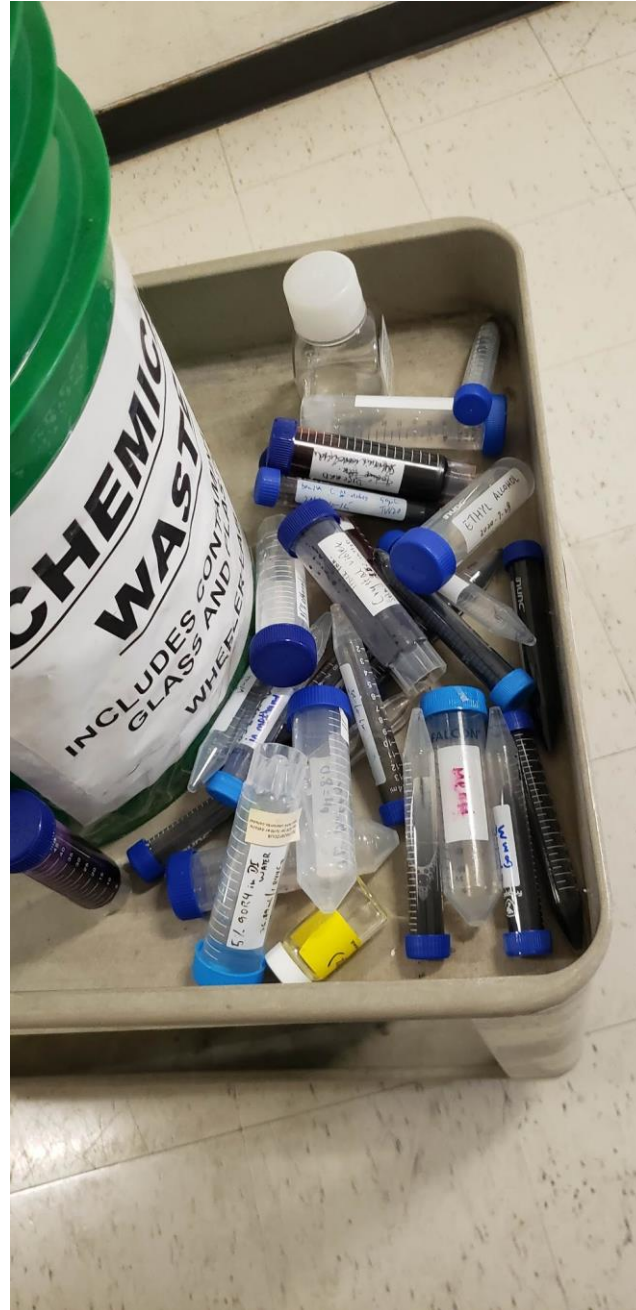
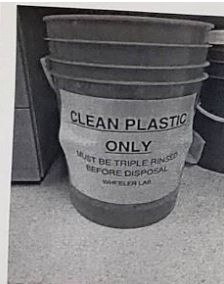


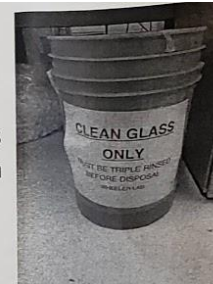
# Waste from lab clean up



# Guideline(Black and white)



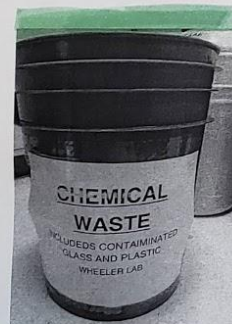
Clean Plastic  
-triple rinsed  
-pipette tips  
-lab plastic  
-non-bio. waste



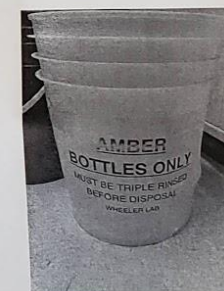
Clean Glass  
-triple rinsed  
-clear glass  
-no DMF devices  
-intact or broken

## Know your waste!

Wipes and gloves go in the regular garbage, unless chemically contaminated.  
Sharps are disposed of in the sharps waste.



Chemical Waste  
-non-bio. DMF & decontaminated  
DMF devices belong here  
-glass or plastic that can't be cleaned



Amber bottles  
-clean  
-label free  
-chemical bottles

# Where do the lab waste go?

## The Bucket List

Getting rid of lab waste? Here's how to dispose of it.

 <p><b>Chemical Waste Pail</b></p> <ul style="list-style-type: none"> <li>• Designate and label for lab specific use</li> <li>• Ethidium Bromide gels</li> <li>• Contaminated solids including plastics and glass</li> <li>• No sharps</li> <li>• Provided by EPS (6-3473)</li> </ul>	 <p><b>Radioactive Solid Waste Container</b></p> <ul style="list-style-type: none"> <li>• Contaminated plastics and solids</li> <li>• Ensure tag provided is completed before pickup</li> <li>• No liquid scintillation vials</li> <li>• Provided by EPS (6-3473)</li> </ul>	 <p><b>Radioactive Liquid Waste Container</b></p> <ul style="list-style-type: none"> <li>• Radioactive aqueous liquid waste</li> <li>• No liquid scintillation vial contents</li> <li>• Green tag: half life &lt;30 days</li> <li>• Blue tag: half life &gt;30 days &amp; &lt;90 days</li> <li>• Yellow tag: half life &gt;90 days</li> <li>• Provided by EPS (6-3473)</li> </ul>	 <p><b>Biohazard Waste Pail</b></p> <ul style="list-style-type: none"> <li>• Risk Group 2 biologically contaminated solids</li> <li>• No liquids, sharps, Risk Group 1 biologicals or animal anatomical waste</li> <li>• Provided by EPS (6-3473)</li> <li>• (Some locations receive pails that are lined)</li> </ul>	 <p><b>Biohazard Bag</b></p> <ul style="list-style-type: none"> <li>• Biologically contaminated solids only</li> <li>• No sharps</li> <li>• Purchased by lab</li> </ul>	 <p><b>Sharps Container (CSA Approved)</b></p> <ul style="list-style-type: none"> <li>• Needles, syringes, lancets, blades, etc.</li> <li>• Designate, separate and label as Biological, Chemical or Radioactive waste</li> <li>• Purchased by lab</li> </ul>
 <p><b>Animal Anatomical Waste Pail</b></p> <ul style="list-style-type: none"> <li>• All animal anatomical waste</li> <li>• All materials contaminated with toxins requiring incineration</li> <li>• Biobags, provided by DCM can be used to transport tissues to DCM</li> <li>• Cytotoxic waste</li> <li>• No biologically or chemically contaminated bedding</li> <li>• Provided by EPS (6-3473)</li> </ul>	 <p><b>Recycling Bin</b></p> <ul style="list-style-type: none"> <li>• Untaminated paper</li> <li>• Empty boxes</li> <li>• Catalogues</li> <li>• Provided by F&amp;S (6-5711)</li> </ul>	 <p><b>Regular Garbage</b></p> <ul style="list-style-type: none"> <li>• Untaminated refuse (paper towels, pipet wrappers, etc.)</li> <li>• Decontaminated Risk Group 1 biological solids</li> <li>• Provided by Caretaking (8-6252)</li> </ul>	 <p><b>Amber Laboratory Glass Tote</b></p> <ul style="list-style-type: none"> <li>• Untaminated coloured glass (triple rinsed)</li> <li>• No hazardous materials, garbage or gloves</li> <li>• No clear glass</li> <li>• Provided by F&amp;S (6-5711)</li> </ul>	 <p><b>Teal Laboratory Glass Tote</b></p> <ul style="list-style-type: none"> <li>• Untaminated Clear glass (triple rinsed)</li> <li>• No hazardous materials, garbage or gloves</li> <li>• No coloured glass</li> <li>• Provided by F&amp;S (6-5711)</li> </ul>	 <p><b>Orange Laboratory Plastic Tote</b></p> <ul style="list-style-type: none"> <li>• Untaminated laboratory plastics (triple rinsed)</li> <li>• No hazardous materials, garbage or gloves</li> <li>• Provided by F&amp;S (6-5711)</li> </ul>



# Chemical, solid waste

- Gloves (chemically contaminated)
- Pipette tips (Clean and used)
- Used falcon and centrifuge tube (without liquid)
- DMF devices/contaminated glass slides
- Agarose gel (non-ethidium bromide stained)

## DON'T

- Falcon tubes with liquid
- Any liquid without absorbent
- Bottles with liquid/content inside

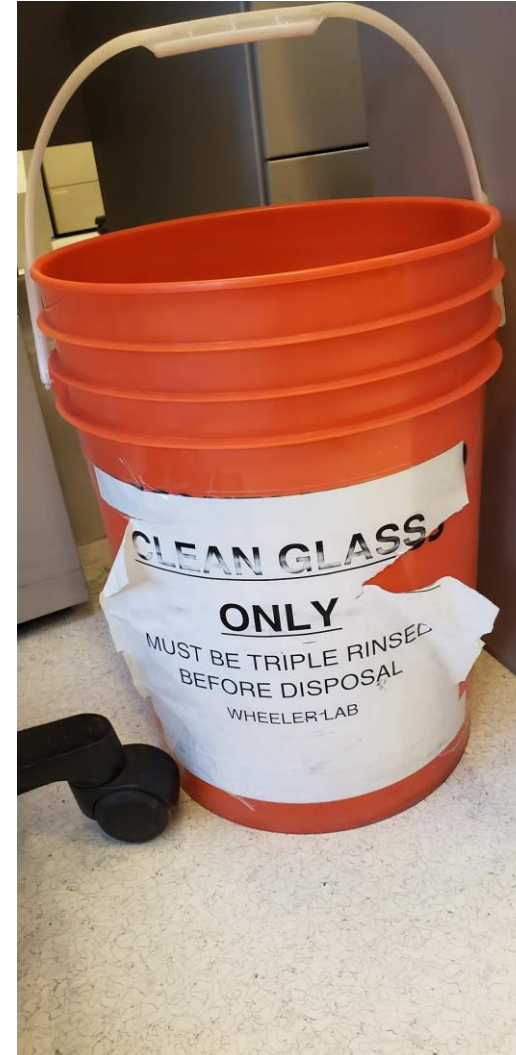


# Orange bin, clean plastic and glass

- Clean plastic and glass: **Triple rinsed/cleaned glassware or plastic only**
- Three labelled bins: Plastic, glass, and amber glass

## DON'T

- DMF devices
- Contaminated glass/plastic bottle
- Mixing plastic and glass



# Biohazard waste, yellow bin

- Risk group 2 Biologically contaminated SOLID materials
- Gloves, DMF devices, tubes
- Bottle cannot be tightly sealed
- Some materials required disinfected by bleach/EtOH

# Sharp container

- Needles, blade, any sharps must go in the container
- Any syringe/needles in contact with biological materials may require disinfection
- Close the cover after use
- Request training before using the lip to remove needles from syringe
- Contain me when the container is full
- Be very careful with the container

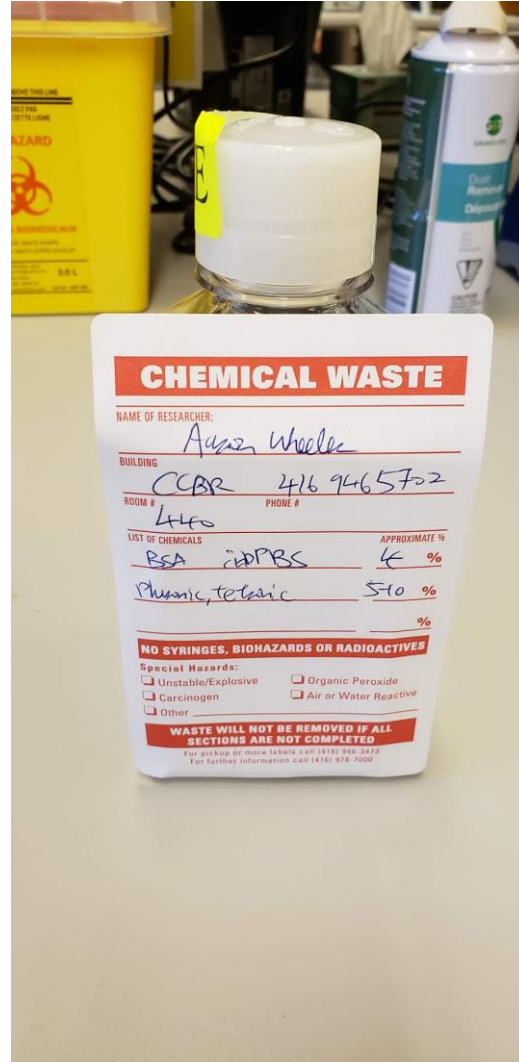


# Liquid waste

- Biological : disinfect and dispose according to SOP
  - Standard: 1 % bleach → sink
- Non-biological/chemical
  - Organic (Acetone, acetonitrile, etc)
  - Fluorinated (FC-40, PFC110, and fluorinated oil)
  - Aqueous (Buffer, BSA, Pluronic, etc)
  - Acidic (HCl, HNO<sub>3</sub>, acetic acid, etc)
  - Basic (NaOH, NH<sub>4</sub>OH, basic liquid)
  - Others (Silver nanoparticles, mag. Beads)



# Dispose in original/other container: Waste labeling



# Temporary storage of waste

- Organic: inflammable cabinet
- Acid/basic: Acid and base cabinet
- Fluorinated: inflammable cabinet
- Aqueous: Cabinet Under the sink
- Others: depends on the nature of the waste.

# If you don't know how to dispose your waste

1. Storage and secure your waste properly
  - Prevent transferring waste to new container, reduce exposure
2. Extra container with possible leak
3. Place the waste in corresponding storage location
4. Place in fume hood if highly volatile/toxic (NOTICE EVERYONE IN LAB)
5. Notice me and also consult EHS (for pickup or disposal instruction)

# Resources

- **Environmental Health and Safety at U of T (EHS)**
  - <https://ehs.utoronto.ca/laboratory-hazardous-waste-management-and-disposal-manual/>
- Training courses on EHS (bloodborne pathogen, SARS-CoV-2, biosafety)
- Senior members in lab and the waste guy (ME)