Homework #4: Project Outline
One report per group

Due date: April 23, 2015

Goal: To start developing concrete ideas for “The Design Project”: to engineer a protein for the advancement of a medical or technological problem

Format: 1 page max, 0.5” margins, single spaced, Arial 11pt

Task: Address items 1-7 below.

1. **Group member names:** (2-3 students)
2. **Problem:** state the problem to be addressed (1-3 sentences)
3. **Main goal:** state the goal of your proposed project (1-3 sentences)
4. **Strategy:** state the main strategy of your approach (1-3 sentences)
5. Explain the applicability to protein engineering (1-3 sentences)
6. **Sources:** list at least 3 specific sources of information you intend to use
   - Examples:
     1. McLellan et al., Science 2012
     2. Personal interview with Dr. Mark Akeson
     3. HHPred online structure prediction server
   - The following are NOT specific examples:
     1. Research papers
     2. The library
     3. The internet
7. **Abstract:** write an abstract of your research idea, similar in style and content to the ones in the NIH Grants from Homework #3, that clearly conveys items 2-5 above. Max 300 words.

Note: you have to select 1 idea for this report, but you can change the goal of your project if your research takes you in unexpected - and maybe more exciting - directions. Design Project goal has to be finalized by May 12 (date of HW#6 - revised Design Project development report); your strategies to accomplish your goal are flexible until the due date of your final report (June 9).