

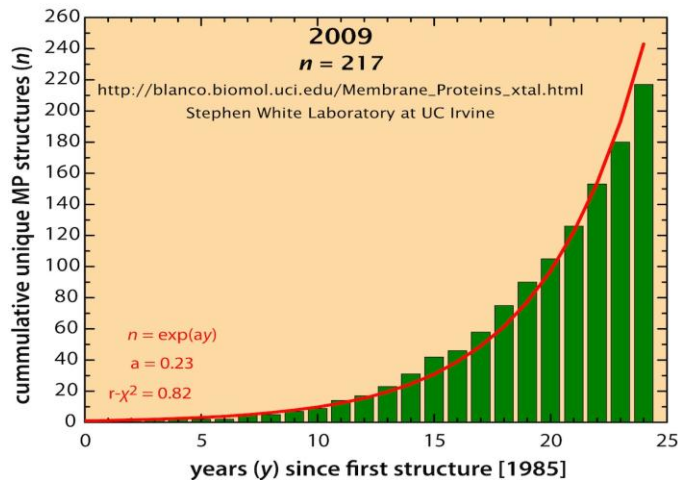
Syllabus

Biol 750 (Advanced Biochemistry)

Instructor: Fusao Takusagawa (xraymain@ku.edu)

Web-site: <http://web.ku.edu/~crystal/taksnotes.html>

As shown below, it is very difficult to determine the 3D structures of membrane proteins although it is impossible to discuss the functions of cells without knowing the 3D structures of membrane proteins.



Last database update: 12 Feb 2010

Unique proteins* in database = 231.

Number of coordinate files in database = 596.

In this course, we will study the structures and functions of membrane proteins. There are many different types of membrane proteins. I selected 24 papers that describe the first crystal structure in each type of membrane proteins. Each student selects one of papers, and read it and up-date the research by checking the follow-up papers. Each student makes PowerPoint slides and describes the research as if “you carried out the research and wrote the papers”. Each presentation is 30/20 min, and questions and discussion take 20/5 min. The PowerPoint file must submit with your answer of the take-home exam. **The due date of take-home exam is at 5:00 pm on May 4, 2012.** No written exam is schedule.

In this year, 11 students have enrolled in this course, so that three slots have to split to two students. For the full slot students, the presentation and discussion times are 30 min and 20 min, respectively. For the half slot students, the presentation and discussion times are 20 min and 5 min, respectively. Instructor will assign a slot to each student upon their requests, so that each student has to request his/her preferred slot as sooner as possible.

Class schedule:

Date	Name(s)	Paper
3/26/2012 (Mon)	No class (FT is in a meeting)	
3/28/2012 (Wed)	Fusao Takusagawa	
3/30/2012 (Fri)		
4/2/2012 (Mon)		
4/4/2012 (Wed)		
4/6/2012 (Fri)		
4/9/2012 (Mon)		
4/11/2012 (Wed)		
4/13/2012 (Fri)		