

Everyone's job:

1. Clean up after yourself.
2. **Reorder or restock any solution or item that is running low.**
3. Fix or make sure to order service for any equipment item that malfunctioned or broke while you were using it. Make sure to let people know, and keep Charles in the loop. (Exception for equipment used for 2-photon imaging (Kendyll) , optical imaging (Bettina), and IUE (Joe/Bettina), for which assigned people handle communication with repair companies and keep Charles in the loop).
4. Training new lab members.
5. Mouse colony sheet monitoring

Bettina's responsibilities:

1. Send lab coats from the main lab for cleaning.
2. Maintain and update the lab website (with Blake)
3. Surgery and general imaging equipment repair and maintenance (with Kendyll and Joe): Kent digital anesthesia, Heating pads, drill, lamps
4. Coordinate Surgery area equipment diagnostics and repair for surgery-related equipment (e.g. electroporator, heating pads, drills, isoflurane machine)
5. Optical imaging microscope: Coordinate diagnostics and repair for equipment associated with optical imaging microscope.
6. Monitor pH meter in the main lab and recalibrate when needed.

Joe's responsibilities:

1. Analogue Anesthesia calibration (annual) and necessary troubleshooting
2. Make arrangements with DCM pharmacy the week before each inspection to swap out any expired medications if needed (DCM pharmacy is only open on Fridays, and appointments must be pre-arranged by email, so this needs to be planned the week before each inspection). - Aygul will email before.

Andie's responsibilities:

1. Take out biowaste trash in the main lab
2. Fold bags away and wipe mouse carts daily EOD
3. Secondary DCM rep: Attend the DCM's monthly visits to inform them about the procedures used in the lab and receive their new recommendations (together with Katie), send out the minutes to lab
4. Make 1x PBS for shared use (separate supply for histology vs surgery).
5. Monitor the main hallway centrifuge to ensure everyone is signing up. Check liquid accumulation in the rotors located in the cold room. Changes in temperature can result in water condensation.

6. Monitor and refill EtOH stocks and bottles around lab, order more 100% EtOH when necessary
7. Monitor both water bath levels in the main lab
8. Weekly check O₂, N₂, and CO₂, tanks and order more when low
9. Weekly check and replace avertin when needed
10. Weekly IUE water bath (scrub all the parts including the heating coil, cuvettes etc and fill with DI)
11. Weekly prepping surgery supplies like tools, drapes and Q tips and autoclaving
12. Monitor supply of surgery-related consumables (e.g. custom coverslips, drill bits, gelfoam, dental cement, betadine, eye ointment, scalpel blades, syringes) and add items to order log before they run low
13. Monitor supply of clean window cover slips and restock
14. Remove excess ice from -40 as well as yearly freezer thaws of whole lab
15. Check animal bills to make sure there is no overcharges or mistakes
16. Monthly mouse census
17. Annual pipet tips box recycling
18. Bi-annual sending of tools for sharpening
19. Pipette calibration: annually (~end of December). Charles helps scheduling with the company.

Katie's responsibilities:

1. Monitor PCR machine. Ensure that overnight incubations do not result in overheating. Check for water accumulation due to condensation. Clean it up and shut it down.
2. DCM Pharmacy communications and drug exchange (together with Kendyll)
3. Drug dilutions preparation and documentation
4. Additional secondary DCM rep: Attend the DCM's monthly visits to inform them about the procedures used in the lab and receive their new recommendations (together with Andie)
5. Check the cold room monthly (coordinate with Bear Lab manager) for mold, wiping the entire area (including the wire frame, samples/items with Clidox), get rid of expired/unclaimed items
6. Main MIT EHS committee (coordinate with Rosa Liberman)
7. Secondary lab EHS rep:
 - a. EHS rep meetings
 - i. Attend **monthly meetings**: 11am-noon on the 4th Tuesday of the month
 - ii. Communicate relevant information to lab members.
 - b. Level I weekly inspection:

- i. Satellite accumulation areas, biological waste, waste containers, reg tags, emergency showers/eyewashes, fire extinguishers, spill kits, aisles/hallways not obstructed, lab benches clean and neat.
- c. Level II bi-annual inspection with EHS Coordinator (Rosa Liberman)
- d. Chemical inventory

Vi's responsibilities:

- 1. EHS rep:
 - 1. EHS rep meetings
 - 1. Attend **monthly meetings**: 11am-noon on the 4th Tuesday of the month
 - 2. Communicate relevant information to lab members.
 - 2. Level I weekly inspection:
 - 1. Satellite accumulation areas, biological waste, waste containers, reg tags, emergency showers/eyewashes, fire extinguishers, spill kits, aisles/hallways not obstructed, lab benches clean and neat.
 - 3. Level II bi-annual inspection with EHS Coordinator (Rosa Liberman)
 - 4. Keep training records of all lab members:
 - 1. Review training status of lab members and perform training reconciliation.
 - 5. Validate autoclave: twice a year (in Spring and Summer)
 - 6. PPE Hazard Assessment: update annually
 - 7. **Biological registration**: renew annually
- 2. **Chemical inventory**
 - 1. Submit Chemical Inventory Report Annually. Note: when you obtain a new chemical, please let Vi know so that Vi can update the list.
 - 3. Scheduling and coordinating the biosafety cabinets certification annually
- 1. Monitor guillotine and surgical/culture tool sharpness and coordinate sharpening (min. annually)

Dalila's responsibilities:

- 1. Monitor water levels in the CO2 incubators. If light turns ON please fill it with autoclaved dH2O until the light goes off again.
- 2. Daily monitor pressure levels in the pressure sensor (especially in days of heavy use to ensure it doesn't go down). The pressure should be between 14-16psi. Anything below will need attention.
- 3. Monitor LB broth mix and reorder as necessary. Keep track of LB plates in the cabinet in the main lab. They do not need to be TC treated so you do not need to order expensive plates.
- 4. Maintain/order new or replacements for molecular biology equipment (centrifuges, PCR, Transblot, tetracells, chemiDoc, DNA cassette).
- 5. Keep track of the dissecting microscope.
- 6. Keep an eye on QIAGEN kits.

7. Culture tools being checked and sharpened (coordinate with April, Sofia, Joe & Bettina).
8. Monitor the nanodrop computer and machinery. If it starts to fail, clean with dH₂O and shut down the computer (including unplugging the battery). Restart everything and it should work normal again.

Vi & Dalila Share - passed on from Sofia

1. Keep track of surgical tools for dissection and set apart those that need repair and sharpening - blue set
2. TC
 - a. Take out biowaste trash in the TC room.
 - b. Send lab coats from the TC room for cleaning.
 - c. Daily monitor pressure levels in the pressure sensor of CO₂ input to incubators in TC room. Should be between 14-16psi. Anything below will need attention.
 - d. Clean flasks weekly
 - e. Monitoring humidity pans (check for microsatellite growth in the TC water reservoirs) and cleaning/refilling as needed
 - f. Continuously check for TC stocking and put in the order list. This includes items that are kept in the 4C across the main hallway. Continuously checkup on orders that are backordered and search for alternative solutions, if urgent. [For example, 100mm plates from WVR are backordered until the end of March but Sigma Aldrich has small batches that you could get while you wait for the rest.] You can always ask Charles to help you check on the status of an order. (as needed)
 - g. Monitor and refill EtOH stocks in TC room (including reservoir) - order more 100% EtOH when necessary
 - h. Change the water bath when needed and use Acryl AquaClear instead of AquaClear antibacterial solution. (15 ml per 3 L of dH₂O)
 - i. Refill and autoclave distilled water and 1X PBS (10X stock in far right cabinet) for cell culture use
 - j. Refill and autoclave pipette tips (plastic + glass), 1.5mL Eppendorf tubes, glass pipettes.

Aygul's responsibilities:

1. Animal Protocol and lab visits by DCM and CAC
 - a) Maintaining the Nedivi animal protocol
 - Prepare the 3- year animal protocol renewal for the lab: Attend to all issues raised during the review process (dosage of the medications, usage of the antibiotics, post-operative care of the animals, housing of the animals, credentials of the lab members, justifications of the type and the numbers of the transgenic lines to be included in the protocol)

- Prepare the annual renewal of the animal protocol
- Manage the approval procedures for both three-year and annual renewals prior to their expiration dates
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- b) Attend to the lab visits from DCM and CAC
 - Communicate with DCM and CAC to coordinate their biannual visits, attend to their questions/suggestions and communicate new information to lab members
 - Attend the DCM's monthly visits to inform them about the procedures used in the lab and receive their new recommendations

Email Joe at least 2 weeks in advance of DCM inspection so he can check drug expiration dates and coordinate with the pharmacy.

- c) Additional animal protocol work
 - Apprise incoming lab members about the training required to be included in our animal protocol and direct them in the right direction should they get stuck
 - Attend to any addenda to the current animal protocol (grant numbers, new personnel, new animal line, new procedure, new medication, anything new and different etc.)
- 2. Attend to the monthly representative meetings for the buildings 46 and 68

Kendyll's Responsibilities:

1. DCM Pharmacy communications and drug exchange (together with Katie)
2. Any non-laser microscope duties
 - 2.1. Other microscope maintenance (i.e. microscope parts not associated with lasers and chillers; together with Bettina and Blake)
 - 2.2. Coordinating diagnostics
 - 2.3. Coordinating with So lab
 - 2.4. Training on use
 - 2.5. Realigning laser
3. 2-photon microscope:
 - 3.1. Chiller maintenance
 - 3.1.1. Check fluid levels (3x/week) in 3 chillers and top up as needed due to evaporation.
 - 3.1.2. Drain and replace coolant for 3 chillers according to schedule set by manufacturers.
 - 3.1.3. Clean and change filters on 3 chillers according to schedule set by manufacturers.
 - 3.1.4. Coordinate with Coherent and Spectra Physics for replacement of filters and for other necessary chiller maintenance

3.2. Laser maintenance

- 3.2.1. Check humidity regularly (at least 3x/week) and change the purge filter when humidity is high.
- 3.2.2. Clean air filters on both lasers when the filters accumulate visible dust.
- 3.2.3. Coordinate with Coherent and Spectra Physics for remote diagnostics and repairs when lasers aren't working.

Blake

- 1. Scheduling lab meeting
- 2. Maintain and update the lab website and lab calendar
- 3. Lab server IS&T comms
- 4. Take care of Millipore water filters.
- 5. Any non-laser microscope duties (together with Kendyll)
 - a. Other microscope maintenance (i.e. microscope parts not associated with lasers and chillers)
 - b. Coordinating diagnostics
 - c. Coordinating with So lab
 - d. Training on use
 - e. Realigning laser