

# Human Physiology in Medicine 2023

This is a lecture/research paper discussion course covering the molecular basis of human physiological systems and related methodologies used in modern physiological and medical research. Designed to further extend and supplement areas covered in the companion course Physiological Basis of Disease (and courses in the core MBS/MSBS curriculum), this course is subdivided into six parts including:

- 1) Nerve, Muscle and Bone Physiology,
- 2) Hormones, Signal Transduction, and Regulation of Gene Expression,
- 3) Sensory Physiology,
- 4) Cellular and Physiological Homeostasis,
- 5) Pathophysiology of Metabolic Diseases, and
- 6) Regenerative Medicine.

A total of 22 lectures will be given by a diverse group of expert scientists and physicians from across the Rutgers, CINJ and RWJMS research communities. Given the interdisciplinary nature of the course, no single textbook will be used. Rather, clinically relevant research papers, review articles or specific book chapters (assigned by each lecturer) will be available for downloading at the RWJMS Canvas website or via the Rutgers RWJMS Library website.