Biosafety at MUSC

- Unit 6
  - Requirements for the Bi-Annual Inspection
Laboratory Inspections

- Every two years

- Information Needed
  - PI’s name, department, building, room number, lab manager, phone, mail code, email, etc.
  - Laboratory Safety Manual
    - Protocols or Standard Operating Procedures
    - Complete inventory of the Biohazardous materials
      - prions; genomic sequences; viroids; viruses; rickettsiae/chlamydia; bacteria; parasites; plants/plant, pathogens; animals; human/primate blood; human body fluids, cells and tissues
    - IBC approval forms and number(s)
    - Emergency call-list
    - Outline of Annual Safety Training Session and Risk Briefing
    - Acknowledgement of Annual Safety Training and Risk Briefing
Laboratory Inspections

- Facility/Equipment
  - Things we will expect and look for:
    - Airflow from lower-hazard to higher-hazard areas
    - Designated clean area
    - Any hazardous material in designated clean area
    - Neat or cluttered work areas
    - Biosafety cabinet: make, model, size, number
    - Negative-pressure thimble connection on biosafety cabinet
    - Biosafety cabinet certification
      - At least once per year
      - Date of last certification
Laboratory Inspections

- Facility/Equipment
  - Things we will expect and look for:
    - Decontamination of biosafety cabinet before use
    - Decontamination of biosafety cabinet after use
    - Neat or cluttered grate in biosafety cabinet
    - Neat or cluttered work area in biosafety cabinet
    - HEPA filter on vacuum line
    - How full is the suction flask

- Autoclave
  - Make, model, frequency of autoclave calibration, log
Laboratory Inspections

- Facility/Equipment

  - Things we will expect and look for:
    - Centrifuge
      - make, model, condition of centrifuge bucket, condition of centrifuge rotors (check for stress cracks),
      - condition of centrifuge interior (check for residue buildup), log
    - Spill-kit availability
Laboratory Inspections

■ Work Practices

◆ Things we will expect and look for:
  
  F Aerosol-generating procedures and steps taken to control them
  
  F Effective use of biosafety cabinets
  
  F Surface decontamination: disinfectant used, contact time, frequency
  
  F Are lab coats worn or not ?
  
  F Are safety glasses required; if so, are they worn or not ?
  
  F Any evidence of eating in the lab areas

◆ Interview of laboratory personnel
Principles of Biosafety

Summary

- BSL 1 - 4
  - Standard Practices
  - Special Practices
  - Safety Equipment (Primary Barriers)
  - Laboratory Facilities (Secondary Barriers)
  - Building (Tertiary Barriers)
Biosafety at MUSC

- Questions Unit 6
  - Requirements for the Bi-annual inspection