

## BCH 252 Seminar Series



**Alemayehu (Alex) Gorfe, Professor of Integrative Biology and Pharmacology, The University of Texas Health Science Center at Houston**

**Seminar Title: "Membrane interactions and inhibition of the KRAS oncogene"**

**Abstract:** Compared to protein-based membrane targeting motifs, much less is known about the structural and biophysical basis of membrane targeting by the intrinsically disordered lipid-based membrane targeting motifs of small GTPases. In this presentation, I will discuss new insights from molecular simulations and experiments into how the flexible lipid anchor of KRAS recognizes membrane lipids in a conformational ensemble-dependent manner, and its role in the dynamics of the full-length protein on membrane surfaces. I will then briefly discuss our efforts toward the development of small-molecule non-covalent allosteric KRAS inhibitors.

**Tuesday, May 21st, 2024 12:00 p.m. - 12:50 p.m. PST**

**In-Person: Genomics Auditorium 1102A**

**Host: Dr. Chia-en Chang**