

***Biophysics and Systems Biology
Seminar Series***

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Biological Sciences and
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**“Bacterial Outer Membranes and Interactions with
Membrane Proteins”**

Abstract:

The outer membrane of gram-negative bacteria is a unique asymmetric membrane bilayer that is composed of phospholipids in the inner leaflet and lipopolysaccharides (LPS) in the outer leaflet. Its function as a selective barrier is crucial for the survival of bacteria in many distinct environments, and it also renders gram-negative bacteria more resistant to antibiotics than their gram-positive counterparts. LPS comprises three regions: lipid A, core oligosaccharide, and O-antigen polysaccharide. In this talk, I will present our ongoing efforts to understanding various bacterial outer membranes and their interactions with outer membrane proteins. In addition, I will also present other research projects in my lab, such as the CHARMM-GUI development, a local structure-centric bioinformatics for drug development, and structure-based computational glycobiology.

**Thursday, February 20, 2020 at 10:00AM
Natural Sciences II Room 1201**

Host: Steve Gross

**If you're interested in meeting with Dr. Im, please contact Jun Allard
(jun.allard@uci.edu) or Steve Gross (sgross@uci.edu).**