BioNMR Practicum (MCB 5896)

Fall 2008 **Credit hours:** 2

Classes:
Practicum -> Tuesdays afternoon (Chem Basement).
Lectures -> Tu 1:00-2:00 PM in BSP 203
(check the syllabus because class will meet in different locations on different days)

Color Code:

Blue – Lectures in BSP 203
Black – NMR experiments in Chemistry basement.

Month	Date		Class meeting	Class Location
Sep	2 (Tu)	1	Sample preparation lysozyme	Chem Basement
	9 (Tu)	2	Basics of 1D (lock, tune, shim, 90o pulses, others…)	Chem Basement
	16 (Tu)	3	Introductory NMR – continued	Chem Basement
	23 (Tu)	4	Lysozyme denaturation (protein unfolding), H- Exchange	Chem Basement
	30 (Tu)	5	T1/T2 experiments	Chem Basement
Oct	7 (Tu)	6	^{1}H-^{15}N HSQC	Chem Basement
	14 (Tu)	7	^{1}H-^{15}N HSQC + ligand	Chem Basement
	21 (Tu)	8	NOESY / TOCSY	BSP 203
	28 (Tu)	9	NOESY / TOCSY	Chem Basement
Nov	4 (Tu)	10	pH titration	Chem Basement
	11 (Tu)	11	Spin-probe experiments with memebrane protein	Chem Basement
	18 (Tu)	12	Comparison of ^{1}H-^{15}N HSQC for WT and mutant α-synucleiin	Chem Basement
	NOTE : November 23-29 T'giving recess			
Dec	2 (Tu)	13	Practice session for final	**Chem Basement**

Friday Dec 5 last day of classes

Final Dec 3-10 **Final- NMR practical test (dates set individually)** **Chem Basement**

Tue Dec 16 – last day for submitting grades.

Class materials (syllabus & exercises) will be put on the Vista site for MCB338

Grading:

Lab reports –> 6 x 10 pts = 60 pts.
Lab (NMR) performance = 20 pts
Final NMR test = 20 pts

Total = 100 pts

If you need to miss a class let me know and I will arrange a make-up if possible.

A 1/2 pt. will be deducted from your exercise grade for every day past the due date (no exceptions).

Exercise	Dates Performed	Due date
1. Instrument operation	9/2 through 9/16	**Sept 23**
2. Lysozyme denaturation	9/23	**Oct 7**
4. pH titration	9/30	**Oct 14**
3. T1/T2 experiments	10/14	**Oct 28**
5. 2D NOESY/ TOCSY	10/28-11/4	**Nov 18**
6. ^{1}H-^{15}N HSQC binding experiments	11/11-11/18	**Bring report to final exam**

Instructor:

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Office hours:

Tue 4-5 pm (after class)