## Glycobiology

醣質生物學

Tuesdays: 15:30~17:20 N101, IBS, NTU Coordinators: Dr. Kay-Hooi Khoo, Dr. Takashi Angata, Dr. Chun-Hung Lin, Dr. Todd Lowary

目標:本課程旨在讓學生了解醣化學的概論並使他們能夠:1)自信地閱讀此領域的文獻,2)為以後深入此領域的研究做好準備。

**Goals:** This course intended to give students an overview of glycoscience in turn enabling them to: 1) read literature in this area with confidence and 2) be prepared for future more in-depth study of the area.

**評分:**學生將依學期末的演講被評分。此外,學生必須出席所有的課程,包括其他同學的演講。曠課超過兩節課的學生,其等第被降低的細節如下:三次曠課--降低三分之一個等第(如 A-至 B+);四次曠課--降低一個完整的等第(如 A-至 B-);五次曠課-降低兩個等第(如 A-至 C-);六次或以上曠課-課程不及格。

**Assessment:** Students will be evaluated on the basis of a presentation at the end of the semester. In addition, attendance in all classes, including student presentations, is required. Students who miss more than two classes will have their grades reduced as follows: three absences – reduction of one-third a letter grade (*e.g.*, A– to B+); four absences – reduction of a full letter grade (*e.g.*, A– to B–); five absences – reduction of two letter grades (*e.g.*, A– to C–); six or more absences – failure in course.

週次	日期	授課教師	授課內容
1	2/23	Todd	A Primer on Carbohydrate Structure and Conformation
2	3/2	Khoo	Protein Glycosylation – From ER to Golgi
3	3/9	Khoo	Diverse range of O-glycosylation
4	3/16	Khoo	Analytical and Functional Glycomics
5	3/23	Todd	Microbial Glycans and Biophysical Methods
6	3/30	Angata	Galectins – Outside and Inside
7	4/06		溫書假
8	4/13	Angata	General Aspects of GBP and C-type Lectins
9	4/20		Mid Term Exam

10	4/27	Angata	Siglecs and Sialylation
11	5/04	Todd	Chemical Glycosidic Bond Formation
12	5/11	Hans	Glycoenzymes: Synthesis, Mechanism and Inhibitors
13	5/18	Hans	Chemical and Translational Glycobiology I
14	5/25	Hans	Chemical and Translational Glycobiology II
15	6/01	All	Student Presentations
16	6/08	All	Student Presentations
17	6/15	All	Student Presentations
18	6/22		期末考週