

Welcome to the Kortemme Experimental Laboratory

Here are just a few general things to know and procedures to follow to make sure you work most effectively and your work causes minimal disruption to others in the lab. This is not meant to be accusatory or condescending; everyone has different backgrounds and skills. Just read over the tips, taking note of anything you didn't already know. Thanks.

Your bench

Your bench is your area. You can expect others to NOT be disrupting things on your bench and shelves. You should therefore NOT be disrupting other people's things on their benches. If you need to borrow a solution or reagent, it is best to ask (just to be nice). If someone isn't available to ask, you can borrow something without permission, but you should be extra careful and put things back where you found them.

Your pipettmen are your tools. Take care of them. Do not use other people's pipettmen.

Sterile things

Many experimental procedures require sterile technique and sterile tools. This is another reason to avoid borrowing things from other people's benches – you do not want to contaminate any of their things. For this reason, it is normal practice for each person to have her own sterile water, sterile pipette tips, sterile glass beads, and sterile media. All of these are available so there should be no reason to borrow these things from other lab workers.

Things that are sterile are marked with autoclave tape. Autoclave tape has white stripes that turn black after the tape has been sterilized by autoclaving. Check the tape to make sure that whatever you think is sterile has in fact been sterilized.

Extra sterile tips are available on the wire rack in room 309A. When you finish a box, please remove the top tray inside so that the next tray of tips fits correctly. (If you don't understand, get some help.) Please recycle the top tray.

Dishes and sinks

We are lucky to have Ula helping us with the dish washing and media preparation. We need to help Ula by rinsing out all dirty glassware and putting the dirty things on a cart in Room 309A. Please be careful if you are working with any chemicals or products that are in any way hazardous. Make sure everything is rinsed extra well before Ula has to deal with it.

Please do your best to keep the sinks clean. Do not throw any chemicals or non-soluble products in the sink (little things like pipette tips can go down the drain and clog the sink). If you are making gels or plates, do not pour liquids down the drain that will harden and clog the drains.

Ula is able to make buffers and solutions for us. You need to provide her with a detailed recipe (the more detailed, the better) and make sure we have all of the chemicals she needs. Ula generally works on Tuesdays to Fridays so it pays to plan ahead.

Ordering

If there is something you need, it can be ordered. You need to know the SpeedChart number for your account. This 5 digit number links any purchase you make to the correct grant that should be paying for it. Figure out what your SpeedChart number is (ask Tanja if you're not sure what grant/SpeedChart you're supposed to be using).

Deliveries

When boxes arrive, please unpack them. Please put the packing slip on the designated tray, so we can keep track of what we received.

Common things

You are part of a lab, so it is important to be a good lab citizen, clean up after yourself, and take care of common things.

If you use up some reagent or product (or even if it is close to empty) it is important to let Debbie know so that more can be ordered. It is incredibly frustrating if you need a common reagent and you find the bottle is empty. When in doubt, let someone know when supplies are low.

Enzymes must be treated correctly. Everyone uses them, so if you kill an enzyme you will ruin other people's work. Enzymes need to be kept at -20°C at all times. They are stored in the freezer in a special storage block. This block can be removed and used on your bench for several minutes and it will keep the enzymes cold. Do not leave the enzymes on your bench for more than 5 minutes. If a tube of enzyme is almost empty, please buy a new tube from the cell culture facility on the second floor of Genentech Hall or if you are lazy to go down let someone know. *Do not vortex enzyme tubes* (this will kill the enzyme). Only dispense enzymes with clean tips – *you do not want to contaminate the enzyme tube* with anything.

Anytime you centrifuge, all tubes need to be balanced. This is very important. Unbalanced centrifugation is damaging to the centrifuge and can become dangerous in certain cases. Balance everything.

Location of certain items

All common enzymes are in the -20°C freezer in room 309C. You can find IPTG and DTT in 1mL aliquots (1M) in the same -20°C freezer.

Antibiotics are kept in the -20°C freezer.

Ampicillin is dissolved in 70% EtOH. It is 100mg/mL, which is generally 1000x concentrated.

Chloramphenicol is dissolved in 70% EtOH. It is 34mg/mL, which is generally 1000x concentrated.

Kanamycin is dissolved in H₂O. There are aliquots at 30mg/mL, which is generally 1000x concentrated.

Competent cells are always kept at -80°C . Always keep the cells cold. Only take cells you are going to use.

Bacterial plates are kept in the cold room (4° C). Note that while the sleeves of the plates are labeled. Do not remove labels from the sleeves and confuse others.

Personal Safety equipment and training

Please wear lab coat and gloves every time you work at your bench. You need to wear eye protection if you are working with acids, bases and other hazardous chemicals. You need to do several safety training courses before you can start working in the lab. Please find in Kortemmewiki which classes you need to complete.

You are responsible for keeping track of your safety training classes. So, please login in your *Research Online* account, go to Training/Training History and check when your courses are going to expire. If you have any expired courses, please go to UC Learning Center, login with your UCSF ID go to the bottom of the page to Catalog/Environment, Safety, and Emergency Management/Laboratory and Research safety, then select the course and click start. You will receive an email after successful completion of the course

Additional questions

If you have any questions, just ask someone. Everyone is willing to help. It's better to know what you're doing and understand proper procedures than to be guessing.

If you think you've made a mistake, contaminated a reagent or enzyme, or noticed contamination in something, please let someone know. It may be embarrassing, but it is better to fix problems than to try and hide them.