

## MUSC College of Medicine Institutional Learning Objectives (ILOs) 2016

**Medical Knowledge for Practice:** Students must demonstrate knowledge about established and evolving basic, clinical, and cognate (i.e., epidemiological and social-behavioral) sciences and the application of this knowledge to the practice of medicine.

**MK 1** Describe the **normal structure and function (morphology and physiology)** of the human body and of each of its major organ systems across the life span.

**MK 2** Describe how molecular, biochemical, cellular and genetic mechanisms affect human development and **maintain the body's homeostasis** across the life span.

**MK 3** Explain various **causes of major diseases and conditions** (genetic, developmental, metabolic/nutritional, toxic, microbiologic, immunologic, inflammatory, neoplastic, degenerative, traumatic and behavioral) and the ways in which they operate on the body (**pathogenesis**) in individuals and in populations.

**MK 4** Describe how **altered structure and function** (pathology and pathophysiology) of the body and its major organ systems are exhibited through various diseases and conditions, and as a result of aging.

**MK 5** Describe the scientific principles underlying **diagnostic methods**, including laboratory and radiologic testing, and **treatment approaches (pharmacologic and non-pharmacologic)** that may be applied to major diseases and conditions.

**MK 6** Demonstrate knowledge of physical and functional principles of normal and altered **human behavior** throughout the life cycle, including scientific basis for diagnostic and treatment approaches applied to these conditions.

**MK 7** Explain how **social determinants, health behaviors and preventive measures** affect disease, illness, and health in individuals and across populations regionally, nationally, and globally.

**MK 8** Demonstrate knowledge of the scientific method in establishing causation of health and disease, the utility of diagnostic modalities, and the efficacy of therapies (traditional and non-traditional), through **critical evaluation of current basic and clinical scientific knowledge**.

**Patient Care:** Students must be prepared to provide patient-centered care that is compassionate, appropriate, safe and effective, responsive to the personhood of the patient inclusive of culture, race, ethnicity, spirituality, gender, sexual orientation, age, disabilities, chronic medical conditions, socioeconomic status, family-context and other aspects of personal and health beliefs, practices and decisions.

**PC 1** Obtain essential, accurate, and age-appropriate **information about patients** through history-taking, physical examination, and the use of laboratory data, imaging, and other tests.

**PC 2** Formulate an accurate and comprehensive **differential diagnosis** through interpretation and synthesis of relevant patient data.

**PC 3** Develop and implement with supervision appropriate **evaluation and management plans** in the inpatient and outpatient setting utilizing individual patient information and preferences, evidence-based medicine and clinical judgment for diverse populations.

**PC 4** Provide appropriate **referral of patients** including ensuring continuity of care throughout transitions between providers or settings and following up on patient progress and outcomes.

**PC 5** **Counsel, educate, and partner** with patients, families, and the community to promote health and prevent health problems using accurate, current evidence-based information.

**PC 6** Organize and prioritize responsibilities to provide care that is **safe, effective, and efficient**.

**PC 7** Perform routine **procedures** safely and correctly with appropriate supervision.

**Interpersonal and Communication Skills:** Students must demonstrate interpersonal and communication skills that facilitate effective exchange of information and collaboration with patients, their families and health professionals.

**CS 1** **Communicate** effectively with patients, families, colleagues, and the public through the use of active listening and appropriate verbal, nonverbal and written skills.

**CS 2** Foster **therapeutic and ethically sound relationships** with patients across a broad range of socioeconomic and cultural backgrounds with respect, empathy and support of emotions.

**CS 3** Demonstrate **sensitivity, honesty, and compassion** in difficult conversations, including those about death, end of life, adverse events, bad news, disclosure of errors, and other sensitive topics.

**CS 4** Act in a **consultative role** to other health professionals.

**CS 5** Maintain accurate, comprehensive, timely, and legible **medical records**.

**Professionalism:** Students must demonstrate a commitment to professional and personal excellence in all settings, including adherence to ethical principles and sensitivity to a diverse patient population.

**PR 1** Demonstrate **honesty, integrity, respect, and compassion** in all interactions with patients, peers, faculty, staff, and other health care professionals in all settings.

**PR 2** Demonstrate **ethical, patient-centered decision-making, informed consent, and respect for autonomy and confidentiality** of patient information in all settings (i.e., clinical, academic, electronic or web-based.)

**PR 3** Demonstrate sensitivity and responsiveness to the **personhood of the patient** inclusive of culture, race, ethnicity, spirituality, gender, sexual orientation, age, physical characteristics, medical condition, disabilities, socioeconomic status, family-context and other aspects of personal and health beliefs, practices and decisions.

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**PR 4** Demonstrate **accountability** for academic, patient care and professional responsibilities including concern for societal needs.

**PR 5** Demonstrate responsiveness to patient needs that **supersedes self-interest**.

**Personal and Professional Development:** Students must demonstrate the qualities required to sustain lifelong personal and professional growth.

**PD 1** Acknowledge **personal limitations** and mistakes openly and honestly, seek and respond to feedback in a positive way, and demonstrate flexibility and maturity in adjusting one's behavior.

**PD 2** Demonstrate **strategies** for analyzing, identifying and improving **personal deficiencies** in knowledge and skills by setting learning and improvement goals.

**PD 3** Demonstrate a commitment to **personal health** and well-being, and recognize and address personal attributes, attitudes, and behaviors that may adversely influence one's effectiveness as a physician.

**PD 4** Define **professional impairment** and describe the role and responsibility of health care professionals in addressing impairment and unprofessional behavior in colleagues and in the profession.

**PD 5** Use **self-awareness and assessment** data of one's knowledge, skills and attributes to identify appropriate **career options**.

**PD 6** Recognize that **ambiguity** is part of clinical health care and respond by utilizing appropriate resources in dealing with uncertainty.

**Practice-Based Learning:** Students must investigate and assess their academic and clinical performance and appraise and assimilate scientific evidence in order to continuously improve their care of patients and populations.

**PL 1** Apply foundational principles of **service-learning** with reflection on outcomes for patients and populations.

**PL 2** Demonstrate the use of **technology** in optimizing learning and improving patient care outcomes.

**PL 3** Retrieve, critically appraise, and integrate current, **evidence-based** biomedical information into patient care, clinical decision-making, and **scholarly work**.

**PL 4** Apply principles of **medical informatics, patient safety and quality improvement** to enhance patient care.

**PL 5** Apply the foundational principles of basic, clinical and **translational research** to patient care.

**PL 6** Describe and apply principles of **public health and population health** improvement for specific populations with attention to access, cost and patient-centered clinical outcomes.

**Systems-Based Learning:** Students must demonstrate an awareness of and responsiveness to the larger context and systems of health care, including barriers and drivers of health and health care access.

**SL 1** Describe various approaches to the organization, financing, and **delivery of health care** locally, nationally and internationally.

**SL 2** Advocate for **quality, cost effective** patient care and describe strategies for **coordinating** care within complex systems.

**SL 3** Describe the role and responsibility of physicians in developing and implementing **health policy**.

**SL 4** Describe **health disparities and health care disparities**, how they affect patient and system outcomes, and identify ways to effectively address disparities.

**Interprofessional Collaboration:** Students must demonstrate the ability to engage in an interprofessional team in a manner that optimizes safe, effective patient- and population-centered care.

**IP 1** Define the **roles and responsibilities** of various health professionals in the healthcare team.

**IP 2** Work with other health professionals to establish and maintain a **climate** of mutual respect, dignity, diversity, ethical integrity, and trust.

**IP 3** **Communicate** effectively and respectfully with other health professionals in a responsive and responsible manner.

**IP 4** Collaborate with other health professionals and **health care teams** to deliver quality patient care and improve system performance.

Resources: (1) MUSC COM 2012 Institutional Learning Objectives. (2) AAMC Physician Competency Reference Set. Englander R, Cameron T, Ballard AJ, Dodge J, Bull J, and Aschenbrenner CA. Toward a common taxonomy of competency domains for the health professions and competencies for physicians. Acad Med. 2013;88:1088-1094, (3) ACGME Core Competencies, ACGME Outcomes Project, 2002.