LABORATORY-SPECIFIC INFORMATION

This Laboratory Safety Manual *serves* as your Chemical Hygiene Plan (CHP), it belongs to:

|  |  |
| --- | --- |
| Laboratory Name: | Rubel Lab |
| Chemical Hygiene Officer\*: | Robin Gibson |
| Department: | Otolaryngology |
| Phone: | 206-221-6438 |
| Date: | October 27, 2020 |

This Laboratory Safety Manual *serves* as your Chemical Hygiene Plan (CHP), it belongs to:

|  |  |
| --- | --- |
| Laboratory Name: | Stone Lab |
| Chemical Hygiene Officer\*: | Robin Gibson |
| Department: | Otolaryngology |
| Phone: | 206-221-6438 |
| Date: | October 27, 2020 |

\* The Chemical Hygiene Officer is the Principal Investigator, Faculty Member, or Supervisor who is responsible for the Chemical Hygiene Plan in the unit or laboratory.

This CHP covers the following laboratory spaces:

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| --- |
| Building(s): CHDD |
| Room #: CD186A, CD186HJK, CD186N, CD186L, CD186D, CD055, CD056, CD056A, CD056B, CD056D, CD056E, CD068, CD175 |
| If Parts of Room(s), Description of Area: |
| CD 186A-Histology |
| CD 186N-Microtomy |
| CD186D-Molecular Biology |
| CD186 H,J,K-Tissue Culture |
| CD175 Digital Microscopy |
| CD 055 Animal Procedure |
| **CD 056E:** Fish Cave, **CD 056B:** VOR, **CD 056D:** Mouse ABR |
| CD 068 Electrophysiology |
| Names of PI(s) that share the space(s): |
| Dr. Edwin W Rubel  Dr. Jennifer Stone |

This CHP, consisting of the UW Laboratory Safety Manual and our laboratory-specific information, was reviewed and updated

On: By:

|  |  |
| --- | --- |
| March 8, 2016 | Robin Gibson |
| August 30, 2016 | Robin Gibson |
| October 18, 2016 | Robin Gibson |
| May 23, 2017 | Robin Gibson |
| May 25, 2017 | Robin Gibson |
| April 03, 2018 | Robin Gibson |
| June 05, 2018 | Robin Gibson |
| August 28, 2019 | Robin Gibson |
| October 27, 2020 | Robin Gibson |
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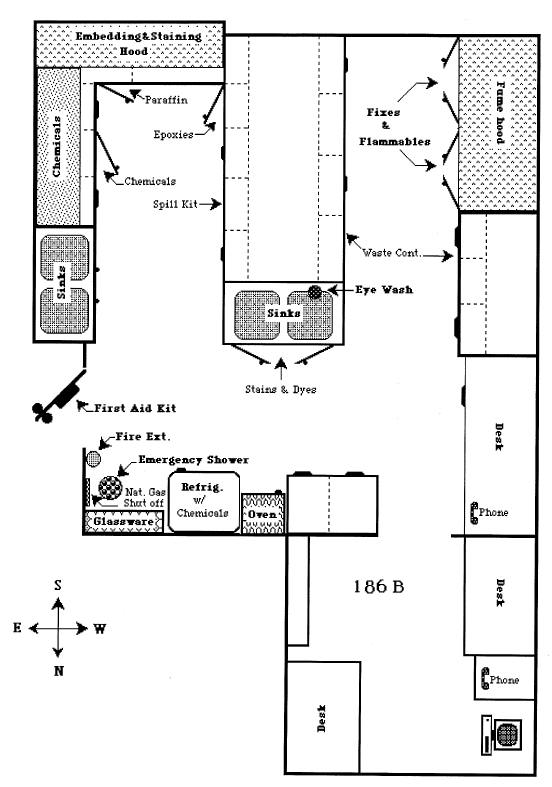
The items listed below identify the laboratory-specific information that is attached (or filed in its noted location) and that applies to this laboratory:

|  |  |
| --- | --- |
| ✓ | Laboratory-specific information cover sheet (*i.e.*, these pages) |
| ✓ | Laboratory floor plan(s) CD186A CD186D, CD186HJK, CD055 |
| ✓ | General laboratory safety rules, applicable throughout the laboratory |
| ✓ | Designations of individuals performing particular tasks (*e.g.*, checking first aid supplies, maintaining chemical inventories, *etc*.) |
| ✓ | Authorizations for individuals to use specific hazardous/controlled substances |
|  | Any special instructions for receiving and storing hazardous materials |
|  | Contents of chemical spill kit(s) |
|  | Any special instructions for labeling containers |
| ✓ | Training records, or location if filed separately from this Plan |
| ✓ | Standard Operating Procedures (SOPs), or location if filed separately  SOPS ARE IN THIS SECTION OF THE 3-RING BINDER (LSM) LOCATED IN CD186A |
| ✓ | MyChem Chemical Inventory Report, or location if filed separately  For access to MSDS/SDSs, go to http://mychem.ehs.washington.edu and login using your UWNetID and password.  To request access to site-specific chemical inventories and the Chemical Exchange, send an email to mychem@uw.edu . |
| ✓ | Locations of MSDSs, other reference materials, University or departmental  safety rules that apply to us, equipment maintenance manuals, other paper  documents (such as a building evacuation plan or departmental health and safety plan) if filed separately from this CHP, etc.  ADDITIONAL INFORMATION CAN BE FOUND AT  http://depts.washington.edu/rubelab/index.html |

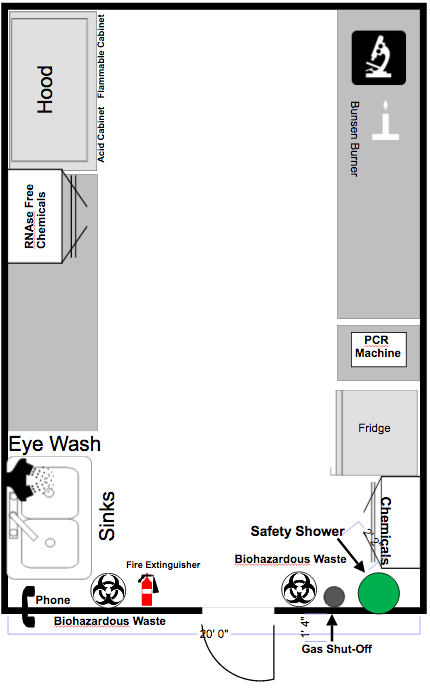
Laboratory floor plans

|  |
| --- |
| Building: CHDD |
| Room #: CD186A CD186D, CD186HJK, CD055 |
| CD 186A-Histology |
| CD186D-Molecular Biology |
| CD186 H,J,K-Tissue Culture |
| CD 055 Animal Procedure |

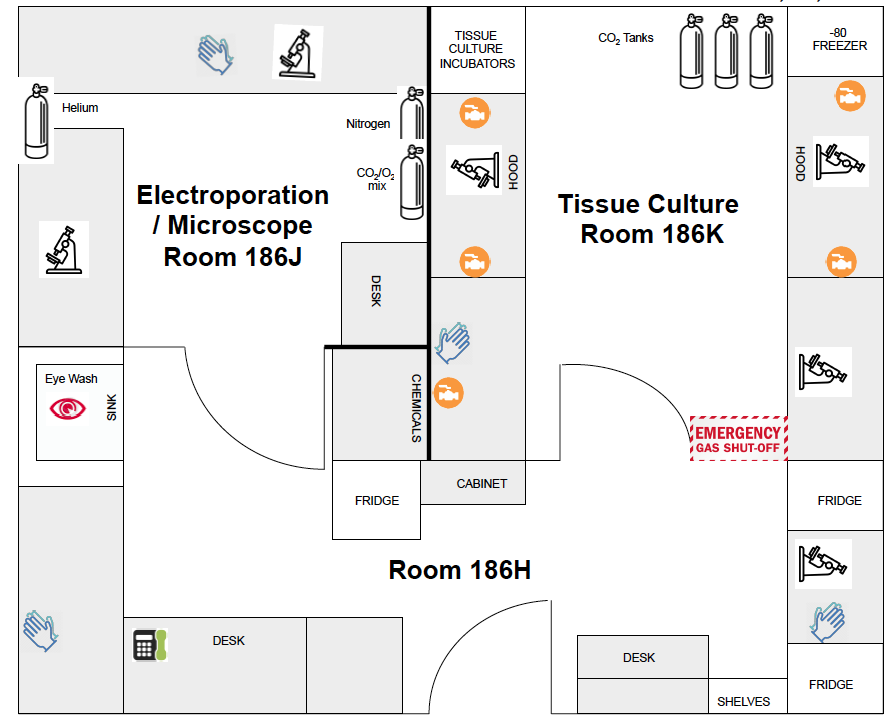
**CD186A/B Histology Floor Plan**



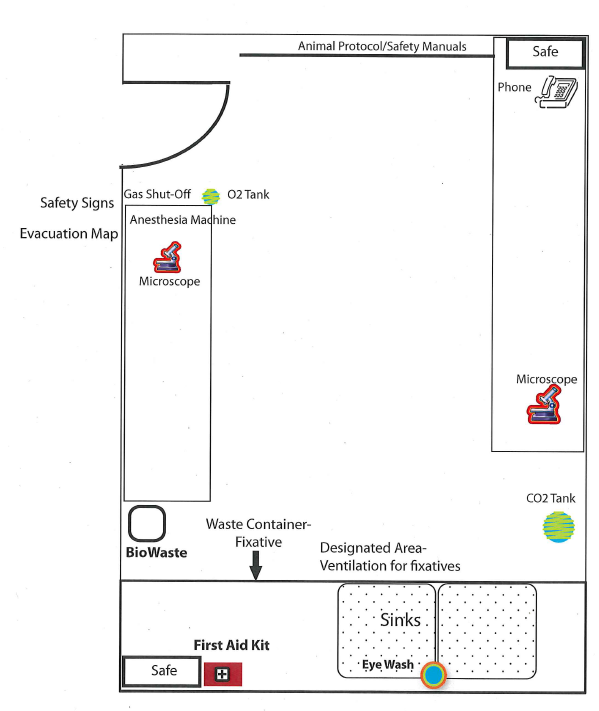
**CD186D Molecular Biology Floor Plan**



**CD186 (H, J, K) Tissue Culture Floor Plan**



**CD055 Animal Procedure Room Floor Plan**

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**General laboratory safety rules, applicable throughout the Rubelab**

**Emergency procedures**

1. It is your responsibility to read safety and fire alarm posters and follow the instructions during an emergency.
2. Know the location of the fire extinguisher, eye wash, and safety shower in your lab and know how to use them.
3. Know the location of your **Evacuation Assembly Point (EAP).** **For CHDD, the EAP is outside on the south lawn, near the Montlake Cut.**
4. **Accident Reporting:** Report any work-related injury or illness to your supervisor as soon as possible. Then report it to the Environmental Health and Safety Department (EH&S) via the UW Online Accident Reporting System (OARS). Submit the OARS report within 24 hours.

* Also submit an OARS report for near misses, hazardous conditions, and accidents or injuries involving students, UW volunteers working on or off campus, or members of the public visiting campus.
* Anyone with a UW NetID can access OARS.

The affected UW employee, his or her supervisor, or a University representative can submit the report.

Also call EH&S ***immediately*** at 206.543.7262 if the incident involves any of the following:

* In-patient hospitalization
* Recombinant/synthetic DNA exposure or spill
* Fatality

Outside of EH&S business hours (8:00-5:00 PM, Monday-Friday), call the UW Police Department (UWPD) at 206.685.UWPD (8973). UWPD will notify an EH&S on-call staff member.

**General laboratory safety rules**

1. Never eat, drink, or smoke while working in the laboratory.
2. Read labels and signs carefully.
3. Do not use any equipment unless you are trained and approved as a user by **Ed Rubel** (PI).
4. Wear safety glasses or face shields when working with hazardous materials and/or equipment.
5. Wear gloves when using any hazardous or toxic agent.
6. **Do NOT wear gloves in the hallway, elevators, stair well, offices or common areas outside of the laboratory.**
7. Clothing: When handling dangerous substances, wear gloves, laboratory coats, and safety shield or glasses. **Shorts and sandals should not be worn in the lab at any time**.
8. If you have long hair or loose clothes, make sure it is tied back or confined.
9. Disposal – lab members are responsible for knowing how and where to dispose of chemical waste, bio hazardous materials and sharps/plastic/glassware.
10. Lab members are required to label all reagents, buffers and waste containers with:

**Name:**

**Date:**

**Contents:** (this includes the percent of each chemical so that including water, it adds up to 100%)

1. Equipment Failure - If a piece of equipment fails while being used, report it immediately to your PI or the lab manager.
2. If leaving a lab unattended, turn off all ignition sources and lock the doors. (**If leaving after 5PM, please check and lock all lab doors.**)
3. Never pipette anything by mouth.
4. Clean up your work area before leaving.
5. Wash hands before leaving the lab and before eating.

**Chemical safety**

1. Make sure all chemicals are clearly and currently labeled with the **substance name, concentration, date, and name of the individual responsible.**
2. Never return chemicals to reagent bottles. (Try for the correct amount and dispose of any excess.)
3. Comply with fire regulations concerning storage quantities, types of approved containers and cabinets, proper labeling, etc. If uncertain about regulations, contact the lab manager or EH&S.
4. Use volatile and flammable compounds only in a fume hood. Procedures that produce aerosols should be performed in a hood to prevent inhalation of hazardous material.
5. Never allow a solvent to come in contact with your skin. Always use gloves.
6. Never "smell" a solvent!! Read the label on the solvent bottle to identify its contents.
7. Dispose of waste and broken glassware in proper containers.
8. Sharps and Broken Glassware boxes must be labeled with PI Name and Room number (e.g. “Rubel/CD186”).
9. Clean up spills immediately.
10. Do not store or consume food in laboratories.

**Additional Safety Guidelines**

* Keep your lab space clean and organized.
* Maintain unobstructed access to all exits, fire extinguishers, electrical panels, emergency showers, and eye washes.
* Be careful when lifting heavy objects.
* Clean your lab bench and equipment, and lock the door before you leave the laboratory, especially if you are the last one leaving and it is close to 5PM.

**Designations of individuals performing particular tasks (*e.g.*, checking first aid supplies, maintaining chemical inventories, *etc*.)**

**Rubelab Main Brain Page**

| ***What*** | ***Description*** | ***Who*** |
| --- | --- | --- |
| ***RESPONSIBILITES SHARED BY EVERYONE*** | | |
| Lab Safety |  | Everyone |
| Lab Dish Washing | Wash your glassware and put it away.  Please see Robin Gibson for training before using the dishwasher downstairs. | Everyone |
| Animal Surgery Room | Leave clean and stocked. | Everyone |
| Sharps Waste | Red Biohazardous Sharps Containers: seal when no more than 2/3 full, **label with autoclave tape, PI and Room #--**do not cover vents. Leave next to autoclave. *Notify Van or Jialin.* | Everyone |
| Biohazardous Waste | When Red Biohazardous Waste bags are no more than 2/3 full they must be double bagged and transported to autoclave room for decontamination following the posted instructions. The waste is then placed in a black garbage bag and put in the garbage dumpster**. Be sure to label the bag with room number and PI name.** | Everyone |
| Non-Biohazardous Lab Glass and Plastic | Cardboard boxes **must be labeled with PI name and Room number**. When boxes are less than full, the boxes must be taped shut using packing tape and LABORATORY GLASS TAPE. They may then be placed in the hall for custodial pick-up (as long as they are not too heavy) or taken directly to the dumpster. | Everyone |
| Styrofoam Box Recycling | Styrofoam Boxes are bagged and labeled following the SOP that is posted in CD 186L (darkroom) and on the Rubelab webpage. UW recycling is notified for pick-up. | Everyone |
| Ordering Supplies | General supplies are ordered on a shared budget matrix by everyone. Please see detailed ordering instructions in “***Welcome to the Rubelab***”. | Everyone |
|  | | |
| ***LAB DUTY SPECIFIC MAIN BRAINS*** | | |
| Microscopy | Training, consultation and maintenance. | Jennifer Stone |
| Autoclave | Please see Van, Jialin or Stephanie for training before using the autoclave. Maintenance duty includes running monthly biospore safety test. | Van Redila, Jialin Shang |
| Lab Coats | Send soiled coats to Medicleanse | Robin Gibson |
| Sharps Waste | Red Biohazardous Sharps Waste Container Disposal: Autoclave and transport to **T-276** in the T-Wing. | Van Redila, Jialin Shang |
|  |  |  |
| ***EQUIPMENT SPECIFIC MAIN BRAINS*** | | |
| Confocal Microscope | Training, consultation and maintenance. | Jennifer Stone |
| Cryostat, CD 186N | Training, consultation and maintenance. | Ling Tong |
| Sledge, CD 186N | Training, consultation and maintenance. | Ling Tong |
| Microtome, CD 186N | Training, consultation and maintenance. | Jialin Shang |
| Vibratome | Training, consultation and maintenance. | Jennifer Stone |
| Sterilization Oven | Located in dark room. | Ling Tong |
| PCR machine | Located in molecular biology | Ling Tong |
| Nano Drop | Located in basement (Tempel lab) | Tot Nguyen/Robin Gibson |
| Centrifuge | Located in basement (Tempel lab) | Tot Nguyen/Robin Gibson |
| i-Cycler (Bio Rad) | Located in basement (Tempel lab) | Robin Gibson |
| Gas Tanks | Oxygen and CO2 tanks, ordering and changing, consulting. | Jialin Shang, Van Redila |
|  |  |  |
| ***ROOM SPECIFIC MAIN BRAINS*** | | |
| Tissue Culture, CD186H |  | Jialin Shang |
| Histology, CD 186A |  | Ling Tong |
| Molecular Biology, CD 186D |  | Tot Nguyen/Ling Tong |
| Animal Surgery, CD 055 |  | Van Redila |
|  |  |  |
| **In Vitro Suite: CD 056** |  |  |
| Fish Cave, CD 056E | *No longer in use.* |  |
| VOR Testing, CD 056B |  | Jim Phillips |
| Mouse ABR, CD 056D |  | Ed Rubel, Ling Tong |
|  |  |  |
| Animal Physiology, CD 068 |  | Van Redila |
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| Tempel Physiology CD 072 |  | Cliff Hume, Jay Rubinstein |
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| **Bloedel Maintenance** | Building concerns/burned out light bulbs. | Llyne Foy, Robin Gibson |
| Freezers |  |  |
| Refrigerators |  |  |
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| ***LAB MANAGER DUTES*** | | |
| EH&S | Maintain Chemical Hygiene Plan, attend and follow-up with inspections | Robin Gibson |
| Website | Maintain and update website | Robin Gibson |
| IACUC | Attend inspections. | Robin Gibson |
| Animal Protocol | Submit Significant Changes; complete renewals | Robin Gibson |
| Eye Wash Checks | Flush monthly and log the date. | Robin Gibson |
| Lab Safety Training | Maintain and document lab-training records. | Robin Gibson |
| Ed’s Calendar |  | Robin Gibson |
| Lab Meeting Announcements | Weekly announcement sent out on Tuesday whether or not we are having lab meeting on Wednesday. | Robin Gibson |
|  |  |  |

**Authorizations for individuals to use specific hazardous/controlled substances**

* Individuals working with hazardous substances have read the Occupational Health recommendations.

| **Hazardous Substance** | **Name** | **Date** | **Authorization** |
| --- | --- | --- | --- |
| BrdU |  |  |  |
| Isoflurane | **Van Redila** | **10/12/16** |  |
| Amsacrine, cisplatin, vinorelbine | **Patricia Wu** | **10/12/16** |  |
| TTX (tetrodotoxin) via disk implantation |  |  |  |
| DT (diphtheria toxin) via disk implantation | **Ling Tong** | **10/12/16** |  |
| Cholera toxin B subunit |  |  |  |
| Carvedilol, fluspirilene, fluoxetine, fluvoxamine, paroxetine, phenoxybenzamine, raloxifene, ractopamine, tamoxifen |  |  |  |
| Proparacaine eye drops |  |  |  |
| Kanamycin, amikacin, neomycin, tobramycin, gentamicin | **Van Redila**  **Patricia Wu** | **10/12/16** |  |
| For listed injectable agents pharmaceutical forms of the drug must be used.  (including SR buprenorphine, atropine, Beuthanasia, ketamine, xylazine, neomycin, kanamycin, gentamycin, butorphanol, buprenorphine, carprofen, heparin, vinorelbine, pentamidine, amikacin, streptomycin, tobramycin, and other injectable drugs) | **Ling Tong**  **Van Redila** | **10/12/16** |  |
| Paraformaldehyde (fixing agents) | **Ling Tong** | **10/12/16** |  |
| DMSO (dimethyl sulfoxide), used as diluent for certain agents. | **Van Redila**  **Patricia Wu** | **10/12/16** |  |
| **Ethanol aka ETOH, Dimethylacetamide aka DMA**, PROTO X (and PROTO 1, 2 etc.), drugs identified with Cell Death inhibitors screen (bax channel blocker, pifithrin (PFT)-alpha, UCF-101, FUT-175, Z-LLF-CHO, Leupeptin. 3-MA and D-methinonine), cepharanthin(e), drofenine, hexamethlyene amiloride, methiothepin, tacrine, drugs identified with Timtec library screen (ST001973, ST052198, ST014647, ST070285, metergoline ester), | **Van Redila** | **2/2/2016** |  |
| CO2 gas | **Van Redila**  **Ling Tong** | **10/12/16** |  |

**Authorizations for individuals to use specific controlled substances**

**Rubel Lab Personnel with Access to Controlled Substance Drug Stocks**

|  |  |  |
| --- | --- | --- |
| **Lab Member** | **Title** | **Authorized** |
| Edwin Rubel | Principal Investigator | ✔ |
| Jennifer Stone | Professor | ✔ |
| Robin Gibson | Research Scientist/Lab Manager | ✔ |
| Van Redila | Research Scientist | ✔ |
| Jialin Shang | Research Scientist | ✔ |
| Ling Tong | Research Scientist | ✔ |
| Patricia Wu | Research Scientist | ✔ |