Advanced Practice Selective in Rural Family Medicine Clinic associated with the MAHEC Family Medicine Residency in Asheville, NC
APSM 401-02

Faculty:
Dr. Mike Coladonato

Prerequisites:
Completion of Third Year

Offered:
Periods 6-8

Min. Enrollment:
1

Max. Enrollment:

Duration:
One Elective Period

Meeting Times:
TBA

Credit Hours:
6

Meeting Place:
Where to report on first clinical day: Report to the Computer Learning Center. MAHEC Bridge Bldg., 501 Biltmore Ave., Asheville, NC. Contact Amanda Greene for further instructions.

Clinical Goals: What will student be able to do as a result of this rotation?
1. Effectively provide care to patients in both outpatient and inpatient settings
2. Provide effective obstetrical care
3. Perform office procedures as requested by the attending.

Learning Objectives
1. Effectively provide care to patients in both outpatient and inpatient settings
2. Provide effective obstetrical care
3. Perform office procedures as requested by the attending.

Structure of rotation:
60% time in clinic
10% time in conferences
30% time in other settings

Learning Activities:

Notes:
Preference to Asheville students--contact amanda.greene@mahec.net or 828-771-4225 for availability
Advanced Practice Selective in Information Mastery – Chapel Hill
APSM 401-03

Faculty: Anne Mounsey MD

Prerequisites: Completion of Third Year

Blocks Offered: Period 10

Min. Enrollment: 2
Max. Enrollment: 2

Duration: One Elective Period

Meeting Times: TBA

Credit Hours: 6

Meeting Place: TBA

Clinical Goals: At the end of this rotation, the student will be able to:
1. Describe which point of care databases are useful in clinical practice.
2. Develop and implement a strategy for keeping up to date with relevant literature.
3. Apply evidence based principles to patients seeking preventive care

Structure of rotation:
90% time in clinic
10% time in conferences: 3-4 seminars

Learning Activities:

Notes:

Contacts: Email: anne_mounsey@med.unc.edu, reid_johnson@med.unc.edu Phone: 843 5260
Advanced Practice Selective in Primary Care Sports Medicine – Chapel Hill
APSM 401-04

Faculty:
Harry Stafford, MD CAQSM
Admin Support: Lauretta Lowery

Prerequisites:
Completion of Third Year

Offered:
Periods 5-8, 11, 12

Min. Enrollment: 1

Max. Enrollment: 6

Duration: One Elective Period

Meeting Times: TBA

Credit Hours: 6

Meeting Place:
Alexis Barnett, Rm 254 Dept. of Family Medicine, Building 590 Manning Drive, Chapel Hill

Clinical Goals: At the end of this rotation, the student will be able to:
1. Demonstrate basic skills in the diagnosis and non-operative management of musculoskeletal injuries and complaints
2. Describe how sports participation can impact upon medical health and illness and vice versa.
3. Demonstrate basic skills in diagnosis and management of common medical problems of the knee, ankle and shoulder, encountered in Sports Medicine

Structure of rotation: Students are expected to attend evening clinics as illustrated in the schedule below.

<table>
<thead>
<tr>
<th>Time</th>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
</tr>
</thead>
<tbody>
<tr>
<td>AM</td>
<td>Family Medicine Cont. Clinic</td>
<td>Sports Med FMC 8:00-12:00</td>
<td>System based practice time</td>
<td>System based practice time</td>
<td>Ortho ACC Stafford 8:00 to 12:00</td>
</tr>
<tr>
<td>PM</td>
<td>Ortho ACC Stafford 12:30-5</td>
<td>Reading/Project Time/PT or System based practice time</td>
<td>Ortho ACC Stafford 1:30-5</td>
<td>Reading/Project Time/PT System based practice time</td>
<td>Sports Med FMC 1-5</td>
</tr>
<tr>
<td>Evening</td>
<td></td>
<td>NCCU injury clinic 7-9 pm</td>
<td>NCCU injury clinic 7-9</td>
<td>Game Coverage if available</td>
<td></td>
</tr>
</tbody>
</table>

- This schedule will repeat over the duration of the course.
- The student should cover at least one training room per week.
- Game coverage is optional but encouraged and will vary depending on the sports season (NCCU, and East Chapel Hill High)
- PT time will be at FMC or at the ACC

Notes:
Contact: Email: lauretta_lowery@med.unc.edu Phone: 966-2718 office
Faculty:
Laura Hester, MD

Prerequisites:
Completion of Third Year

Offered:
All Blocks

Min. Enrollment:
1

Max. Enrollment:

Duration:
One Elective Period

Meeting Times:
TBA

Credit Hours:
6

Meeting Place:
TBA

Learning Objectives:
This rotation offers a unique opportunity to learn about managing emergencies in a multi-cultural rural hospital setting. The attending physicians are UNC primary care physicians who have developed a passion for working in this challenging environment. There will be plenty of opportunities to practice your Spanish language skills, or to gain experience working with an interpreter. We attempt to schedule individual APS students as the only learner present in order to maximize the richness of this experience. We will gladly accept 1 student per month for this exciting and intensive learning opportunity.

Clinical Goals: By the end of this rotation, the student will be able to:
1. Conduct an appropriate history and physical examination on patients who present to a rural emergency department.
2. Develop an increased awareness of cultural differences present in rural North Carolina, as well as learn to work with an interpreter as part of a team.
3. Learn about and participate in various emergency department procedures as the clinical situation allows: suturing, airway management, IO insertion, CPR, cardioversion, lumbar puncture, fracture management, splinting, I & D, x-ray interpretation, chest tube placement, thrombolytic therapy, etc.
4. Increase understanding of the relationship between a rural emergency department and its relationship with EMS and the surrounding medical centers.

Structure of rotation: Please describe how a student would spend his/her time during the 14 days of clinical work.
90% of time in emergency department one-on-one with the attending physician
10% of time in conferences: 2 CME conferences (1 hour each)

Learning Activities:

Notes:

Contacts: Email: laura_hester@med.unc.edu; Suzanne Eller seller@chathamhospital.org Phone: 919-799-4550
kparker@chathamhospital.org; mmccoy@chathamhospital.org; kthomas@chathamhospital.org

Students must complete SARF form for access to Chatham Hospital. Contact kparker@chathamhospital.org and reid_johnson@med.unc.edu for information.
Advanced Practice Selective in Geriatric Care in Asheville, NC
APSM 401-08

Faculty:
TBD

Prerequisites:
Completion of Third Year

Offered:
6-9; please confirm availability with amanda.greene@mahec.net

Min. Enrollment:
1

Max. Enrollment:
1

Duration:
One Elective Block

Meeting Times:
TBA

Credit Hours:
6

Meeting Place:
Where to report on first clinical day: Report to the Computer Learning Center. MAHEC Bridge Bldg., 501 Biltmore Ave., Asheville, NC. Contact Amanda Greene for further instructions.

Clinical Goals: What will student be able to do as a result of this rotation?
1. Be able to give an overview of the full range of care for the geriatric patient.
2. Have participated in geriatric care in a variety of settings including nursing home, assisted living, ambulatory geriatric clinic, inpatient, and home visits.
3. Explore other community resources such as memory care center, Council on Aging, and Delirium Prevention Program.
4. Learn to care for patients at the end-of-life, including working with Hospice and palliative care.

Structure of rotation
60 % time in clinic
20% time in conferences
20% time in other settings

Special Notes:
Registration upon permission: Contact Amanda Greene, Director of Curriculum, UNC SOM Asheville Campus. Email amanda.greene@mahec.net Phone 828-771-4225
Advanced Practice Selective in Addiction Medicine
APSM 401-09

Faculty:
James Finch, MD

Prerequisites:
Completion of Third Year

Blocks available:
Periods 2, 3, 7-12. 6 rotations per year. Please contact Dr. Finch to confirm.

Min. Enrollment:
1

Max. Enrollment:
1

Duration:
One Elective Period

Meeting Times:
TBA

Credit Hours:
6

Meeting Place:
Report to Dr. Finch's office at 909 Broad St., Durham. Directions are available on the website:
http://changesbychoice.com

Clinical Goals: What will student be able to do as a result of this rotation?
1. Perform comprehensive substance abuse history to identify abuse and/or dependence as well as common co-morbidities.
2. Identify appropriated treatment options for common drugs of abuse: alcohol, tobacco, cocaine, opioids, marijuana.
3. Define the physician's role in working with SA disorders, including the role of motivation enhancement counseling, supportive follow-up and the use of medication adjuncts and working with community resources.
4. Practice settings include a private Addiction Medicine office-based practice, a Family Physician's office with an addiction treatment component and a community outpatient drug abuse treatment center. Learning Objectives:

Structure of rotation
60% time in clinic
5% time in conferences
time in other settings (please specify): opioid treatment program: 10%, detox center: 25%

Notes:

Contacts: Email: jwfinch@nc.rr.com  Phone: (919) 623-7800
Advance Practice Selective in Complementary, Alternative and Integrative Medicine
APSM 401-10

Faculty:
Susan Gaylord and Gary Asher

Prerequisites:
Completion of all clinical clerkships

Offered:
Periods 6-9, 11, 12

Min. Enrollment:
1

Max. Enrollment:
2

Duration:
One elective period

Meeting Times:
TBA

Credit Hours:
6

Meeting Place:
TBA

Clinical Goals:
Overall goal: Acquire knowledge about philosophy, practice, and integration of CAM therapies in outpatient and inpatient clinical settings.
Specific clinical objectives:
Increase familiarity with basic clinical skills and attitudes related to assessment, diagnosis, and treatment re: specific CAM modalities, including herbal medicine, acupuncture, and mind-body therapies.
Learn about application of evidence-based CAM modalities in specific illness conditions, including pain management and recovery from physical and mental illnesses.
Increase appreciation for the knowledge, attitudes, and skills necessary to communicate effectively with patients and providers of CAM therapies.

Structure of Rotation:
75% (10 days) of time in clinic
5% of time in conferences
20% of time in other settings (Library, seminars, and other learning environments)

Contacts: Pamela Phillips pamela_phillips@med.unc.edu. (919) 966-8586
Advanced Practice Selective in Health Promotion & Disease Prevention in Rural Mexico
APSM 401-11

Faculty: Evan Ashkin, MD
Email: Ashkin@med.unc.edu

Prerequisites: Spanish proficiency

Periods Offered: Only offered in June (Block 3) when Evan Ashkin is on site.

Min/Maximum Enrollment: 2

Credit Hours: 6

Clinical/Non-Clinical: Duration of Elective/Selective: 4 weeks

Where/When to report on first day: Contact Dr. Ashkin for details.

Learning Objectives: (what student will be able to do as a result of this experience)
1. Work closely with a group of 1st year UNC medical students performing Health Fairs in rural central Mexico.
2. Develop an area of interest in Health Promotion that you would champion during your time on-site with presentations to local groups.
3. Improve knowledge of program development and implementation in global health.

Learning Activities: (What the student will do e.g., conferences, rounds, clinic, expected hours, on-call requirements/opportunities)
Please describe how a student would spend his/her time during the 14 days of clinical work. You would be expected to participate with the group of Proyecto Puentes de Salud, 1st year medical students in as much of the planning process as possible during the spring, prior to the time in Mexico. You would spend a minimum of 3 weeks living in either Juventino Rosas or San Miguel de Allende, participating in the planned Health Promotion and Disease Prevention activities. You will need to provide your own funding for all costs associated with this elective; plane fare, housing, food, other transportation, etc.

Evaluation: (How student will be evaluated e.g., observed administering procedures, interviewing patients, presentation at case conference, participation in rounds, patient write-ups)
1. Participation in ongoing planning process throughout the Spring prior to going to Mexico. Participation in all planned activities while on-site.
2. Creation of Health Promotion talk with language and culturally appropriate materials.
3. End of project write-up summarizing activities and lessons learned
Advanced Practice Selective Global Health in Family Medicine – Asheville, NC and Honduras
APSM 401-13

Faculty: Benjamin Gilmer, MD  Benjamin.Gilmer@mahec.net

Prerequisites:

Periods Offered: Block 5 - 7/30 - 8/13, 2016

Min/Maximum Enrollment: 10 (between this and FMME 404). Students interested in Primary Care will get first priority.

Credit Hours: 6

Clinical/Non-Clinical:

Duration of Elective/Selective: One elective period

Where/When to report on first day: Mountain Area Health Education Center (MAHEC) Family Medicine Residency Program, Asheville, NC and Shoulder to Shoulder site in Concepcion, Intibuca, Honduras and Roatan Island.

Learning Objectives: At end of course students will be able to:
Within the context of a third world country, students will be to:
1. Delve more deeply into the basic science of clinical problems than what was encountered in the third year clerkships.
2. Re-emphasize basic science from preclinical years.
3. Provide a foundation for evidence-based practice of clinical medicine.
4. Present an oral presentation according to course guidelines.

To enroll: Permission is required. Please contact Benjamin.gilmer@mahec.net and amanda.greene@mahec.net. In addition, a DEPOSIT of $700.00 made to Shoulder To Shoulder by April 1st, 2012 is REQUIRED. The balance of the course fees will be due by June 1st, 2012.

Fees: Approximately $2100. Exact cost of airfare will be determined when group reservations are made. Fees cover: food, lodging, flights and in-country transportation once in Honduras. Housing in Asheville with faculty and residents will be provided. Expenses NOT covered by the fees, include UNC tuition, travel immunizations and food in Roatan. International health insurance is required for all students from UNC/CH.

Evaluation: Grades will be: pass and fail. Evaluation is based on:
1. Attendance at all Asheville seminars and Spanish language training
2. Participation small scale community intervention project(s) with Shoulder to Shoulder group project as outlined by Shoulder to Shoulder staff
3. Completion of reflective daily journal while in Honduras
4. Participation in debriefing at the conclusion of the rotation
5. Completion of the two online modules developed by the Office of International Affairs. Contact Sam Hawes, MPH, Program Manager

shawes@med.unc.edu for details
Advanced Practice Selective Principles and Practice of Integrative Medicine - Charlotte
APSM 401-14

Faculty:
Michele Birch MD

Prerequisites:
Completion of Third Year

Offered:
Blocks 1, 2, 6-8, 10-13
1 student per year--contact michele.birch@carolinashealthcare.org to confirm availability

Min. Enrollment: 1
Max. Enrollment: 1

Duration:
One Elective Block

Meeting Times:
TBA

Credit Hours:
6

Meeting Place:
Carolinas Medical Center
Department of Family Medicine
2001 Vail Ave, Suite 400
Charlotte, NC 28207

Clinical Goals: At end of rotation, students will be able to:
1. To develop an understanding of an Integrative Medicine approach to patient care
2. To gain knowledge about complementary and alternative approaches to conditions commonly seem in primary care offices
3. To develop ability to gather relevant information about safety, efficacy, and costs of complementary therapies & interventions and communicate this clearly to patients
4. To develop understanding of an integrative approach to health promotion and wellness
5. To promote students’ own self-care through exploration of Integrative Medicine principles.

Learning Objectives:

62 % time in clinic
8% time in conferences
30% time in other settings: (urology offices, plastic surgery, ER and student health and college training room.

Learning Activities:
1. Attend Integrative Medicine Consultation Clinics at CMC Elizabeth Family Medicine
2. Work with Fellowship trained Integrative Medicine Providers in the greater Charlotte area
3. Shadow practitioners of complementary approaches to healing, including: Traditional Chinese Medicine, Acupuncture, Massage Therapy, Aromatherapy, Homeopathy
4. Complete online curriculum in Prevention and Wellness from the University of Arizona College of Integrative Medicine (approximately 20 hours).

Evaluation:
The student will be evaluated by observing their interactions with patients and complementary providers. Also by their patient write-ups and their course work in the online Integrative Medicine curriculum.

Notes:
Contact: michele.birch@carolinashealthcare.org; felecia.lassiter@carolinashealthcare.org
Phone: (704) 304-7117
Advanced Practice Selective in Sports Medicine in Family Medicine - Greensboro AHEC
APSM 401-18

Faculty:
Bert Fields, MD

Prerequisites:
Completion of Third Year

Cross-Listed as:

Offered:
Periods 2, 3, 5-8, 10-12

Min. Enrollment:
1

Max. Enrollment:

Duration:
One Elective Period

Meeting Times:
TBA

Credit Hours:
6

Meeting Place:
TBA

Clinical Goals: What will student be able to do as a result of this rotation?
1. Perform advanced exam of major joints injured in sports activities.
2. Give differential diagnosis of injuries to major joints.
3. Perform common sports medicine procedures such as ETT, splinting and or casting; joint injection, and orthotic preparation
4. Gain exposure to use of Musculoskeletal Ultrasound for diagnosis
5. Assess injured athletes at sporting event

Learning Objectives:
80 % of time in clinic: Greensboro AHEC orthopedic practices and Moses Cone Sports Medicine Center
15 % of time in conferences: weekly seminar
5 % of time in other settings (please specify): training room evaluation, primary care sports medicine clinics, orthopedic office, student health, sports medicine clinic, and game coverage.

Notes:
Please note: Students considering going into Family Medicine have preference for this selective. Contact Lisa Slatt, MEd at 966-3912 for questions and permission.
Advanced Practice Selective in Maternity Care in Rural Western North Carolina
APSM 401-21

Faculty: Various Board Certified Physicians
Prerequisites: Completion of Third Year
Offered: Varies depending up availability of preceptor. (Preference given to Asheville Campus students and by permission only. See Note below.)
Max. Enrollment: 1
Credit Hours: 6
Meeting Place: TBD
Meeting Times: TBA
Learning Objectives:
Clinical Goals: What will student be able to do as a result of this rotation?
1. Describe scope of services available to maternity patients in rural setting including c-section, midwife services or county health system.
2. Describe the appropriate tests and counseling done during a low risk pregnancy.
3. Learn the basics of managing an uncomplicated labor, the mechanics of a spontaneous vaginal delivery, and routine post-partum care.
4. Counsel patient on birth control options appropriate for the age and health.
Learning Activities: 80 % time in clinic or inpatient settings
20 % time in project related activities
Evaluation: Clinical evaluation by preceptor and completion of project
Location: Mitchell or Avery County NC
Special Notes: This rotation is only offered to Asheville students. Please contact Amanda Greene, Asheville Campus: amanda.greene@mahec.net
**Advanced Practice Selective in Palliative Care in Western NC**

**APSM 401-22**

*Faculty:*
Dr. Sandra Whitlock, and others

*Prerequisites:*
Completion of Third Year, **ONLY ASHEVILLE STUDENTS**

*Offered:*
All blocks

*Min. Enrollment:*
1

*Max. Enrollment:*
1

*Duration:*
One Elective Period

*Meeting Times:*
TBA

*Credit Hours:*
6

*Meeting Place:*
Blue Ridge Community Health Services. Contact [amanda.greene@mahec.net](mailto:amanda.greene@mahec.net) for first day instructions

*Learning Objectives:*
1. Characterize delivery of palliative care in both inpatient and outpatient settings.
2. Describe the physiology of both chronic and acute pain management using opioids.
3. Appropriately manage pain as well as other symptoms in patients with advanced disease.
4. Participate effectively in the delivery of interdisciplinary care to patients at the end of life.
5. Describe the role of hospice in care of patients with advanced illness.

*Learning Activities:*

*Structure of Rotation:*
70% in consultations or other settings delivering care
30% in activities related to project

*Evaluation:*

*Location:*
Buncombe and Henderson County, NC

*Notes:*
Permission for enrollment must be obtained from Amanda Greene, Director of 4th Year Programming, UNC SOM Asheville. Email: [amanda.greene@mahec.net](mailto:amanda.greene@mahec.net) or 828-771-4225
Advanced Practice Selective in Rural Underserved Community Health Clinic in Western North Carolina

APSM 401-23

Faculty:
Dr. Shannon Dowler and others

Prerequisites:
Completion of Third Year, strong Spanish language skills—ONLY ASHEVILLE STUDENTS

Offered:
Varies

Min. Enrollment:
1

Max. Enrollment:
1

Duration:
One Elective Period

Meeting Times:
TBA

Credit Hours:
6

Meeting Place: Blue Ridge Community Health Services. Contact amanda.greene@mahec.net for first day instructions

Learning Objectives:
1. Describe health disparities and challenges of rural underserved populations.
2. Diagnose and treat specific disease processes found in rural underserved populations including HIV/AIDS, other STDs, mental illness, substance abuse and addiction.
3. Provide health care with an increased multicultural awareness and competence in the diverse population of rural WNC.
4. Describe how family physicians develop relationships with community members/leaders and use techniques of primary care research to improve health care service to a diverse community.
5. Identify and use community resources to improve the health of underserved populations

Learning Activities:
This selective will bring students to a rural community in WNC which had great population change from immigration of Latinos and other cultures. The student will observe how family physicians are working to overcome obstacles in order to provide culturally competent healthcare to this community. Through a well-established community health center and other community resources, the student will be actively involved with caring for underserved rural populations.

Structure of Rotation:
Evaluation:

City:
State:
Location:
Notes:

Preference to Asheville students--contact amanda.greene@mahec.net or 828-771-4225 for availability
Advanced Practice Selective in New Models of Care for Underserved Populations

APSM 401-47

Faculty:
Beat Steiner, Warren Newton

Cross-listed as: FMME 410

Prerequisites:
Completion of Third Year

Offered:
Block 7

Min. Enrollment:
Max. Enrollment: 10 students (including those in FMME 410)

Duration:
One Elective Period

Meeting Times:
TBA

Credit Hours:
6

Meeting Place:
TBA

Clinical Goals: What will student be able to do as a result of this rotation?
1. More effectively care for patients in underserved setting by incorporating advanced clinical competencies. Advanced clinical competencies include effectively combining acute care, chronic care and prevention into single visits, efficiently collecting and using social information about patients, collecting sensitive information about financial issues from patients, providing patient education to patients with low literacy, conducting group visits, paying attention to cost effectiveness when ordering tests, coordinating care for ancillaries, hospital and subspecialties and prescribing medications.
2. Describe a) current health disparities b) governmental and non-governmental systems that influence health policy c) safety net system in the United States including Community Health Centers, Health Departments, Academic Health Centers as well as private practices d) role of Medicaid and Medicare) local initiatives to improve care for the uninsured and underinsured f) new models of care, including approaches to improving access to care and improving the quality of care for chronic disease
3. Use skills in analysis and synthesis to propose a solution to improve one area of care relevant to underserved patients in our community.

Learning Objectives:
Structure of rotation:
50 % time in clinic
Weekly 2 ½ hour conferences
Remainder of time is spent on group projects and individual projects.

Learning Activities:

Notes:

Contacts: Email: beat_steiner@med.unc.edu, carolyn_joines@med.unc.edu Phone: 966-2824
Advanced Practice Selective in Procedures in Family Medicine - Charlotte AHEC
APSM 401-48

Faculty:
Michele Birch MD

Cross-listed as:

Prerequisites:
Completion of Third Year

Offered:
Blocks 1-3, 5-13

Min. Enrollment:
1

Max. Enrollment:

Duration:
One Elective Block

Meeting Times:
TBA

Credit Hours:
6

Meeting Place:
Carolinas Medical Center
Department of Family Medicine
2001 Vail Ave, Suite 400
Charlotte, NC 28207

Clinical Goals: At end of rotation, students will be able to:
1. Demonstrate basic competency with the following procedures:
   o Excisional, punch, and shave biopsies of skin lesions.
   o I and D abcesses
   o Circumcisions, newborn males
   o Treadmill stress tests
   o Colposcopies
   o Sports medicine evaluations
   o Joint injections
   o Suture lacerations
   o Dermatology
2. Apply history taking, physical exam and procedural skills to different settings such as family practice center, the emergency rooms, sports medicine and dermatology clinics.

Note: By special arrangement with the faculty, students may do one week of occupational medicine as part of this APS.

Learning Objectives:
62 % time in clinic
8% time in conferences
30% time in other settings: urology offices, plastic surgery, ER and student health and college training room.

Learning Activities:

Notes:
Contact: michele.birch@carolinashealthcare.org; felecia.lassiter@carolinashealthcare.org
Phone: (704) 304-7117
Advanced Practice Selective in Geriatrics in Family Medicine - Charlotte AHEC
APSM 401-49

Faculty:
Anthony Caprio

Prerequisites:
Completion of Third Year

Offered:
7-13

Min. Enrollment:
1

Max. Enrollment:

Duration:
One Elective Block

Meeting Times:
TBA

Credit Hours:
6

Meeting Place:
Where to report on first clinical day: Elizabeth Family Medicine, Division of Aging, 2001 Vail Ave Suite 400, Charlotte, NC 28207.

Clinical Goals: At the end of this rotation, the student will be able to:
1. Participate in the care of older adults in multiple sites, including nursing homes, hospital, Continuing Care Retirement Homes, and outpatient geriatric clinic, while working with a geriatricians and nurse practitioner
2. Care planning and delivery of appropriate care for patients at the end of life, including working with Hospice and Palliative Care
3. Make home visits to older adults discuss how to coordinate their care with Home Health Agencies
4. Exposure to community agencies and specialists who support Geriatric patients in the community.

Learning Objectives:
Structure of rotation
20 % time in clinic
10 % time in conferences
70 % time in other settings (please specify): community agencies such as Alzheimer's Association and Adult Protective Services, seeing Nursing Home, assisted living and home care patients

Learning Activities:

Notes:
Contact: felecia.lassiter@carolinashealthcare.org
Phone: (704) 304-7124
Advanced Practice Selective in Urban Underserved - Charlotte, NC
APSM 401-51

Faculty:
Dellyse Bright, MD

Prerequisites:
Completion of Third Year

Offered:
Blocks 1, 6-8, 11-13

Min. Enrollment:
1

Max. Enrollment:

Duration:
One Elective Period

Meeting Times:
TBA

Credit Hours:
6

Meeting Place:
Dept. of Family Medicine, 5516 Central Avenue, Charlotte, NC 28212. Go to 1st floor, ask the receptionist for Nicole Bayha.

Clinical Goals: At the end of this rotation, the student will be able to:
1. describe health disparities and challenges that urban underserved populations face
2. diagnose and treat specific disease processes found in urban underserved populations including: HIV/AIDS, other STDs, mental illness, substance abuse and addiction.
3. practice with an increased multicultural awareness and competence in the diverse population of a large metropolitan area (Charlotte)
4. describe how family physicians develop relationships with community members/leaders and use techniques of primary care research to improve health care service to a diverse community
5. identify and use community resources to improve the health of underserved populations

Learning Objectives:
50-60% time in clinic
5 % time in conferences
35-45% time in various community resources for underserved

Learning Activities:

Notes:
Contacts: Email Dellyse.Bright@carolinashealthcare.org or felecia.lassiter@carolinashealthcare.org Phone: (704) 446-7738
Advanced Practice Selective in Rural Emergency Medicine in Marion, NC
APSM 401-55

Faculty:
Sumner Mitchell anresumi@gmail.com, and Billy Lewis imblewis@charter.net 828-213-1924,

Prerequisites:
Completion of Third Year—ONLY ASHEVILLE STUDENTS

Offered:
5-13

Min. Enrollment:
1

Max. Enrollment:

Duration:
One Elective Period

Meeting Times:
TBA

Credit Hours:
6

Meeting Place:

Learning Objectives:
This rotation offers an opportunity to learn about managing emergencies in a rural hospital setting. The attending physicians are emergency medicine physicians. There will be only one APS student per rotation in order to maximize the richness of this experience.

Learning Activities:
1. Conduct an appropriate history and physical examination on patients who present to a rural emergency department.
2. Develop an increased awareness of cultural differences present in rural western North Carolina.
3. Learn about and participate in various emergency department procedures as the clinical situation allows: suturing, airway management, IO insertion, CPR, cardioversion, lumbar puncture, fracture management, splinting, I & D, x-ray interpretation, chest tube placement, thrombolytic therapy, etc.
4. Develop an increased understanding of the relationship between a rural emergency department, its relationship with EMS, and the surrounding medical centers.

Evaluation:

Notes:
Preference to Asheville students--contact amanda.greene@mahec.net or 828-771-4225 for availability
Advanced Practice Selective in Rural Emergency - Medicine Western North Carolina (Asheville Campus students only)
APSM 401-57

Faculty:
Varies depending upon site: Drs. Charlie Baker, Kathryn Lynch, Amiee Queng, Shannon Dowler, or Mary Shell Zaffino and others

Prerequisites:
Completion of Third Year—ONLY ASHEVILLE STUDENTS

Offered:
All Blocks

Min. Enrollment:
1

Max. Enrollment:

Duration:
One Elective Period

Meeting Times:
TBA

Credit Hours:
6

Meeting Place: Charles A. Cannon Memorial Hospital in Linville, NC

Learning Objectives:
1. Describe how rural health care is provided through a community owned, private medical practice.
2. Describe the health care delivery by a team of health care providers including midlevel staff and family physicians in a rural health setting.
3. Examine the economic challenges of a rural, community-funded, health system compared to other systems of care delivery.
4. Participate in broad spectrum of clinical care provided in rural sites.

Learning Activities:
70% time in clinic
30% time in researching aspects of health care delivery in preparation of presentation

Evaluation:
1. Observation by attending physician
2. Completion of project

Notes:
Permission for enrollment must be obtained from Amanda Greene, Director of 4th Year Programming, UNC SOM Asheville. Email: amanda.greene@mahec.net or 828-771-4225.
Advanced Practice Selective in Rheumatology
APSM 402-03

Faculty:
Dr. Beth Jonas and Dr. Robert Berger

Prerequisites:
Completion of Third Year

Offered:
All Blocks

Min. Enrollment:
1 (Cross listed with MEDI 415)

Max. Enrollment:

Duration:
One Elective Period

Meeting Times:
TBA

Credit Hours:
6

Meeting Place:
TBA

Clinical Goals: What will student be able to do as a result of this rotation?
1. Elicit a thorough history from a patient with a suspected or established rheumatic disease with a focus on differentiating inflammatory from non-inflammatory conditions.
2. Perform a complete physical examination with particular attention to the musculoskeletal system.
3. Develop a working knowledge of the common rheumatic diseases encountered in clinical practice and the general approach to management.

Learning Objectives:
Structure of rotation
90 % time in clinic
10 % time in conferences

Learning Activities:

Notes:
Contact: bjonas@med.unc.edu, Phone: (919) 966-4191
Advanced Practice Selective in Pulmonary / Internal Medicine [with an emphasis on chronic / end stage lung disease diagnosis and management: bronchiectasis, cystic fibrosis, lung transplant medicine, and procedural tests]  
APSM 402-04

Faculty:  
Peadar G Noone MD FCCP FRCPI

Prerequisites:  
Completion of Third Year

Offered:  
Periods 1-3, 6-13

Min. Enrollment:  
Max. Enrollment: 2

Duration:  
One Elective Period

Meeting Times:  
TBA

Credit Hours:  
6

Meeting Place:  
Pulmonary office, sixth floor (near 6BT nurses station). Phone 966-5082

Clinical Objectives: By the end of the rotation, the student will be able to:

1. Evaluate and manage patients chronic and severe, often end stage lung diseases. Examples include patients with various stages of lung disease (mild to severe) - cystic fibrosis, bronchiectasis, COPD, sarcoidosis, interstitial lung disease (ILD), and some unusual rare lung diseases. Particular focus is placed on developing clinical skills - history, a focused physical examination, and presentation and communication skills, as well as working in a team. Assimilation of data to allow development of a coherent plan of action. Follow up (within the time frame of the rotation) of specific patients is encouraged and mentored.

2. Interact with multi-disciplinary teams in the evaluation and management of said diseases, as well as learn critical communication skills with patients, family members, other clinicians, and other team members.

3. Directly observe procedures, as well as interpret the data generated, such as arterial blood gas analysis, pulmonary function tests, bronchoscopies, chest radiographs/CT scans, six-minute walk tests, physical therapy techniques.

4. Attend weekly or bi-weekly set piece meetings, including quality improvement meetings amongst CF and Lung Transplant teams. Also weekly journal club, case conferences and didactic lectures / small groups. If timely with attending rotations and SOM duties, attend with the preceptor in teaching first and second year (TEC) med students in small group physical diagnosis sessions in the labs and classrooms, as well as participate on some inpatient pulmonary medicine rounds or consults.

Learning Objectives:

20-25% of time in clinic
10-15% of time in conferences
60-70% of time in other settings (please specify): Ward rounds, radiology rounds, informal daily liaison meetings with coordinators, reviewing new referrals to CF and transplant clinics.

Learning Activities:

Notes:

Contacts: Email: pnoone@med.unc.edu, nboyd@med.unc.edu Phone: 919 966 2531
Advanced Practice Selective in Internal Medicine - Portugal, Hospital São João - Porto / Porto Medical School
APSM 402-05

Faculty:
Ana C.G.Felix (UNC Neurology)/Michael Harrigan (UNC Emergency Medicine); Filipe Basto (Oporto, Portugal)

Prerequisites:
Students interested in this offering must obtain permission from Dr. Felix

Offered:
All Blocks

Min. Enrollment:
1 student. If more than 1 student is interested/available for this APS, consideration will be given to each request after consultation with Dr. Basto

Max. Enrollment:

Duration:
One Elective Period

Meeting Times:
TBA

Credit Hours:
6

Meeting Place:
*(See Special Notes)

Clinical Goals: What will student be able to do as a result of this rotation?
1. Demonstrate that he/she can be an effective member of the clinical team.
2. Demonstrate the ability to perform an advanced history and physical examination on a patient with medical disease symptoms.
3. Order appropriate studies based on history and physical.
4. Interpret the findings from the studies.
5. Develop an appropriate differential diagnosis.
6. Construct a management plan.
7. Compare and contrast the approach to patients with symptoms from the US and Portuguese perspective.
8. Explore cultural differences in the approach to patient care in the context of each patient the student interacts with
9. Explore differences in the financing and provision of health care in Portugal as compared to the USA

Learning Objectives:
60 % time in clinic
15 % time in conferences
25 % of time in other settings (please specify):
- Clinic or any of the medical supervised units that work as an interface for clinical work processes the Internal Medicine Department (Subspecialties/Ancillary Lab - like Imaging, Pathology...)
- Conferences in English will be provided whenever possible
- Accreditation from the Hospital and the Medical School will be provided
- A supplementary Portuguese course could be arranged (in due time) for those interested - - Interaction with the medical tutor will be in English

Learning Activities:

Notes:

Contacts: Dr. Felix: Email: felixa@neurology.unc.edu, dunshie@email.unc.edu Phone: 843-5780; Dr. Basto:
Email: bastocf@gmail.com Phone: 351-91-323-65-25

*Where should the student report for the first day of clinical work? Sao Joao Hospital Main Lobby, Porto, Portugal. This will be coordinated upon arrival in Porto with Dr Basto. Students will be required to meet with Drs Felix and Harrigan at least 30 days prior to their departure to Portugal to ensure that the goals of the APS are reviewed and any other issues/concerns. All travel arrangements will be the students’ responsibility, including but not limited to Passport and VISA requirements.
Advanced Practice Selective in Infectious Diseases CMC
APSM 402-09

Faculty:
James Horton, David Weinrib, Catherine Passaretti, and Bevin Hearn

Prerequisites:

Periods Offered: All Blocks
Min/Maximum Enrollment: one per month
Credit Hours: 6
Clinical/Non-Clinical: Clinical 20% Conferences 15% Inpatient Rounds & Consultations 65%
Duration of Elective/Selective: 4 weeks
Where/When to report on first day: CMC Orientation: Please contact Medical Student Coordinator for placement – Enid Stanford office  704-355-8368

Learning Objectives:
1. Learn basic skills in performing initial inpatient ID consultations & follow up
2. Learn basic outpatient care of HIV patients
3. Integrate evidence based medicine with diagnostic and therapeutic decision making
4. Develop awareness of complex ethical issues encountered in HIV disease management

Evaluation:
1. Direct Observation
2. Case write ups, progress notes
3. Critique of oral presentations
4. Participation in rounds/teaching sessions
5. Written examination before and after the rotation

Contact: James.Horton@carolinashealthcare.org, Heather.tarantino@carolinas.org
Staff Support: Enid.Stanford@carolinas.org Phone: (704) 355-8368
Advanced Practice Selective in Cardiology, Carolinas Medical Center, Charlotte NC
APSM 402-10

Faculty:
Laszlow Littman, James Bower, Troy Leo, Richard Musialowski, John Symanski and Heather Tarantino.

Prerequisites:
Completion of third year

Offered:
All blocks

Min. Enrollment:
1

Max. Enrollment:

Duration:
One elective period

Meeting Times:
TBA

Credit Hours:
6

Meeting Place:
CMC Orientation: Please contact Medical Student Coordinator for placement – Enid Stanford

Learning Objectives:
The student will acquire basic clinical skills in cardiology including physical diagnosis, interpretation of electrocardiograms and other imaging modalities, exercise tests, and to participate in the clinical decision-making process.

Learning Activities:
Student experiences during three of the four weeks will include cardiology consultations, preoperative cardiovascular evaluations, daily clinic, and teaching rounds. Attendance in a weekly heart failure clinic is also part of the rotation. One week of the rotation will occur in the coronary care unit. The student will admit patients requiring intensive care and participate in the continuous evaluation and management of these patients including diagnostic procedures and therapeutic interventions. Responsibilities during the Coronary Care Unit rotation will include call responsibilities, two weekdays, 24 hours each.

Notes:
Email

Support Staff: Enid.Stanford@carolinas.org  Phone: (704) 355-8368
Advanced Practice Selective in Gastroenterology, Carolinas Medical Center, Charlotte NC
APSM 402-11

Faculty:
Dr. Martin Scobey

Prerequisites:
Completion of third year

Offered:
1, 2, 6-13

Min. Enrollment:
1

Max. Enrollment:

Duration:
one elective period

Meeting Times:
TBA

Credit Hours:
6

Meeting Place:
TBA

Clinical Goals
1. Learn basic clinical skills related to the practice of gastroenterology
2. Interpretation of GI related laboratory testing
3. Learn indications, contraindications, limitations & basic interpretation of common GI radiologic and endoscopic procedures
4. Present one disease topic of interest weekly to the attending/consultative team

Learning Objectives:
% of time in clinic: 10%
% of time in conferences: 10%
% of time in other settings (please specify): 80% (inpatient & endoscopy suite)
The 14 days of the clinical rotation must be completed while the faculty attending is on service

Learning Activities:

Contact:
Email martin.scobey@carolinashealthcare.org, Heather.tarantino@carolinas.org
Support Staff: Enid.Stanford@carolinas.org Phone: (704) 355-8368
Advanced Practice Selective in Outpatient Medicine, UNC Ambulatory Care Center, Chapel Hill, NC
APSM 402-12

Faculty:
Amy Shaheen, MD

Prerequisites:
Completion of all clinical clerkships

Offered:
4-13

Min. Enrollment:
1

Max. Enrollment:

Duration:
One elective period

Meeting Times:
TBA

Credit Hours:
6

Meeting Place:
TBA

Clinical Goals:
- To see how systems based practices are put into effect in a primary care setting
- To learn about the PDSA method for quality improvement and put it into practice with a QI project that will be spearheaded by the resident or intern
- To see patients with complex medical histories and see how they may benefit from systems put in place in the practice for chronic disease management
- To gain an advanced understanding of acute and chronic illnesses in a primary care office

By the end of the four weeks, student should be competent in the following:
- Student is knowledgeable about the systems in place for chronic disease management at the practice
- Student is able to propose PDSA cycles and learned methods for improving quality in the clinical setting
- The student is able to take a complex history and take advantage of systems in place to manage chronic diseases in the clinic
- The student is able to present complex or chronically ill patients in a problem based format
- The student is able to devise plans that foster relationships and improve care for the patient

Learning Objectives:

Structure of rotation:
Time in Clinic: 7 clinic sessions: 5 with an attending, 1 with diabetes educator, 1 with member of the anticoagulation team or pain team. Ideally the sessions are 4 for chronic disease management and 1 in the acute care practice setting-same day clinic.
Time in conferences: Student will attend the division meeting and 2 QI meetings during the 4 week rotation. The student will also attend the weekly Wednesday noon conference where QI projects are discussed and presented.
Time in other settings: Student will be paired with a resident ACR (intern), or resident doing the 2 month continuity elective (resident) to work on one of the clinic based QI projects.

Learning Activities:

Notes:
E-Mail: Shaheen@med.unc.edu or carol_carden@med.unc.edu  Phone: 966-7776
Advanced Practice Selective in UNC Center for Latino Health (CELAH)  
APSM 402-13

Faculty:
Marco Alemán, Course Director. Dan Reuland, Doug Morgan, others.

Prerequisites:
Medical Spanish 297/8 or fluency in Spanish as assessed by faculty: All non-CAMPOS students need to receive approval from the CD after an interview in Spanish. (contact maleman@med.unc.edu, copy Claudia_Rojas@med.unc.edu)

Periods Offered: All Blocks
Min/Maximum Enrollment: one per month
Credit Hours: 6
Clinical/Non-Clinical: Clinical 90% Conferences 10%
Duration of Elective/Selective: 4 weeks
Where/When to report on first day: TBA

Learning Objectives:
1. Obtain an accurate, age-appropriate medical history in Spanish (Competency Y4, #8)
2. Adjust interview to overcome potential barriers (milestone 4011)
3. Communicate effectively with Spanish-speaking patients and their families (Competency Y4, #18).
4. Use literacy-level appropriate language to overcome health literacy barriers in the clinical care setting (Milestone 4026)
5. Apply case and disease-specific Spanish-language medical terminology
6. Work in teams to collaborate on a quality improvement project

Learning Activities:
1. Evaluate patients at the various Spanish-speaking UNC Latino Clinics (IM, breast, gynecology, GI, cardiology, geriatrics, pediatrics nephrology, among others)
2. Option of clinical experiences outside UNC
3. Conferences on selected advanced Spanish-language communication skills
4. Hours: 40 per week
5. Participation on a quality improvement project affecting the UNC Latino Clinic

Evaluation:
1. Clinical evaluation using UNC SOM evaluation tool
2. Medical Spanish terminology assessed during clinical work with faculty
3. CLASS test to assess verbal and cultural competency (telephone-based, oral)
4. Quality Improvement project (participation in)
5. 360 evaluation by Latino Clinic Staff

Notes: maleman@med.unc.edu, Claudia_Rojas@med.unc.edu
Advanced Practice Selective Longitudinal Quality and Safety Track
APSM 402-17

Faculty: Amy Shaheen
Prerequisites: Quality and Safety Elective
Periods Offered: Longitudinal - Must register for April or May Orientation session
Min/Maximum Enrollment: 8 - Dr. Shaheen must be notified in March of all students signed up for the course.
Credit Hours: 6
Clinical/Non-Clinical: Clinical 70% Conferences 30%
Duration of Elective/Selective: 4 weeks

Where/When to report on first day: April or May APS selective orientation. You will be emailed about project reviews and once you sign up, we will be in touch with you about your preferences for the department in which you want to do it and who your assigned mentor is.

Learning Objectives:
1. Students will be able to describe different QI models (LEAN, Model for Improvement, Six Sigma) and how they can be applied to the field of your choice
2. Students will work with a mentor to develop a quality improvement project
3. Students will describe different types of measures/tools and their use in improvement processes (e.g. driver diagrams, PDSA cycles, process flow/value stream maps, run charts)
4. Students will demonstrate how to graph measurement in ways that are meaningful to colleagues and supervisors (bar graphs, run charts, G charts)
5. Students will use metrics proposed by quality and safety organizations in your field to demonstrate improvement
6. Students will demonstrate knowledge of policy and systems issues that affect hospital and provider payments (ACA, VBP, ACO, PFP)
7. Students will participate in an RCA and demonstrate how to act on those findings (yield/effort/cost/never events)
8. Students will demonstrate knowledge of reporting systems (local and national)
9. Students will identify the roles of informatics, human factors, error types (sharp and latent) in quality and safety
10. Students will engage in activities that highlight institutional priorities and responses to those priorities
11. Students will demonstrate errors in handoffs, communication, and teams, and propose solutions
12. Students will be advocates and leaders for change while learning about culture, stakeholder engagement, and teamwork from healthcare and other industries.

Learning Activities:
- All students accepted into the tract will be assigned a mentor in the field of their choice. Students will work with that mentor to develop a quality improvement project. The mentor and the student will meet regularly. The student will use a PDSA worksheet or A3 worksheet to demonstrate understanding of the project/goals/measurement. The student will help in data collection, data display, and development of changes needed. The mentor will give feedback, guide the project, contact/assist with stakeholders.
- You should plan on working clinically with your mentor for 13 days during the year. This will give you the same clinical exposure as those on the traditional APS will receive. You can coordinate this with your quality exercises. I.e. follow a patient from check in, through the visit that you take a history and through check out and scheduling to make a process map, etc.
- Monthly evening/late afternoon sessions on above topics and group presentations of data collected
- Presentation of the project to IHQI faculty
- Poster/abstract submission to relevant organization

Evaluation: Pass/fail. Student will be given regular feedback by his/her mentor and at the project review sessions. A student is required to attend the project review sessions and to work on a project.

Notes: See Sakai sites for more information: Students Engaged in Quality and Safety Track
Advanced Practice Selective in Nephrology  
APSM 402-20  

**Faculty:**  
Cindy Ciocca, MD  

**Prerequisites:**  
Completion of Third Year  

**Offered:**  
Periods 1-3, 4-10  

**Min. Enrollment:** 1  

**Max. Enrollment:** 1  

**Duration:**  
One Elective Period  

**Credit Hours:** 6  

**Meeting Place:** Visiting students should report to the Pediatric Education Office on the 3rd floor of the NC Women's Hospital at 9:00 a.m. on the first day and ask for Kelly Lear. UNC students - you will be contacted to arrange a meeting time.  

**Clinical Goals:** By the end of this selective, the student will be able to:  
1. Use critical thinking to develop a differential diagnosis and management plan for patients with abnormalities in volume status, electrolyte, and acid-base disorders.  
2. Demonstrate knowledge of the various causes of clinical syndromes and pathology commonly encountered in patients presenting with acute and chronic kidney disease, glomerular syndromes, and kidney transplantation.  
3. Demonstrate knowledge of the systems employed to care for patients with end stage kidney disease.  
4. Demonstrate knowledge of the basic techniques of renal replacement therapy.  
5. Use critical thinking to develop a differential diagnosis and management plan for patients with acute and chronic kidney disease, glomerular syndromes, and kidney transplantation.  
6. Demonstrate knowledge of the principles of therapeutics and therapeutic decision making in patients presenting with disorders of the kidney.  
7. Demonstrate knowledge of the scientific principles of laboratory diagnosis, and the ability to critically evaluate the limitations of diagnostic methodologies in the evaluation of patients with disorders of the kidney.  
8. Interpret the results of urinalysis and identify the most frequent clinical, laboratory, radiologic manifestations of kidney disease.  
9. Identify factors that place individuals at risk for kidney disease, select appropriate tests for detecting patients at risk, and determine strategies for preventing injury or progression.  
10. Demonstrate a basic understanding of technical aspects necessary for preparing histological material (including the collection of tissue in the ultrasound suite). Using a case-based approach the student will develop morphological correlates underlying clinical symptoms that led to a diagnostic biopsy procedure.  

**Learning Objectives:**  

**Learning Activities:**  
1. Attend UNC Kidney Center’s Outpatient Subspecialty Clinics  
2. Attend rounds at UNC-Renal Research Institute’s Outpatient Dialysis Clinics  
3. Participate in Inpatient Consultative Clinical Nephrology at UNC Hospitals  
4. Attend all Nephrology Conferences as schedule permits:  
   a. Nephrology Fellows’ Conference  
   b. Nephrology Grand Rounds  
   c. UNC Nephropathology Conference  

**Notes:**  

**Contacts:** Email: cynthia_denu-ciocca@med.unc, rochelle_moser@med.unc.edu
Advanced Practice Selective in Internal Medicine – Malawi Clinical Rotation
APSM 402-21

**Faculty:**
Mina Hosseinipour, Irving Hoffman

**Prerequisites:** None (completion of all third year core rotations)

**Offered:**
All Blocks or at least 4 weeks as approved by Dr. Agnes Moses and Dr. Portia Kamthunzi, and Dr. Mina Hosseinipour. (Lilongwe Clinical Team)

**Min. Enrollment:**

**Max. Enrollment:** 1

**Duration:**
One Elective Period

**Meeting Times:**
TBA

**Credit Hours:**
6

**Meeting Place:**
For APS orientation on first day as directed. For international portion: Lilongwe, Malawi. UNC Project will then provide transportation from the airport to UNC project guesthouse.

**Clinical Goals:** What will student be able to do as a result of this rotation?
1. Increased understanding of issues involved in caring for patients from a different culture and language/cultural barriers
2. Improved expertise in diagnostic capabilities appropriate for low resource situation
3. Increased understanding of public health and economic situations impacting health and health seeking behaviors in rural, impoverished geographic area.

**Clinical/Non-Clinical (%) in each:** 90% clinical on the wards, 10% Grand Rounds and Local Journal club

**Learning Activities:**
The course is located in Lilongwe Malawi, the capital city. The Kamuzu Central Hospital serves the Central Region of the country. Rotations may include pediatrics, internal medicine, OB/GYN, and surgery. Outpatients rotation (1 week) can be arranged at a local HIV clinic or rotations in hematology/oncology clinic. Students are integrated into existing teams on the ward led by a consultant physician. In the arrangement, students will work with physicians, nurses and clinical officers. Students should be available Monday-Friday from 7:30 until 5 and some weekends when their team is on call but overnight call is not expected. Common medical conditions will include malaria, tuberculosis, pneumonia, meningitis, diarrhea, hypertension, and anemia.

**Evaluation:** (How student will be evaluated e.g., observed administering procedures, interviewing patients, presentation at case conference, participation in rounds, patient write-ups)
Student will be evaluated by on site preceptor (evaluation completed and returned to course director).

**Contacts:** mina_hosseinipour@med.unc.edu, irving_hoffman@med.unc.edu

All travel arrangements will be the students' responsibility, including but not limited to Passport and VISA requirements.

**Notes:** Students must contact mina_hosseinipour@med.unc.edu for permission to take this course.
Advanced Practice Selective in Hematology/Oncology at Levine Cancer Institute, Charlotte
APSM 402-22

Faculty:
Julie Fisher, MD, and Dan Carrizosa, MD

Prerequisites:
Completion of Third Year

Offered: All Blocks Except 1,6,9 and 10

Contact enid.stanford@carolinashealthcare.org for permission.

Min. Enrollment: 1
Max. Enrollment: 1

Duration: One Elective Period

Meeting Times: TBA

Credit Hours: 6

Meeting Place:
CMC Orientation: Please contact Medical Student Coordinator for placement – Enid Stanford office 704-355-8368

Clinical Goals:
The student will learn basic clinical skills related to the practice of outpatient and consultative hematology and oncology. This will include history taking, physical exam, procedures and interpretation of basic laboratory tests. There will be an emphasis on identifying disease and the basic treatment principles.

Learning Objectives:

Learning Activities:
During the 15 day clinical rotation, the student will attend 5 half days a week of hematology or oncology clinic and/or participate in the consultation service with the rotating attending. The student will learn to formulate differential diagnoses of hematologic and malignant diseases and become familiar with common workups, procedures and basic treatment plans for them. Conferences include tumor boards and division grand rounds. In addition, the student will complete the required modules for APS during the non-clinical time.

Evaluation:
Students receive both formative and summative feedback at regular intervals during this rotation. Students are evaluated using the standardized form provided by UNC and the APS course. Participation as a team member, basic science and clinical knowledge, translation of clinical knowledge to active patient care as evidenced by oral and written presentation of cases, and conference attendance are important aspects for evaluation.

Notes:

Contacts: Email:
Support Staff: Enid.Stanford@carolinas.org  Phone: (704) 355-8368
Advanced Practice Selective in Metrolina Nephrology, Charlotte NC
APSM 402-23

Faculty:
Nancy Gritter, MD, Nephrology partners of Metrolina Nephrology Associates, PA

Prerequisites:
Completion of Third Year

Offered:
Periods 3, 7, 12

Min. Enrollment: 1
Max. Enrollment: 1

Duration:
One Elective Period

Credit Hours:
6

Meeting Place:
CMC Orientation: Please contact Medical Student Coordinator for placement – Enid Stanford office 704-355-8368

Clinical Goals:
The student will gain knowledge in the appropriate evaluation and management of a wide range of patients with suspected or established diseases of the renal system. The student will learn basic clinical skills related the practice of consultative nephrology. This will include appropriate history taking, physical diagnosis, interpretation of laboratory testing, and review of renal pathophysiology including renal biopsy material. The student will learn the indications for, limitations of, and therapeutic goals of renal replacement therapies, to include all forms of dialysis and transplantation. There will be the opportunity to observe and potentially perform acute hemodialysis vascular access procedures. The student will learn about the unique aspects of care for the patient with End Stage Kidney Disease (perioperative care, pharmacology, peculiar disease processes, and end-of-life management).

Learning Objectives:

Learning Activities:
Educational methods will include patient-centered teaching rounds, organized didactic sessions, teaching sessions on interpretation of blood chemistries, blood gases, urinalyses, urine microscopy and other diagnostic tests such as renal biopsies. There will be an emphasis on the pathophysiology of nephrologic disorders and their management. Pertinent supplemental educational materials will be provided as indicated. Students will participate in Morning Report and the medical education conferences of the Department of Internal Medicine (Departmental Grand Rounds and Resident Conference Curriculum).

This will be primarily an inpatient rotation, although the student will attend a general nephrology clinic one-half day per week and have the option to attend outpatient transplant clinics, outpatient dialysis rounds, or additional general nephrology clinic sessions to enhance the clinical experience and/or as directed by clinical interest and continuity of care across the clinical spectrum.

Evaluation:
Students receive both formative and summative feedback at regular intervals during this rotation. Students are evaluated using the standardized form provided by UNC. Participation as a team member, basic science and clinical knowledge, translation of clinical knowledge to active patient care as evidenced by daily notes, initial consultations, oral presentations, and discharge planning, participation in procedures, and conference attendance are important aspects for evaluation. Attendance and participation in conferences will contribute to the overall evaluation. Each faculty member with whom the student works will provide feedback and formal evaluation.

Notes:

Contacts: Tom Montgomery Thomas.Montgomery@carolinashealthcare.org, Gina Ernsberger heather.tarantino@med.unc.edu

Additional Support: Enid.Stanford@carolinas.org Phone: (704) 355-8368
Advanced Practice Selective in Geriatric Oncology, Chapel Hill NC
APSM 402-24

Faculty: Drs. Trevor Jolly, Hyman Muss, Ellen Roberts
Offered: 5-7
Max. Enrollment: 1
Duration: 4 weeks
Credit Hours: 6
Meeting Place: Hematology oncology clinic (2nd Floor) first Tuesday (Monday is APS orientation)

Learning Objectives:
The geriatric oncology elective is a predominantly outpatient block which provides instruction and experience in the care of older adult with cancer. The trainee will gain an understanding of the core concepts of Geriatric Oncology including changes in physiology with aging and the need for individualized patient care. The student will be trained and gain valuable experience by performing a Comprehensive Geriatric Assessment (CGA) including measures of comorbidity, polypharmacy, cognitive, functional, psychosocial, and nutritional status. The assessment is the cornerstone evaluation of older adults. Students will learn to communicate effectively with ancillary staff including nursing, research coordinators, physical therapist, and the primary team, physician or oncologist caring for the patient.

Learning Activities:
The Geriatric Oncology Clinic is a consultation clinic for patients 65 years and older with malignant disease (Hematologic and solid tumor) referred from UNC and outside institutions. The trainee will see follow-up and new patients with Drs. Muss and/or Jolly, summarize and present the clinic findings and be responsible for documenting these finding in the electronic medical record (EMR). In addition to the outpatient Geriatric Oncology Clinic trainees will have the opportunity to round on the inpatient geriatric medicine and/or oncology service. Students will attend the Oncology and Geriatric Medicine division conference and work with the geriatric oncology group on short research projects which may be presented at the monthly geriatric oncology working group meeting. Trainees will review the Geriatric Oncology Module on ASCO University.

List of activities:
1. Participate in weekly geriatric oncology group meetings (Every other Thursday morning at 9:30am)
2. Attend monthly Geriatric Oncology working group meetings (2nd Thursday each month at 5:30pm)
3. Attend all required Geriatric Medicine (Friday 8:30-9:30am) and Oncology (Mondays 12:30-1:30pm) conferences

Evaluation: Students will be evaluated based on the following:
1. Quality of patient care and clinical presentation
2. Knowledge base and understanding/application of Geriatric Oncology principles
3. Professionalism including attendance to clinic and conferences and timely documentation.
4. Utilization of multidisciplinary resources and working effectively with members of the interdisciplinary team including social work, pharmacist and nursing
5. Quality of research presentation
6. Interpersonal and communication skills.

Contacts:
Advanced Practice Selective in Palliative Care
APSM 402-48

Faculty:
Stephen Bernard, MD

Prerequisites:
Completion of Third Year

Offered:
Periods 2-13

Min. Enrollment:
2

Max. Enrollment:

Duration:
One Elective Period

Meeting Times:
TBA

Credit Hours:
6

Meeting Place:
TBA

Clinical Goals: By the end of this selective, the student will be able to:
1. To understand the physiology of pain, chronic and acute.
2. To learn about the pharmacology of opioids.
3. To understand the management of pain.
4. To learn about the multidisciplinary care of patients with advanced illness and at end of life
5. To learn about the care of children with advanced or life limiting illness
6. To learn about management of the elderly with end of life conditions.
7. To learn about the role of hospice.

Learning Objectives:
47.5 % of time in Consultations
5 % of time in Didactic Sessions
47.5% of time in other settings (please specify): Hospice: 25%; Other Rotation: 25% Students will now spend 2 weeks on consults, 1 week on Hospice, and 1 week on either Anesthesia Pain, Supportive Care, or other rotation (Pediatric Pall Care) if arranged with course director. Each week is 4 days with 1 optional day for course work related to Health Policy projects.

Learning Activities:

Notes:
Students may miss up to 2 days of the rotation due to other schedule conflicts; further absences will be made up by work on weekend rounds.

Contacts: Email: Donna Lague djlague@email.unc.edu Phone: 919 843-7706
Advanced Practice Selective - Internal Medicine in Western North Carolina
APSM 402-60

Faculty:
Josh Bernstein, MD and other physicians

Prerequisites:
Completion of Third Year

Offered:
All Months (All Blocks) Notes: (Asheville Branch Campus Students Only. See Below)

Min. Enrollment:
2

Max. Enrollment:

Duration:
One Elective Period

Meeting Times:
TBA

Credit Hours:
6

Meeting Place:
Varies depending upon preceptor

Learning Objectives:
Clinical Goals: By the end of this selective, the student will be able to:
1. Describe the role continuity plays in the transition of care among multiple health care settings.
2. Compare differences between health care delivery in rural settings and more urban settings.

Learning Activities:
Structure of rotation: 70% time in clinic, hospital, nursing home, and time in conferences 30% time researching systems based practice component

Evaluation:
Observation by attending physician using standard evaluation form.

Notes:
Preference to Asheville students--contact amanda.greene@mahec.net or 828-771-4225 for availability
Advanced Practice Selective in Public Health Setting – Wake County
APSM 403-01

Faculty:
Cathi Weatherly-Jones, MD

Prerequisites:
Completion of Third Year

Offered:
5-13

Min. Enrollment:
1

Max. Enrollment:

Duration:
One Elective Period

Meeting Times:
TBA

Credit Hours:
6

Meeting Place:
Wake County Human Services Prenatal Clinic

Clinical Goals: What will student be able to do as a result of this rotation?
1. Perform a problem focused and general medical history on pregnant women presents to a public health clinic
2. Perform a female examination.
3. Discuss how providing pregnancy care in a public health setting differs from other settings.

Learning Objectives:
100 % time in clinic

Learning Activities:

Notes:

Contacts: cweatherlyjones@co.wake.nc.us  Phone: 919-250-3987
Advanced Practice Selective in Preventative Women's Health - Planned Parenthood Location
APSM 403-06

Faculty: Jes Morse, MD

Prerequisites: Completion of Third Year

Offered:
Periods 7-13 - contact jessica_morse@med.unc.edu to confirm.

Min. Enrollment: 1

Max. Enrollment: One Elective Period

Duration: TBA

Meeting Times: TBA

Credit Hours: 6

Meeting Place:
Contact Emily Adams emily.adams@ppcentralnc.org

Clinical Goals: What will student be able to do as a result of this rotation?
1. Counsel patients on reproductive health issue;
2. Effectively manage patients with chronic disease (diabetes and obesity);
3. Diagnosis and propose treatment plans for patients with Infectious disease (chlamydia, vaginitis), and
4. Recommend preventative health practices (cancer screening) for different age groups

Learning Objectives:
75 % time in clinic
10 % time in conferences
15 % of time in other settings (please specify): reading

Learning Activities:

Notes:
Coordinator: Krishna Foust Contacts: Phone: 843-4927 Email: emily.adams@ppcentralnc.org: krishna_foust@med.unc.edu
Advanced Practice Selective in Preventative Women's Health in Chapel Hill, NC
APSM 403-09

Faculty:
Alice Chuang, MD, Coordinator Krishna Foust

Prerequisites:
Completion of Third Year

Offered:
2-5, 6-8, 10, 11, 13

Min. Enrollment:

Max. Enrollment: Blocks 2-5--One student, 6-8, 10, 11, 13--Two students

Duration:
One Elective Period

Meeting Times:
TBA

Credit Hours:
6

Meeting Place:
TBA

Clinical Goals: What will student be able to do as a result of this rotation?
Students will apply their knowledge of Preventative Women's Health related to:
1. Reproductive health (obstetrics, gynecologic)
2. Preventative health practices (cancer screening).

Learning Objectives:
75% time in clinic
10 % time in conferences
15 % time reading

Learning Activities:

Notes:
Email: Krishna_foust@med.unc.edu; Phone: (919) 966-5096
Advanced Practice Selective in Senior Women's Health - OB/GYN – Chapel Hill
APSM 403-10

Faculty:
Elizabeth Geller, MD

Prerequisites:
Completion of Third Year

Offered:
Periods 2-3, 5-6, 11-12

Min. Enrollment:
Max. Enrollment: 2

Duration:
One Elective Period

Meeting Times:
TBA

Credit Hours:
6

Meeting Place:
TBA

Clinical Goals: What will student be able to do as a result of this rotation?
Students will apply his/her clinical fund of knowledge in the area of Senior Women’s Health related to:
1. Preventative health practices (cancer screening, immunizations, osteoporosis)
2. Chronic diseases (hypertension, hypercholesterolemia, diabetes, obesity), and
3. Pelvic floor disorders such as urinary and fecal incontinence.
4. Gynecologic cancer screening and diagnoses including ovarian, uterine, cervical, vulvar and vaginal

Learning Objectives:
75% time in clinic
10 % time in conferences
25 % time for reading

Learning Activities:

Notes: elizabeth_geller@med.unc.edu
Coordinator: Kim Marks Phone: 843-4927 Contact: Email: kim_marks@med.unc.edu
Advanced Practice Selective in Pediatric Infectious Disease
APSM 404-01

Faculty:
Tom Belhorn, MD, PhD, Rick Hobbs, MD, Departmental Rep;

Prerequisites:
Completion of Third Year

Offered:
All Blocks

Min. Enrollment:
2

Max. Enrollment:

Duration:
One Elective Period

Meeting Times:
TBA

Credit Hours:
6

Meeting Place:
2242 Genome Sciences, CB#7231
250 Bell Tower Dr.
Chapel Hill, NC 27599-7231

Clinical Goals: What will student be able to do as a result of this rotation?
1. Through experience in both basic and applied aspects of childhood infectious diseases, the student will increase his/her proficiency in recognizing the clinical manifestations of such infections.
2. Students will be able to discuss a) the etiologic agents themselves of pediatric infectious diseases; b) the disease epidemiology, and c) the appropriate use of diagnostic testing and treatment.
3. Students will be able to counsel parents on the prevention of both common and unusual infections in children.

Learning Objectives:
Structure of rotation:
20% time in clinic
10% time in conferences
70% of time in other settings (please specify): inpatient rounds, inpatient consults, micro lab

Learning Activities:

Notes:
Contacts: Email-
Additional Support: jennykaselak@med.unc.edu
Phone: 919-966-3172
Advanced Practice Selective in Pediatric Cardiology  
APSM 404-02  

**Faculty:**  
Dr. Jennifer Whitham  

**Prerequisites:**  
Completion of Pediatrics Clerkship  

**Offered:**  
This experience is offered with permission of the course director only. Interested students should contact jennykaselak@med.unc.edu  

**Min. Enrollment:**  
1  

**Max. Enrollment:**  
One Elective Period  

**Duration:**  
TBA  

**Meeting Times:**  
TBA  

**Credit Hours:**  
6  

**Meeting Place:**  
TBA  

**Clinical Goals:** What will student be able to do as a result of this rotation?  
Understand the anatomy and physiology of common pediatric congenital heart defects  
Be proficient in physical diagnosis as related to the cardiovascular system  
Perform a problem focused history and physical including formulating potential plan for work up and treatment  
Understand basic echocardiography  
Interpreting pediatric electrocardiograms and understand diagnosis and management of common dysrhythmias  
Gain an understanding in the differential diagnosis, work up, and management of common chief complaints, such as, chest pain, syncope, palpitations, and high blood pressure  

**Learning Objectives:**  
- Structure of rotation:  
  - 50% time in clinic  
  - 10 % time in conferences  
  - 40 % of time in other settings (please specify): inpatient rounds, cath lab, echo lab  

**Learning Activities:**  
- Primarily outpatient elective, however observation in the cath lab, EP lab, Exercise lab, and OR are available if desired as scheduling permits. Outpatient clinic experiences may take place at UNC, Raleigh, Cary, and Greensboro. There are no call requirements. Every Monday afternoon the student will attend the weekly pre-surgical cardiac conference. Although not required, there is also opportunity to observe inpatient rounds.  

**Evaluation:** (How student will be evaluated e.g., observed administering procedures, interviewing patients, presentation at case conference, participation in rounds, patient write-ups)  
The student will be evaluated on his/her proficiency in organizing clinical presentations, cardiovascular physical diagnosis skills, chest x-ray, and echocardiography interpretations skills and participation in clinics  

**Notes:**  
Jenny Kaselak (jennykaselak@med.unc.edu) will contact assigned students prior to the start of the rotation.
Advanced Practice Selective in Pediatric Pulmonary
APSM 404-04

Faculty:
Elisabeth Dellon, MD, Pediatric Pulmonary, Rick Hobbs, MD, Departmental Rep; Suzanne Record, Staff

Prerequisites:
Completion of Third Year

Offered:
All Blocks

Min. Enrollment:
1

Max. Enrollment:

Duration:
One Elective Block

Meeting Times:
TBA

Credit Hours:
6

Meeting Place:
TBA

Clinical Goals: What will student be able to do as a result of this rotation?
1. Develop skills in obtaining a history and performing a physical examination focused on the pulmonary system.
2. Demonstrate proficiency in basic interpretation of tests of lung function, chest imaging, and sweat testing.
3. Discuss with an attending the following pulmonary disorders including cystic fibrosis, asthma, upper airway obstruction, pneumonia, GE reflux-associated lung problems, structural lower airway abnormalities, foreign body aspiration and immune dysfunction.

Learning Objectives:
50 % time in clinic
20 % time in conferences
30 % of time in other settings (please specify): inpatient rounds and consults, PFT lab, sweat test lab, bronchoscopy

Learning Activities:

Notes:

Contacts: Email
Support: jennykaselak@med.unc.edu
Phone: 919-966-3172
Advanced Practice Selective in Pediatric Hematology/Oncology
APSM 404-05

Faculty:
Stuart Gold, MD, Pediatric Hematology/Oncology

Prerequisites:
Completion of Third Year

Offered:
This experience is offered with permission of the course director only. Interested students should contact Richard.Hobbs@unchealth.unc.edu

Min. Enrollment:
1

Max. Enrollment:

Duration:
One Elective Period

Meeting Times:
TBA

Credit Hours:
6

Meeting Place:
TBA

Clinical Goals: What will student be able to do as a result of this rotation?
1. Recognize the signs and symptoms of common childhood and adolescent blood disorders (anemia, neutropenia, thrombocytopenia, coagulopathies, hemoglobinopathies)
2. Recognize the signs and symptoms of childhood and adolescent cancer.
3. Know the side effects and mechanism of action of the common chemotherapies.
4. Demonstrate the ability to interpret a complete blood count, PT, PTT, and relate abnormalities to specific disease processes.
5. Demonstrate the ability to manage common emergencies such as fever/neutropenia, blood product transfusions.
6. Understand the concept of the Cooperative Childhood Cancer Groups and the need to refer patients for care in tertiary centers.
7. Demonstrate competence and/or understanding of procedures and skills: venipuncture, establishment of emergent IV access, handling of central lines, basic evaluation of peripheral blood smears, working with a multidisciplinary team.
8. Develop an ability to speak with patients with cancer and their families.
9. Understand the approach to the long-term survivor of childhood cancer and the role of the generalist in that process.
10. Become familiar with research opportunities in the field, at UNC, and elsewhere.

Learning Objectives:
Structure of rotation
50 % time in clinical
10 % time in conferences
40 % of time in other settings (please specify): in-patient rounds

Learning Activities:

Notes:

Contacts: Email
Support: jennykaselak@med.unc.edu
Phone: 919-966-3172
Advanced Practice Selective in Pediatric Nephrology
APSM 404-06

Faculty:
Keisha Gibson, MD, Pediatric Nephrology, Rick Hobbs, MD, Departmental Rep

Prerequisites:
Completion of Third Year

Offered:
All Blocks

Min. Enrollment:
1

Max. Enrollment:

Duration:
One Elective Period

Meeting Times:
TBA

Credit Hours:
6

Meeting Place:
TBA

Clinical Goals: What will student be able to do as a result of this rotation?
1. Perform and interpret urinalysis.
2. Describe the etiology of hypertension in children.
3. Evaluate and treat hypertension in children.
4. Develop a differential diagnosis for acute and chronic glomerulopathies.
5. Describe tubular/acid-based disorders and fluid and electrolyte management.
7. Estimate kidney function in children and develop an approach to acute kidney injury.

Learning Objectives:
Structure of rotation
50 % time in clinic
20 % time in conferences
30 % of time in other settings (please specify): inpatient rounds and consults, renal biopsies

Learning Activities:

Notes:

Contacts: Email:
Support: jennykaselak@med.unc.edu
Phone: 919-966-3172
Advanced Practice Selective in Pediatric Gastroenterology
APSM 404-07

Faculty:
Steven Lichtman, MD, Peds GI, Rick Hobbs, MD, Departmental Rep

Prerequisites:
Completion of Third Year

Offered:
All Blocks

Min. Enrollment:
1 (coordinate with PEDS 445)

Max. Enrollment:

Duration:
One Elective Period

Meeting Times:
TBA

Credit Hours:
6

Meeting Place:
TBA

Clinical Goals: What will student be able to do as a result of this rotation?
1. Describe the basics of pediatric gastroenterology and liver disease (hepatology).
2. Recognize common pediatric gastroenterology and liver disorders in children.
3. Diagnose gastroenterology and liver disorders in children.
4. Use laboratory tests appropriately in evaluating gastroenterology and liver disorders.
5. Manage common gastroenterology and liver disorders.

Learning Objectives:
Structure of rotation
50 % time in clinic
20 % time in conferences
30 % of time in other settings (please specify): inpatient rounds and consults

Learning Activities:

Notes:

Contacts: Email:
Support: jennykaselak@med.unc.edu
Phone: 919-966-3172
Advanced Practice Selective in Pediatric Emergency Medicine
APSM 404-08

Faculty:
William Mills, MD, Pediatric Emergency Medicine, Rick Hobbs, MD, Departmental Rep;

Prerequisites:
Completion of Third Year

Offered:
All Blocks

Min. Enrollment:
1

Max. Enrollment:

Duration:
One Elective Period

Meeting Times:
TBA

Credit Hours:
6

Meeting Place:
TBA

Clinical Goals: What will student be able to do as a result of this rotation?
1. Take a history and appropriately examine a pediatric patient who presents for acute care.
2. Generate a differential diagnosis and initial management plan for common pediatric acute illnesses.
3. Develop skills at judging severity of illness in the pediatric patient.
4. As appropriate, develop skills of routine procedures in evaluation of children with acute illness or injury, such as obtaining throat cultures, obtaining blood or urine specimens, suturing, splinting, reading radiographs, etc.

Learning Objectives:
Structure of rotation
90 % time in clinic
10 % time in conferences

Learning Activities:

Notes:

Contacts: Email: william_mills@med.unc.edu; Richard.Hobbs@unchealth.unc.edu; JennyKaselak@med.unc.edu

Support: jennykaselak@med.unc.edu  Phone: 919-966-3172

Students require access to the Epic Emergency Department environment at UNC (EMERG DEPT UNCH). Please contact Jenny Kaselak (JennyKaselak@med.unc.edu) a month before your rotation to obtain access.
Advanced Practice Selective in Genetics at Carolinas Medical Center, Charlotte, NC
APSM 404-09

Faculty:
Ed Spence, MD, Genetics at CMC, Rick Hobbs, MD, Departmental Rep;

Prerequisites:
Completion of Third Year

Offered:
All Blocks

Min. Enrollment:
1

Max. Enrollment:

Duration:
One Elective Period

Meeting Times:
TBA

Credit Hours:
6

Meeting Place:
TBA

Clinical Goals: What will student be able to do as a result of this rotation?
1. recognize clinical genetic disorders and initiate the evaluation of such patients with appropriate patient medical history and family history
2. order appropriate lab tests
3. make appropriate referrals
4. demonstrate the basics of genetic counseling
5. demonstrate how to perform a basic genetic evaluation including chromosome analysis and genetic lab tests available
6. demonstrate how to obtain a three generation pedigree and appropriate family history.

Learning Objectives:
Structure of rotation
70 % time in clinic
20 % time in conferences
10 % of time in other settings (please specify): inpatient rounds and consults

Learning Activities:

Notes:
Contacts: Email: kathy.adams@carolinashealthcare.org; Richard.Hobbs@unchealth.unc.edu; edward.spence@carolinashealthcare.org
Phone: (704) 381-6804 or 919-966-3172
Advanced Practice Selective in Pediatric Infectious Diseases at Levine Children's Hospital, Charlotte, NC
APSM 404-10

Faculty:
David Rupar, MD, Rick Hobbs, MD, Departmental Rep

Prerequisites:
Completion of Third Year

Offered:
Periods All Blocks

Min. Enrollment: 1
Max. Enrollment: 1

Duration:
One Elective Period

Meeting Times:
TBA

Credit Hours:
6

Meeting Place:
TBA

Clinical Goals: What will student be able to do as a result of this rotation?
1. Demonstrate advanced history taking and physical diagnosis skills in the field of pediatric infectious disease
2. Demonstrate proficiency in answering focused clinical questions by using the medical literature.

Learning Objectives:
30 % time in clinic
10 % time in conferences
time in other settings (please specify): Inpatient consultation service 50% ; Independent reading 10%

Learning Activities:

Notes:

Contacts: Email: kathy.adams@carolinashealthcare.org; Richard.Hobbs@unchealth.unc.edu
Phone: 704.381.6800
Advanced Practice Selective in Pediatric Cardiology in Charlotte, NC
APSM 404-11

Faculty:
Donald Riopel, MD, Pediatric Cardiology in Charlotte, Rick Hobbs, MD, Departmental Rep;
Prerequisites:
Completion of Third Year
Offered:
All Blocks
Min. Enrollment:
Max. Enrollment: 1
Duration:
One Elective Period
Meeting Times:
TBA
Credit Hours:
6
Meeting Place:
TBA
Clinical Goals: What will student be able to do as a result of this rotation?
1. Discuss the anatomy and physiology of pediatric cardiac problems
2. Identify pathological and innocent murmurs in patients
3. Discuss with parents preventative cardiology
4. Interpret pediatric EKG's and dysrhythmias
The student may also become acquainted with the care of critically ill children in an intensive care setting if he/she wishes.

Learning Objectives:
Structure of rotation
60 % time in clinic
10 % time in conferences
30 % of time in other settings (please specify): inpatient rounds, cath lab, echo lab

Learning Activities:

Notes:
Contacts: kathy.adams@carolinashealthcare.org, Richard.Hobbs@unchealth.unc.edu
Phone: 919-966-3172 or (704) 381-6804
Advanced Practice Selective in the Science and Clinical Management of Common Hemoglobinopathies

APSM 404-12

Faculty:
Rupa Redding-Lallinger, MD, Heme/Onc, Rick Hobbs, MD, Departmental Rep;

Prerequisites:
Completion of Third Year

Offered:
1. 3-8, 10-13

Min. Enrollment:
2

Max. Enrollment:

Duration:
One Elective Period

Meeting Times:
TBA

Credit Hours:
6

Meeting Place:
TBA

Clinical Goals: What will student be able to do as a result of this rotation?
1. Describe the pathophysiology of sickle cell disease as it is now understood.
2. Make an accurate diagnosis of the various sickle cell syndrome.
3. Recognize the common acute and chronic complications of sickle cell disease as seen in the outpatient clinic, ED and inpatient setting.
4. Develop a management plan for the common complications of sickle cell disease, as well as preventive therapies.
5. Describe how the impact of race and culture affect care of this population of patients.

Learning Objectives:
50 % time in clinic
10 % time in conferences
10% time working on case report or other investigation.
10% of time in other settings (please specify): inpatient rounds

Learning Activities:

Notes:

Contacts: Email: rredding@med.unc.edu; Richard.Hobbs@unchealth.unc.edu
Advanced Practice Selective Genetics and Metabolism
APSM 404-13

Faculty:
Cindy Powell, MD, Genetics, Rick Hobbs, MD, Departmental Rep;

Prerequisites:
Completion of Third Year

Offered:
Periods 5-11, 13

Min. Enrollment:
1

Max. Enrollment:

Duration:
One Elective Period

Meeting Times:
TBA

Credit Hours:
6

Meeting Place:
Carolina Medical Center Behavioral Health

Clinical Goals: What will student be able to do as a result of this rotation?
1. Review basic principles of medical genetics and integrate this knowledge into medical practice.
2. Diagnose and manage individuals with a variety of genetic disorders, including common conditions such as Down Syndrome and PKU.
3. Apply practical applications of the new information being provided by the Human Genome Project.
4. Explain complex genetic concepts to patients and their families.
5. Select appropriate genetic tests and demonstrate correct interpretation of them.
6. Demonstrate an understanding of ethical issues raised by new advances in genetic testing and knowledge.
7. Use library and web-based resources appropriately in medical genetics.

Learning Objectives:
Structure of rotation
70 % time in clinic
20 % time in conferences
10 % of time in other settings (please specify): inpatient rounds and consults

Learning Activities:

Notes:

Contacts: Email: powellcm@med.unc.edu; Richard.Hobbs@unchealth.unc.edu; bljohnso@med.unc.edu
Phone: 919-966-3172

Support: bljohnso@med.unc.edu

Instructions for - Genetics and Metabolism Rotation
The student should report to Med School Wing E, room 117, at 8:30 on the first day of rotation. If Dr. Powell is available, she will meet with the student when they arrive. The student will also meet with Becky Johnson, Administrative Assistant for Genetics, to be assigned a desk/computer if one is available. If the student is beginning on a Monday, he/she should come to the 8:30 Metabolism and General Genetics preclinic conferences. If the student is beginning on a Tuesday and Dr. Powell is at a satellite clinic, the student should find out from the office staff who the attending is for metabolism, contact the attending and plan to attend inpatient metabolism rounds. All Pediatric Genetics and Metabolism Clinics are held in the NC Children’s Hospital Ground floor specialty clinic area unless otherwise indicated. The weekly schedule is below.
<table>
<thead>
<tr>
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<th>Mon</th>
<th>Tue</th>
<th>Wed</th>
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<tbody>
<tr>
<td><strong>AM</strong></td>
<td>8:30-10:30 Pre-clinic work conference – rm 133 Med Wing E Inpatient consults</td>
<td>Genetics Satellite Clinic (Lumberton, Raleigh) schedule varies 9:30-10:30 3rd Tuesday Cytogenetics Seminar, AP Conf Rm</td>
<td>Pediatric Genetics and Metabolism Clinic (Ground floor NC Children’s Hospital, Peds Specialty Clinic)</td>
<td>8:00 – Pediatric, Grand Rounds or M&amp;M Conference Pediatric Genetics and Metabolism Clinic</td>
<td>Pediatric Genetics and Metabolism Clinic Raleigh/Rex Genetics Clinic (varies)</td>
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<tr>
<td><strong>PM</strong></td>
<td>Inpatient consults 4:00 – Maternal and Infant Health Perinatal Care Conference, Currier-Denny conference room</td>
<td>12:30 - Craniofacial Center Case Conference (optional) Inpatient consults</td>
<td>Pediatric Genetics and Metabolism Clinic</td>
<td>2:30 - Current Topics in Medical and Human Genetics AP Conference Room/ 3rd floor WH</td>
<td>12N - Curriculum in Genetics and Molecular Biology Seminar (Sept-May) – G202 MBRB Pediatric Genetics Clinic</td>
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<tr>
<td><strong>OTHER</strong></td>
<td>11:12 – 4th Tuesday Molecular Case Conference</td>
<td>Monthly Prader-Willi Clinic 9-12 at Center for Development and Learning</td>
<td>North Carolina Medical Genetics Association – biannual meetings</td>
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Underlined conferences are recommended for the student. The student should plan to attend all UNC-based clinics.

Weekly schedule available in Room 117, Medical School Wing E

Office Phone number: 966-4202  Please leave pager/contact info with Becky or Denita in office
Advanced Practice Selective in Pediatric Neurology
APSM 404-15

Faculty:
Robert Greenwood, MD, Pediatric Neurology, Rick Hobbs, MD, Departmental Rep;

Prerequisites:
Completion of Third Year

Offered:
1, 2, 4-13

Min. Enrollment:
3

Max. Enrollment:

Duration:
One Elective Period

Meeting Times:
TBA

Credit Hours:
6

Meeting Place:
TBA

Clinical Goals: What will student be able to do as a result of this rotation?
1. Perform a neurological examination on children and infants.
2. Demonstrate techniques to localize neurological problems.
3. Describe and identify normal developmental milestones.
4. Diagnose and treat some of the common neurological problems including: headaches, seizure, attention, deficit disorders, developmental delay, and cerebral palsy and common movement disorders.
5. Demonstrate how to how to find information rapidly and efficiently using computer techniques.
6. Demonstrate when and how to order laboratory tests used in Child Neurology and how to interpret them.

Learning Objectives:
Structure of rotation
50% time in clinic
10% time in conferences
40% of time in other settings (please specify): inpatient rounds

Learning Activities:

Notes:

Contacts: Email: greenwor@neurology.unc.edu; Richard.Hobbs@unchealth.unc.edu;
Staff: bfallen@ad.unc.edu; mmegan@neurology.unc.edu
Phone: (919) 966-8160
Advanced Practice Selective in Med/Peds Endocrinology
APSM 404-16

Faculty:
Deepa Kirk, Endocrinology, Ali Calikoglu, MD, Rick Hobbs, MD, Departmental Rep

Prerequisites:
Completion of Third Year

Offered:
Periods 2-5, 7-13

Min. Enrollment:
1 (to be coordinated with MEDI 412 and PEDS 412)

Max. Enrollment:

Duration:
One Elective Period

Meeting Times:
TBA

Credit Hours:
6

Meeting Place:
TBA

Clinical Goals: What will student be able to do as a result of this rotation?
1. Describe the basics of endocrine physiology.
2. Identify endocrine disorders in patients.
3. Develop diagnosis of endocrine disorders based on histories and physical exams.
4. Describe which laboratory tests to use to evaluate and manage endocrine disorders.
5. Develop a management plan for common endocrine disorders, especially diabetes mellitus.

Learning Objectives:
Structure of rotation
70% time in clinic
20 % time in conferences
10 % of time in other settings (please specify): inpatient rounds

Evaluation
Student evaluations will be based on: a) skills in interviewing patients, doing physical exams, and evaluation clinical and laboratory data, b) participation in problem solving exercises, c) presentations and case conferences, d) patient write-ups, and e) participation on rounds.

Learning Activities:

Notes:

Contacts
Contacts: Email: d.kirk@med.unc.edu; ali_calikoglu@med.unc.edu; Phone: 919-966-3172. Students are responsible for their own transportation. Pediatric clinics are held in the Pediatric Subspecialty Outpatient Center II area on the ground floor of the Children's Hospital in Chapel Hill. Medicine clinics are held off-campus at 300 Meadowmont Village Circle, Chapel Hill, NC.
Advanced Practice Selective in Child and Adolescent Psychiatry
APSM 405-04

Faculty:
Nadia Charguia, Erin Malloy, Nichole Grier, & Jennifer Richards

Prerequisites:
Completion of Third Year

Offered:
1-3, 5-9, 11-13

Min. Enrollment:
Max. Enrollment: 1 (or permission from nadia_charguia@med.unc.edu)

Duration:
One Elective Period

Meeting Times:
TBA

Credit Hours:
6

Meeting Place:
UNC Dept of Psychiatry
Campus Box 7160
Chapel Hill, NC 27599-7160

Special Note: Students should contact Dr. Nadia Charguia at nadia_charguia@med.unc.edu at least two weeks prior to the start of their elective in order to discuss goals to maximize the possibility of an individualized experience.

In order to have access to the psychiatry inpatient units in Neurosciences, we will need your name as it appears on your official ID badge and the numbers on the back of the badge at least 7 days prior to your start date for the rotation.

You will need to swipe your badge for access. We will need a week’s notice for the security people to have your badges in the system.

Please check your schedule and make a note to send your ID badge information to myra_daniel@med.unc.edu at least one week prior to the start date of your psychiatry APS.

Clinical Goals: What will student be able to do as a result of this rotation?

1. To develop a greater fund of knowledge in mental health disorders that impact the child/adolescent population, both in outlining and effecting diagnosis and treatment in a variety of settings
2. To develop greater awareness of the impact from biological, psychological and social factors that may present as behavioral struggles or mental health problems
3. To appreciate the complexity of ethical issues in the child and adolescent population as well as associated dynamics in clinical encounters between patients and their caretakers
4. To perform advanced interviewing skills with children and adolescents, as well as interviewing parents and gathering collateral information
5. To function as a member of the multidisciplinary team in implementing treatment plans for children and adolescents with developmental, emotional and behavioral needs
6. To use community resources effectively in treatment plans for patients and have the opportunity to experience a variety of community models

Learning Objectives:
Structure of rotation:
30% time in clinic
20 % time in conferences
50 % of time in inpatient or other clinical specialty venues: TBA

Learning Activities:

Notes:
Please send myra_daniel@med.unc.edu your hospital ID badge name and numbers SEVERAL DAYS IN ADVANCE so that you can get security clearance BEFORE you start.

Contacts: Primary Preceptor email: Nadia_charguia@med.unc.edu
Secondary Preceptor email: nichole_grier@med.unc.edu; jennifer_richards@med.unc.edu; erin_malloy@med.unc.edu
Support: myra_daniel@med.unc.edu; kimberly_infante@med.unc.edu
Phone: 919-962-9799
Advanced Practice Selective in Emergency Psychiatry - Carolinas Medical Center, Charlotte, NC
APSM 405-06

Faculty:
Wayne Sparks, et al

Prerequisites:
Completion of Third Year

Offered:
Periods 1, 3, 5, 7, 9, 11

Min. Enrollment:
1

Max. Enrollment:

Duration:
One Elective Period

Meeting Times:
TBA

Credit Hours:
6

Meeting Place:
TBA

Clinical Goals: What will student be able to do as a result of this rotation?
1. Evaluate and treat psychiatric patients in crisis.
2. Improve interviewing skills. The patient population ranges from pre-school to geriatric, from every socioeconomic background, with wide range of psychiatric concerns
3. Participate in delivery of evaluation and care via telepsychiatry.
4. Provide greater educational continuity and "closure" by following their patients' care in the 24-hour emergency room observation unit and/or if admitted to our hospital on the inpatient units and/or in the crisis stabilization unit.
5. Describe the acute psychiatric needs in the Charlotte community and assess how effectively community-based systems (acute medical hospitals/ERs, shelters, substance abuse facilities, churches, jails, etc.) are meeting them.

Learning Objectives:
Student will work with emergency room psychiatrists in the 24-hour Emergency Department at Carolinas Medical Center: Randolph.

Learning Activities:

Notes:

Contacts: email: lmundle@carolinashealthcare.org, helen.womack@carolinashealthcare.org
Phone: (704) 358-2888
Advanced Practice Selective in Child Psychiatry - Carolinas Medical Center, Charlotte, NC
APSM 405-07

Faculty:
David Lelio, et al

Prerequisites:
Completion of Third Year

Offered:
Periods 1, 3, 5, 7, 9, 11

Min. Enrollment:
1

Max. Enrollment:

Duration:
One Elective Period

Meeting Times:
TBA

Credit Hours:
6

Meeting Place:
TBA

Learning Objectives:
To more effectively evaluate and treat psychiatric disorders in children and adolescents.

Learning Activities:
Students will work in the child and adolescent inpatient unit, partial hospital program, outpatient clinics, the public schools, the pediatric (medical) hospital, Teen Health and/or our very busy psychiatric emergency room.

Notes:

Contacts: email: lmundle@carolinas.org, helen.womack@carolinashealthcare.org
Phone: (704) 358-2888
Advanced Practice Selective in Emergency Psychiatry in Chapel Hill
APSM 405-08

Faculty:
Julia Knerr, MD

Prerequisites:
Completion of all clinical clerkships

Offered:
All Blocks

Min. Enrollment:
1

Max. Enrollment:

Duration:
One month

Meeting Times:
TBA

Credit Hours:
6

Meeting Place:
TBA

Clinical Goals
1. Evaluate and treat psychiatric patients in crisis.
2. Improve interviewing skills in a diverse patient population with a wide array of psychiatric concerns.
3. Enhance educational continuity by following patients’ care in the emergency room and/or, if admitted to our hospital, on the inpatient units.
4. Describe the acute psychiatric needs in the Chapel Hill/Carrboro community and assess how effectively community-based systems (acute medical hospitals/ERs, shelters, substance abuse facilities, churches, jails, etc.) are meeting them.
5. Use community resources effectively in treatment plans for patients.

Learning Objectives:

Structure of rotation:
Student will spend 95-98% in the Emergency Room or The Walk-in-Clinic

Amount of time in conferences: 2 to 5%

Amount of time in other settings: Student may do some limited follow up on the inpatient units if desired.

Learning Activities:

Notes:
Please send myra_daniel@med.unc.edu your hospital ID badge name and numbers SEVERAL DAYS IN ADVANCE so that you can get security clearance BEFORE you start.
Email: myra_daniel@med.unc.edu; kimberly_infante@med.unc.edu
Phone: (919) 966-7791
Advanced Practice Selective in Inpatient Adult Psychiatry, Carolinas Medical Center, Charlotte NC
APSM 405-10

Faculty:
Manuel Castro MD; David Lelio MD, et al

Prerequisites:
Completion of Third Year

Offered:
Periods 1, 3, 5, 7, 9, 11

Min. Enrollment:
1

Max. Enrollment:

Duration:
One Elective Period

Meeting Times:
8am

Credit Hours:
6

Meeting Place:
Carolinas Medical Center Out-Patient Medication Services

Learning Objectives:

Clinical Goals: What will student be able to do as a result of this rotation?
Student will enhance interviewing, oral presentation and documentation skills.
Student will develop greater competency in assessing, diagnosing and co-operatively planning treatment with patients in the outpatient setting.
Student will hone (and test) patient communication skills.
Student will learn to function effectively as part of a multidisciplinary team.
Student will develop an awareness of the ethical and legal issues sometimes involved in outpatient psychiatric care.

Learning Activities:
Under the supervision of attending physician, students will assess patients (adults and/or children and special populations) in a variety of outpatient clinics/settings.
Students will observe group therapies and, with permission, may observe individual psychotherapy.
Students will visit private practitioners in their offices and discuss private practice.
Students will attend Grand Rounds and other educational offerings.
For interested students, there will be opportunity to expand their knowledge of substance abuse disorders.
At the discretion of the student and attending, the student may research and present a topic of shared interest to the treatment team.
There is no on-call requirement, but students are encouraged to spend time evaluating patients in crisis in the psychiatric emergency department.

Evaluation:
Student will be observed interviewing patients.
Student documentation will be reviewed and critiqued.
Student will receive on-going, real-time feedback on their performance.
Final evaluation will be completed by the attending physician who has worked most closely with the student.
The attending will consult with other members of the team who have first-hand knowledge of the student’s work.

Notes:
Contact Linda Mundle MD (lundle@carolinashealthcare.org) one month prior to the start of the elective to confirm arrangements.
Advanced Practice Selective in Inpatient Child Psychiatry, Carolinas Medical Center, Charlotte NC
APSM 405-11

Faculty:
David Lelio MD, et. al.

Prerequisites:
Completion of Third Year

Offered:
Periods 1, 3, 5, 7, 9, 11

Min. Enrollment:
1

Max. Enrollment:

Duration:
One Elective Period

Meeting Times:
8am

Credit Hours:
6

Meeting Place:
Carolinas Medical Center Child and Adolescent Inpatient Unit

Learning Objectives:

Clinical Goals: What will student be able to do as a result of this rotation?
Student will gain skills and confidence in the medical and psychiatric evaluation and treatment of acutely ill hospitalized children and adolescents.
Student, in consultation with supervising attending, will take the lead in planning and providing treatment.
Student will learn to function effectively as part of a multidisciplinary team.
Student will develop an awareness of the complex ethical and legal issues inherent in child and adolescent psychiatry.

Learning Activities:
Student will be team leaders for 3-4 hospitalized patients and will function as an intern under the direct supervision of attending physicians.
Student will follow patients closely and present patients on rounds and in team meetings.
Students will be involved in all aspects of patient care including medical and psychiatric evaluation and treatment, individual and group therapy, school, recreation, family meetings and discharge planning.
Student will attend Grand Rounds and other educational offerings.
At the discretion of the student and attending, the student may research and present a topic of shared interest to the treatment team.
There is no on-call requirement, but student will be welcome to work with physicians evaluating children in the psychiatric emergency room.

Evaluation:
Student will be observed interviewing patients and participating in patient care.
Student documentation will be reviewed and critiqued.
Students will receive on-going, real-time feedback on their performance.
Final evaluation will be completed by the attending physician who has worked most closely with the student.
The attending will consult with other members of the team who have first-hand knowledge of the student’s work.

Notes:
Contact Linda Mundle MD (lmundle@carolinashealthcare.org) one month prior to the start of the elective to confirm arrangements.
Advanced Practice Selective in Consultation Psychiatry, Carolinas Healthcare System, Charlotte NC
APSM 405-12

Faculty:
Jay Yeomans MD, Justin Johnson MD, David Lelio MD, et. al.

Prerequisites:
Completion of Third Year

Offered:
Periods 1, 3, 5, 7, 9, 11 - Contact Linda Mundle MD (lmundle@carolinashealthcare.org) to confirm.

Min. Enrollment:
1

Max. Enrollment:

Duration:
One Elective Period

Meeting Times:
Carolinas Medical Center – 6B, 8:30am.

Credit Hours:
6

Meeting Place:

Learning Objectives:

Clinical Goals: What will student be able to do as a result of this rotation?
Under the supervision of attending physicians, student will learn to recognize and manage the psychological and psychiatric conditions which complicate the treatment of medical and surgical illness in the acute-care hospital.
Adults and children, with major psychiatric disorders, adjustment disorders, “psychosomatic” illnesses and organic brain syndromes are assessed and treated in concert with medical and surgical teams.
Student will learn to function effectively as part of a multidisciplinary team.
Student will develop an awareness of the ethical and legal issues often involved with consult psychiatry.

Learning Activities:
Attending physicians and the consult/liaison team will closely supervise students as they assess patients and provide clinical care in the acute care hospital setting.
Students will attend daily rounds and present their patients to the team.
Students will attend Grand Rounds and other educational conferences suggested by their attending.
Students are required to make at least one presentation on a topic of shared interest and/or a clinical case report to the consult team.
Students will be based in the general hospital(s), but if the student expresses special interest, opportunities to evaluate patients in outpatient specialty clinics or in the general hospital emergency room may be provided.

Evaluation:
Student will be observed interviewing patients and participating in patient care.
Student documentation will be reviewed and critiqued.
Students will receive on-going, real-time feedback on their performance throughout the elective.
Final evaluation will be completed by the attending physician who has worked most closely with the student.
The attending will consult with other members of the team who have first-hand knowledge of the student’s work.

Notes:
Contact Linda Mundle MD (lmundle@carolinashealthcare.org) one month prior to the start of the elective to confirm arrangements.
Advanced Practice Selective in Community-based Care of the Severely Mentally Ill, Carolinas Medical Center, Charlotte NC
APSM 405-13

Faculty:
Bruce Noll MD, et. al.

Prerequisites:
Completion of Third Year

Offered:
Periods 1, 3, 5, 7, 9, 11

Min. Enrollment:
1

Max. Enrollment:

Duration:
One Elective Period

Meeting Times:
Carolinas Medical Center: Randolph – Cottage A,

Credit Hours:
6

Meeting Place:

Learning Objectives:

Clinical Goals: What will student be able to do as a result of this rotation?
Under the supervision of attending physician, and working side-by-side with psychiatric nurses and case managers, student will comprehensively assess the multiple needs of patients with severe mental illness. Student will learn to function effectively as part of a multidisciplinary team. Student will become well-grounded in the biopsychosocial model. Student will refine their interviewing, documentation and presentation skills. Student will become more knowledgeable about substance abuse and addiction. Student will develop an awareness of the ethical and legal issues sometimes involved in caring for severely mentally ill individuals.

Learning Activities:
Attending physicians will supervise the student as the student works/visits different sites where care is provided to severely mentally ill individuals. The student will see patients, individually and in groups, in an outpatient clinic devoted to caring for severely mentally ill patients, many of whom struggle with co-morbid substance-abuse. Students will assist in patient care the Crisis Stabilization Unit. The student may go into the community with the Assertive Community Treatment Team, working with nurses and case managers who provide psychiatric treatment in situ. And, in the company of attending physician, student may participate in care for patients at a residential-based clinic serving the chronically homeless mentally ill. At the student’s request, arrangements can be made to visit local substance-abuse treatment facilities. At the discretion of the student and attending, the student may research a topic of shared interest and present to the treatment team.

Evaluation:
Student will be observed interviewing patients and participating in patient care. Student documentation will be reviewed and critiqued. Student will receive on-going, real-time feedback on their performance throughout the elective. Final evaluation will be completed by the attending physician who as worked most closely with the student. The attending will consult with other members of the team who have first-hand knowledge of the student’s work.

Notes:
Contact Linda Mundle MD (lmundle@carolinashealthcare.org) one month prior to the start of the elective to confirm arrangements.
Advanced Practice Selective in Emergency Room Psychiatry, Carolinas Medical Center, Charlotte NC
APSM 405-14

Faculty:
Wayne Sparks MD, et. al.

Prerequisites:
Completion of Third Year

Offered:
Periods 1, 3, 5, 7, 9, 11

Min. Enrollment:
1

Max. Enrollment:

Duration:
One Elective Period

Meeting Times:
Carolinas Medical Center: Randolph Emergency Room, 8am.

Credit Hours:
6

Meeting Place:
Carolinas Medical Center Behavioral Health

Learning Objectives:

Clinical Goals: What will student be able to do as a result of this rotation?
Student will learn to evaluate and treat psychiatric patients in crisis.
Students will learn to perform risk assessments and understand the indications for hospital admission.
Student will enhance interviewing, oral presentation and documentation skills.
Student will expand their knowledge of substance abuse assessment and detoxification.
Student will learn to work effectively as part of the multidisciplinary emergency department team.
Student will develop an awareness of the ethical and legal issues inherent in emergency psychiatry.
Student will develop appreciation for the acute psychiatric needs in our community, within our hospital system and throughout our region and state.
Students will work in the child and adolescent inpatient unit, partial hospital program, outpatient clinics, the public schools, the pediatric (medical) hospital, Teen Health and/or our very busy psychiatric emergency room.

Learning Activities:
Under the supervision of attending physicians, student will assess patients (adults and children) in the psychiatric emergency departments at CMC:Randolph and at CMC:Main.
Student will participate in telemedicine consultations provided by emergency psychiatrists to other emergency rooms.
Student will care for patients admitted for observation.
At the discretion of student and attending, the student may follow their patients admitted to the Crisis Stabilization or inpatient units.
Also at the discretion of the student and attending, the student may research and present a topic of shared interest to the treatment team.
Student will attend Grand Rounds and other educational offerings.

Evaluation:
Student will be observed interviewing patients.
Student documentation will be reviewed and critiqued.
Student will receive on-going performance feedback.
Final evaluation will be completed by the attending physician(s) who have worked most closely with the student, in consultation with other members of the team with first-hand knowledge of the student's work.

Notes:
Contact Linda Mundle MD (lmundle@carolinashealthcare.org) one month prior to the start of the elective to confirm arrangements.
Advanced Practice Selective in Outpatient Psychiatry, Adults and/or Children and Adolescents, Carolinas Medical Center, Charlotte NC
APSM 405-15

Faculty:
Manuel Castro, David Lelio

Prerequisites:
Completion of Third Year

Offered:
Periods 1, 3, 5, 7, 9, 11

Min. Enrollment:
1

Max. Enrollment:

Duration:
One Elective Period

Meeting Times:
8am

Credit Hours:
6

Meeting Place:
Carolinas Medical Center Out-Patient Medication Service

Learning Objectives:

Clinical Goals: What will student be able to do as a result of this rotation?
Student will enhance interviewing, oral presentation and documentation skills.
Student will develop greater competency in assessing, diagnosing and co-operatively planning treatment with patients in the outpatient setting.
Student will hone (and test) patient communication skills.
Student will learn to function effectively as part of a multidisciplinary team.
Student will develop an awareness of the ethical and legal issues sometimes involved in outpatient psychiatric care.

Learning Activities:
Under the supervision of attending physician, students will assess patients (adults and/or children and special populations) in a variety of outpatient clinics/settings.
Students will observe group therapies and, with permission, may observe individual psychotherapy.
Students will visit private practitioners in their offices and discuss private practice.
Students will attend Grand Rounds and other educational offerings.
For interested students, there will be opportunity to expand their knowledge of substance abuse disorders.
At the discretion of the student and attending, the student may research and present a topic of shared interest to the treatment team.
There is no on-call requirement, but students are encouraged to spend time evaluating patients in crisis in the psychiatric emergency department.

Evaluation:
Student will be observed interviewing patients.
Student documentation will be reviewed and critiqued.
Student will receive on-going, real-time feedback on their performance.
Final evaluation will be completed by the attending physician who has worked most closely with the student.
The attending will consult with other members of the team who have first-hand knowledge of the student’s work.

Notes:
Contact Linda Mundle MD (lmundle@carolinashealthcare.org) one month prior to the start of the elective to confirm arrangements.
Advanced Practice Selective in General Hospital/Consultation Psychiatry in Chapel Hill
APSM 405-16

Faculty:
Jonny Gerkin MD, Don Rosenstein MD, Gary Gala MD

Prerequisites: Completion of all clinical clerkships

Offered: Periods 2, 3, 12

Max. Enrollment: 1

Duration:
One month

Credit Hours: 6

Meeting Place:
101 Manning Drive, Psychiatry Clinic, Workroom 3 Ground Floor Neuroscience Hospital

Clinical Goals:

ACGME General Competency based objectives and clinical goals:

(1) Patient care – APS students will observe and provide empathic, supportive and preventive care that is compassionate, appropriate and effective. Real time supervision of at least 1 complete patient interview, ideally 2, with more frequent supervision of sophisticated treatment planning will be part of the experience. Students will be supported in providing interventions such as psychopharmacologic recommendations and basic (supportive) psychotherapy that spans various modalities.

(2) Medical knowledge – Real time supervision, cases conferences, psychosomatic medicine lecture series, and suggested readings will aid the students with developing a greater appreciation of both established and evolving biomedical, clinical, epidemiological and social-behavioral sciences while supporting the application of this knowledge to patient care.

(3) Practice-based learning and improvement – Supervision will foster insight and the incorporation of the pursuit of valid knowledge into practice. Faculty will model the ability to investigate and evaluate their care of patients. Students will practice accessing, appraising and assimilating scientific evidence as a means to continuously improve patient care based on constant self-evaluation and life-long learning.

(4) Interpersonal and communication skills – Real time supervision, cases conferences and suggested readings will foster the effective exchange of information and collaboration with patients, their families, and other health professionals.

(5) Professionalism – Accountability and moral standards are vital components of an effective psychiatric consultation service team member. Faculty, fellows and residents on our service model a commitment to carrying out professional responsibilities and adherence to ethical principles. Clinical supervision and case conferen

Structure of rotation:
Clinical/Non-Clinical (%): 70%/30% (Typically ~3 contiguous weeks on the clinical service and one week for an APS project – see APS orientation materials for more details).

Learning Activities:

1. The Advance Practice Selective (APS) student will function at the level of a junior fellow in our Psychosomatic Medicine Fellowship. They will complete direct diagnostic evaluations on at least 2 cases which includes chart reviews, collateral interviews, liaison with other teams and on-going follow up care to include monitoring of medication response and supportive psychotherapy interventions as indicated.

2. As opposed to the basic MS3 experience or the Science of Medicine elective, the Advanced Practice Selective on consult psychiatry will preferentially have the student involved in both the clinical and (at least some) administrative aspects of the service by preferentially working directly with the attending. This represents a more complex level of practice management that integrates, academic, clinical and systems levels of practice. This approach will also provide for the student to experience a greater volume of cases.

The hours are from 8:30 until the work is done (usually between 4:30 and 7:30 depending on clinical demands). There are no on-call demands. The student will be asked to carry a pager, their own if they have one, or 216-2580 can be provided to them. The resident or fellow carrying the consult service pager is instructed to involve the APS student. We expect the APS student to primarily be involved in the process of staffing cases with the attending and attending interviews. Thus the attending will ensure that the the student is aware and involved with all appropriate cases. The student can request to spend the majority of their time on either the general psychiatry consult service or the psycho-oncology consult service, but effort will be made to help them experience at least some work on the psycho-oncology service. As noted above, the student will be expected
to complete at least 2 consults independently under the direct observation of an attending during their 3 weeks of clinical work. After seeing their case, the student will present to the attending, and if appropriate a resident or fellow simultaneously. The student will be asked to schedule a ‘Professor’s hour’ each week with the director of the service to discuss a variety of matters (e.g., their APS project, clinical cases/review of clinical documentation, their progress on the rotation, bi-directional feedback, interests in psychiatry, interface of psychiatry with their specific practice interests outside of psychiatry, systems/administrative issues germane to the practice of consultation psychiatry, etc.). The APS student will be asked to present their clinical findings on one of their cases at a Friday noon C/L Case Conference (depending on the time of year as this conference runs from August through May). The student is invited to attend a psychiatry literature based course called the Papers Course on Wednesday afternoons at 4:30 (depending on the time of year as this conference runs from August through May). The student is expected to prepare for and attend Psychosomatic Medicine Fellowship Seminars on Tuesdays and Wednesdays at noon throughout the clinical aspect of their rotation as available (which depends on the time of year).

**Evaluation:**

APS students will be directly observed on at least 2 patient interviews and presentations. Direct and specific feedback through real time supervision as well as the above mentioned weekly professor’s hour meetings will include reviewing at least on full write up in detail. Documented evaluation will be completed as well.

**Notes:**

Please send myra_daniel@med.unc.edu your hospital ID badge name and numbers SEVERAL DAYS IN ADVANCE so that you can get security clearance BEFORE you start.

Email: gerkin@med.unc.edu; myra_daniel@med.unc.edu; kimberly_infante@med.unc.edu

Phone: Office: 919-843-2369; Pager: 919-216-3226
Advanced Practice Selective in Multidisciplinary Cancer Care
APSM 406-01

Faculty: Dr. Tom Egan (surgery)
Prerequisites: Completion of Third Year
Offered: All Bloks
Min. Enrollment: 1
Max. Enrollment: 4
Duration: One Elective Period
Meeting Times: TBA
Credit Hours: 6
Meeting Place: TBA

Learning Objectives:
For each area of study, students will
1. attend and participate in outpatient clinics and the associated multidisciplinary tumor board or conferences.
2. see new and follow-up patients in an outpatient setting with surgeons, medical oncologists, and radiation oncologists.
3. spend 1 day each week on each of three chosen oncology "service lines". Because interaction with radiation oncologist in multidisciplinary clinics varies among programs, and to better incorporate radiation oncology into this curriculum,
4. spend 2 - 5 days with a radiation oncologist depending on the assigned services.

NOTES:
This 4 week (20 day) Advanced Practice Selective (APS) will involve 4th year medical students in the practical aspects of multidisciplinary care for cancer. UNC has many "multidisciplinary" out-patient oncology clinics where specialists interact to provide truly multidisciplinary care to address the needs of cancer patients. Although students may be exposed to this teamwork and style of care briefly on some individual services, this APS will provide a more in depth opportunity to be involved in the multidisciplinary approach to cancer care primarily in the out-patient setting. Students will choose 3 areas of oncologic study from among 7 offered. This APS should be of interest to a broad range of students: those interested in oncology, from a medical, surgical, or radiation oncology perspective; and students planning to focus on primary care to experience firsthand how multidisciplinary care works in a tertiary care cancer center.

During this 4 week APS, students are required to complete the System Based Practice workbook and assignments. Students will participate in multidisciplinary oncologic care for 14 days, and the System Based Practice portion of the course requires 6 days - the first full day, and 5 other full days or 10 half days. Interdisciplinary teamwork (Module 1) explores how multidisciplinary care actually works. By its nature, oncology care involves the activities of different MD sub-specialists, and many other health care professionals (e.g. social workers, dieticians, physician-extenders, patient-navigators, radiation therapists, physicists, dosimetrist, chemotherapy nurses, etc). Thus, students choosing this APS will have considerable exposure to multidisciplinary care, but are of course free to concentrate on one of the other 9 modules in the workbook for the "Systems Based Practice portion" of this selective.

Students choosing this APS will select 3 areas of oncology from the list below. For the three chosen areas of study, students will attend and participate in out-patient clinics and the associated multidisciplinary tumor board or conferences. Students will see patients in an out-patient setting with surgeons, medical oncologists, and radiation oncologists. It is anticipated that approximately 1 day each week will be spent on each of three chosen oncology "service lines". Because interaction with radiation oncologist in multidisciplinary clinics varies among programs, and to better incorporate radiation oncology into this curriculum, students will spend 2 - 5 days with a radiation oncologist during the APS, depending on the assigned services. The student will identify the most appropriate mentor to provide an evaluation of their performance in the clinical portion of the course.

Students will see new and follow-up patients. Attendings will assign each student responsibilities for seeing patients and will review their work-up and plan of therapy. If an assigned mentor is out of town, he/she will enlist the assistance of a colleague to mentor the student. Each student will be allotted a short assignment about some aspect of care for each oncologic diagnosis. Assignments may require a written report or brief presentation during the appropriate multi-disciplinary conference. Grade will be determined by performance in clinic and outpatient radiation oncology (70%), and by a grade for each of the three course assignments (30%).

Students choosing this APS will rank order ALL of the choices by preference, with one being your top choice (see the chart below). Each student’s schedule will be coordinated by Dr. Tom Egan (Thoracic Surgery), based on student preferences and the number of students requesting different service exposure. It is anticipated that each service can accommodate 2 APS students at any one time and the APS course will be
offered throughout the year. Please email your preferences to Dr. Egan (thomas_egan@med.unc.edu) one month prior to the start of the course.

<table>
<thead>
<tr>
<th>Area of Oncology</th>
<th>Med Onc Preceptor</th>
<th>Surgical Preceptor</th>
<th>Rad Onc Preceptor</th>
<th>Clinic Day</th>
<th>Conference</th>
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<tbody>
<tr>
<td>Otolaryngology (ENT Oncology)</td>
<td>Hayes</td>
<td>Weissler</td>
<td>Chera</td>
<td>Mon or Wed</td>
<td>Fri 7 am</td>
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<td>Thoracic Oncology (Lung, esophagus, mediastinum)</td>
<td>Stinchcombe Weiss</td>
<td>Veeramachaneni Haithcock Feins</td>
<td>Zagar Marks</td>
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<td>Tues 730-830</td>
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<td>DeMore Amos</td>
<td>Wu Marks</td>
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<td>Calvo</td>
<td>Tepper</td>
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<td>Tepper Chen</td>
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**Notes:**
Contact: Email thomas_egan@med.unc.edu; stacey_owen@med.unc.edu
Phone: (919) 966-3381
Advanced Practice Selective in Ambulatory Surgery at Wake Medical Center
APSM 406-03

**Faculty:**
Pascal Udekwu, MD

**Prerequisites:**
Completion of Third Year

**Offered:**
Periods 7, 8, 11, 13

**Min. Enrollment:**
1

**Max. Enrollment:**

**Duration:**
One Elective Period

**Meeting Times:**
TBA

**Credit Hours:**
6

**Meeting Place:**
TBA

Clinical Goals: What will student be able to do as a result of this rotation?
1. develop differential diagnoses and a care plans for trauma, hernias, gastrointestinal, breast, endocrinological, infectious disease patients presenting to the clinic
2. demonstrate adequate proficiency in selected surgical diagnostic and therapeutic procedures
3. demonstrate appropriate follow up with patients after procedures/surgeries
4. discuss the role of rehabilitation in assisting patients recuperating from surgery
5. demonstrate adequate proficiency in wound care

**Learning Objectives:**
Structure of rotation
50 % time in clinic
50 % time in other settings (please specify): operating room

**Learning Activities:**

**Notes:**
Contact: Email: udekwu@med.unc.edu
Staff Assistant: LaDe Rogers LAROGERS@wakemed.org
ACS Department Administrative Coordinator for Surgery: Stacey Owen stacey_owen@med.unc.edu
919-966-4781
Advanced Practice Selective in General Thoracic Surgery
APSM 406-05

Faculty:
Ben Haithcock & Jason Long

Prerequisites:
Completion of Third Year

Offered:
All Blocks

Min. Enrollment:
1

Max. Enrollment:

Duration:
One Elective Period

Meeting Times:
TBA

Credit Hours:
6

Meeting Place:
TBA

Clinical Goals: What will student be able to do as a result of this rotation?
1. Explain the basic pathophysiology of thoracic conditions and
2. Discuss the key issues involved in the decision making process of thoracic surgeons in caring for patients with benign and malignant thoracic clinical problems.
3. Participate in general thoracic surgical procedures in the operating room, such as making incisions, inserting chest tubes and thoracoscopic ports

Learning Objectives:

Structure of rotation
30% time in clinic: Tuesdays
10% time in conferences: Conferences include multi-disciplinary oncology conference Tues 12- 1:30 pm; Thurs and Fri Cardiothoracic teaching conferences 7-8 am
60% of time in other settings (please specify): rounding on Thoracic Surgery in-patients, seeing consults, and participating in Thoracic OR

Learning Activities:

Notes:

Contacts:
Staff Support: tracie_wood@med.unc.edu
Phone: 966-3381
Advanced Practice Selective in Ambulatory Surgery at Wilmington
APSM 406-06

Faculty: Ellis Tinsley, MD

Prerequisites: Completion of Third Year

Offered: Periods 1-8, 10-13

Max Enrollment: 2

Max. Enrollment: 2

Duration: One Elective Period

Meeting Times: TBA

Credit Hours: 6

Meeting Place: Wilmington Surgical Associates, P.A; 1414 Medical Center Drive; Wilmington, NC 28401

Clinical Goals: What will student be able to do as a result of this rotation?
1. demonstrate knowledge of ambulatory general, vascular, endocrine, laparoscopic, and oncologic surgery in a high volume clinic
2. demonstrate adequate proficiency in selected surgical diagnostic and therapeutic procedures
3. demonstrate appropriate follow up with patients after procedures/surgeries
4. discuss the role of rehabilitation in assisting patients recuperating from surgery
5. demonstrate adequate proficiency in wound care

Learning Objectives:

Structure of rotation
50 % time in clinic
50 % time in other settings (please specify): operating room

Learning Activities:

Notes:

Contacts: stacey_owen@med.unc.edu; chupert@wilmingtonsurgical.com; mwf7373@live.com

Stacey Owen, ACS Department Administrative Coordinator for Surgery at 919-966-4781
Advanced Practice Selective in HepatoPancreaticoBiliary Surgery - Carolinas Medical Center, Charlotte, NC
APSM 406-07

Faculty:
John B. Martinie, MD

Prerequisites:
Completion of Third Year

Offered:
All Blocks

Max. Enrollment: 1

Duration:
One Elective Period

Credit Hours:
6

Meeting Place:
Carolinas Medical Center; HPB Surgery Offices; 1000 Blythe Blvd; Medical Education Building, Suite 105

Clinical Goals: What will student be able to do as a result of this rotation?
1. Develop differential diagnoses and a care plans for trauma, hernias, gastrointestinal diseases, breast, endocrinological, infectious disease patients presenting to the clinic, as well as advanced wound care for chronic non-healing wounds which will include indications for hyperbaric oxygen therapy.
2. Demonstrate adequate proficiency in selected surgical diagnostic and therapeutic procedures.
3. Demonstrate appropriate follow up with patients after procedures/surgeries.
4. Discuss the role of rehabilitation in assisting patients recuperating from surgery.
5. Demonstrate adequate proficiency in wound care.

Learning Objectives:
20 % time in clinic 10 % time on patient rounds
10 % time in conferences 40 % time in the operating room
20 % time working with additional designated physicians

Following this one-month selective, the student will have gained an in-depth understanding of the various disease processes involved with the three primary components of this area of the body: liver, pancreas, and biliary system. Of particular importance, the student will gain an appreciation for the multi-disciplinary nature of these diseases and the need for collaborative efforts among several types of specialists throughout the diagnosis, treatment and follow-up of patients with HPB diseases. The structure of the selective reflects the multi-disciplinary approach in that the student will spend a specified number of days with designated physicians in the following areas:

Endoscopic Ultrasound (EUS) and ERCP - Purpose: to observe and learn how these procedures are incorporated into the diagnosis and management of HPB diseases.

Interventional Radiology - Purpose: to observe and learn how interventional radiological techniques apply to HPB cancers and diseases. (Ex: chemoembolization, hepatic infusional therapies, etc.)

Multi-disciplinary GI Clinic - Students will be under the direct supervision of Dr. Martinie during these specialized office hours in the Blumenthal Cancer Center. The student will observe the various stages of management of different types of pancreatic and biliary diseases, among others. The student will gain experience in reading various radiographic studies of the affected organs/areas, note the progression of changes over time (retrospectively) following various interventions, and observe how the physicians interact with patients with serious disease (ex: explain that they have cancer and what can be done about it, etc.)

HPB Surgical Clinic - Students will be under the direct supervision of Dr. David Iannitti, Chief of HPB Surgery at Carolinas Medical Center. The students will observe the various stages of management of various types of liver disease such as hepatocellular carcinoma and cholangiocarcinoma, among others. Similarly, the student will also follow the patients’ cases through their radiographic history related to treatment interventions as described above.

Operating Room - Students will observe and participate as determined by the primary surgeon for the cases on the HPB Service. These include, but are not limited to, the following procedures (many will be done laparoscopically):

Pancreas:
Whipple (pylorus preserving and non-pylorus preserving)
Peustow Pancreatectomy
Total Pancreatectomy
Distal Pancreatectomy
Pancreatic Resection
Neuroendocrine Tumor Resection
Pancreatic Pseudocyst drainage procedures (cyst gastrectomy; cyst jejunostomy)
Pancreas Biopsy
Debridements for pancreatic necrosis
Liver:
Hepatic Lobectomy
Partial Hepatic Lobectomy
Liver Tumor Ablation (microwave ablation or radiofrequency ablation)
Trisegmentectomy
Hepatic Vein reconstruction with interposition grafts
Portal Vein reconstruction with interposition grafts
Liver Biopsy
Marsupialization of liver cysts
(Dr. Martinie will often utilize the DaVinci Robotic System for pancreatic and liver cases)

**Learning Activities:**
Biliary:
Laparoscopic Cholecystectomy
Common Bile Duct Exploration
Removal Biliary Cysts
Choledochojejunostomy
Choledochoduodenostomy
Biliary Reconstructions (both intra and extra-hepatic)
Transduodenal Ampullectomy
Associated Procedures:
Staging Laparotomy
Nephrectomy w/IVC tumor extraction
Splenectomy
Lysis of Adhesions
Hernia Repair
Intra-operative ultrasound
Intra-operative cholangiograms

Rounds: Students will round daily with the HPB team (physicians, fellow, residents, and nurse practitioner) and thereby receive continual bedside teaching. The student will be assigned 2-3 of his/her own patients to follow and present during rounds. Active participation by the student is encouraged. Of particular importance is that the student will receive an in-depth experience in the care of HPB patients in the Intensive Care Unit. At CMC an open ICU system is employed and HPB patients in the ICU ward are managed solely by the HPB team. The HPB Surgical Fellow will take on a special mentoring role with regard to the student in addition to Drs. Martinie and Iannitti. There will be no overnight call for students on this selective.

Conferences: Students will participate in HPB-related conferences including HPB Conference, Liver Journal Club, GI Tumor Planning Conference, and Tumor Board, as well as General Surgery M&M and General Surgery Grand Rounds.
The HPB Conference which is chaired by Drs. Martinie and Iannitti most truly points to the multi-disciplinary nature of these diseases. The audience consists of HPB surgeons, transplant surgeons, surgical oncologists, hepatologists, gastroenterologists, interventional radiologists, fellows and residents, among others. As HPB patients are usually treated by physicians in two or more clinical areas, the conference is a proactive forum where a patient’s current and past issues are presented and options / future treatment plans are discussed and decided upon. This collaborative effort between physicians not only benefits the patients in terms of their ongoing treatment, follow-up, and eventual outcomes, but enhances the collegiality among the physicians. This is an excellent type of forum for medical students to observe physicians working together in the pursuit of improving patient outcomes.
Overall, this selective will instruct the students on the various disease processes of the liver, pancreas, and biliary system and the multi-disciplinary management of these issues. Though the rotation is primary an operative one, non-operative management also plays a part in this patient population (ex: non-operative management of pancreatitis). As HPB diseases are becoming more prevalent and their treatments are becoming increasingly complex, dedicated study by medical students (particularly those intending to enter a surgical career) becomes quite important. It is our intention to provide this experience to UNC, Chapel Hill students.

**Notes:**

**Contacts:**
Staff Assistant Suzie Smeaton suzie.smeaton@carolinashealthcare.org
Phone: (704)355-4062
Advanced Practice Selective in Congenital Cardiac Surgery
APSM 406-09

Faculty:
Michael Mill, MD

Prerequisites:
Completion of Third Year

Offered:
All Blocks

Min. Enrollment:
1

Max. Enrollment:

Duration:
One Elective Block

Meeting Times:
TBA

Credit Hours:
6

Meeting Place:
Dr. Mills Office, 3038 Burnett-Womack Building at 8:00 a.m. Directions available by calling Shelby Long at 966-3381

Clinical Goals: What will student be able to do as a result of this rotation?
1. Demonstrate through development of differential diagnosis an understanding of pathophysiology of congenital cardiac conditions
2. Demonstration through a presentation an in-depth understanding of one relevant topic in congenital cardiac surgery, determined after discussion with course director.
3. Participate in congenital cardiac surgical procedures in the OR, primarily by assisting with & observing procedures. Activities may include incisions, wound closure, chest tube placement/removal, removal pacing wires

Learning Objectives:
Structure of rotation
20 % time in clinic
10 % time in conferences: Conferences include multi-disciplinary congenital cardiac conference Mon 430-6 pm.
Thurs and Fri Cardiothoracic teaching conferences 7-8 am.
70 % of time in other settings (please specify): rounding on Congenital Cardiac Surgery in-patients in PICU and on the floor, seeing consults, and participating in OR

Learning Activities:

Notes:

Contacts: Email: mrm@med.unc.edu; stacey_owen@med.unc.edu
Phone: 966-3381
Advanced Practice Selective in Bariatric and Minimally Invasive Surgery
APSM 406-10

Faculty:
Timothy Farrell

Prerequisites:
Completion of Third Year

Offered:
All Blocks

Min. Enrollment:
1

Max. Enrollment:

Duration:
One Elective Period

Meeting Times:
TBA

Credit Hours:
6

Meeting Place:
Burnett-Womack 4030, GI Surgery Division

Clinical Goals: What will student be able to do as a result of this rotation?
1. Assess whether patients are appropriate candidates for weight loss surgery
2. Outline for patients the preparations for such surgery
3. Discuss with patients expected outcomes and clinical follow up for and indications for, weight loss surgery patients
4. Participate to their appropriate level of training in minimally invasive and general surgery including treatment of hernias and biliary disease.

Learning Objectives:
Structure of rotation:
20% time in clinic
10 % time in conferences
70 % of time in other settings (please specify):
40% Operating Room
30% Clinical Research

Learning Activities:

Notes:
Contacts: Email: Melissa_Davis@med.unc.edu, Additional Support: stacey_owen@med.unc.edu Phone: 919-966-8436
Advanced Practice Selective in Abdominal Transplant Surgery
APSM 406-11

Faculty:
Dr. Robert Watson

Prerequisites:
Completion of Third Year

Offered:
Periods 7-12

Min. Enrollment:
2

Max. Enrollment:

Duration:
One Elective Period

Meeting Times:
TBA

Credit Hours:
6

Meeting Place:
TBA

Clinical Goals: What will student be able to do as a result of this rotation?
1. Function as an effective member of a surgical team
2. Discuss the differences and similarities between general and subspecialty surgical teams
3. Explain to patients current treatment options for endstage organ disease

Learning Objectives:
Structure of rotation
20% time in clinic
20% time in conferences
20% OR
20% Ward/ICU
20% didactic teaching

Learning Activities:

Notes:

Contacts:
Staff Support: Melissa Haugh, mhaugh@med.unc.edu
Phone: 919-966-8008

ACS Department Administrative Coordinator for Surgery: Stacey Owen stacey_owen@med.unc.edu,
919-966-4781
Advanced Practice Selective in Otolaryngology, Head/Neck Surgery
APSM 406-16

Faculty:
Charles S. Ebert, Jr. MD, MPH

Prerequisites: Completion of all clinical clerkships

Offered: All Blocks

Max. Enrollment: 2

Duration: One period

Meeting Times: TBA

Clinic/Program: UNC Dept of Otolaryngology/Head and Neck Surgery

Credit Hours: 6

Meeting Place: TBA

Clinical Goals: The students will have the option to choose 2 of the 5 following options. One week will be devoted to each of the 2 chosen options. The student will spend time with the faculty and residents working in a subspecialty area of ENT for 1 week per chosen subspecialty. Clinical goals are described on the right (below) and evaluations will be composed of items on the left (below).

<table>
<thead>
<tr>
<th>Clinical Goals</th>
<th>Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Understand the multidisciplinary work-up and management of head and neck cancer patients.</td>
<td>1. Attend a Tumor Board and present a Head and Neck cancer patient on rounds and tumor board.</td>
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<tr>
<td></td>
<td>2. Read and discuss an article on current management of head and neck cancer. i.e. tumor cachexia.</td>
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<td></td>
<td>3. Present a write-up of patient with head and neck cancer seen during time in clinic with head and neck oncologist.</td>
</tr>
<tr>
<td>2. Understand the work-up of hearing loss: pediatric and adult.</td>
<td>1. Watch an audiogram or hearing aid evaluation by audiologists.</td>
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<td></td>
<td>2. Perform detailed ear exam and tuning fork exam.</td>
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<td></td>
<td>3. Learn how to interpret an audiogram.</td>
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<td></td>
<td>4. Participate in Otology clinic and OR.</td>
</tr>
<tr>
<td>3. Understand the work-up and physical exam features of patients with hoarseness/dysphonia.</td>
<td>1. Participate in clinic with laryngologist and speech pathology.</td>
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<td></td>
<td>2. Participate in laryngoscopy with stroboscopy and/or vocal fold augmentation.</td>
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<tr>
<td>4. Understand the work-up of stridor in infants and children.</td>
<td>1. Participate in one Airway Center Conference.</td>
</tr>
<tr>
<td></td>
<td>2. Participate in a pediatric otolaryngologist clinic and OR.</td>
</tr>
<tr>
<td></td>
<td>3. Present case write-up of infant with stridor.</td>
</tr>
<tr>
<td>5. Learn the diagnostic criteria for acute/chronic rhinosinusitis.</td>
<td>1. Participate in rhinology clinic/OR.</td>
</tr>
<tr>
<td></td>
<td>2. Read and discuss article on guidelines for management of rhinosinusitis.</td>
</tr>
</tbody>
</table>

Learning Objectives:
article on guidelines for management of rhinosinusitis.

% of time in clinic: 40  % of time in conferences: 10  
% of time in other settings (please specify): 30% in OR, 10% reading/write-ups

Notes:
Contact: Staff Assistant, Ellen Doutt, edoutt@med.unc.edu (919) 966-3342
Advanced Practice Selective in Orthopedics, UNC Hospitals  
APSM 406-17

Faculty:  
Dr. Robert Esther

Prerequisites:  
Completion of third year

Offered:  
11-12

Min. Enrollment:  
Max. Enrollment: 1

Duration:  
One elective period

Meeting Times:  
TBA

Credit Hours:  
6

Meeting Place:  
TBA

Clinical Goals
1. Competence in physical examination of major joints (knee, hip, shoulder, etc) as well as peripheral nerve exam.
2. Competence in assessment of orthopaedic patients: including obtaining a history from an orthopaedic patient, completion of a physical exam, and initiation of an appropriate diagnostic work-up. (including radiographic interpretation)
3. Demonstration of enhanced knowledge of one subject area of the student's choosing. Subject area to be based on condition/diagnosis encountered in clinic or operating room.

Learning Objectives:  
Structure of rotation: Please describe how a student would spend his/her time during the 14 days of clinical work.
% of time in clinic: 40
% of time in conferences: 10
% of time in other settings (please specify): 10% inpatient rounds, 40% operative cases

Learning Activities:

Notes:  
Email: bob@med.unc.edu  
Phone: 919-966-3340
Staff Assistant: Karen Gilliam, karen_gilliam@med.unc.edu
Advanced Practice Selective in Otolaryngology/Head and Neck Surgery,
Charlotte, NC
APSM 406-19

Faculty:
Dr. Eric Mair

Prerequisites:
Completion of Third Year, General Surgery core rotation and interest in diseases of the head and neck.

Offered:
All Blocks

Max. Enrollment: 1

Duration:
One Elective Period

Credit Hours:
6

Meeting Place:
Charlotte Eye, Ear, Nose, and Throat Associates
6035 Fairview Rd., Charlotte, NC, 28210

Learning Objectives:

Clinical Goals: What will student be able to do as a result of this rotation?
1. Understand the assessment of normal and abnormal anatomy of the head and neck
2. Learn the detailed physical exam of the head and neck
3. Perform detailed otologic exam, including micro-otoscopy
4. Learn how to interpret an audiogram
5. Perform flexible laryngoscopy in the office
6. Observe specialized diagnostic procedures such as stroboscopic laryngoscopy, electronystagmogram, allergy testing, nasal endoscopy
7. Obtain basic history and perform appropriate physical exam for common out-patient otolaryngological problems
8. Develop differential diagnosis for common otolaryngological problems
9. Understand indications for surgical intervention in common otolaryngological problems

Learning Activities:
1. Participate in out-patient office visits with designated attending physicians
2. Scrub in for surgical cases
3. Round on in-patients on designated days
4. Participate in in-patient consults on designated days
5. First 3 weeks will rotate between general ENT, pediatric ENT, otology, head and neck surgery, and laryngology subspecialties. Last week will be an opportunity for student to concentrate in one of these areas.

Notes:
Contacts: Dr. Darrell Klotz dklotz@ceenta.com, Dr. Eric Mair emair@ceenta.com
Phone: (704) 295-3000
Staff Assistant Helen Womack Helen.Womack@carolinashealthcare.org
Phone: (704) 446-9260
Advanced Practice Selective in Leadership in Multidisciplinary Care
APSM 406-20

Faculty:
Amelia Drake, Carlton Zdanski, Jeyhan Wood, Lauren Kilpatrick, Jose Zevallos Mark Weissler, and Luiz Pimenta

Prerequisites: Completion of Third Year

Offered: Periods 4, 6-13
Max. Enrollment: 1
Duration: One Elective Period
Credit Hours: 6

Meeting Place:

Learning Objectives:
Clinical Goals: What will student be able to do as a result of this rotation? 78 14.4
1. This program is designed to give medical students the opportunity to directly participate in a multidisciplinary team in 2 of 3 options: craniofacial center, NC pediatric airway center, or head and neck tumor board.
2. The student will manage patients and operate with skilled houestaff and attendings.
3. The student will participate in patient care planning with ancillary staff to enhance understanding of multidisciplinary care of particular patient sub groups including but not limited to social workers, speech pathology, dental, etc.
4. The rotation is complimented by didactic sessions with members of the house staff and teaching faculty.

Learning Activities:
The students will have the option to choose 2 of the 3 following options. Two weeks will be devoted to each of the chosen options. The student will spend time with the faculty and residents working in a subspecialty area of either the craniofacial center, the NC pediatric airway center, or head and neck tumor board. Clinical goals are described below.

Craniofacial Center
1. Understand the multidisciplinary work up and present craniofacial patients in clinic.
2. Attend craniofacial conference and participate in speech evaluation of child with cleft lip/palate.
3. Read and discuss an article on current management of a craniofacial condition, i.e. cleft lip/palate.
4. Participate in craniofacial clinic and OR.
5. Present case write up of patient with craniofacial syndrome.

Head and Neck Tumor Board
1. Understand the multidisciplinary work up and present a head and neck cancer patient on rounds.
2. Attend head and neck tumor board.
3. Read and discuss an article on current management of head and neck cancer.
4. Participate in head and neck oncology clinic and OR.
5. Present a write up of patient with head and neck cancer seen during time in clinic with head and neck oncologist.

NC Pediatric Airway Center
1. Understand the multidisciplinary work up and present a pediatric airway patient on rounds. Demonstrate an understanding of the work up of stridor in infants and children.
2. Participate in one Airway Center Conference.
3. Read and discuss an article on current management of the pediatric airway.
4. Participate in pediatric airway clinic and OR.
5. Present case write up of pediatric airway patient.

Students will participate in craniofacial conference, head and neck tumor board, and airway center conference. In addition students will participate in clinic and OR for each of their 2 chosen options specifically learning about multidisciplinary as it applies to each option by interaction with the medical team and participation in patient care. Hour requirements will be dependent on chosen option. This rotation will not have on-call requirements.

Evaluation: Evaluation will be based on participation in clinic, teamwork, patient presentations, and case write ups. Dr. Amelia Drake will perform final evaluation.

Notes: Contact: coordinator Ellen Doutt edoutt@med.unc.edu
Advanced Practice Selective in Dermatology
APSM 408-01

Faculty:
Chris Sayed, MD

Prerequisites:
Completion of Third Year

Offered: Blocks 8-13
Preference is given to Derm 401, 401B, and 404. Contact cherie_ezuka@med.unc.edu for permission.

Min. Enrollment: 1
Max. Enrollment: 1

Duration: One Elective Period
Meeting Times: TBA

Credit Hours: 6
Meeting Place: TBA

Clinical Goals: What will student be able to do as a result of this rotation?
1. Students will be able to describe dermatologic lesions.
2. Students will be able to diagnose common skin conditions.

Learning Objectives:
Structure of rotation:
80 % of time in clinic
20 % of time in conferences

Learning Activities:

Notes:

Contacts: Email: christopher_sayed@med.unc.edu Phone: 966-2485
Advanced Practice Selective in Dermatology, Charlotte
APSM 408-02

Faculty:
Meredith Dasher, April Boswell, Joel Sugarman, Libby Edwards, Laura McGirt

Prerequisites:
Completion of Third Year

Offered:
TBD

Preference is given to Charlotte students – contact helen.womack@carolinashealthcare.org for permission.

Min. Enrollment:
1

Max. Enrollment:

Duration:
One Elective Period

Meeting Times:

Credit Hours:
6

Meeting Place:
CMC-Morrocroft Medical Plaza 4525 Cameron Valley Parkway, Charlotte, NC

Clinical Goals: What will student be able to do as a result of this rotation?
1. Accurately communicate exam findings using medical terminology
2. Understand how to perform an appropriate skin examination
3. Recognize common benign lesions such as seborrhea keratosis, sebaceous hyperplasia, cherry angiomas, non-melanoma skin cancers and melanoma.
4. Understand treatments for common skin lesions
5. Review pathologic evaluation of dermatologic specimens

Learning Objectives:
Structure of rotation:
80 % of time in clinic
20 % of time in conferences

Learning Activities:
The student will work with dermatologists at Mecklenburg Medical Group seeing patients in the office as well as working in pathology evaluating dermatologic specimens. Students may also rotate at the family medicine ‘lumps and bumps’ clinic depending on availability. There are no on-call hours required.

Evaluation:
Students will be evaluated based on clinical evaluations (90%) as well as an oral presentation (10%)

Notes:
Contacts: laura.mcgirt@carolinashealthcare.org, Bryan Stanley bryansarah.mcdr@gmail.com, meredith.dasher@carolinashealthcare.org,
Additional Support: helen.womack@carolinashealthcare.org Phone: (704) 302-8350
Advanced Practice Selective in Dermatology, Charlotte
APSM 408-03

Faculty:
Laura McGirt, MD

Prerequisites:
Completion of Third Year

Offered:
Periods 9, 11
Preference is given to Charlotte students – contact helen.womack@carolinashealthcare.org for permission, or for availability during other blocks.

Min. Enrollment:
1

Max. Enrollment:

Duration:
One Elective Period

Meeting Times:

Credit Hours:
6

Meeting Place:
Levine Cancer Institute
1021 Morehead Medical Drive
Surgical Oncology 6th Floor
Charlotte, NC 28204

Clinical Goals: What will student be able to do as a result of this rotation?
1. Accurately communicate exam findings using medical terminology
2. Understand how to perform an appropriate skin examination
3. Recognize common cutaneous lesions such as seborrhea keratosis, sebaceous hyperplasia, cherry angiomas, as well as non-melanoma skin cancers and melanoma.
4. Understand treatments for common skin lesions and dermatitides
5. Understand the evaluation of cancer therapeutic related skin eruptions.

Learning Objectives:
Structure of rotation:
80 % of time in clinic
20 % of time in conferences

Learning Activities:
The student will work with the dermatologist at the Levine Cancer Institute seeing patients in the office 4 half days a week. The outpatient clinic will be a mix of skin cancer screenings, primary skin cancers, reactions to cancer therapeutics, and graft-versus-host disease among others. We will also follow dermatology consult patients on the inpatient hematology/oncology service, as well as patients undergoing extracorporeal photopheresis. There are no on-call hours required.

Evaluation:
Students will be evaluated based on clinical evaluations (90%) as well as an oral presentation (10%)

Notes:

Contacts:
Additional Support: patti.silverman@carolinas.org Phone: (980) 442-6035
Advanced Practice Selective in Emergency Medicine and Urgent Care
APSM 409-01

Faculty:
Tracy M. DeSelm, M.D

Prerequisites:
Completion of Third Year

Offered:
Periods 2-11

Min. Enrollment:
2

Max. Enrollment:
2

Duration:
One Elective Period

Meeting Times:
schedule will be emailed prior to first day of rotation

Credit Hours:
6

Meeting Place:
TBA

Clinical Goals: What will student be able to do as a result of this rotation?
1. Perform appropriate histories and physical exams in order to diagnose and manage urgent care problems in the undifferentiated emergency medicine patient
2. Perform various procedural skills, including, but not limited to, abscess I and D, laceration repair (simple and more complex), splint placement, eye FB removal, ear FB removal, simple orthopedic reductions
3. Participate in EM lecture series, and simulation labs on pertinent EM topics.

Learning Objectives:
Structure of rotation:
70% (14 shifts) in ED Team D
20% (8 hrs weekly) in conferences
10% (APS writing requirements)

Learning Activities:

Notes:
Contact: Email: tracy_deselm@med.unc.edu Phone: (919) 928-4026.
1. Schedule preferences need to be made 2 weeks in advance of the first day of the rotation with Kari Corker kari_corker@med.unc.edu. Requests need to be limited to School of Medicine events (tests, conference presentation, etc.)
2. Requests off will try to be granted, but cannot be guaranteed.
3. Ms. Corker should only be contacted after this time for emergencies (illness, death in the family, etc.)
4. Other scheduling changes need to be initiated by the student through trade with another student.
5. Holidays off will be the same as the scheduled medical school holidays.
Advanced Practice Selective in Wilderness Emergency Medicine
APSM 409-04

Faculty:
Stephanie Lareau

Prerequisites:
Completion of third year

NOTE: Applicants must have camping/backpacking skills and equipment and should be in sufficient physical condition and health to complete a 4-day overnight field experience with a trek through the mountains (elevation under 8,000 ft) as a requirement for successful completion of the elective.

Offered:
11 – per availability

Duration:
One month

Meeting Times:
TBA

Credit Hours:
6

Meeting Place:
TBA

Clinical Goals:
• Act as a medical group leader in backcountry or other remote settings
• Advise a wilderness travel group concerning care and evacuation of ill or injured members
• Plan for the medical support of wilderness and adventure travel experiences
• Manage common illnesses and injuries in an austere environment with limited resources
• Understand the physician's role in search and rescue
• Identify and plan for special hazards in a variety of extreme environments
• Demonstrate basic competence in exotic travel and wilderness survival skills

NOTE: YOU MUST SELECT THE COURSE, CHECK ON SPACE AVAILABILITY, GET APPROVAL BY CONTACTING TRACY DESELM tmdeselm@med.unc.edu, INCLUDING THE NAME OF THE CONTACT PERSON DIRECTING THE COURSE, FILL OUT ANY NECESSARY APPLICATIONS, AND BE RESPONSIBLE FOR ANY EXTRA FEES THE COURSE MAY INVOLVE.

One contact website is: http://www.wms.org/education/elective.asp

Learning Objectives:
Clinical evaluations will be performed by instructors on site; APS specific writing and project requirements will be evaluated by UNC faculty

Learning Activities:

Contact:
Email:
Administrative assistant: kari_corker@med.unc.edu 843-8067
Advanced Practice Selective Emergency Medicine at UNC
APSM 409-05

Faculty:
Tracy DeSelm, MD

Prerequisites:
Completion of third year

Offered:
2-11

Duration:
One month

Meeting Times:

Credit Hours:
6

Meeting Place:

Learning Objectives:
1) Utilize the skills of patient history and physical diagnosis to diagnose and manage acute care conditions in the undifferentiated ED patient.
2) Develop accurate and succinct communication skills for oral presentations and consultations which provide comprehensive information transfer in the ED setting.
3) Integrate evidence-based medicine practices into the routine diagnosis and management of patients in the ED.
4) Gain proficiency in the basic procedures required for the management of acutely ill or traumatized patients. Such procedures include, but are not limited to, arterial puncture, suture placement, BVM ventilation, and central line placement.
5) Bedside sonography experience to enhance the physical diagnosis and treatment for a wide array of ED presentations: cardiopulmonary arrest, trauma, dyspnea, vaginal bleeding, abdominal pain, kidney stones, etc.
6) Develop an awareness of the complex ethical issues involving the practice of emergency medicine.
7) Continue to develop professionalism and ethical principles in caring for patients and relating to patients' families and others involved in patient care.

Learning Activities:
Students will participate in:
1) A minimum of 7 nine-hour clinical shifts in the ED. Student will have clinical experiences at UNC Medical ED.
2) A minimum of 2 days of supervised ED ultrasound experience.
3) Evidence-based review of medical literature in conjunction with emergency medicine department Journal Club and weekly didactic conferences.

Evaluation:
Students will be evaluated by:
1) Each attending with whom the student is scheduled to work clinically. This evaluation is completed by the responsible attending.
2) Attendance and participation at conferences
3) Direct observation assessment.

Special Notes:
Contacts: tracy.deselm@med.unc.edu, (919) 843-8067 (Kari Corker) or (919) 966-6442 (main EM office)
1. Schedule preferences need to be made 2 weeks in advance of the first day of the rotation with Kari Corker kari.corker@med.unc.edu. Requests need to be limited to School of Medicine events (tests, conference presentation, etc.)
2. Requests off will try to be granted, but cannot be guaranteed.
3. Ms. Corker should only be contacted after this time for emergencies (illness, death in the family, etc.)
4. Other scheduling changes need to be initiated by the student through trade with another student.
5. Holidays off will be the same as the scheduled medical school holidays.
Advanced Practice Selective Emergency Medicine in East Africa
APSM 409-06

Faculty:
Ian B.K. Martin, M.D., Benjamin Moyo, M.D.
Assistant Professor, Emergency Medicine and Internal Medicine
Simmons Scholar
Director, Global Emergency Medicine
Associate Program Director, Emergency Medicine Residency

Prerequisites:
Completion of 3rd year

Offered: All Blocks – contact ian_martin@med.unc.edu for permission.

Min. Enrollment: 2

Duration:
one elective period

Credit Hours: 6

Meeting Place:
TBD
1. To discuss the importance of malaria as a consideration in patients presenting with febrile illness in the Tropics.
2. To describe public health measures aimed at preventing malaria.
3. To recognize and explain the burden HIV disease in Sub-Saharan Africa.
4. To diagnose and appropriately treat malaria, typhoid, tuberculosis, and brucellosis, among other infectious diseases.
5. To diagnose and appropriately treat a variety of skin and soft tissue infections, including cellulitis and tinea, etc.
6. To compare and contrast the delivery of medical care in a resource-limited setting versus that of the United States.

Learning Objectives:
1. Pre-test (To be completed before departing the UNC-Chapel Hill campus)
2. Independent study (Assigned readings to be completed in advance of travel to clinical site)
3. International practicum (To be done abroad)
4. Post-test (To be completed at conclusion of rotation)

Notes:
CONTACT ian_martin@med.unc.edu FOR PERMISSION, AND ALSO AT LEAST 4-5 MONTHS BEFORE THE ROTATION IN ORDER TO MAKE ARRANGEMENTS.

Contacts: Email: ian_martin@med.unc.edu, tracy_deselm@med.unc.edu
Assistant: kari_corker@med.unc.edu 919-843-8067
Advanced Practice Selective Geriatric Emergency Medicine and Transitions of Care, UNC Hospitals
APSM 409-07

Faculty: Nikki Waller, MD; Lindsay Wilson, MD; Ellen Roberts PhD, MPH; Kevin Biese MD, MAT
Offered: Blocks 7, 11
Max. Enrollment: 6

Learning Objectives:
1. Provide care for older adult patients in the Emergency Department
2. Recognize the unique and atypical presentation of disease in older adults
3. Understand and recognize the challenges in triaging older adults who present to the emergency department
4. Describe how to appropriately treat pain in the older adult patient in the emergency room
5. Describe how to appropriately manage delirium in the older adult patient in the emergency room
6. Perform a cognitive exam on older patients in the emergency room to assess for delirium and dementia
7. Describe why older adults are at higher risk for iatrogenesis and provide examples of iatrogenesis
8. Perform a medication reconciliation on admission to and discharge from the emergency room
9. Recognize high-risk medications that should be avoided in older adults and provide examples of safer alternatives
10. Explore issues of care transitions specifically relating to older patients seen in the Emergency Department
11. Outline the key steps that ensure a safe disposition for an older adult, specifically on a discharge to home or a long-term care setting
12. Assess social support in the home and community of an older adult patient and make recommendations for additional supports should they be needed
13. Assess an older adults’ risk for falls and make recommendations to reduce risk of falls
14. Understand the diverse role of caregivers in the care of older adults
15. Develop a presentation on a specific issue related to care transitions
16. Enhance their basic Emergency Department procedure skills possibly including, but not limited, to IV placement, splinting, suturing, lumbar punctures, ECG acquisition, and possibly airway management and central venous access

Learning Activities: Participating students will work five 8 hour emergency department shifts, during which time they will focus on caring for older patients with emergency physicians with expertise and interest in geriatrics. While caring for these patients, the students will ask permission from the patients or care givers to follow up with a total of 10 patients, including an in-person visit to their living environment and/or hospital setting to which they are admitted. The students will be asked to answer a set of questions for each patient they follow, focused on the aspects of care transitions to which they are exposed. They will also be exposed to the care of patients in long-term care facilities and the challenges of transferring patients in and out of these facilities to other care settings (such as the Emergency Department). Furthermore, while in the ED, students will be encouraged to participate in procedural aspects of multiple patients’ care as per the objectives above.

There will also be four 2-3 hour class meetings with lectures, interactive sessions, and simulations focused on the care of older adults including challenges in transitions of care, trauma, abdominal pain, long term care, polypharmacy, delirium/ dementia/ depression, and iatrogenic injury. Finally, the class will conclude with a seminar of presentations by each student on a specific topic of interest relating to care transitions.

Evaluation: Dr. Waller will provide evaluations for each student. Evaluations will be based on the following:
1. Attendance at and performance during emergency medicine shifts, long-term care experiences, follow-up care encounters, and interactive class sessions.
2. Quality of transitions of care presentation at the end of the rotation.

Special Notes:
Nikki Waller, MD, nikki_waller@med.unc.edu
Lindsay Wilson, MD, lwilson3@unch.unc.edu
Ellen Roberts, PhD, MPH, ellen_roberts@med.unc.edu
Kevin Biese, MD, MAT, kevin_biese@med.unc.edu
Kari Corker, kari_corker@med.unc.edu
Advanced Practice Selective in Radiation Oncology
APSM 410-01

Faculty:
Drs. Ronald Chen, Ellen Jones and Lawrence Marks

Prerequisites:
Completion of Third Year

Offered:
All Blocks

Min. Enrollment:
2 (Cross listed with RADY 414) 2 students max blocks 1 & 2, 3 student max blocks 3-10

Max. Enrollment:

Duration:
One Elective Period

Credit Hours:
6

Meeting Place:
Students should arrive at 7:30AM on the first day for orientation. Location is the North Carolina Cancer Hospital, Level B (Radiation Oncology Administration), Conference Room.

Clinical Goals: What will student be able to do as a result of this rotation?
1) To become acquainted with the general management of cancer.
2) To understand the role of radiation in multi-modality management of cancer patients.
3) To understand the uses of different techniques of radiation therapy.
4) To understand the acute and late side effects of cancer treatment.

Learning Objectives:
Structure of rotation
60% time in clinic
20 % time in conferences
20 % time in other settings: radiation treatment planning

Learning Activities:

Notes:

Contacts: Email: ronald_chen@med.unc.edu; ellen_jones@med.unc.edu; marks@med.unc.edu
Phone: 966-0400
Advanced Practice Selective in Neurology in Raleigh, NC
APSM 413-01

**Faculty:**
Dr. Mitch Freedman

**Prerequisites:**
Completion of Third Year

**Offered:**
All Blocks

**Min. Enrollment:**
1

**Max. Enrollment:**

**Duration:**
One Elective Period

**Meeting Times:**
TBA

**Credit Hours:**
6

**Meeting Place:**
TBA

Clinical Goals: What will student be able to do as a result of this rotation?
1. Perform a detailed, comprehensive neurologic history on both pediatric and adult patients
2. Perform an appropriate neurologic exam based on the history on both pediatric and adult patients
3. Develop an appropriate differential based on history, exams, and appropriate tests

**Learning Objectives:**
Structure of rotation: Please describe how a student would spend his/her time during the 14 days of clinical work.
75 % of time in clinic
25 % of time on in-patient service
Substantial reading is required for this site.

**Learning Activities:**

**Notes:**

*A good understanding of neurological problems is important for students going into medicine, psychiatry, pediatrics, orthopedics, gynecology, and family medicine. This APS will provide the student with a comprehensive framework for approaching neurological issues faced in many non-neurological specialties. This course provides students the opportunity to work in a large community based neurology practice where a wide range of patients can be seen.*
Advanced Practice Selective in Neuroradiology
APSM 414-01

Faculty:
Ben Huang, MD

Prerequisites:
Completion of Third Year

Offered:
All Blocks

Min. Enrollment:
1

Max. Enrollment:

Duration:
One Elective Period

Credit Hours:
6

Meeting Place:
Students should report to Neuroradiology reading room, basement of Women's hospital at 8AM (across from film library window)

Clinical Goals: What will student be able to do as a result of this rotation?
1. Provide a rational to patients and attending physician for using one type of neuroimaging studies over another based on patient history and physical examination
2. Describe imaging findings of disease processes in general (distribution of abnormalities, location, contrast enhancement).
3. Describe imaging findings associated with one or a few disease processes in detail.

Learning Objectives:
Structure of rotation
90 % time in clinic
10 % time in conferences

Learning Activities:

Notes:

Contacts: Email: benjamin_huang@med.unc.edu, samantha_johnston@med.unc.edu
Phone: (919) 966-2885
Advanced Practice Selective in Neuroradiology
APSM 414-02

Faculty:
Daniel Nissman, MD

Prerequisites:
Completion of Third Year

Offered:
Periods 1-11, 13

Min. Enrollment: 1
Max. Enrollment: 1

Duration:
One Elective Period

Credit Hours:
6

Meeting Place:
Students should report to Neuroradiology reading room, basement of Women's hospital at 8AM (across from film library window)

Clinical Goals: What will student be able to do as a result of this rotation?
The goal for this activity is to provide the student with an in depth exposure to all aspects of musculoskeletal radiology including noninvasive imaging as well as interventional musculoskeletal procedures. Students will participate in ongoing readout sessions that will include all aspects of MSK imaging and will gain an understanding of the efficient use of imaging resources and the appearances of many diseases and disorders at imaging.

Learning Objectives:
Structure of rotation
100% clinical

Learning Activities:
Students should expect to attend daily readout sessions and departmental noon conferences. The student will give a short presentation at noon conference during the last week of the rotation on a MSK topic of his or her choosing.

Evaluation: (How student will be evaluated e.g., observed administering procedures, interviewing patients, presentation at case conference, participation in rounds, patient write-ups)
The student’s participation in readout sessions and the presentation will be evaluated

Notes:

Contacts:
Phone: (919) 966-4398, email samantha_johnston@med.unc.edu
Advanced Practice Selective in Body Imaging
APSM 414-03

Faculty:
Ellie Lee, MD, Lauren Burke, MD

Prerequisites:
Completion of Third Year

Offered:
Periods 5-13

Min. Enrollment: 1

Max. Enrollment: 1

Duration:
One Elective Period

Credit Hours:
6

Meeting Place:
Students should report to Body CT Reading Room, in basement of Women's hospital, at 8AM on first Monday of block. Contact Dr. Ellie Lee the week before by email.

Clinical Goals: What will student be able to do as a result of this rotation?

1. Provide rationale for utilizing one type of body imaging study over another based on patient history and clinical question posed (ie, Why US for RUQ pain and CT for RLQ pain? Why MR for evaluating Cirrhotic liver?)

2. Describe imaging findings of common abdominal and pelvic diseases (ie appendicitis, cholecystitis, small bowel obstruction, Crohns, nephrolithiasis, hepatic cirrhosis, pancreatitis, ovarian cancer, uterine fibroids), including location and description of organ abnormalities

3. Choose and gain in-depth knowledge of one case with one common disease process, and present the case to the group on service

Learning Objectives:

1. Gain knowledge regarding choice of imaging modality depending on posed clinical question and patient clinical history

2. Gain experience in viewing body imaging studies on PACS

3. Review common appearances of common abdominal and pelvic disease processes

4. Learn basics of radiation safety

Learning Activities:

1. 80 % time in reading rooms, 10 % time in conferences, 10% time independent study

2. Rotate through different reading rooms on Body Imaging Service (CT, MRI, US, GI/GU)

3. Participate in resident read-out sessions throughout the day.

4. Listen and participate in face-to-face clinical consultations.

5. Gather patient information to assist in protocoling studies

6. Attend daily resident noon conference

7. Attend weekly GI Tumor Board meeting

8. Present a case in detail to the group on service

9. Assist with clinical projects/clinical research (optional)

Notes:

Contacts: Email: ellie_lee@med.unc.edu; Lauren_Burke@med.unc.edu Support: virginia_butler@med.unc.edu
Advanced Practice Selective in Anesthesiology
APSM 416-01

Faculty:
Dr. Kyle and Dr. Spielman

Prerequisites:
Completion of Third Year

Offered:
1, 5-13

Min. Enrollment:
5 (Cross listed with ANES 401 and ANES 407)

Max. Enrollment:

Duration:
One Elective Period

Meeting Times:
TBA

Credit Hours:
6

Meeting Place:
Room N2201, UNC Hospitals

Clinical Goals: What will student be able to do as a result of this rotation?
1. Participate in the pre-and postoperative evaluation of patients, with direct patient responsibility.
2. Care for anesthetized patients.
3. Select appropriate clinical pharmacology strategies in the perioperative period.
4. Discuss the physiologic changes that occur during the perioperative period
5. Discuss the principles of both regional and inhalational anesthetic techniques including intravenous therapy, the principles of the intravenous administration of drugs, airway management and endotracheal intubation, cardiovascular monitoring, and the care of critically ill patients during the operative period and select the most practice for each patient.
6. Set up an anesthetic cart and ventilator
7. Diagnosis and treat common chronic pain problems.
8. Participate as needed in cardiovascular support of patients

Learning Objectives:
Structure of rotation
12% time in formal lectures
88% in OR (patient care/ clinical learning)

Learning Activities:

Notes:
Contact: Email RKyle@aims.unc.edu; gbalfanz@aims.unc.edu; jberry@aims.unc.edu
Phone: 966-5136
Support Staff: Elizabeth Aguero  eaguero@aims.unc.edu
Advanced Practice Selective in Ophthalmology  
APSM 417-01

Faculty:
Dr. Robert M. Saltzmann, MD

Prerequisites:
Completion of Third Year

Offered:
Periods 5-7, 9, 11-13

Min. Enrollment:
Max. Enrollment: 2

Duration: One Elective Period

Meeting Times: TBA

Credit Hours: 6

Meeting Place:
Charlotte Eye Ear Nose & Throat Associates, PA, 6035 Fairview Rd, Charlotte, NC 28210

Clinical Goals:
(what student will be able to do as a result of this experience)
1. Improve direct ophthalmoscopy and slit lamp examination skills.
2. Increase familiarity with the lexicon of abbreviations in ophthalmology.
3. Discuss the pathophysiology, diagnosis, work-up and general management of common ocular manifestations of systemic disease, including but not limited to: herpetic keratitis, diabetic retinopathy, hypertensive retinopathy, arteritic and non-arteritic anterior ischemic optic neuropathy (AION), retinal venous and arterial occlusion, anterior uveitis, optic neuritis, cranial neuropathies, thyroid orbitopathy, papilledema, and pseudotumor crebri/idiopathic intracranial hypertension.
4. Identify and classify diabetic retinopathy into mild, moderate, and severe non-proliferative vs. proliferative by funduscopy findings.
5. Understand the classification scheme for diabetic macular edema (clinically vs. not clinically significant) as well as the indications for laser treatment for macular edema and proliferative retinopathy.
6. Develop a general familiarity with diagnosis and management of common ocular and peri-ocular diseases including preseptal and orbital cellulitis, conjunctivitis, corneal abrasion, corneal ulcer, dry eye, cataract, glaucoma, and age-related macular degeneration.
7. Basic understanding of the goals and techniques used in modern cataract and glaucoma surgery.

Learning Objectives:
Structure of rotation
30% time in formal lectures
70% in OR (patient care/clinical learning)

Learning Activities: (What the student will do e.g., conferences, rounds, clinic, expected hours, on-call requirements/opportunities)
Student will shadow clinician seeing 20-40 patients/day in the office between the hours of 8 AM and 4:30 PM. Ophthalmology encounters and clinics may be more fast paced and high volume than the student is accustomed to in other specialties. Every opportunity will be taken to allow the student to view pertinent ocular findings as they are identified. Time will be taken between patients and/or after clinic to further discuss interesting findings and pathology encountered in the day. During those discussions, the student's understanding of the learning objectives above will be assessed.
The student may be given the opportunity to observe ocular surgery and/or accompany the physician on call for emergencies (typically eye trauma). These activities are not considered a mandatory part of the elective, but particularly enthusiastic students will be permitted to participate where appropriate.

*Note: as ophthalmology charting is highly specialized, involving a detailed understanding of abbreviations that the student is likely to be unfamiliar with and requiring specific EMR training, the student will NOT be expected to document in the medical record.

Evaluation
The student will be evaluated based upon their demonstrated mastery of the above learning objectives, enthusiasm and level of inquisitiveness during office encounters, and daily attendance. A short presentation regarding a diagnostic or management challenge and/or interesting finding is encouraged and will be factored into the student’s evaluation. However, this activity is not required.

Notes:
Contact: Robert Saltzmann, email rsaltzmann@ceenta.com, Donna Nicholson dnicholson@ceenta.com
Phone (704) 295-3700
Advanced Practice Selective in Neurological Surgery
APSM 418-01

Faculty:
Deanna Sasaki-Adams, MD

Prerequisites:
Completion of Third Year

Offered:
All Blocks

Max. Enrollment: 1

Duration: One Elective Period

Meeting Times: TBA

Credit Hours: 6

Meeting Place:
UNC Department of Neurosurgery

Clinical Goals:
(what student will be able to do as a result of this experience)
1. Develop appropriate treatment plans for patients on the Neurosurgery service; inpatient and outpatient
2. Opportunity to give a 15 minute oral presentation at completion of Selective at Neurosurgery Grand Rounds, on a Neurosurgery topic of their choice
3. Further develop general surgical skills and assist with minor neurosurgical procedures

Structure of rotation
20% time in clinic
10% in conferences
70% in OR/Rounds/Clinical Service

Evaluation
1. Direct observation and evaluation of their clinical presentation
2. Direct observation and critique of oral presentation
3. Direct observation

Notes:
Contact: Contact Neurosurgery Chief Resident for meeting location
Email: julie.seger@med.unc.edu (919) 843-4608
Each student will have a designated clinical faculty mentor, either internal or external to UNC, whom he/she will work with throughout the course of this longitudinal clerkship. This clinical faculty mentor will be selected jointly by the student and the course coordinators, a selection that will match as closely as possible the student’s PhD dissertation thesis research topic with the mentor’s clinical area of interest. It is anticipated that the faculty mentor will have compatible clinical patient population to support this longitudinal clerkship (e.g., a neuroscience PhD candidate may elect to participate in a Neurology, Neurosurgery, or Psychiatry Clinic, a microbiology/immunology PhD candidate may participate in an Infectious Diseases or Rheumatology, Allergy & Immunology Clinic, etc.). In addition, we will ensure that the mentor also has a clinical/translational research program relevant to the student’s thesis topic.

*Having a clinical faculty mentor from outside of the UNC School of Medicine and UNC Healthcare System will necessitate designation of a UNC faculty co-mentor to coordinate and oversee the conduct of the clinical experience; this will be facilitated by the Course Coordinators prior to beginning the Longitudinal APS course.*

**Prerequisites:**
Enrollment in the UNC MD-PhD combined degree training program, successful completion of the second year of medical school, passing score on the USMLE Step 1 examination, and approval of the Course Coordinators.

**Periods Offered:** Variable (start-dates of Fall session start & Spring session start—July 5-April 30 unless otherwise noted)

**Min/Maximum Enrollment:** Open (prerequisites strictly enforced)

**Credit Hours:** 6
For attaining an accumulated 40 half-day sessions under the direction of his/her faculty mentor (e.g., one entire calendar year at one half-day per week; two entire calendar years at two half-days per month, etc.), the student will receive for 4 weeks of credit for the Advanced Practice Selective.

**Clinical/Non-Clinical:** Clinical
In order to qualify for credit for the Advanced Practice Selective, students are required to attend the initial day of didactics of the APS, and by the end of the 40 half-day sessions have completed the following on-line curriculum in Systems-Based Practice (SBP) associated with that course: [http://goo.gl/1rIR3](http://goo.gl/1rIR3)

**Duration of Elective/Selective:**
**Minimum Duration:**
1. Forty half-day sessions with clinical mentor
2. Required attendance at:
   1. Initial APS Orientation session *(There are 10 of these days throughout the year, please e-mail reid_johnson@med.unc.edu, the course administrator, for the schedule and let him know which day you will attend.)*
   2. Monday MD-PhD Seminars *(held bimonthly)*
   3. Noon Clinical Case Conferences *(held monthly)*
   4. NIH Grant writing boot camp session *(run by David Siderovski)*
**Maximum Duration:** 40 half-day sessions with clinical mentor.

**Where/When to report on first day:** Variable (faculty mentor-specific)

**Learning Objectives:**
The overall objectives of this course are four-fold:
- To integrate medical and graduate school training throughout the course of the combined degree program;
- To enable the MD-PhD students to develop and maintain their clinical skills throughout their time in graduate school;
- To prepare for grant-writing and grants-management, for as physician-scientists, they will be expected to establish and maintain funded research programs;
- To demonstrate an awareness of and responsiveness to the larger context and systems of health care and the ability to call on system resources to provide care that is of optimal value.

**Learning Activities:**
- Become proficient in evaluation and management of patients according to the specific specialty of the clinical faculty mentor. This includes seeing patients independently, presenting the patient to the preceptor, and then returning to the bedside with the preceptor to initiate diagnostic and therapeutic plans;
- Identify and develop clinical connections linked to the dissertation research topic;
- Recognize and experience the translational and clinical aspects of biomedical research;
- Learn to read and understand NIH Program Announcements (PAs) and Requests for Applications (RFAs) in their chosen field of research inquiry;
- Complete the APS SBP curriculum.

**Evaluation:**

**Initial Goal-Setting:** At the beginning of the Longitudinal APS Clerkship, the student, his/her PhD thesis advisor, and his/her clinical mentor will meet with the Course Coordinators to define those particular clinical and research competencies that will be relevant both to the student’s PhD dissertation research program and to his/her clinical clerkship.

**Mid-Clerkship Review:** After completing 20 half-days of the clerkship, the student and his/her clinical mentor will hold a short meeting with the Course Coordinators and the clinical faculty mentor. The purpose of this meeting is to: evaluate the progress made to date on achieving the competencies and goals that had been established; provide evaluative feedback to one another and the coordinators; and adjust expectations and goals for the second phase, as appropriate. A written report of this evaluation, corresponding to the guidelines currently accepted in the SOM for evaluation of performance in a selective, will be prepared.

**Evaluating Competencies:**

- **Presentation on Integration and Translational Research:** (Pass/Fail)
  At the end of each 40 half-day clerkship, the student will give a seminar either as a part of the Monday MD-PhD Seminar Series or the Clinical Case Conference. Here, the student will describe his/her experiences in the framework of integrating medical and graduate school training and performing translational biomedical research. The presentation will be formally graded by the clinical preceptor and Course Coordinators. Pass/Fail grade and written feedback will be provided to the student and also recorded using one45 forms.

- **Faculty evaluation of student:** (Pass/Fail)
  At the end of each 40 half-day clerkship, the student will be evaluated by the clinical mentor for the attainment of the previously defined competencies, and a formal written evaluation will be sent to the Course Coordinators. Additionally, since the student will
have established a long-term relationship with the clinician-researcher mentor, a narrative letter of recommendation may also be formulated for future residency and/or post-doctoral fellowship applications. In addition, it is anticipated that the clinical clerkship experiences of the student will figure prominently in the “clinical relevance” chapter of the PhD dissertation thesis that each combined-degree student is expected to complete. This chapter will be evaluated on a Pass/Fail grade scale by the Course Coordinators, the clinical preceptor, and the rest of the student’s Graduate School dissertation advisory committee during the final adjudication of the PhD thesis.

**Student evaluation of clerkship:**

Students will also be asked to complete a brief narrative report at the end of each 40 half-day clerkship that will be submitted to the Course Coordinators. Students will also be asked to evaluate the course for institutional research purposes: a standard course evaluation, delivered to the student through one45, will be used.

**Formal evaluation of the SBP curriculum module assignments:**

Students will perform the required set of Systems-Based Practice modules, which will be evaluated by Anne Mounsey as is already required for the Advanced Practices Selective.

**Notes:** Contact Anne Mounsey (anne_mounsey@med.unc.edu), Reid Johnson (reid_johnson@med.unc.edu), and Leanne Shook (leanne_shook@med.unc.edu) for course approval and confirmation of your rotation dates. Each course will need to submit a Faculty Form, found HERE.