GENERAL TECHNICAL STANDARDS FOR RESIDENCY AND CLINICAL FELLOWSHIP
AT THE UNIVERSITY OF MASSACHUSETTS MEDICAL SCHOOL

A resident/fellow must possess abilities, and skills in five areas: 1) observation; 2) communication; 3) sensory and motor coordination and function; 4) conceptualization, integrative, and analytic abilities; and 5) behavioral and social attributes and professionalism. These technical standards are to be understood as requirements for training in all UMass residency and clinical fellowship programs, and are not to be construed as competencies for practice in any given specialty.

In addition, a resident/fellow must be able to comply with UMass Memorial Medical Center policies, including Policy #5008 on Management of a Healthcare Worker Infected with a Bloodborne Pathogen. Any resident who is a carrier of a bloodborne pathogen [including but not limited to Hep B virus (HBV), Hep C and HIV] may not be permitted to perform some invasive procedures. This may restrict the resident’s ability to meet specialty specific requirements and thus prevent him/her from training in his/her chosen field. See Addendum for a more detailed description of such procedures and clinical environments. These standards are designed to protect the health and safety all healthcare workers and patients. All questions should be directed immediately to your prospective program director, the GME office or the Director of Infection Control.

OBSERVATION
The resident must be able to:
• Observe a patient accurately at a reasonable distance and close at hand, noting non-verbal as well as verbal signals
• Detect color of skin, fluids, media, etc.
• Visualize and discriminate findings on X-rays and other imaging studies
• Efficiently read written and illustrated materials
• Observe demonstrations in the classroom (demonstration material, projected slides, videos, films, overheads)
• Observe and differentiate changes in body movement
• Observe anatomic structures
• Discriminate numbers and patterns (diagnostic instruments and tests, e.g., ECG, imaging studies)
• Possess sufficient hearing for required diagnostic functions (e.g., use of stethoscope) and for hearing the full range of human speech (whispered to loud voices)

COMMUNICATION
The resident must be able to:
• Relate effectively and sensitively with patients, families, and other caregivers, conveying a sense of compassion and empathy
• Communicate clearly with and observe patients and families in order to elicit information including a thorough history from patients, families and other sources
• Accurately describe changes in mood, activity and posture
• Perceive verbal as well as non-verbal communications, and promptly respond to emotional communications (sadness, worry, agitation, lack of comprehension)
• Read and understand a large volume and breadth of materials (scientific, clinical)
• Impart knowledge information to others
• Communicate clinical information effectively and efficiently in oral and written English with members of the health care team and other health care professionals
• Communicate complex findings in appropriate terms to patients and their families
• Adjust form and content of communications to the patient’s functional level or mental state
• Communicate complex findings in appropriate terms to various members of the health care team (fellow students, physicians, nurses, nurses aides, therapists, social workers, and paraprofessionals)
• Engage in a collaborative relationship with patients and families
• Read and record observations and plans legibly, efficiently, and accurately
• Prepare and communicate precise but complete summaries of individual encounters, including hospitalizations
• Complete forms according to directions in a complete and timely fashion

SENSORY AND MOTOR COORDINATION OR FUNCTION
The resident must be able to:
• Perform a physical exam utilizing palpation, auscultation, percussion, and other diagnostic maneuvers
• Provide basic first aid to patients in a timely manner
• Respond promptly to medical emergencies within the hospital
• Perform basic emergency interventions (CPR)
• Not hinder the ability of their co-workers to provide prompt care
• Perform basic diagnostic and therapeutic procedures (e.g., venepuncture, intravenous line placement and administration of iv medications, lumbar puncture) under non-emergent conditions.
• Transport oneself to a variety of ambulatory settings in a timely fashion

The performance of more invasive procedures or participation in clinical environments where there is a definite risk of blood exposure may be impacted by healthcare bloodborne pathogen status.

CONCEPTUAL, INTEGRATIVE, and ANALYTIC ABILITIES
including capacities for measurement, calculation, reasoning, judgment, and synthesis
The resident must be able to:
• Demonstrate clinical reasoning and problem solving
• Identify significant findings from history, physical exam and laboratory data
• Perceive subtle cognitive and behavioral findings and perform a mental status evaluation
• Provide a reasoned explanation for likely diagnoses (i.e., a reasoned differential diagnosis)
• Construct an appropriate diagnostic plan
• Prescribe appropriate medications and therapy
• Recall and retain information
• Deal with several tasks or problems simultaneously
• Identify and communicate the limits of their knowledge to others
• Incorporate new information from peers, teachers, and the medical literature in formulating diagnoses and plans
• Show good judgment in patient assessment, diagnostic, and therapeutic planning
BEHAVIORAL AND SOCIAL ATTRIBUTES AND PROFESSIONALISM - including empathy, integrity, honesty, concern for others, good interpersonal skills, interest and motivation

The resident must:

- Possess the consistent capacity for the full use of their intellectual abilities, the exercise of good judgment, the prompt completion of all responsibilities attendant to diagnosis and care of patients, the development of mature, sensitive, and effective relationships with patients and with other health care providers
- Maintain a professional demeanor
- Maintain appropriate professional and ethical conduct
- Be able to function at a high level in the face of long hours and a high stress environment.
- Develop empathic relationships with patients and families while establishing appropriate professional boundaries
- Be accessible to and proficient in learning about diverse ethnic groups and cultural practices
- Provide comfort and reassurance where appropriate
- Protect patient confidentiality and the confidentiality of written and electronic medical records
- Possess adequate endurance to tolerate physically taxing workloads
- Function effectively under stress
- Flexibly adapt to changing environments
- Function in the face of uncertainties inherent in the clinical problems of patients
- Accept the responsibility of caring for others
- Accept appropriate suggestions and criticisms and modify behavior
- Give and accept criticism appropriately and without prejudice

Please refer to UMMS GME Policy on Professional Behavior for additional information
ADDENDUM TO
GENERAL TECHNICAL STANDARDS FOR RESIDENCY AND CLINICAL FELLOWSHIP:

PROCEDURES OR CLINICAL ENVIRONMENTS WHERE RESTRICTIONS MAY BE
APPLIED FOR PHYSICIANS INFECTED WITH A BLOOD BORNE PATHOGEN

The exact restrictions that would be required will vary depending upon the bloodborne pathogen involved as well as an individual physician’s medical condition. However, potential restrictions that could be required include:

Category 1: Categories or procedures with minimal risk of viral transmission

Performance of peripheral phlebotomy in emergency situations (e.g. during acute trauma or resuscitation efforts)
Psychiatric evaluations may pose some risk with biting or otherwise violent patients

Category 2: Categories or procedures for which viral transmissions is theoretically possible but unlikely

Procedures that warrant general attention:
- Locally anesthetized ophthalmologic surgery
- Minor local procedures (e.g. skin excisions, abscess drainage, biopsies, and use of laser) under local anesthesia (often under bloodless conditions)
- Percutaneous cardiological procedures (e.g. angiography and catheterization)
- Subcutaneous pacemaker implantation
- Bronchoscopy
- Insertion and maintenance of epidural and spinal anesthesia lines
- Minor gynecological procedures (e.g. dilatation and curettage, suction abortion, colposcopy, inserting and removing contraceptive devices and implants, and collecting ova)
- Male urological procedures (excluding transabdominal intrapelvic procedures)
- Upper gastrointestinal tract endoscopic procedures
- Minor vascular procedures (e.g. embolectomy and vein stripping)
- Amputations, including major limbs (e.g. hemipelvectomy and amputation of legs or arms) and minor amputations (e.g. amputations of fingers, toes, hands or feet)
- Mamma augmentation
- Minimum exposure plastic surgical procedures (e.g. liposuction, minor skin resections for reshaping, face lift, brow lift, blepharoplasty, and otoplasty)
- Thyroidectomy and/or biopsy
- Endoscopic ear, nose and throat surgery and simple ear and nasal procedures (e.g. stapedectomy/stapedotomy and insertion of tympani tubes)

Procedures that warrant special attention
- Assistance with uncomplicated vaginal delivery
- Laparoscopic procedures
- Thorascoscopic procedures
- Nasal endoscopic procedures
- Routine arthroscopic procedures
- Plastic Surgery
Category 3: Categories of procedures for which there is a definite risk of viral transmissions or that are exposure-prone procedures

Abdominal surgery
Anesthesiology
Cardiothoracic Surgery
Open extensive head and neck surgery involving bones
Neurosurgery
Non-elective procedures performed in the emergency department
Obstetrical/gynecological surgery
Orthopedic Procedures
Plastic Surgery
Psychiatric evaluations and care of violent and/or biting patients
Transplantation surgery
Trauma Surgery
Interactions with patients in situations during which risk of biting physician is significant
Any open surgical procedures of >3 hours in duration, probably necessitating glove change