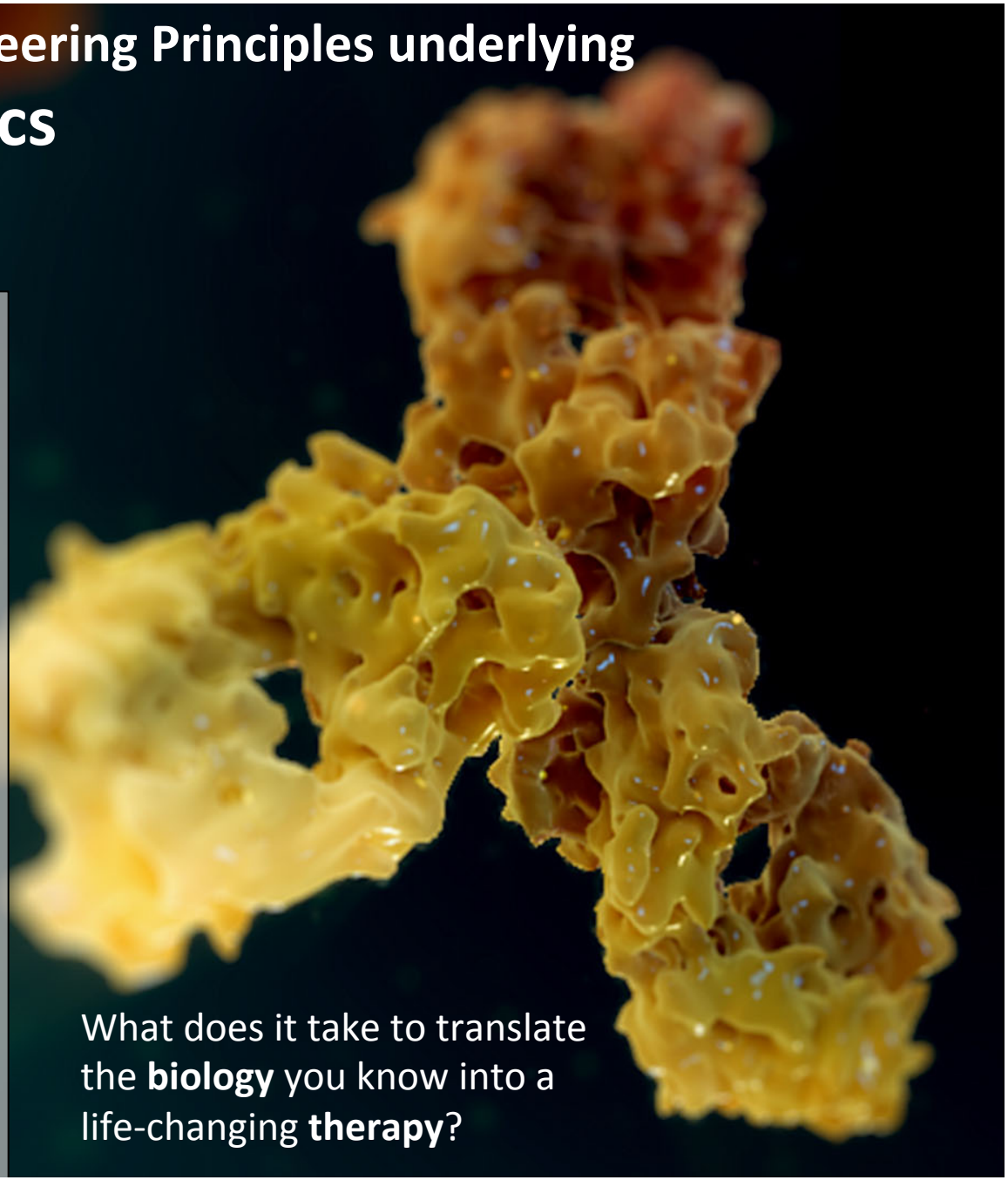
7.371: Biological and Engineering Principles underlying Novel Biotherapeutics (Fall 2015)



Instructors: Harvey Lodish & Jianzhu Chen

Course description:

7.371 is for upper level undergraduate students who wish to explore in depth biological and bioengineering principles underlying the development and therapeutic use of recombinant proteins and engineered cells. Emphasis will be on monoclonal antibodies and engineered immune cells as therapeutics; protein- and glyco- engineering to enhance protein function; nucleic acid-based biotherapeutics; generation of functional cells and tissues from embryonic stem cells and iPS cells. The course is primarily based on paper discussions with some lectures, mini-presentations, term paper and final presentation.

Prerequisites: 7.05 or 5.071, 7.03 , 7.06

Mon/Wed 3-5pm

What does it take to translate the **biology** you know into a life-changing **therapy**?