CAMB 5320
HUMAN PHYSIOLOGY
Spring 2023  Mon, Weds, Fri, 9-10:30am
Room Smilow Center Translation Research (SCTR) 10-146
Directors: Dr's Tejvir S. Khurana, Benjamin L. Prosser, Paul M. Titchenell
confirmed

Membrane Physiology
Jan. 11  Dr. Hoshi  Action Potentials/Voltage-gates Ion Channels
Jan. 13  Dr. Hoshi  Synaptic Transmission and Ligand-gated Ion Channels

Jan 16 No class (MLK)

Nervous System
Jan. 18  Dr. Thomas  Nervous System
Jan. 20  Dr. Thomas  Central Nervous System
Jan. 23  Dr. Thomas  Peripheral Nervous System

Muscle Physiology
Jan. 25  Dr. Ostap  Contractile Proteins and Striated Muscle-1
Jan. 27  Dr. Ostap  Striated Muscle-2
Jan. 30  Dr. Ostap  Smooth Muscle

Cardiovascular System
Feb. 1   Dr. Prosser  Cardiac and Skeletal Muscle Signaling
Feb. 3   Dr. Margulies  Myocardial Physiology and Cardiac Pump Function
Feb. 6   Dr. Margulies  Vascular Physiology
Feb. 8   Dr. Margulies  Cardiovascular Integration

Feb. 10  Self Study

Feb. 13  Exam 1 (Membranes, Neuro, Muscle, Cardiovascular)

Renal System
Feb. 15  Drs. Lohani/Fay  Organization of the Kidney and Glomerular Filtration
Feb. 17  Drs. Lohani/Fay  Regulation of Sodium Balance
Feb. 20  Dr. Spiardi  Renal Regulation of Potassium and Acid Balance
Feb. 22  Dr. Spiardi  Renal Regulation of Water Balance

Endocrine Physiology
Feb. 24  Dr. Titchenell  Neuroendocrinology
Feb. 27  Dr. Titchenell  Thyroid; Adrenal
Mar.  1  Dr. Titchenell  Glucose Homeostasis; Insulin Signaling

Mar. 3-10 No class (Spring Break)

Reproductive Physiology
Mar. 13  Dr. Mainigi  Female Reproductive Physiology
Mar. 15  Dr. Masson  Male Reproductive Physiology

Mar. 17  Self Study

Mar. 20  Dr. Dokras  Fertilization

Mar. 22  Exam 2 (Renal, Endo, Reproductive)
### Digestive System
- **Mar. 24**  Dr. Ahuja  GI Tract
- **Mar. 27**  Dr. Heuckeroth  Bowel motility and human motility disorders
- **Mar. 29**  Dr. Hayes  Neuro-endocrine control of food intake
- **Mar. 31**  Dr. Thaiss  Gut microbiome

### Sensory System
- **Apr. 3**  Dr. Genovese  Sensory Physiology

### Respiratory System
- **Apr. 5**  Drs. Frank & Basil  Ventilation/Perfusion & Gas Exchange and Transport
- **April 7**  Drs. Frank & Basil  Gas Exchange and Transport

### Integration
- **Apr. 10**  Dr. Khurana  Integrative Responses to Exercise
- **Apr. 12**  Dr. Khurana  Integrative Responses to the Environment

**Apr. 14**  **Self Study**

**Apr. 17**  **Exam 3 (Digestive, Respiratory, Sensory, Integration)**