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## AN INTRODUCTION TO THE CELL CULTURE FACILITY

The UCSF Cell Culture Facility (CCF) provides goods and services for UCSF researchers. The CCF can be found at <http://www.ccf.ucsf.edu>, and at our two walk up storefronts – Parnassus Medical Science Building S1000 and Mission Bay Genentech Hall S-212.

The CCF is a full service core facility. The Tissue Culture section can assist with protocols and projects of any size; labs with insufficient space or resources can source tissue culture work to the CCF. The CCF also provides a cell banking service, with complete tracking and provenance of cells in long term liquid nitrogen storage. The Media Production unit makes standard and custom media at any scale from 2 liters to 100 liters. Standard media are in stock for pickup or delivery; formulations are provided on the website. Custom media can be made to your specifications. The Resale section negotiates aggressive discounts with life science vendors, providing around 2000 products for sale. The CCF website also features vendor portals for Primer/Oligo ordering (RNA and DNA) as well as DNA sequencing and radioisotope ordering. We strive to adjust our selection and services to track research needs on campus.

Using the CCF is easy. To open an account, a researcher should provide account and fund number, contact information and a list of authorized users. Purchases do not require a P.O. Goods and services are provided on a recharge basis, with a paper invoice provided each time, and a summary invoice at the end of each month. When you purchase your media and reagents through the CCF, you never pay shipping and handling or dry ice charges. You can order online, by phone or at the storefront, and pick up your items or have free delivery to your lab.

Please contact the CCF Director, Dr. Linda M. Reilly with any questions at [lreilly@ccf.ucsf.edu](mailto:lreilly@ccf.ucsf.edu), or call 476-5247. We look forward to working with you!

# SAFETY

UNIVERSITY OF CALIFORNIA, SAN FRANCISCO

## UPDATE

OFFICE OF ENVIRONMENTAL HEALTH AND SAFETY

# NEWSLETTER

OCTOBER / NOVEMBER / DECEMBER 2006

VOLUME 06, NUMBER 4

## CLEAN HOODS, BUNSEN BURNERS, AND FLAMMABLE MATERIALS: A DANGEROUS COMBINATION

Consider these three (non-UCSF) accidents:



- An individual was decontaminating the surfaces of a clean bench with 70% isopropanol while the Bunsen burner was still lit. The alcohol fumes caught fire and then caused the unit's HEPA filters to ignite. A fresh supply of air from the hood blower was delivered to the burning filters; you can imagine the intensity of the resultant fire. The picture above shows the aftermath.

- Natural gas leaking from a loose tubing connection was ignited by the Bunsen burner's flame, causing a small explosion. Isopropanol in a nearby flask inside the cabinet also caught fire.

- A researcher inadvertently turned on the gas thinking he was turning on the vacuum line. Realizing his mistake, he turned off the gas. He did not, however, wait long enough for the gas to dissipate. When he subsequently attempted to light the burner, the residual gas in the cabinet ignited, burning his arms (first degree burns) and singeing his hair.

Bunsen burners are typically used inside biological safety cabinets for sterilizing inoculating loops and test tube lips. They have been used in microbiology for many years.

There are, however, readily available alternatives. One method is using disposable loops for inoculating cultures. Another is a small electric "furnace" - a device expressly designed to eliminate the need for using flammable gas in a safety cabinet (available from Fisher).

If you feel you must use a Bunsen burner, please follow these guidelines:

- Use a burner equipped with a pilot light, in place of older models with a blow torch-like flame;
  - Do not use latex tubing (the stretchy yellow material) it tears easily and is prone to pinholes. Instead, use butyl rubber tubing.
  - Check tubing regularly for cracks and tears.
  - Replace tubing at the first sign of wear or deterioration.
- If there is no use for a gas line in your biosafety cabinet, seal it off.

During routine inspections, Department Safety Advisors will note use of Bunsen burners, discuss the hazards and alternatives, and ask you to consider other methods.

## CONTROLLED SUBSTANCE SECURITY REQUIREMENTS

Earlier this year a large quantity of morphine was stolen from a UCSF pain research lab. The laboratory was judicious about keeping logs and was compliant with every existing security requirement. The stolen morphine was secured in a locked metal desk drawer. However there was one security lapse. The lab kept all keys in a common area.

Following a morphine theft, the United States Drug Enforcement Agency (DEA) reviewed the UCSF controlled substance

program. The DEA determined that UCSF met regulatory compliance; however, they offered additional suggestions to improve security to prevent future theft attempts.

To evaluate your lab's controlled substance security, ask yourself the following questions.

- Who has access to the controlled substances and who needs access?
- Can access be limited to the lab manager?
- Does the drawer have a unique key?
- Can non-lab personnel find the key and gain access?

Here are a few simple and inexpensive improvements any lab can make to secure controlled substances:

- Keep only two copies of the controlled substance drawer key. Consider limiting key authority to the Principal Investigator and lab manager.
- Be sure that the drawer's lock and key are unique. If necessary have a locksmith install a new lock.
- Use a combination lock to allow more freedom to authorized personnel. Be sure to change the combination when any lab member moves on.
- In the event that your lab requires a key and access to the lab is needed, procure a small lockbox similar to the one pictured below. This is especially useful when a drawer cannot accommodate a combination lock; secure lock to any permanent lab fixture.



Please contact your DSA if you would like to discuss Controlled Substance security or arrange for a security evaluation.

## DELL'S NOTEBOOK AND APPLE'S POWERBOOK BATTERY RECALL

In cooperation with the U.S. Consumer Product Safety Commission, Dell and Apple are voluntarily recalling and offering free replacement batteries for certain notebooks and PowerBooks that were sold.

Dell is recalling models of the Dell Latitude™, Inspiron™, XPS™, and Dell Precision Mobile Workstation™ notebook computers, shipped between April 1, 2004 and July 18, 2006. These batteries were also sold separately as replacement batteries and may have also been provided in response to service calls. Note that only the described battery packs are subject to this recall and not the notebook computers themselves.

Apple Computer Inc., is recalling batteries used in the 12-inch iBook G4, the 12-inch PowerBook G4, and the 15-inch PowerBook G4 notebook computers which were sold between October 2003 and August 2006. These batteries were also sold separately and may have been provided as a service replacement unit.

It is possible for these batteries to overheat, which could pose a risk of fire. Dell has received several reports pertaining to batteries overheating. One incident resulted in a fire.

Use the charts below to identify the battery model, serial numbers, and computer models that apply to your Dell computer, iBook, or PowerBook.



### DELL PRODUCT DETAILS

• Potentially affected batteries were sold with the following models of Dell notebook computers or separately as secondary batteries.

- Latitude: D410, D500, D505, D510, D520, D600, D610, D620, D800, D810
- Inspiron: 500M, 510M, 600M, 700M, 710M, 6000, 6400, 8500, 8600, 9100, 9200, 9300, 9400, E1505, E1705
- Precision: M20, M60, M70, M90
- XPS: XPS, XPS Gen2, XPS M170, XPS M1710

• The words "DELL" and "Made in Japan" or "Made in China" or "Battery cell made in Japan, Assembled in China" are printed on the back of the batteries. If the battery does not reflect one of these markings it is not part of the recall.

The following Dell battery models may be subjected to recall:

1K055	C2603	C6269	D6024	GD785	KD494	U5867	X5329	X5877
3K590	C5339	C6270	D6025	H3191	M3006	U5882	X5332	Y1333
59474	C5340	D2961	F2100	JD616	RD857	W5915	X5333	Y4500
6P922	C5446	D5555	F5132	JD617	TD349	X5308	X5875	Y5466

These Dell part numbers are printed on the back of the battery packs as illustrated below.



### APPLE PRODUCT DETAILS

Apple model and serial numbers are labeled on the bottom of the battery, you must remove the battery from the computer in order to view the numbers. The battery serial number is printed in black or dark grey lettering beneath a barcode. See the photographs in Figure 1.

Computer model	Battery model number	Serial number range
<b>12-inch iBook G4</b>	A1061	ZZ338 – ZZ427 3K429 – 3K611 6C519 – 6C552
<b>12-inch PowerBook G4</b>	A1079	ZZ411 – ZZ427 3K428 – 3K611
<b>15-inch PowerBook G4</b>	A1078 and A1148	3K425 – 3K601 6N530 – 6N551 6N601

Note: If you participated in a previous recall that affected these computers, please check your battery because you may have received a replacement battery that is affected by this program.



Figure 1

### RECOMMENDED ACTION

1. Check the above list to determine if your battery model MAY be affected. If your battery is not listed, it is not affected.
2. Click on the following Website and follow the directions for identifying recalled batteries: <https://www.dellbatteryprogram.com/default.aspx> and [https://support.apple.com/iBook\\_powerbook/batteryexchange/](https://support.apple.com/iBook_powerbook/batteryexchange/)
3. Check if your specific battery PPID (Dell Part Piece Identification) is affected. This step is necessary because only some batteries within each model are affected. If the battery is subject to this recall you will be automatically connected to a replacement order form.
4. If your specific Apple battery serial number is subject to this recall you should enter your notebook computer serial number and the battery serial number into the exchange information box on the webpage. You will be automatically connected to a replacement order form.
5. Batteries subject to recall should not be used while awaiting a replacement battery pack from Dell and Apple. You may continue to use your notebook computer using the AC adaptor power cord originally provided with your notebook.

### WHERE TO GET HELP OR MORE INFORMATION

- Contact Dell toll-free at (866) 342-0011 between 8 a.m. and 5 p.m. CT Monday through Friday, or go to the Dell Battery Pack Recall Program website shown above.
- Contact the Apple hotline at (800) 275-2273, or go to the Apple Battery Recall Program website shown above
- Consumer Product and Safety Commission <http://www.cpsc.gov/cpsc/pub/prerel/prhtml06/06056.html>.

## MEET SALLY SHUTE

Sally A. Shute, MA CEES SPHR, an ergonomics specialist with Clayton Group Services, will be providing ergonomics services for special projects. Initially she will be evaluating high-risk tasks for Animal Technicians and Assistant Animal Technicians working in LARC. During her 2-6 month contract, she will also be upgrading classroom training materials with an online focus. Sally has been providing ergonomics consulting services for the past eight years, the last of which has been primarily with Clayton. Since 2003 she has served on the Planning Committee of the Bay Area Ergonomics Study Group, a peer-run professional development group for ergonomics practitioners.



## LABORATORY ERGONOMICS: MICROSCOPES

Microscopes are important research tools. Microscopes are used to view specimens and aid researchers in collecting data. Using a microscope for long periods can cause strain on your back, neck, shoulders, arms, wrists, and eyes. Awkward postures, high repetition, contact stress, and incorrect use of light are all factors that can cause ergonomic injuries. Awareness of risk factors is important to microscope users. Understanding what the risk factors of prolonged microscope use are will help prevent injury.

To avoid the risk factor of awkward posture:

- Your seating should support your lower back and thighs.
- Your feet should rest comfortably and be supported.
- Use an adjustable microscope stand, if available.
- Move and raise the microscope so your head remains in an upright position and your arms and elbows remain close to your body.

To avoid risk factors associated with high repetition:

- Take adequate breaks.
- Take "short micro breaks".
- Evaluate your work process so you can spread microscope work throughout the day.

To avoid risk factors associated with contact stress:

- Be sure not to rest your arms or wrist on hard surfaces.
- Be sure not rest your arms or wrist on the sharp edges of desk or work benches.
- Use arm pads if desired.

To avoid ergonomic risk factors associated with lighting:

- Clean microscope lens.
- Ensure illuminators are in alignment and light projects evenly.
- Use a television system to eliminate the use of binocular eyepieces when appropriate and available.

Prolonged or improper use of microscopes can lead to injury. You can reduce the likelihood of injury by attention to ergonomic safety. If you have any concerns regarding microscope use, call your Department Safety Advisor.

