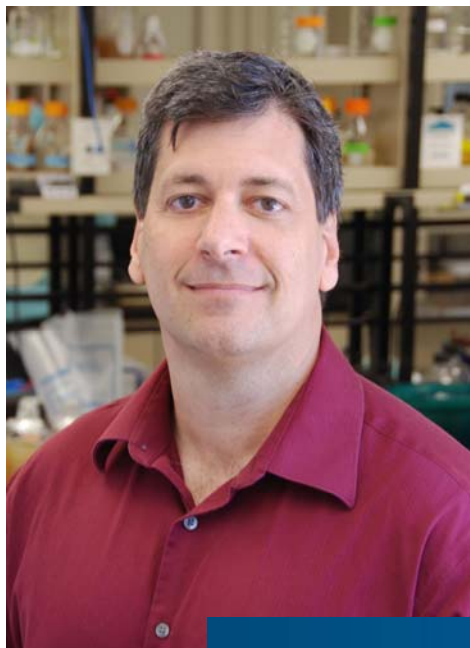


# BIOCHEMISTRY SEMINAR SERIES

Faculty Research Seminars – Fall 2020



Bacterial pathogens mount successful infections by displaying virulence factors that enable them to adhere to host tissues, evade the immune response, invade host cells and acquire essential nutrients. I am interested in understanding the molecular mechanisms that underpin virulence factor display and function, and I hope to translate my laboratory's research findings into practical applications. Our work is concentrated in two general areas of microbiology: (1) the biosynthesis of protein- and glyco-based polymeric virulence factors, and (2) microbial mechanisms that acquire heme-iron from human hemoglobin. We are also applying high-throughput screening and structure-based methods toward the goal of discovering new anti-infective agents to infections caused by *Staphylococcus aureus*, a leading cause of life-threatening hospital and community acquired infections in the United States.



**Prof. Robert Clubb**

**UCLA Chemistry & Biochemistry**

Our research encompasses two major areas: Understanding the mechanism of protein import into mitochondria and determining the process by which defects in mitochondrial protein translocation lead to disease.

A basic question in cell biology is the mechanism by which a protein reaches its correct location within the cell. Of all the organelles in a mammalian cell, the mitochondrion is the most complex because two membranes must be crossed. In addition to the metabolic role, the mitochondria is a key player in many cellular processes including apoptosis, metal ion homeostasis and aging. My specific interests lie in mitochondrial biogenesis, particularly the mechanism by which proteins are imported into the mitochondrial inner membrane.



**Prof. Carla Koehler**

**UCLA Chemistry & Biochemistry**

**Friday, November 6, 2020**

**via Zoom**

**3:30 pm**