

Purpose of the 9.12 lab class

- Gain experience in commonly used methods in molecular/cellular neuroscience
- Understand how research are conducted in real life

Lab Report

- Once in a several sessions (total 3 or 4). Type and give print out to TAs. No E-mails please.
- Arrange similarly to scientific papers
 - Title
 - Author
 - Abstract: 100-200 words.
 - Introduction: The back ground and significance of what you have done.
 - Methods: Do not just copy and paste protocol. Write what you have actually done.
 - Results: Include raw data here.
 - Discussion: Interpretation of the results
- Total 2 pages.
- Do not copy each other or from web pages.

Grading

- Class attendance and attitude
 - Presentation of paper
 - Report on lab
 - Report on paper
 - Quiz
 - No final exam
- We are *not* evaluating you by your knowledge but *by what you learn during the class!!*

Suggested Text Books

- DNA recombinant technology
 - Primrose et al. “Principles of Gene Manipulation”
Blackwell Science
- Molecular Biology in general
 - Alberts et al. “Molecular Biology of the Cell”
Rockefeller University Press
- Cellular level neuroscience in general
 - Martin et al., “From Neuron to Brain” Academic Press

Questions

- Think, think, think...
- Search yourself (text, Google...)
- Ask questions
 - TA (your primary TA)
 - Instructors

Please do not send e-mail to every instructors and TAs. Nobody may answer.

Safety precautions

- No food and drink in the lab area.
- Understand what is dangerous.
 - Sharps
 - Hot/cold
 - Chemicals: Ethidium bromide, acrylamide, paraformaldehyde, NaOH, SDS
 - Ultraviolet
- Personal protective: if you do not have one, we will provide.
 - Goggles
 - Glasses or safety goggles
 - Lab coat
 - Shoes. No open toe.

Emergency

- Shower (fire or large toxic spills on your body)
- Eye wash (spills in your eye)
- Other wounds (cut, burn etc)

Immediately notify instructors and TAs so that we can help you further

Garbage Disposal

- Sharps (pipette tips, glass, razor blades etc)
 - Temporally in small bucket on your bench.
 - Biohazard container (grey plastic bin)
- Chemicals
 - Most salt solutions can go sink.
- Biological materials
 - Bacterial and cells: needs sterilization before disposal
 - Other nonviable things (bare DNA, eppendorf tubes, gloves etc): regular trash