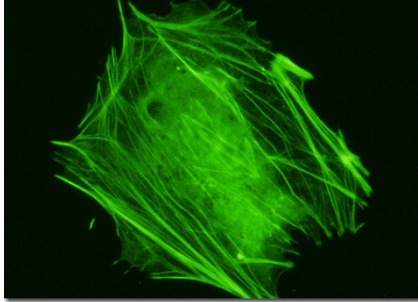


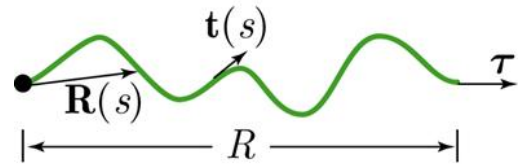
Physical Cell Biology

Instructors: Melissa Pepling, Biology & Martin B. Forstner, Physics

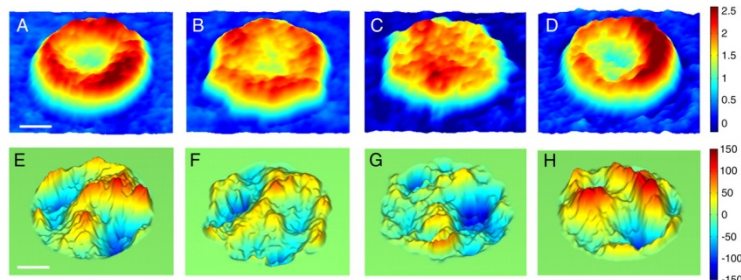
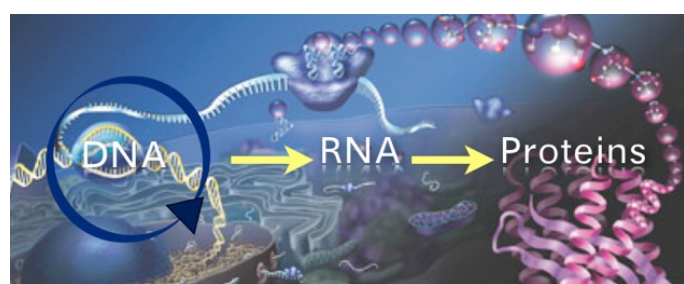
This core course of SU's IGERT program in Soft Interfaces is open to all interested graduate students. Aiming at an interdisciplinary audience,



the course will give biology and bioengineering students a more quantitative background for describing biological processes and give physics and chemistry students a strong introduction to biomolecules and cellular processes. Some questions answered in this course are:



- What are the molecules of life?
 - How do they assembly into larger structures?
 - What are biopolymers and why are they so important?
 - What is the Central Dogma?
 - What is the cell cycle and how is it regulated?
 - Why is energy so central in Physics AND Biology?
 - How do molecular motors work?
 - How do cells move?
 - How do cells communicate?



For any questions regarding this course please email the instructors at

mepeplin@syr.edu or mbforstn@syr.edu