure you have a psychiatry VAMC key.
-Child psychiatry at KUMC was very accommodating. There was a special room next to the resident's office that I could go to for pumping. There was no sink, but the bathroom was only a few feet away. It was also much more private than the bathroom on that floor, which is one stall and used by all the staff.

SURGERY:

-Neurosurgery was a busy service with lots of late nights and early mornings. I tried to pump twice during my time at the hospital. I don't think the resident's library is a good place because attendings and residents and students are constantly coming and going. Ask if they would let you use the call room; it is close by. You need a code to get in and make sure you put a trash can in front of the door so you don't get surprised. There is no sink, but you can take your things to a nearby bathroom. Also, make sure you pump on overnight call; set your alarm if you need to.
-Pediatric surgery is a very accommodating service because you usually have plenty of time to do your own thing in the early afternoons, so you can go to a bathroom, the Express Station in Wescoe, or any special place you have found on campus. Be sure to still bring your pump because you won't necessarily be able to go home that early because you have to wait for patients who might show up later in the day.

MEDICINE:

-Lunch meetings during this rotation at KUMC make it hard to plan pumping. Sometimes you might have to ask to leave a little early or come back late from the lunch meeting to get your pumping in. They do have an exam room on Unit 42 for pelvic oncology that is rarely used by patients and is used by nursing staff and students for pumping. I thought it was kind of awkward because there was no sink and no bathroom nearby and I had to walk by my work area to wash my things and I usually got stopped to do things on the way. I'd recommend trying it and maybe thinking about using the Express Station in 2nd Wescoe if needed.
-medicine at the VAMC was very accommodating. They have call rooms on the third floor with bathrooms and computers in them, so I could do my charting and pumping at the same time. Be careful about housekeeping. I had a couple of times where a single housekeeper walked in and started cleaning and I felt uncomfortable and unsafe because no one else was around, so I left. Be sure you don't get trapped in a room by yourself with strangers and no exit. That said, there were several housekeepers that I did get along with, so just be alert.

OB/GYN:

-You can pump in the resident's call room or the medical student call room if needed. I used a trash can to block the door. I only had a problem once walking in on a resident sleeping at 2pm. So be sure to ask before you go in if you think someone might be using it. There are no sinks or bathrooms nearby, but you can wash your things in the bathroom on the 5th floor. They do have outlets in the room.

-Be sure to pump on night and weekend call as well and pump when you get home at night to keep up your milk supply with the variety of hours.

PEDIATRICS:

-Very accommodating to pumping. This is the only rotation where they have a designated room for medical students and residents to pump! The room is located in the 2nd floor offices in Miller Building, which is nice because your clinics are a long way from Wescoe's Express Station. There is no sink, but there are outlets and a place to hang your coat. Plus the clerkship coordinator can see you entering and exiting, so they know you are not slacking off. You can wash your things in the bathroom around the corner.

-On the peds floor (unit 55) you can use the med student call room which has an outlet, but no sink. You do have some lunch lectures that might require you to put off pumping until early afternoon, but just let your residents know why you'll be late from lecture and they'll understand.

FAMILY MEDICINE:

-This was one of the harder rotations to pump on for me because a couple days a week, I was in my car in transition from one place to another when I wanted to pump. I had to use my manual pump to go faster. There really is no pumping room and no resident to ask, so use the Express Station in Wescoe when at KUMC and ask your preceptor on day one where you can pump (usually an exam room). Don't forget to pump on days at your community volunteer site as well. Sometimes I had to ask them if I could go pump because I got out of student clinic late.

GERIATRICS:

-This rotation would be hard to pump on. You are doing a lot of driving and you are in a lot of different places from day to day and week to week. I would strongly recommend making your needs known and seeing if you can have a few minutes to pump either before you leave or before you begin your clinical duties. Keep pumping at home in the evenings because the short days make it easy to do that at least. There are few residents to ask, so you have to talk to attendings, and there are multiple sites, so a room is hard to find.

Remember that your experience is likely to vary some, but that most residents and attendings were very accommodating for pumping breastmilk and were only interested in how much time you needed. Be honest if you need more time so that you don't feel rushed and remember to share pictures of your little one when asked so they can see that a little bit of time can lead to such a happy and healthy baby.

Telephone Directory

KUMC-913-588-5000 (operator). Dial **8** before in-house extension, or dial **9** for outside line. KCVA-816-861-4700	
Admissions----5804	GI Consult/Endo----3945
Ambulatory Care/Fax----3974/8389	GI Office/Hepat----6019
Anesthesiology---- 6670	Hematology----6077
Cancer Center----7750	Bone Marrow----1731
CTS----7743	ID----6035
Dermatology----6028	Clinic Appt----3901
Dictation Line----1-877-544-4999	Oncology----6029
Dietary----7681	Pulmonary----6044
EEG----7189	Renal----6074
ENT----6701	OT/PT----6789/6790
ER----6500	Ophthalmology----6690
Gen Surgery----6100	Ortho Surgery----6100
Gen Surgery Consults----6161	Orthotics----6548
Hearing/Speech----5937	Page Operator----5115
IT Help Desk----7995	Pharmacy----2330
IV team (pager)----7538	Plastic Surgery----2000
KUMED West----8400	Police----5030/911
Lab----1700	Psychiatry----1300/6400
Chem----1720	Radiation Oncology----3632
Bac T----1750	Radiology----6850
Blood Bank----1760	CT Body----6878
Stat Lab----1795	CT Head----6824
Heme----1730	MRI----1832
Immunology----1770	Sono----7861/6861
Virology----1750	Specials----6875
Surg Path----1180	Nuc Med----6844/6839
Cytology----1179	Resident On-Call Pager----917-
Medical Records----2454	Rehab----6795/2050
Neurology----6820	Sleep Study----3843
Neuro Surg----6119	Social Work----2160
Medicine----6000	Urology----6146
Allergy/Rheum/Immun----6009	Vasc Surgery ---- 6109
Cardiology----9600	
Echo----6016	
EKG----6021	
Endocrinology----6022	
Gen Med Cons----6063	

Useful Websites:

1. Dykes Library (x7166) Link for Access Medicine and PubMed.
2. www.emedicine.com
3. www.uptodate.com

PDA Resources:

1. http://library.kumc.edu/resources/pda.htm
2. www.handheld.com
3. www.epocrates.com
4. www.medscape.com

Notes

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