



Thursday, August 30, 2018, 12:30 pm
Seaver Science Auditorium, Room 150

SSC Auditorium next to the library

Professor “Shiv” Sivaramakrishnan

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In Cell Biochemistry: Targeting Synergies in Dynamic Protein Ensembles

Cellular chemistry relies on an ensemble of dynamic, transient protein-protein interactions in crowded, compartmentalized cellular environments. Aberrant protein-protein interactions are very often implicated in debilitating or fatal diseases such as diabetes, neurodegenerative diseases, and cancer. Chemical and synthetic biology approaches to target disease states have focused on the function of individual proteins or stable protein complexes, and cannot address emergent behavior stemming from multiple transient interactions. My laboratory uses DNA nanotechnology scaffolds and protein engineering to investigate and target synergies in dynamic protein assemblies in cells. This seminar talk will highlight recent advances using these technologies to dissect G protein-coupled receptor signaling and biophysical regulation of cytoskeletal molecular motors.

Hosted by Professor Vadim Cherezov

The scientific community is invited

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