Good Lab Etiquettes & Procedures

With additional contributions from:

Mr. Wade Baggett, Ms. Janice Dodge (EH&S), Dr. Joan Hare, Mr. Ed Kirkland, Dr. Tim Logan, Dr. Claudius Mundoma, Mr. Rick Wang, and Dr. Michael Zawrotny

© 2006 Thayumanasamy Somasundaram
Introduction

- Supplement to FSU Safety Seminars
- Scope
  - Issues Related to Kasha Lab (KLB)
- Reason
  - Instances of Improper Practices
- Aim
  - Remind You about Correct Procedures
Overview

- Review Lab Practices & Etiquettes
  - General & Wet Lab
- Help You Find & Get Things Done
  - Common Labs & Core Facilities
- Computer Help & Tips
Emergency Contacts

Env. Health & Safety
Main: 4-6895
Lab Safety: 4-8916
Bio Safety: 4-5374
Rad Safety: 4-8802
Chem Safety: 4-7682

FSU

Emergency: 911
Urgency: 311
Police: 4-1234
Maintenance: 4-2424
Information: 4-4636
Emergency Help

First Aid

Fire Extinguisher

EXIT

Lab Contacts

© 2006 Thayumanasamy Somasundaram
Emergency Help

In Every Lab

Drench Hose

In Hallway

Eye Wash & Shower
Emergency Help

Fire Pull Station

Fire Extinguisher

In Hallway

In Hallway
Helpful People

- **Building & Common Lab Issues:**
  Wade Baggett or
  Ed Kirkland (KLB 121 & 123)

- **Electronic, Electrical & Printer Issues:**
  Rick Wang (KLB 119)
General Lab Etiquette

- No Food or Drink in Labs
- Proper Attire, Eye, & Foot Ware
- Work Under a Fume Hood
- Cylinders should be Strapped
- Ice Machine for Samples Only
- Working Late and Weekends
Wet Lab Etiquettes

- Gloves Usage
  - Correct One: Nitrile, Latex, & Vinyl
  - Disposable Gloves Are Resistant But Not Impervious
  - Use Only Inside the Lab
  - Discard Before Using Common Equipment
  - Change Often
Proper Gloves Usage

YES

NO

NO

NO
Sharps & Broken Glass Disposal

- Proper Sharps Disposal
  - Use Designated Units
  - Or Use Strong Lined Marked Box
  - Replace When 75% Full

- Proper Broken Glass Disposal
  - Use Designated Unit
  - Or Good Lined Cardboard Marked Unit
  - Replace When 75% Full
Disposal Units (Ideal)

EH & S Can Provide Some Disposal Units

Sharps Disposal Unit

Needles, Razors, Syringes, etc.,

Glass Disposal Unit

Bottles, Beakers, Test Tubes, etc.,
Haz Waste Etiquette

- No Haz Chemicals in Drain or Sink
- Waste Containers from EH & S
- Call EH & S For Pick-Up
- No Haz Waste in Trash
- Label Samples w/ Name, Date, & Chemical
Chemical Waste Containers

Liquid Waste Unit

Waste Disposal Unit

Name | Date

Chemical

Name | Date

Chemical
Biological Samples

- Bacterial Waste > Autoclavable Waste
- Bacterial Tips > Autoclavable Waste
- Autoclave When 75% Full
- Autoclaved Waste > Regular Trash
- Other Waste > Regular Trash
- DO NOT Mix In Autoclave Bag
- Consult with Dr. Joan Hare
Radioactive Samples

- Permission & Radiation Safety Training
- PEF, Li, & Greenbaum Labs
- Separate & Dedicated Areas
- Aware of Contamination
- Proper
  - Storage, Disposal of Waste, and Log
Radiation Safety

- Radiation Safety Training
- Personal Radiation Monitor
- Radioactivity & Radiation Safety
- X-Ray Facility in KLB 410
Common Lab Equipment

KLB 215 & KLB 515
Usage Requires Special Training

- Centrifuges: Rick Wang
- Autoclaves: Wade Baggett
- Micro Fluidizer: Wade Baggett
- French Press: Wade Baggett
Common Labs

KLB 211, 212, 511, & 512

- Ice Machines: Wade Baggett
- Ultra Colds: Rick Wang
- Nano-pure: Rick Wang
- Sorvall Speed Vac: Rick Wang
Machine & Wood Shops

KLB 121
- Wade Baggett (4-1419)
- Machining of Small Items
- Common Repairs
- User Training

KLB 123
- Ed Kirkland (5-1338)
- Wood Cabinets
- Book Shelves
- Tables & Desks
Electronics Shop

KLB 119

- Rick Wang (5-3309)
- Minor Electrical Problems
- Electronics Troubleshooting
- Small Instrument Repairs
- Projector & Printer Help
Core: Computer Resources (CR)

KLB Basement & Common Areas

- Director: Dr. Michael Zawrotny  
  zawrotny@sb.fsu.edu

- Webpage:  
  www.sb.fsu.edu/core/cr/cr.html
Computer Resources

- Hardware & Core Software Installation
- Computer Connectivity & Virus Issues
- E-Mail & IMB Web Site
- Data Archiving Consultation
- Maillistings
  
  www.sb.fsu.edu/imb/departres/maillist.htm

Send E-mail to a Specific List to “Subscribe” or “Unsubscribe
Core: Physical Biochemistry Facility (PBF)

KLB 311-318 except 312

- Director: Dr. Claudius Mundoma
  cmundoma@sb.fsu.edu

- Webpage:
  www.sb.fsu.edu/core/pbf/pbf.html

- Facility Training Required

- Multi-user Facility

- Subscribe to “pbfusers” Mail Listing
Physical Biochemistry Facility (PBF)

- Equipment, Expertise, and Training
- Circular Dichroism (CD)
- Differential Scanning Calorimetry (DSC)
- Isothermal Titration Calorimetry (ITC)
- Stopped & Quenched Flow Systems
- Dynamic Light Scattering (DLS)
- UV-Vis & Fluorescence Spectrometers
Core: Protein Expression Facility (PEF)

KLB 312 A-G

- Director: Dr. Joan Hare
  hare@sb.fsu.edu
- Webpage:
  www.sb.fsu.edu/core/pef/pef.html
- Facility Training Required
- FSU Bio Safety Training Required
- Multi-user Self-contained Facility
- Portions BSL2 Capable
Protein Expression Facility (PEF)

- Large Scale Production of Proteins from Mammalian & Insect Cells
- Equipment, Space, & Expertise provided for Protein Expression
- Graduate Student Training
- Assistance for Protein Expression in *E. Coli* - Proper Bacterial Handling
- Bio Safety Issues
Core: X-Ray Facility (XRF)

KLB 410-413

- Director: Dr. Thay “Soma” sundaram  
soma@sb.fsu.edu

- Webpage:  
www.sb.fsu.edu/~xray/

- Facility Training Required
- FSU Radiation Safety Training Required
- Multi-user Facility
- Subscribe to “xrfusers” Mail Listing
X-Ray Facility (XRF)

- Macromolecular X-Ray Diffraction
- Crystal Set-up & Documentation
- Data Collection & Interpretation
- 3-D Stereo Viewing & Interpretation
- Crystal Storage & Transportation
- Synchrotron Scheduling & Training
- IMB Safety Co-ordinator
- IMB Webpage & Minor Computer Issues
IMB Computer Architecture

Outside World

Non-secure

Secure

Mail

WWW

Firewall

IMB2 domain

Kodiak

Log-in authentication

Printers

Windows computer

MS Windows Computers

Fileserv

/Linux/users/d1

Linux computer

Common Linux Computers

© 2006 Thayumanasamy Somasundaram
Computer: Profile Size Errors

- Set Small Cache in Internet Explorer & Firefox (~50 MB)
- Don’t Store Files in Desktop
- Store Files in D:\ or E:\ Drives
- Remove or Archive Data Often (3 months)
Printer Related

- Default as B&W Printer (rtgprint.sb.fsu.edu | KLB 418)
- Discreet Color Printing (cheetah.sb.fsu.edu | KLB 418 | 21¢ vs. 6¢)
- PosterPS for Posters (KLB 005)
- Remove or Discard Your Print Job!!
Contact Info

Building Problems:
  Wade Baggett: 4-1419 (KLB 121) or
  Ed Kirkland: 5-1338 (KLB 123) or
  Rick Wang: 5-3309 (KLB 119)

Bio/Chem Safety Issues:
  Thay Soma: 4-6448 (KLB 414)
  Joan Hare: 4-1421 (KLB 304)

Computer Problems:
  Michael Zawrotny: 4-0069 (KLB 415)
IMB Manual

- Carolyn Moore (4-4917 | KLB 117 | moore@sb.fsu.edu)
  Keys, Pay, Visas (Non-Student), & Grants
- Peggye Baker (4-4574 | KLB 116 | baker@sb.fsu.edu)
  State & Markey Budgets
- Regina Ware (4-4474 | KLB 118 | ware@sb.fsu.edu)
  C&G Grants and Phone
- Daphne Williams (4-7754 | KLB 115 | daphne@sb.fsu.edu)
  Appointments and Purchase Orders
- Patricia Brinkley (4-1209 | KLB 114 | brinkley@sb.fsu.edu)
  RF Grants & Travel
- Dale Leonard (4-1012 | KLB 106 | leonard@sb.fsu.edu)
  MOB & Visas (Student)
- Jocelyne Waller (4-4764 | KLB 101 | jocelyne@sb.fsu.edu)
  Reception, Mail, Car Keys, & Seminar Room
Thanks

Feedbacks Welcome

Thanks for Attending

Updates @

www.sb.fsu.edu/~soma/Proj/Present/KLBLabEtiquettes.ppt