



The Louis and Beatrice Laufer Center for Physical & Quantitative Biology

Physical and Quantitative Biology

Faculty Info: <http://laufercenter.stonybrook.edu/people/faculty>

Description

The Louis and Beatrice Laufer Center is a hub for research in Physical and Quantitative Biology at Stony Brook University. Laufer Center researchers study biochemical networks in cells. They use computational modeling to understand how proteins fold; design drugs for high-affinity binding to proteins; learn how protein motions cause biological mechanisms; explore the physical forces that drive proteins to aggregate in neurodegenerative diseases such as Parkinson's and Alzheimer's; develop combinatorial computer algorithms for designing DNA sequences for synthetic biology; and more. We are seeking an individual with extensive training in the statistical biophysics of cells and/or in computational structural biology of proteins. Candidate must have a strong background in physics, particularly statistical physics or polymer theory and considerable experience in molecular dynamics simulations is a plus.