Biochemical understanding of proteins and nucleic acids is fueling a revolution in medicine, demonstrating how the basic principles of biochemical structure govern molecular regulation in normal human health or malfunction in disease. Medical Biochemistry at Tulane University School of Medicine divides its focus into two sets of broad topics. Cellular Biochemistry focuses upon the molecular and cellular level of biochemistry, providing information about how cell organelles and structures function. Metabolic Biochemistry focuses upon biochemical pathways involved in intermediary metabolism. Both stress normal function and why disease states occur if these functions are abrogated. In this manner students can appreciate the relevance of biochemical structure and function. Numerous clinical cases are provided, relating disease states to biochemistry, to help students integrate complex disease states viewed from a cellular standpoint.