

**LEWIS KATZ SCHOOL OF MEDICINE AT TEMPLE UNIVERSITY  
MD PROGRAM COMPETENCIES**

**KNOWLEDGE-BASED COMPETENCIES**

Physicians must be knowledgeable about the scientific basis of medicine and be able to apply that knowledge to clinical problem-solving and the care of patients. They must engage in self-directed and independent learning to remain current in their knowledge.

Students must demonstrate:

1. Knowledge of the normal anatomical structure and function (physiological and psychological) of the human body as a whole and of each of its major organ systems, throughout the life cycle, to include developmental (infancy and adolescence) and aging processes
2. Knowledge of the molecular, biochemical, and cellular mechanisms important in maintaining the body's homeostasis
3. Knowledge of the various causes (genetic, developmental, metabolic, toxic, microbiologic, immunologic, neoplastic, degenerative, psychologic, and traumatic) of disease and the ways in which disease affects homeostasis (pathogenesis)
4. Knowledge of the altered structure and function (pathology and pathophysiology) of the body and its major organ systems that occur in clinically and pathophysiologically important diseases and conditions
5. Knowledge of the basic mechanisms of pharmacologic and non-pharmacologic modalities employed in the prevention and treatment of disease and amelioration of pain and suffering
6. Awareness that, and recognition of how, factors such as age, gender, ethnicity, sexual orientation, functional limitations, languages, belief systems, and socioeconomic status impact health, perceptions of well-being, and medical care of culturally diverse and medically underserved populations.
7. Knowledge of the epidemiology of common illnesses and the systematic approaches useful in reducing the incidence and prevalence of those illnesses.
8. Knowledge of disease and injury prevention practices in the care of individual patients and their families, and the community.

9. Knowledge of the various types of family planning and their potential impact on the patient, the family and society.
10. Knowledge of the physical and psychological aspects of aging and dying and a commitment to support and appropriately counsel patients and their families.
11. The ability to describe the principles and application of evidence-based medicine in establishing the causation of disease and therapeutic efficacy of treatment.
12. Knowledge of the biological and cultural basis of sex, gender, sexuality, sexual orientation, and gender identity, and application of that knowledge to the care of patients throughout life stages.
13. Knowledge of the forms and value of complementary medicine as employed in the treatment of disease.
14. The ability to recognize the impact of chronic disease and disability on a patient's ability to function in society.
15. Knowledge of the basic principles and ethics of clinical and translational research, and how such research is conducted, evaluated and applied to the care of patients.

Approved by the Curriculum Committee and the Dean, May 2015