

**CAMB 5320
HUMAN PHYSIOLOGY**

Spring 2024 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

Membrane Physiology

Jan. 19	Dr. Hoshi	Action Potentials/Voltage-gates Ion Channels
Jan. 22	Dr. Hoshi	Synaptic Transmission and Ligand-gated Ion Channels

Nervous System

Jan. 24	Dr. Thomas	Nervous System
Jan. 26	Dr. Thomas	Central Nervous System
Jan. 29	Dr. Thomas	Peripheral Nervous System

Jan. 31 Lauren Lee Mentored Study Day

Feb. 2 Exam 1 – Membranes and Neuro

Muscle Physiology

Feb. 5	Dr. Ostap	Contractile Proteins and Striated Muscle-1
Feb, 7.	Dr. Ostap	Striated Muscle-2
Feb. 9	Dr. Ostap	Smooth Muscle

Cardiovascular System

Feb. 12	Dr. Prosser	Cardiac and Skeletal Muscle Signaling
Feb. 14	Dr. Margulies	Myocardial Physiology and Cardiac Pump Function
Feb. 16	Dr. Margulies	Vascular Physiology
Feb. 19	Dr. Margulies	Cardiovascular Integration

Feb. 21 Lauren Lee Mentored Study Day

Feb. 23 Exam 2 - Muscle, Cardiovascular

Renal System

Feb. 26	Dr. Fay	Organization of the Kidney and Glomerular Filtration
Feb. 28	Dr. Fay	Regulation of Sodium Balance
Mar. 1	Dr. Shulman	Regulation of Potassium and Acid Balance

Mar. 2-10 No class (Spring Break)

Mar. 11 Dr. Spiardi Regulation of Water Balance

Endocrine Physiology

Mar. 13	Dr. Titchenell	Hormone action; neuroendocrinology of metabolism
Mar. 15	Dr. Hayes	Control of food intake
Mar. 18	Dr. Hayes	Regulation of energy balance
Mar. 15	Dr. Titchenell	Glucose Homeostasis; Insulin Signaling

Reproductive Physiology

Mar. 22 Dr. Mainigi Female Reproductive Physiology
Mar. 25 TBD Male Reproductive Physiology

Mar. 27 Lauren Lee Mentored Study Day

Mar. 29 Dr. Dokras Fertilization

Apr. 1 Exam 3 (Renal, Endo, Reproductive)

Digestive System

Apr. 3 Dr. Ahuja GI Tract
Apr. 5 Dr. Heuckeroth Bowel motility and human motility disorders
Apr. 8 Dr. Thaiss Gut microbiome

Sensory System

Apr. 10 Dr. Lee Sensory Physiology

Respiratory System

Apr. 12 Drs. Frank & Basil Ventilation/Perfusion & Gas Exchange and Transport
Apr. 15 Drs. Frank & Basil Gas Exchange and Transport

Integration

Apr. 17 Dr. Khurana Integrative Responses to Exercise
Apr. 19 Dr. Khurana Integrative Responses to the Environment

Apr. 22 Self Study

Apr. 24 Lauren Lee Mentored Study

Apr. 26 Exam 4 (Digestive, Respiratory, Sensory, Integration)