

### **3<sup>RD</sup> YEAR CLERKSHIPS**

#### **Requirements**

- Each clerkship will need a site director (faculty) and coordinator (admin) named prior to enrollment of any students
- Determine the blocks of the academic year the clerkship be willing to take students (please refer to [Academic Year 23/24 Block Schedule](#))
- Confirm the capacity for each block (please work with Martinha Rosa, [Martinha.F.Rosa@lahey.org](mailto:Martinha.F.Rosa@lahey.org))
- Lahey faculty will need to start the faculty appt process here at UMASS which UMass can help facilitate (please work with Monica King, [Monica.L.King@lahey.org](mailto:Monica.L.King@lahey.org), to initiate process)
- The Lahey faculty evaluating learners will need IT access to our student evaluation software (OASIS).

### **3<sup>rd</sup> Year Flexible Clinical Experiences (FCE)**

#### **Requirements**

- Every FCE must include a faculty supervisor and an administrator.
- Determine the FCE blocks of the academic year the faculty supervisor is available to take students (please refer to [Academic Year 23/24 Block Schedule](#))
- Confirm the capacity for each block (please work with Martinha Rosa, [Martinha.F.Rosa@lahey.org](mailto:Martinha.F.Rosa@lahey.org))
- All FCE faculty must submit FCE course description via <https://www.umassmed.edu/oume/fce/proposal-forms/ay2324-faculty-proposal/>

### **4<sup>TH</sup> YEAR ELECTIVES**

Most often electives at Lahey will be considered a UMMS "site" for a pre-existing elective but could alternatively be a new course if the faculty leader wants to apply as a new course.

- To be a UMMS site the faculty leader would read course descriptions here to ensure the elective is similar and we can let the UMMS elective leader know.
- If their envisioned elective was markedly different from the described experience, they could apply to be a new elective [please see this link](#) for that process.
- **For all elective experience questions, please reach out to Jessica Kilham ([Jessica.Kilham@umassmed.edu](mailto:Jessica.Kilham@umassmed.edu)), Colleen Burnham ([Colleen.Burnham@umassmed.edu](mailto:Colleen.Burnham@umassmed.edu))**

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***Please use the following link to access the course catalogue, which provides the course number, faculty, and coordinator. For details on each course description and goals and objectives, please reach out to the individuals listed.***

Link: [UMass Chan Course Catalog](#)

## CONTACTS

### Core Clinical Experience

#### Clerkship Directors

Family Medicine	Mary Lindholm	<a href="mailto:mary.lindholm@umassmemorial.org">mary.lindholm@umassmemorial.org</a>
Internal Medicine	Nancy Skehan	<a href="mailto:nancy.skehan@umassmemorial.org">nancy.skehan@umassmemorial.org</a>
Neurology	Wissam Deeb	<a href="mailto:wissam.deeb2@umassmemorial.org">wissam.deeb2@umassmemorial.org</a>
Ob/Gyn	Dhivya Kannabiran	<a href="mailto:dhivya.kannabiran@umassmemorial.org">dhivya.kannabiran@umassmemorial.org</a>
Pediatrics	Erin McMaster	<a href="mailto:erin.mcmaster@umassmemorial.org">erin.mcmaster@umassmemorial.org</a>
Psychiatry	Anya Bernstein	<a href="mailto:anya.bernstein@umassmemorial.org">anya.bernstein@umassmemorial.org</a>
Surgery	James Carroll	<a href="mailto:james.carroll@umassmemorial.org">james.carroll@umassmemorial.org</a>

### Flexible Clinical Experiences

UMass OUME	Colleen Burnham	<a href="mailto:UMMSFCEProgam@umassmed.edu">UMMSFCEProgam@umassmed.edu</a>
Emergency Clinical Problem Solver (ECPS)	Jennifer Carey	<a href="mailto:jennifer.carey@umassmemorial.org">jennifer.carey@umassmemorial.org</a>
Acting Internship in Acute Care Surgery (ASURG SUBI)	James Carroll	<a href="mailto:james.carroll@umassmemorial.org">james.carroll@umassmemorial.org</a>
Acting Internship in Family Medicine & Community Health (FM SUBI)	Anthony Lorusso	<a href="mailto:anthony.lorusso@umassmemorial.org">anthony.lorusso@umassmemorial.org</a>
Acting Internship in Internal Medicine (IM SUBI)	Majid Yazdani	<a href="mailto:majid.yazdani@umassmemorial.org">majid.yazdani@umassmemorial.org</a>
Acting Internship in Pediatrics (PEDI SUBI)	Tim Gibson	<a href="mailto:timothy.gibson@umassmemorial.org">timothy.gibson@umassmemorial.org</a>

**For all elective experience questions, please reach out to Jessica Kilham ([Jessica.Kilham@umassmed.edu](mailto:Jessica.Kilham@umassmed.edu)), Colleen Burnham ([Colleen.Burnham@umassmed.edu](mailto:Colleen.Burnham@umassmed.edu)) or Trish Seymour ([Patricia.Seymour3@umassmemorial.org](mailto:Patricia.Seymour3@umassmemorial.org))**

## LEARNING OBJECTIVES

### Learning Objectives by Clerkship in the LInC Curriculum

#### Psychiatry:

1. Student will apply knowledge of the normal lifespan changes in the care of patients with psychiatric disorders and medical conditions
2. Student will describe the psychobiological-behavioral theories for psychiatric and substance use disorders
3. Student will describe the psychopharmacological treatments and psychotherapies for psychiatric disorders
4. Student will demonstrate knowledge of components of the psychiatric mental status exam and cognitive screening
5. Student will conduct patient interviews skillfully
6. Student will diagnose psychiatric disorders in patients
7. Student will propose evidence based therapeutic options
8. Student will assess risk factors for suicidality and dangerousness in patients
9. Student will advocate for the humane, just, safe and prudent care of patients with psychiatric disorders
10. Student will describe the basic framework for mental health care in our country
11. Student will effectively communicate psychiatric presentations and findings in both oral and written form, attending to patient dignity and patient preferences in a non-stigmatizing way.
12. Student will communicate and work effectively and respectfully with others, with attention to appropriate boundaries.
13. Student will communicate and work effectively and respectfully with others, with attention to appropriate boundaries.
14. Student will demonstrate respect, empathy, sensitivity, and concern for all patients, regardless of the patient's problems, socioeconomic status, education level, racial and ethnic identification, religion, health behaviors, sexual orientation, gender identification, or other individual or cultural differences
15. Student will behave in a manner consistent with the highest ethical standards of the profession, including matters in confidentiality and honesty, and demonstrate this in interactions with patients, families, staff, colleagues and other medical professionals.

16. Student will seek to advance knowledge through intellectual curiosity, identifying clinical questions as they emerge in patient care activities, and appropriately utilize evidence-based resources to address uncertainty in medicine and gaps in knowledge/skills.

17. Student will engage in self-reflection and seek feedback to identify strengths and weakness, set individual learning goals, and engage in learning activities to meet those goals.

## Pediatrics:

Student will:

1. Demonstrate a humanistic approach to patient care
  - a. Recognize the role of culture, values, beliefs, and social determinants of health in influencing health and illness
  - b. Engage effectively with children across the age and developmental spectrum
  - c. Demonstrate respect for the contributions of caregivers
  
2. Develop communication skills that will facilitate effective clinical interactions with patients and families
  - a. Obtain a developmentally appropriate history pertinent to the needs of patients and families
  - b. Interview an adolescent patient using a standard structured interview technique to address sensitive issues that affect health and safety
  
3. Perform an age and developmentally appropriate physical exam pertinent to the needs of the patient and family
  - a. Perform a comprehensive newborn physical exam
  - b. Demonstrate a child-centered approach to the physical exam
  - c. Assess growth in children, including height/length, weight, head circumference and body mass index using standard or condition-specific growth charts
  
4. Integrate clinical information from the history, physical exam and other available data to develop an assessment and plan for a pediatric patient
  - a. Compare and contrast signs and symptoms of an acutely ill child requiring emergent care versus a stable child, based on history and physical exam findings
  - b. Obtain historical and physical exam information necessary to assess the hydration status of a child
  - c. Demonstrate how to calculate weight-based dosing
  - d. Assess the behavioral and developmental status of a pediatric patient
  - e. Identify that there are different nutritional needs based on age and health status
  - f. Demonstrate knowledge necessary for the diagnosis and initial management of common pediatric complaints
  - g. List characteristics of the history and physical examination that should trigger concern for possible adverse childhood experiences, including physical, sexual, and psychological abuse and neglect
  - h. Document and hand in a formative comprehensive write-up (similar to but more expansive than a regular H&P) that includes a substantive differential and plan for 1 pediatric patient.
  
5. Describe the physician's role in the interdisciplinary care for patients and families
  - a. Recognize the role of the health care team in advocating for the health, well-being, and safety.

## Family Medicine:

### 1. Knowledge:

- Describe epidemiology, diagnostic features, and risk factors related to common ambulatory, acute, and chronic conditions.
- Discuss diagnostic and therapeutic treatment alternatives for common ambulatory, acute and chronic problems.
- Identify and discuss the reasons for which patients present for medical care in the ambulatory setting.
- Understand principles of health maintenance, screening, and disease prevention as it relates to the individual patient and age specific patient groups.
- Identify and discuss psychosocial and family issues as they relate to illness and patient care. Demonstrate the principles of cost-effectiveness in ambulatory care.
- Discuss the principles of continuity, comprehensiveness, and specialty referral as they relate to the role of the primary care physician.

### 2. Skills:

- Obtain a focused medical history and perform the appropriate physical exam`.
- Concisely present orally and in writing case presentations utilizing a problem-based S.O.A.P. format.
- Formulate diagnostic and management plans utilizing principles of cost-containment, continuity, comprehensiveness, and disease prevention.
- Identify relevant psychosocial, family and lifestyle issues as they relate to patient care. Incorporate relevant psychosocial, family and lifestyle issues into patient care management. Demonstrate a patient centered model of patient interviewing.
- Utilizing a patient-centered model for behavior change, identify risk factors and appropriately educate patients on issues of disease prevention and life-style change.

### 3. Attitudes:

- Respect patients' values.
- Subscribe to the ethical principles of medical practice.
- Respect the confidentiality and security of information obtained during the patient encounter.

Neurology:

1. Demonstrate the ability to: obtain a complete neurological history, perform a reliable neurological examination, and interpret the neurological examination findings.
2. Recognize “red flags” and initiate the management of neurological emergencies including but not limited to acute stroke, status epilepticus, spinal cord compression, acute mental status changes (e.g. coma), meningitis/encephalitis, and acute respiratory distress due to neuromuscular disease (e.g. GBS, Myasthenic crisis).
3. Recognize and describe the management of patients with common neurological problems including but not limited to the following categories: Paroxysmal disorder ( seizure, headache, syncope, etc.); Vascular disorder ( strokes, TIA, intracranial hemorrhage); Neuromuscular disorder (myopathy, neuromuscular junction disorders, neuropathy, radiculopathy, motor neuron disease etc.); Progressive degenerative disorder ( Parkinson’s disease, Dementia (Alzheimer’s disease and other dementing processes), Multiple sclerosis, etc.).
4. Describe indications and appropriate use of neurodiagnostic modalities: CT and MRI of the brain and spinal cord, EEG, EMG, and lumbar puncture.
5. Recognize situations in which it is appropriate to request urgent and non-urgent neurological consultations.

**Surgery:**

1. Identify surgical disease in a variety of settings: outpt clinics, emergency ward, inpatient ward, ICU, and operating room
2. Master relevant basic science principles as applied to clinical surgery
3. Evaluate most common conditions seen in patients in these hospital and outpt settings
4. Master relevant clinical information pertaining to specific diseases (listed in appendix I) including: pathogenesis, physical exam, differential dx, basic management principles
5. Master basic surgical procedures including: phlebotomy, suturing, foley catheters, drain care, NG tubes, & dressing changes
6. Review basic skills and techniques for laparoscopic surgery
7. Review surgical anatomy
8. Learn basic principles of pediatric surgery
9. Learn basic principles of transplantation surgery
10. Learn basic principles of trauma surgery
11. Learn basic principles of plastic surgery
12. Learn basic principles of vascular surgery
13. Learn basic principles of human factors as applied to surgery
14. Students will become familiar with the criteria for obtaining informed consent in patients for surgical procedures
15. Students will demonstrate skills in the interpretation of radiologic images as applied to surgical disease, including common entities in Appendix I



**OBGYN:**

Objective: With the supervision of precepting faculty, students will

1. demonstrate the ability a thorough breast and pelvic exam on a standardized patient with assessment from the SP.
2. demonstrate the ability to perform five bimanual / speculum exams. Completion of the pelvic exam certification card will demonstrate that students have met this objective.
3. obtain an obstetrical and gynecological history as measured by performance in the end-of-clerkship OSCE.
4. demonstrate their ability in patient education and modern contraceptive technology by correctly educating a standardized patient about contraceptive options as measured by the end-of-clerkship OSCE
5. acquire data gathering and problem-solving skills necessary for the diagnosis and management of common conditions that all physicians may encounter.
6. present two complete H&Ps of high-risk obstetrical patients seen during the clerkship and answer questions with an attending physician as measured by the end-of-clerkship oral exam.
7. demonstrate knowledge regarding the appropriate use and limitations of Pap smears and other gynecologic tests as measured by performance in the end-of-clerkship OSCE.
8. demonstrate their ability to generate a differential diagnosis, including supporting evidence from history and physical exam, in female patients with lower abdominal pain and or abnormal uterine bleeding as measured by performance in the end-of-clerkship OSCE and the CCCA.
9. demonstrate their knowledge of physiologic adjustments that accompany normal gestation as measured by performance on the NBME OB/GYN subject exam.
10. recall knowledge of embryonic and fetal development including potential teratogens as measured by performance on the NBME OB/GYN subject exam.
11. apply understanding of social and health policy aspects of women's health via case-based discussion and on-line modules.
12. explain endocrine topics important in OB/GYN, including the menstrual cycle, puberty, menopausal issues, polycystic ovarian syndrome, and infertility via small group presentations.
13. demonstrate their understanding of reproductive cancers via case-based discussions with a gyn oncologist and as measured by performance on the NBME OB/GYN subject exam.
14. demonstrate their understanding of intrapartum care and common problems in obstetrics via case-based discussions with a perinatologist and as measured by performance on the end-of-clerkship OSCE and the NBME OB/GYN subject exam
15. demonstrate their understanding of vaginal and vulvar disorders as measured by performance on end-of-clerkship OSCE and the NBME OB/GYN subject exam.
16. recognize common presentations and treatments of incontinence and prolapse as measured by performance in the end-of-clerkship OSCE and the NBME OB/GYN subject exam. • Clinical Problem Solver

**Internal Medicine:**

Clerkship Objectives: By the end of the clerkship,

1. Students will be able to describe the pathophysiologic principles and medical therapies for common medical illnesses including the following diagnoses and clinical conditions:

- Chest Pain/Acute Coronary Syndrome
- Acute Kidney Injury/Chronic Kidney Disease
- Cirrhosis
- Congestive Heart Failure
- Chronic obstructive pulmonary disease
- Coronary artery disease
- Diabetes mellitus
- Dyslipidemia
- Gastroesophageal reflux
- Hypertension
- Thyroid disorders (Hyper-, Hypothyroidism)
- Osteoporosis
- Pancreatitis
- Dyspnea
- Edema
- Fatigue
- Fever
- Gastrointestinal Bleed
- Electrolyte abnormalities
- Nosocomial Infections
- Skin and Soft Tissue Infections
- Syncope
- Unintentional Weight Loss
- Pneumonia
- Substance Use Disorders
- Venous Thromboembolic disease
- Acid Base
- Altered Mental Status
- Anemia
- Constipation
- Cough
- Diarrhea

Satisfactory performance will be determined by direct observations by precepting faculty and successful completion of the clerkship OSCE and Board exam.

2. Students will be able to obtain an accurate and concise medical history, perform a targeted physical examination, and present cases in oral and written form.

Satisfactory performance will be determined by direct observation by precepting faculty and successful completion of the clerkship OSCE and graded History and Physical documentation submitted to longitudinal preceptors.

3. Students will demonstrate effective communication with patients and within a diverse team of allied health care professionals.

Satisfactory performance will be determined by direct observation by precepting faculty and successful completion of the clerkship OSCE.

4. Using information obtained through history and physical examination as well as laboratory and radiological data, students will demonstrate the ability to interpret clinical information through the development of differential diagnoses.

Satisfactory performance will be determined by successful completion of clerkship OSCE and board exam, direct observation by precepting faculty and graded History and Physical documentation submitted to longitudinal preceptors.

5. Students will be able to discuss the health screenings indicated for adults and will be able to counsel patients on smoking cessation, weight management, safe levels of alcohol consumption, blood pressure management and exercise.

Satisfactory performance will be determined by successful completion of clerkship OSCE and board examination and direct observation by precepting faculty.

6. Students will be able to complete a functional and cognitive assessment on a Geriatric patient.

Satisfactory performance will be determined by successful completion of a geriatric History and Physical document, to include a functional assessment and cognitive assessment, submitted to the Longitudinal Preceptor in Medicine (LPM).

7. Students will be able to discuss the social determinants of health as it relates to patient care and clinical outcomes.

Satisfactory performance will be determined by direct observation by precepting faculty and successful completion of a clerkship written reflection submitted to the clerkship director/faculty.

8. Students will be able to discuss common causes for medical errors, gaps, and variations in care, and will look for ways to improve quality of care.

Satisfactory performance will be determined by direct observation by precepting faculty and successful completion of a reflective writing assignment.

9. Students will demonstrate knowledge of the rationale and process for the following common procedures: • Venipuncture • Culture (blood or tissue) • ABG • ECG • Nasogastric tube placement • Peripheral intravenous catheter insertion • Urine dipstick

Satisfactory performance will be determined by direct observation in simulation and successful completion of the student self-reporting tool in OASIS.

10. Students will be able to identify medical conditions requiring emergent evaluation and management.

Satisfactory performance will be determined by direct observation by precepting faculty and successful completion of the clerkship OSCE and Board exam.

11. Students will be able to discuss an approach to palliative care to include defining palliative care, describing care at the end-of-life, and exploring patient and family values and goals. Satisfactory performance will be determined by successful completion of simulated palliative care encounters.

## Population and Community Health Clerkship (PCHC)

In this clerkship, students will:

1. Collect, synthesize, and/or explain relevant population-level data
2. Identify the interprofessional team members who care for the population
3. Explore best practices for advocacy with a population to improve social and structural determinants of health
4. Apply knowledge toward meaningful service in a community

## Learning Objectives for select Electives

### Emergency Clinical Problem Solver (ECPS) [Link](#)

EM-4004 4 weeks  
Updated January 2019

ECPS is a required four-week course during the advanced studies year. The course is designed to teach a general approach to emergency, critical care and urgent decision making that all physicians will be called upon to provide in the office, hospital, and community settings.

Students complete a combination of acute care clinical experiences (eight 8-hour emergency department shifts and an EMS ride along), didactics, and simulation of clinical encounters and procedures. Students will be required to take leadership roles in case discussions and during simulation scenarios. Educational methods will include: case-based learning, an asynchronous on-line curriculum, student presentations, high and low fidelity simulation with debriefing.

After the ECPS course, the MS4 will be able to:

- Identify an emergency (across different clinical settings) and learn a systematic approach to diagnosis, treatment, and disposition (Physician as Clinical Problem Solver)
- Evaluate high risk undifferentiated patients and generate a differential diagnosis using advanced clinical reasoning techniques (Physician as Clinical Problem Solver)
- Perform patient management to include (a) rapid assessment of acuity and stability, initial treatment, stabilization, diagnostics, and disposition; (b) procedural skills necessary to stabilize acutely unstable patients; and (c) leadership, teamwork, and effective communication (Physician as Clinical Problem Solver, Communicator, and Professional)

Student competency is assessed by formative assessment (preceptor and clinical site director feedback, faculty and peer-to-peer feedback during simulation debriefing, small group participation) and summative assessment (global summary of clinical experience, participation during cumulative simulation scenarios each week, quizzes).

Course Director  
Jennifer Carey, MD

## Medicine Acting Internship

4 weeks

Updated March 2021

The Medicine Acting Internship is offered at the School of Medicine's major clinical and educational affiliate teaching hospitals to fulfill the Advanced Studies acting internship requirement. Acting Internships in Medicine may be taken at institutions outside of these affiliates in addition to, but not instead of this core requirement. Students work on a team with appropriate resident and/or attending supervision to provide direct care for patients on the inpatient Medicine service. The number of patients for whom a student is responsible will be adjusted to maximize the learning potential and to fit each individual's capabilities. Students admit new patients and may also assume the care of those admitted by other covering physicians on nights or weekends.

Students participate in all house staff conferences and meet in small groups with the site director (or designee) to review the Acting Internship curriculum topics. This curriculum is standardized across all sites and all required Acting Internships to meet the specific objectives of the Acting Internship. Students are expected to participate in other site-specific teaching sessions with faculty and teams to include opportunities such as case presentations at conferences, topic reviews and bedside presentations. Feedback, personal involvement and individual evaluation are emphasized in this modified apprenticeship model.

After the ME-301 course, the MS4 will be able to:

- Demonstrate the skills of an acting-intern including history taking for various situations admissions, acute problem management, and continued care (Physician as Communicator, Professional, Clinical Problem Solver, and Person)
- Generate a physical diagnosis after a complete physical exam for admission and problem-oriented physical exam (Physician as Communicator and Clinical Problem Solver)
- Present in various settings -- initial admission or full attending rounds, work rounds, sign out, and consultation (Physician as Communicator, Professional, and Advocate)
- Communicate with the patients, family members by providing updates of daily medical issues, patient education on his/her disease and prognosis, and deliver bad news (Physician as Communicator, Professional, Clinical Problem Solver, Person, and Advocate)
- Seek feedback from residents and attendings (Physician as Communicator, Professional, Clinical Problem Solver, and Advocate)
- Prepare concise progress and procedure notes and summarize discharge concisely and timely (Physician as Advocate, Professional and Clinical Problem Solver)
- Develop skills to admit and manage 3-5 patients at a time by organizing daily activities and using flow sheets (Physician as Clinical Problem Solver)
- Apply evidence-based medicine by researching original references (Physician as Scientist, Professional, and Clinical Problem Solver)
- Encounter and manage common acute inpatient medical conditions (Physician as Scientist, Professional, and Clinical Problem Solver)
- Demonstrate higher order skills in teamwork and negotiation, application of evidence-based medicine, applied therapeutics, and breaking bad news/end of life decision making (Physician as Scientist, Professional, Clinical Problem Solver, Person, and Advocate)

Student competency is assessed by evaluation of team members and supervisors using a standardized rubric.