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 background 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.
  – Grove
  – Glasses or safety goggle
  – 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