

Physiology Biophysics Mentors

Faculty	Position	Research Interest	Contact Info
Jessica M. Berthiaume, PhD	Adjunct Professor/ Instructor (Stelzer Lab)	Cardiac energy metabolism and the associated signaling pathways of the heart	jmb141@case.edu
Walter F. Boron, MD, PhD	Professor, Chair	Regulation of intracellular pH, gas channels	wfb2@case.edu
Matthias Buck, MA, DPhil	Professor	Protein-Protein Interactions in Cell Signaling of small GTPases, Plexin and Eph receptors	mxb150@case.edu
Sudha Chakrapani, PhD	Asst. Professor	Understanding the role of structure and dynamics in the functioning of ion channels	sxc584@case.edu
George R. Dubyak, PhD	Professor	Signal transduction by extracellular nucleotides in inflammation and immunity	gxd3@case.edu
Christopher P. Ford, PhD	Asst. Professor	Regulation of Dopamine Synaptic Transmission	cpf@case.edu
Jeffrey L. Garvin, PhD	Professor	Regulation of nephron transport, salt-sensitive hypertension and cross-talk between tubules and vessels	jlg5@case.edu
Stephen W. Jones, PhD	Professor	Voltage-dependent ion channels	swj@case.edu
Joseph C. LaManna, PhD	Professor	Cerebral angiogenesis, blood flow & metabolism	jcl4@case.edu
Fraser J. Moss, PhD	Instructor (Boron Lab)	Molecular mechanisms sensing and regulating physiological pH	fjm31@case.edu
Tingwei Mu, PhD	Asst. Professor	Proteostasis of membrane proteins in health and disease	txm210@case.edu
Xin Qi, PhD	Asst. Professor	Mitochondrial dysfunction in disease	xxq38@case.edu
Rajesh Ramachandran, PhD	Asst. Professor	Molecular mechanisms of membrane remodeling, fission and fusion in endocytosis and mitochondrial dynamics	rxr275@case.edu
Andrea Romani, MD, PhD	Assoc. Professor	Regulation of magnesium homeostasis and transport in mammalian cells	amr5@case.edu

William P. Schilling, PhD	Professor	Structure, function, and regulation of mammalian TRPC channels Mechanisms of Ca ²⁺ dyshomeostasis during oxidative stress	wps@case.edu
Corey Smith, PhD	Professor	Regulation of the sympatho-adrenal stress response.	cbs16@case.edu
Julian E. Stelzer, PhD	Asst. Professor	Cellular and molecular mechanisms of cardiac muscle contraction in health and disease	jes199@case.edu
Witold K. Surewicz, PhD	Professor	Molecular basis of prion diseases and other disorders of protein misfolding	wks3@case.edu
Kui Xu, MD, PhD	Instructor (LaManna Lab)	Brain hypoxia and ischemia	kxx@case.edu