Physical Chemistry Seminar Tuesday, 11:00 am Room 1315 Chemistry Building

Probing the interactions between proteins and cellular membranes



Professor Kalina Hristova

Department of Materials Science and Engineering and Program in Molecular Biophysics John Hopkins University

Host: Jim Weisshaar

We have developed Quantitative Imaging FRET methodologies to study the interactions between membrane receptors in biological membranes. The methods yield association constants, and allow us to follow structural changes in response to ligand binding to the receptors, or due to pathogenic mutations. We have used these methods to examine how fibroblast growth factor receptors (FGFRs) are activated by their ligands. Our work suggests that the current models of signal transduction across the plasma membrane are over-simplified and need to be amended.

Refreshments will be available prior to the seminar at 10:45 a.m. outside room 1315

Graduate Students can meet with the speaker in Room 8305F at 1:00 pm