

"Nuts and Bolts of Managing a Research Lab"

A Mostly Anecdotal Discussion On How To Survive Your Lab Setup

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Knowing Your Lab

- Check out the blueprints
- Follow Plumbing and Electrical Outlets
- Find out who owns what
 - building coordinator
 - EH&S + local safety coordinator
- History
- Disaster Plan
 - Computers
 - Insurance

<http://www.washington.edu/admin/rmequip/should.i.insure.html>
(no, you are probably not insured)
- Modifications cost \$\$\$ (plan ahead)

Knowing Your Equipment

- Real research is required for equipment
 - sometimes this forces you to find a better deal/vendor
- Used Equipment (see attached)
 - Still need sole source over limit
 - History, history, history
- Site Requirements
 - think ahead for site modification
 - beware central facilities! (\$1500 scaffold)
- How big is that elevator?
 - get customer questionnaires when applicable (see attached)
- Get a file drawer and keep that manual/ Keep a record of your equipment

Laboratory Feng Shui

- Segregate Appropriate Hazards
 - noise + people
 - flammables + high voltage
 - appropriate chemical segregation
 - flooding hazards + electrical equipment
- Keep cylinders away from exits (and mount them properly)
- Get a yard stick and take a walk
- Is your lab cool?

If nothing else, please check out:

http://www.hhmi.org/grants/office/graduate/lab_book.html

Attached: Used Equipment Info, Sample of a Customer Questionnaire and TOC for the HHMI Publication "Making the Right Moves".

[UW Home](#) > [UWIN](#) > [Admin Gateway](#)▷ [Equipment Insurance](#)

What Equipment Can I Insure?

Equipment Insurance

[What Can Be Insured?](#)[What Can't Be Insured?](#)[What Is It Insured Against?](#)[What Is It Not Insured Against?](#)[Foreign Location Differences](#)[Transit](#)[Disclaimer](#)

The department is responsible for deciding if an equipment item is eligible for insurance coverage and then requesting it. Domestic coverage applies within the continental United States, Alaska, and Canada. All other locations are considered [foreign locations](#).

What Can Be Insured?

This is a representative list:

- Computers
 - monitors, printers, hard drives, modems, laptops, handheld devices/PDAs, licensed software.
- Scientific equipment
 - spectrometers, microscopes, laboratory balances, etc.
- Audio-visual equipment
 - camcorders, cameras, fax machines, cell phones, TV's, VCR's, overhead projectors, etc.
- Fine art, not to exceed \$50,000 in value per item (excluded in foreign locations.)
- Office equipment
 - photocopiers, typewriters, dictaphones, telecommunications systems, etc.
- Equipment purchased on federal grants or contracts
- Loaned or leased equipment
- Employee-owned computers if
 - Approved by department chairperson
 - Usage is appropriate to the work assignment
 - UW campus location or research facility (not at employee's residence or in transit to or from)

What Can't Be Insured?

- Aircraft, watercraft, motor vehicles,
- Real estate and buildings,
- Office furniture or supplies,
- Loss of data.

What Is It Insured Against?

- Fire, floods, lightning, earthquake, volcanic eruptions,
- Accidental damage,
- Theft and damage during a theft,
- Vandalism

What Is It Not Insured Against?

- Marine cargo shipments,
- Transit with a total value greater than \$50,000, unless approved by [Risk Management](#),
- Shipments by U.S. and foreign mail (UPS and carrier companies are covered,)
- Waterborne exposures (lost at sea, dropped overboard, river or lakeside water damage,)
- Dishonest, fraudulent, or illegal acts by university employees,
- Unexplained disappearance or shortage found upon taking inventory,
- Defective design or faulty material,
- Electrical or mechanical breakdown or damage,
- Wear and tear, gradual deterioration
- Nuclear explosion or war.

Foreign Location Differences

Additional exclusions exist in insurance coverage when equipment is located in Hawaii, Puerto Rico, any U.S. territories or foreign countries (this does not include Canada). They are:

- Coverage for fine arts and employee-owned computers,
- Delays in transit,
- Transit with a total value greater than \$100,000,
- Transit via ocean-going vessels,
- Government action (e.g., seizure by customs),
- Damage by termites or other insects, wet or dry rot or vermin

[Premium rates](#) are different for foreign locations.

Transit

Equipment may be covered while in transit from one place to another, unless it is personally-owned or it is being shipped through the postal service. There are dollar limits on what may be insured.

For transit within the continental United States, Alaska and Canada, the limit is \$50,000. Shipment to or from a [foreign](#) location is limited to \$100,000 and to air shipment only.

To ship equipment with a replacement value exceeding the limits or a marine shipment, contact [Risk Management](#).

Disclaimer

The Equipment Insurance Program is subject to the terms and conditions of the insurance policies on file in [Risk Management](#).

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Used Equipment Suggestions

The purchase of used equipment can be a benefit if you do sufficient research into the condition of the equipment. The following are some issues, concerns or suggestions to consider. The availability of these resources may vary depending on the type of equipment you are considering purchasing. A helpful article to read is http://www.the-scientist.com/yr2001/nov/profile_011112.html concerning purchasing used lab equipment.

1. Negotiation issues that can be deal breakers:

*pre-payment – per Washington state law we can **not** pay in advance for goods or services. You must get “net 30” payment terms.

*14 day right of refusal – since we are often purchasing the equipment sight unseen, we need to protect ourselves from getting in-operable equipment or equipment that is not as represented. (i.e. possible freight damage equipment that is sold as surplus or equipment with parts that have been cannibalized, etc.).

*Used equipment must still comply with UW prior approvals from EH&S for certain commodities (i.e. high pressure) and code requirements.

2. Key questions to ask potential supplier

a. Product description with specific part numbers, options clearly listed, equipment serial numbers &/or date of manufacture

b. Equipment location; last date of operation. Copy of shut-down report if available.

c. Maintenance records available and possible last owner for background check on equipment (like reference check)

d. Refurbished or “as-is” type of sale. Still ask for 14 day right of refusal so that if it is not operational you can at least return it.

e. Warranty: can range from none or 90 days to full year

f. Why is equipment being sold? (possible reasons: company liquidated assets, salvage equipment, auction or surplus sale, company upgrading equipment, equipment no longer supported by manufacturer, repair parts no longer available, obsolete technology)

g. Get additional pictures or video of equipment

h. Pay “expert” or manufacturer's service tech to inspect the equipment..

i. Are there inspection or certification reports from the last time equipment was operational.

j. Is equipment refurbished, as is, new is original pkg, etc

3. Possible alternatives to validate condition of equipment:

*Warranty: Usually vendors who warranty the product have refurbished the equipment or paid the original manufacturer to do necessary repairs so that the equipment is operable.

* Meter readings (like speedometer on a car)

examples:

centrifuge – revolution meter reading

hour meter

ASME inspection report for pressurized units if applicable

*With the serial number; you can call original manufacturer of the equipment and often get maintenance information &/or background information about the specific piece of equipment. (i.e. equipment has been under maintenance contract for last 5 years and was de-commissioned 2 years ago or... maybe it was surplused because it survived a fire but had water damage and manufacture will never allow service contract again, or was diagnosed as non-repairable, etc.)

*Be sure to check with manufacturers on high pressure equipment, due to the high liability risks. Some manufacturers refuse to provide service or maintenance on the used equipment so you may never be able to get it repaired to meet code requirements.

option: get estimate for “re-inspection of equipment” to verify condition of the equipment so that you will know cost to get a service/maintenance contract, plus maybe the cost of annual maintenance/service contract. Depending on the equipment; get the cost to have equipment re-installed and calibrated once on university premises if required.

Also, the original manufacturer can also tell you if product has been out of production for many years (maybe service or parts are no longer available) and/or if there is a problem with the software.

- * Send samples to be tested and evaluate results against baseline.
- * Pay for service tech from original manufacturer or local sales rep to inspect the equipment.
- * Get a copy of calibration tests from when equipment was last operational

Making the Right Moves

A Practical Guide to Scientific Management for Postdocs and New Faculty

Based on the **BWF-HHMI**
Course in Scientific Management for the
Beginning Academic Investigator

Burroughs Wellcome Fund
Research Triangle Park, North Carolina

Howard Hughes Medical Institute
Chevy Chase, Maryland

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