Agenda – August 26, 2019 Group 9 (College of Engineering) Health and Safety Committee

1. Attending

Fiona Spencer or Eliot George, AA
Colleen Irvin, BioE
Sean Yeung, CEE
Michael Pomfret, CEI
Kameron Harmon, ChemE
S. Honeydew or M. Glidden, CoE DO
Sophie Ostlund, CSE
John Young, EE

Angie Haggard, EH&S Stacia Green, HCDE Sheila Prusa, ISE Bill Kuykendall, ME Madison Weaver, MolES/NanoES Tatyana Galenko, MSE Darick Baker, WNF

2. Guest Speaker

Diego Oliver, Fire and Life Safety Specialist, EH&S - upcoming building evacuation drills

3. Previous Meeting Minutes

- July 2019 approve? Corrections/additions?
- Previous meeting minutes are posted at https://www.engr.washington.edu/mycoe/safety#

4. Department Incident Reports (use "5 Why's" analysis for one report)

- CEE @ Mueller tripped on uneven sidewalk and fell into concrete footing (May)
- ECE @ Health Sciences discovered scratch after primate work (May)
- EH&S @ Mueller chemical waste container exploded (July)
- ECE @ Health Sciences cut finger on bin of used PPE (July)
- ME @ EGA battery accumulator in racecar caught fire (July)
- BioE @ SLU broke mercury thermometer (July)
- ChemE @ Benson poked finger with needle (July)
- ChemE/CC @ Benson poked finger with needle (July)
- ChemE @ Benson stabbed hand with pipette (July)

5. Group Business

- Group 9 election status nominations due by Sept 6th
- Carpet wrinkle repair is absorbed by Facilities (trip hazard mitigation)
- Registration open for the 2019 Graduate Student Safety Seminar, 9/24 1:30-3pm
- 2019 Autumn welcome packet/reminder ideas (APP, UW safety video, Roles/Resp...)

6. <u>UW-Wide Meeting</u>

- July minutes attached
- August agenda attached

7. Member Updates

Meeting Date: July 29, 2019

Attended

Colleen Irvin, BioE Michael Pomfret, CEI Kameron Harmon, ChemE Sophie Ostlund, CSE Sonia Honeydew, DO John Young, EE Angie Haggard, EH&S Sheila Prusa, ISE Bill Kuykendall, ME Chris Adams, MoIES/NanoES Torsten Mikkelson for T. Galenko, MSE

<u>Absent</u>

Fiona Spencer, AA

J. Sean Yeung, CEE

Stacia Green, HCDE

Darick Baker, WNF

Guest Speaker: UW TS Commute Options & Planning, Mahala Willard

- RE: bikeshare policy concerns UW has contracts with Jump and Lime. Contracts specify, per WAC standards, that bikes must be parked within 4' of bike racks. Per contracts, vendors must remove bikes within two hours of UW TS reporting incorrect parking or ADA access concerns. Vendors have a financial incentive to respond within two hours; otherwise they're charged \$10, and vendors want good contract renewal (UW provides 20% of Lime's business in Seattle). It is most effective if TS reports these issues to the vendors. If you see a bike >4' from a bike rack or blocking a sidewalk, door, or ADA button, take a picture and send it to TS at bshare@uw.edu with a description of the location.
- Jurisdiction: note that while Rainier Vista and the stadium are controlled by UW, the
 light rail station is Sound Transit's jurisdiction and the bridge is debatable jurisdiction.
 Bikes parked improperly in the light rail station or on the bridge can still be reported
 to TS but UW can't fine the bikeshare companies. Regarding Burke Gilman
 jurisdiction, on campus it is UW; off campus it is City of Seattle in Seattle.
- Tip for moving bikes (this might avoid alarm): pick up rear wheel and steer it with the front wheel on the ground, but don't injure yourself with the weight. You can still email TS a picture after you've moved a bike out of a dangerous location.

- Bikes are frequently parked in front of the ADA office at Mary Gates Hall, despite the signage not to park there. That location experiences fast turnaround so the bike may be rented again before the vendor arrives, but please do still email a picture.
- UW TS is rolling out a bike/ped safety campaign, asking people to wear helmets, bike at reasonable speeds, and announce themselves to pedestrians when passing. Education will include bike share info like how to report improperly parked bikes. Some education via Burma Shave-style signs (currently brainstorming phrases) starting in October, continuing in November with Ride in the Rain, thereafter timed with the start of each quarter. UW/vendors will geofence some areas (like in front of Mary Gates) so customers are charged extra for parking bikes improperly.
- Scooter share is expected in Seattle soon. With e-locks instead of physical locks, Lime will be able to limit locks to certain areas and also slow speeds in certain areas.
- Question: has UW considered disallowing non-transit vehicles on Stevens Way?
 Answer: UW's goals include reducing single-occupancy vehicle trips from current 17% to 12% of commutes, which will be difficult. Disallowing non-transit vehicles in Stevens Way is not included in any plans at this time and would be difficult to execute. This change is unlikely to happen.
- Question: will the upcoming safety campaign encourage helmet use or performing bike safety checks before use? Answer: the campaign will focus on safe practices such as wearing a helmet and calling "on your left" when passing, but will leave the bike share use education to the bike share companies (they have info on their apps). Note that TS does offer free helmets (Lime logo) at events or if you email TS.
- Question: would TS like to bring their bike/ped safety campaign info to EH&S Safety fairs? Answer: Yes!
- Question: what's the process for getting additional bike lockers installed? Answer: Because they are costly to maintain and not the most efficient way to store bikes in terms of space use, UW is phasing them out by not replacing them when they wear out. However, sometimes bike lockers are removed from an area because of new construction so you can inquire about installing used bike lockers by your building. Also note that there are currently four lockers available for rent next to Guthrie. UW is transitioning to bike houses (aka bike cages) because they are cheaper, and will work to enhance safety features in these. Currently piloting digital access for hourly rentals. MolES/NanoES is interested in a bike house; they should email ucommute@uw.edu. Bike house footprint sizes vary; see small example by HUB and large example by Life Sciences. Funding for installing new bike houses is staggered; providing three more by 2021. Bike houses are not usually placed by building entrances.

- Question: how do we find new carpool buddies? Answer: There is a regional "rideshare online" tool that was recently updated so try that. TS also keeps a list of email requests for carpool buddies but it's limited. It would be a great student project to create an app for UW faculty/staff/students to find carpool buddies! Note that Waze does offer this but it is not limited to the UW community. It is also a perdiem app as opposed to a regular schedule, though it would be a great way to find someone to carpool with and you could always transition out of the app.
- Question: who should people talk to when they're upset about bus stop moves during the Stevens Way closure? Answer: UW TS has no control; Metro made the decisions so call King County Metro. The extent and duration of the Stevens Way shutdown were a surprise to UW TS.
- Mahala Willard can be reached at <u>MahalaW@uw.edu</u> through at least Sept 6th. The general UWTS email (<u>ucommute@uw.edu</u>) is also a great resource, funnels appropriate items to the commute options and planning team, and typically responds within 2-5 days.

Previous Meeting Minutes

- June 2019 draft approved
- Previous meeting minutes are at: https://www.engr.washington.edu/mycoe/safety#

Incident Reports

- CEE @ Mueller tripped on uneven sidewalk and fell into concrete footing (May).
 Discuss at August meeting.
- ECE @ Allen Center fell backward in chair (May). Furniture vendor did not install some chairs correctly during initial installation. Building Coordinator had vendor return to service all chairs. Furniture warrantees are typically substantial (5-10 years).
- ChemE @ Benson needle stick (May). This is not "shared space" but multiple people sharing equipment within one research lab. 5 Whys: needle stick because needle left exposed, because user thought would return to task before anyone else used the space, because of lack of training/recognition of hazards. It's especially important to educate young people on the proper handling of sharps.
- ECE @ HSEB discovered scratch after primate work (May). Discuss in August.

Group Business

- Angie introduced Erin McKeown (<u>mstoxic@uw.edu</u>) in her new role as Accident Prevention Manager, 1-2852. Note that significant batteries (beyond normal household AA and AAA's) should be entered into MyChem inventory.
- Preview of upcoming incident discussions:
 - EGA FSAE lithium ion battery accumulator fire a battery accumulator made up of battery cells puts more potential energy in one place. This seemed to start with an arc flash (something shorted). Luckily, people were present for the runaway thermal event. Bill reports that MechE is working on forensic investigation, getting medical clearances and training to use full face respirators for postmortem investigation. They are hoping that during the forensic investigation they will find something sharp that punctured a pouch. Bill thinks it's worth finding an industry expert (from GM or Tesla?) to work with the group (and Erin McKeown) on the root cause analysis, and will share results with the Formula racecar judges and competitors (who could also be invited to come take a look). When a lithium ion battery combusts, the composite resin combusting makes a lot of smoke, but there were also flames to 6 or 7 feet, that occupants fought with chemical fire extinguishers until SFD arrived to tow the car outside. The resin material is also expensive to dispose of afterwards. Group 9 hopes the OARS report will include a recommendation for creating Best Practices for lithium ion accumulator packs, since so many groups on campus are designing these.
 - Mueller exploding waste container save for August. See Root Cause
 Analysis report in Group 9 drive but do not share as unredacted.

UW-Wide Meeting

- June minutes in packet.
- July highlights (at UW Bothell):
 - Learned about history of Bothell campus, now a wetland again.
 Fantastic bat population.
 - Walked through teaching labs, which showcase flexible design elements of modular system (everything on wheels, power in the middle). Anyone interested in touring Bothell teaching labs please contact Chair/CoChair of <u>UW Bothell H&S Group 7</u>.

Department Updates

- BioE theft from suite, then needle found in conference room. Consulted UWPD and HSB guards. Unfortunately, occupants still not locking suite consistently.
- MSE hazmat response, all cleared, no injuries
- MolES revision of sharps disposal process to be discussed in BioWaste Committee meeting Wednesday 7/31. Chris Adams leaving UW – last day first week of Sept; they'll post MolES/NanoES Building Coordinator position soon. Madison will proxy at Group 9 until new hire on board.

Next Meeting

• August 26th 2018 at 3pm, in Loew 355



Human Factors:

University of Washington Accident / Incident Report

Report Number: 2019-05-012	
Person Reporting Incident	
Last Name:	First Name:
Phone:+1	Email:
Occupation/Position: PUBLIC INFORMATION SPECIALIST	Department: ENG: Civil and Environmental Engineering-SCTL
Date Reported(yyyy/mm/dd):2019/05/01	Time of Reporting:04:50 PM
Person Involved or Affected	
Last Name:	First Name:
Phone:+1	Email:
Occupation/Position: PUBLIC INFORMATION SPECIALIST	Department: ENG: Civil and Environmental Engineering-SCTL
Incident Details	
Date of Incident(yyyy/mm/dd):2019/04/17	Time of Incident:10:45 AM When Shift Begins:9:00 AM
Campus:Seattle	Incident Location/Parking Lot:MUELLER HALL
Room:	Other:
Incident Details:	
While walking to meeting, tripped on uneven sidewall	and fell into edge of concrete footing.
While walking to meeting, tripped on uneven sidewall Attachment:No	and fell into edge of concrete footing.
	and fell into edge of concrete footing.
Attachment:No	First Name: William
Attachment:No Supervisor	
Attachment:No Supervisor Last Name:Keough	First Name:William
Attachment:No Supervisor Last Name:Keough Phone:+1 206 799-3108 Occupation/Position:ACADEMIC SERVICES-ASSISTANT	First Name:William Email:wkeough@uw.edu Department:ENG: Civil and Environmental
Attachment:No Supervisor Last Name:Keough Phone:+1 206 799-3108 Occupation/Position:ACADEMIC SERVICES-ASSISTANT DIRECTOR (E S 9) Classification Level 1:	First Name:William Email:wkeough@uw.edu Department:ENG: Civil and Environmental
Attachment:No Supervisor Last Name:Keough Phone:+1 206 799-3108 Occupation/Position:ACADEMIC SERVICES-ASSISTANT DIRECTOR (E S 9) Classification Level 1:	First Name:William Email:wkeough@uw.edu Department:ENG: Civil and Environmental Engineering-SCTL
Attachment:No Supervisor Last Name:Keough Phone:+1 206 799-3108 Occupation/Position:ACADEMIC SERVICES-ASSISTANT DIRECTOR (E S 9) Classification Level 1:	First Name:William Email:wkeough@uw.edu Department:ENG: Civil and Environmental Engineering-SCTL evel 3 if in-patient hospitalization or amputation Cut, Laceration, Puncture, Scratch, Abrasion (Open
Supervisor Last Name: Keough Phone: +1 206 799-3108 Occupation/Position: ACADEMIC SERVICES-ASSISTANT DIRECTOR (E S 9) Classification Level 1:	First Name:William Email:wkeough@uw.edu Department:ENG: Civil and Environmental Engineering-SCTL evel 3 if in-patient hospitalization or amputation Cut, Laceration, Puncture, Scratch, Abrasion (Open
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Supervisor Last Name: Keough Phone: +1 206 799-3108 Occupation/Position: ACADEMIC SERVICES-ASSISTANT DIRECTOR (E S 9) Classification Level 1: Injury requiring first aid, Injury requiring medical treatment (go to 1 occurred), Injury involving lost work days, Type of Incident Injury Description: Bruise, Contusion, Concussion, Gound), Headache, Pain, Irritation, Inflammation, St. Body Parts Affected: Head, Face, Eyes, Nose, Cause of Injury or Damage: Structures, Surfaces,	First Name:William Email:wkeough@uw.edu Department:ENG: Civil and Environmental Engineering-SCTL evel 3 if in-patient hospitalization or amputation Cut, Laceration, Puncture, Scratch, Abrasion (Open
Supervisor Last Name: Keough Phone: +1 206 799-3108 Occupation/Position: ACADEMIC SERVICES-ASSISTANT DIRECTOR (E S 9) Classification Level 1: Injury requiring first aid,	First Name:William Email:wkeough@uw.edu Department:ENG: Civil and Environmental Engineering-SCTL evel 3 if in-patient hospitalization or amputation Cut, Laceration, Puncture, Scratch, Abrasion (Open

Suggested corrective action by the affected party **Supervisor's Comments** Root Causes: (Please look at all the factors that may have contributed to the accident. Such factors may include equipment, environment, policies, procedures, and personnel.) I don't know. I wasn't there. Recommendations/Preventive Measures: I don't know. I wasn't there. Corrective Actions Target Date (yyyy/mm/dd): Corrective Actions Complete Date (yyyy/mm/dd): 2019/05/06 2019/05/03 Other Comments: **EHS Review** Last Name: Phone Number: Email: First Name: Occupation/Position: Department: Comments:



University of Washington Accident / Incident Report

Report Number: 2019-05-104 Contact EH&S at 206-543-7388

Person Reporting Incident	
Last Name:Orsborn	First Name:Amy
Phone: 2066162049	Email:aorsborn@uw.edu
Occupation/Position: ASSISTANT PROFESSOR	Department: ENG: Electrical & Computer Engineering
Date Reported(yyyy/mm/dd):2019/05/24	Time of Reporting:05:32 PM
Person Involved or Affected	
Last Name:	First Name:
Phone:	Email:
Occupation/Position:	Department: ENG: Electrical & Computer Engineering Orsborn Lab
Incident Details	
Date of Incident(yyyy/mm/dd):2019/05/24	Time of Incident:10:30 AM When Shift Begins: N/A
Campus:Not assigned to Campus	Incident Location/Parking Lot:Health Sciences Education Building
Room: I-027	Other:

Incident Details:

was performing positive-reinforcement training with rhesus macaques in the primate center vivarium. During her work, she was wearing all required personal protective equipment required (hair net, splash shield, face mask, lab coat over scrubs, shoe covers, two layers of nitrile gloves). She was additionally wearing a layer of kevlar gloves for scratch protection. After working with the animals for approximately 20 minutes, she removed her PPE and found a scratch that broke the skin underneath her gloves. She did not notice any clear incident where the scratch would have likely occurred during animal work (i.e. an animal did not noticeably scratch her). The source of the scratch is therefore unclear and it may have been pre-existing or occurred during PPE removal. After discovering the scratch, she checked the integrity of her nitrile gloves and they were found to hold water without leaks. She consulted with and then followed recommended exposure protocols including a 15 minute scrub of the wound site and medical followup at the ER for blood draws and anti-viral treatment.

Attachment: No

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Su	no	F\/I	60	r
Ju	UC	1 V I	30	

Last Name:Orsborn	First Name:Amy
Phone: 2066162049	Email:aorsborn@uw.edu
Occupation/Position: ASSISTANT PROFESSOR	Department: ENG: Electrical & Computer Engineering

Classification

Level 1:

Injury requiring medical treatment (go to level 3 if in-patient hospitalization or amputation occurred),

Type of Incident

Injury Description: Exposure to Potential Biohazardous (Infectious) Material,

Body Parts Affected: Hands, Wrists,

Cause of Injury or Damage: Other,

Possible Causes

Equipment:

Environment:					
Policies / Procedures:					
Human Factors: Inattention	, Rushing,				
Suggested corrective action	n by the affected party				
The source of the scratch is unknown, but best guess is that it either was pre-existing before placing PPE or occurred during rushed removal of her gloves (i.e. her nail scratched her hand during removal). was wearing all recommended PPE and additional scratch protection during animal interactions, had no physical interactions with animals or equipment where a clear scratch would have occurred and her gloves were fully intact. Her hypothesis therefore seems highly plausible. She therefore suggests incorporating a self-check for possible broken skin prior to beginning work in the vivarium, and to increase care taken when removing gloves. These additional measures will increase our ability to identify sources of scratches and will mitigate risk of self-injury during PPE removal.					
Supervisor's Comments					
Root Causes: (Please look at all the factors that may have contributed to the accident.Such factors may include equipment, environment, policies, procedures, and personnel.) The root cause of this incident appears to be inattention and/or rushing, as the scratch was likely either pre-existing and not noted prior to starting work or was caused during hurried removal of PPE. Recommendations/Preventive Measures: was following established protocols and wearing recommended PPE plus additional kevlar protection. The best strategies for reducing possible re-occurrence is to add a self-check step for any sites of broken skin prior to entering the vivarium. Any broken skin will be covered with a bandage. Finally, PPE					
removal will be performed where appropriate to keep		ble self-injury. Personnel	will also be encouraged		
Corrective Actions Target 2019/05/24	Date (yyyy/mm/dd):	Corrective Actions Complet 2019/05/24	e Date (yyyy/mm/dd):		
	Other Comments: I have discussed the incident and protocol changes to prevent reoccurrence with procedures will be followed immediately when she resumes work on Monday 5/27/19.				
EHS Review					
Last Name:	First Name:	Phone Number:	Email:		
Occupation/Position:		Department:			
Comments:					



University of Washington Accident / Incident Report

Report Number: 2019-07-049 Contact EH&S at 206-543-7262

Report Number: 2019-07-049	CONTACT EM&S at 200-545-7202
Person Reporting Incident	
Last Name:Moeller	First Name:Matt
Phone:+1 206 616-0588	Email:maddmatt@uw.edu
Occupation/Position: ENVIRONMENTAL PROGRAMS MANAGER	Department: HSA: Env Health & Safety: Environmental Programs
Date Reported(yyyy/mm/dd):2019/07/16	Time of Reporting:03:01 PM
Person Involved or Affected	
Last Name:	First Name:
Phone:	Email:
Occupation/Position:	Department:
Incident Details	
Date of Incident(yyyy/mm/dd):2019/07/16	Time of Incident:10:15 AM When Shift Begins: N/A
Campus:Seattle	Incident Location/Parking Lot:MUELLER HALL
Room: 189	Other:
alkaline chemical containers into a 55 gallon labpace. They heard a hissing sound, and then a large bang from the incident and response was to take a dry of the box. It appears a container had developed pressure the container and the contents to spray onto the ceinvestigation seems to indicate that it was due to the technique container) reacting to the concentrated sodium. Attachment: Yes	com the box. No one was injured or contaminated in themical fire extinguisher and spray the contents of sure and that pressure caused the cap to burst off ling and associated duct work. Preliminary the aluminum of the container (empty and vented ethyl
Supervisor	
Last Name:unknown	First Name:unknown
Phone: unknown	Email:unknown
Occupation/Position:unknown Classification	Department:unknown
CidSSITICATION	
T 1 1 .	
Level 1: Property damage only,	
Property damage only,	
Type of Incident	
Type of Incident Injury Description: None,	Low),
Type of Incident Injury Description: None, Body Parts Affected: None,	Low),
Type of Incident Injury Description: None, Body Parts Affected: None, Cause of Injury or Damage: Pressure Extreme (High or	· Low),
Type of Incident Injury Description: None, Body Parts Affected: None, Cause of Injury or Damage: Pressure Extreme (High or Possible Causes	Low),

Human Factors: Inadequate Training, Suggested corrective action by the affected party lab staff should not use aluminum containers for corrosive materials. **Supervisor's Comments** Root Causes: (Please look at all the factors that may have contributed to the accident. Such factors may include equipment, environment, policies, procedures, and personnel.) see attached report Recommendations/Preventive Measures: see attached report Corrective Actions Target Date (yyyy/mm/dd): Corrective Actions Complete Date (yyyy/mm/dd): 2019/07/30 2019/07/30 Other Comments: direct supervisior is R. Young-Gould, but on behalf of the UW and our waste contractor I am completing this for them. Matt Moeller, Manager, Env. Programs **EHS Review**

3442

Department:

Phone Number:+1 206 616-

Email:ahaggard@uw.edu

First Name: Angelina M

Last Name: Haggard

Comments:

Occupation/Position:

ENVIRONMENTAL HEALTH & SAFETY

UNIVERSITY of WASHINGTON

MUELLER HALL 189 INCIDENT

ROOT CAUSE ANALYSIS (RCA) REPORT

Site: Mueller Hall

OARS Incident #: 2019-07-049

Date: 7/19/2019

Prepared By: Matt Moeller





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SECTION 1: GENERAL INCIDENT INFORMATION

Date of Incident	7/16/2019 Time of I		Inciden	t	10:15	X AM PM	
Location (Site)	UW	Building	Mueller	Roo	om	189	
Date Reported	7/16/201	19	Time R	eported		10:30	X AM PM
OARS Incident Number	2019-07	'-049	Reported	ed By Matt Moeller			
Person(s) Involved		Name				Job Title	
				Grad S	Studer	nt, Miqin Zha	ang lab
				Clean H	Harbo	rs Lead Cher	nist
Serious Incident Outcome		ed container, v under pressure	enting/disper	sing of	haza	rdous caust	tic chemical
Witness(es)		Name				Job Title	
	Jocelyn	Murphy		Clean I	Harbo	rs field staff	
	Jackson	Jackson Underwood			Clean Harbors field staff		
RCA Team Members		Name		Role / Title			
	Matt M	oeller		Lead			
	Eleanor Wade			SME			
RCA Method(s) Used							



SECTION 2: EXECUTIVE SUMMARY

Around 10 am on Tuesday, July 16th, of the Zhang lab (PI: Miqin Zhang) was emptying the "base bath" in the lab into an empty and previously vented ethyl ether can that was made of aluminum. Clean Harbors, the University Hazardous Chemical Waste contractor was on site to do a "cleanout", a lab packing of a large collection of chemicals. The filled waste container was labeled and brought into Mueller 189 to be packed for disposal by Clean Harbors personnel.

Clean Harbor's lead chemist, segregated and determined the hazard classification of the waste container based upon its listed contents and percentages. placed the container into a 55gal "labpacker" (DOT rated 4G cardboard fiber box) and continued hazard classification and packing of other caustic materials into the box. Approximately 30 500-ml containers of Sodium Hydroxide and Ammonium Hydroxide solution had been packed into that box, when the Clean Harbors staff on-site heard a "hissing" sound coming from the box. As proached the box she noticed an odor of ammonia. The hissing sound increased and she and the two other Clean Harbors employees evacuated the room. She closed the door. Suddenly there was a loud popping noise and a jet of vermiculite and liquid sprayed up to the ceiling. It appeared to her that due to some residual smoke there was a possibility of a fire so she took the fire extinguisher from the nearest wall and carefully opening the door as little as possible discharged the fire extinguisher into the box. The box was approximately five feet from the door. She then had her staff and those in the lab next door to evacuate outside. After making sure no one remained on the floor, she called her manager at Clean Harbors, and then notified Mark Volkert of the EH&S Environmental Programs (EP) office.

SECTION 3: IMMEDIATE ACTIONS TAKEN

Mark Volkert notified me of the incident, and then notified Scott Nelson of EH&S OSH section of the event, who quickly responded to the scene along with Denise Bender (AD, EH&S OSH section. Mark then departed for the scene, and I (Matt Moeller) followed a short while later after gathering some PPE.

Upon arrival it was determined that whatever reaction had occurred had self-stabilized, and it was a matter of clean up rather than a first-response situation. At first glance it looked like a container had developed excessive pressure, releasing the lid and venting its contents up onto the ceiling and nearby duct work. After some discussion with the lab personnel it was determined that the caustic had been collected into an aluminum can which resulted in an unwanted chemical reaction and over-pressurization.

The decision was made to close the lab for the day, contact our hazardous materials clean up contractor, NRC, and schedule with them to come and clean the chemically contaminated surfaces, empty the box of its undamaged contents, identify the source of the released liquid, and clean the fire extinguisher residue off of the floor and major surfaces.

SECTION 4: INCIDENT DESCRIPTION

When poured the expired base bath contents into the aluminum container, he unwittingly started a chemical reaction that ultimately led to the container's failure. Aluminum is an amphoteric metal (a metal that reacts as an acid when in contact with a base or as a base when in contact with an acid) to produce sodium aluminate and hydrogen gas. (Traditionally represented as follows: $2Al + 2NaOH + 2H_2O \rightarrow 2NaAlO_2 + 3H_2$) The original (now modified to include our recommended actions) standard operating procedure (SOP) for using the acid or base baths did not specify what types of containers to use for the waste collection. Since the bath had been made quite a while ago, the original percentages of 2.7% Sodium Hydroxide, 5.7% water and 91.6% isopropanol was no longer representative of the mixture. He assumed, thatdue to evaporation a large percentage of the isopropanol had evaporated, leaving a much higher concentration of sodium hydroxide, so he labeled the container as 10% Sodium Hydroxide, 20% isopropanol and 70% water.

The container used was one originally used for the shipment of anhydrous Ethyl Ether, from Fisher Scientific. It was a DOT spec container, a 1B1 (aluminum drum, non-removable head), which means it was designed, among other things, to withstand the pressure differential requirements for transport by aircraft. Due to the fact it was also intended to be used for Ethyl Ether, a potential peroxide former, it had a plastic cap with plastic threads. Therefore, when the container developed pressure, the cap threads failed first (the hissing sound) until the cap itself was stretched to the point of popping off due to the pressure. The intact cap was found on the floor afterwards. After venting the pressure and a large volume of its contents, the remaining Sodium Hydroxide ate away at the base of the container and any remaining solution leaked into the box's absorbent material. (non-asbestos vermiculite).

During the NRC cleanup, NRC removed the container to a fume hood for our examination (see attached photographs)

SECTION 5: PREVIOUS INCIDENTS

I am unaware of any previous incidents of this happening in this lab or on this campus.

SECTION 6: SUMMARY OF CAUSAL FACTORS AND ROOT CAUSE(S)

See attached completed Causal Factor, Root-Cause, and Corrective Action Form

Causal factors	Explanation	Root-Cause
2.1 was incorrect material used?	Yes, Sodium Hydroxide was put into an aluminum container.	The incompatible materials caused a chemical reaction which developed pressure in the container until it failed.
5.1 Was the hazardous condition not recognized?	Yes, he was unaware of the hazardous of using aluminum container with corrosive solutions and the chemical reaction that would be caused by doing so.	SOP did not specifically mention not to use aluminum containers.
5.5 Was the written method or job procedures inadequate (did not anticipate the factors that contributed to the accident)?	Yes, Original SOP did not specify what type of containers to use for waste bath solutions	Failure to do so allowed a container incompatible with the waste to be used.

SECTION 7: RATIONALE FOR PROCEEDING WITH UNCONFIRMED CAUSAL FACTORS AND MOST PROBABLY ROOT CAUSES

N/A – No unconfirmed causal factors identified.

SECTION 8: CORRECTIVE AND PREVENTIVE ACTION (CAPA) PLAN

Root Cause	Recommended Actions	Assigned To	Target Completion Date
Use of inappropriate container for base bath waste.	Update lab SOP to specifically mention that aluminum containers are not to be used for the storage of Acid or Base bath wastes	of the Zhang lab	7/19/2019



Date

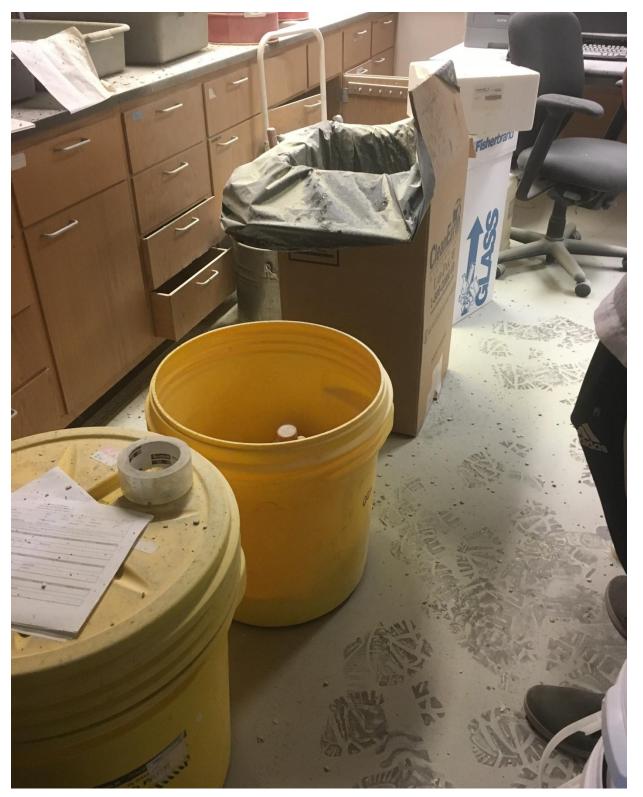
Lead Investigator Date

SECTION 9: RCA REPORT APPROVALS

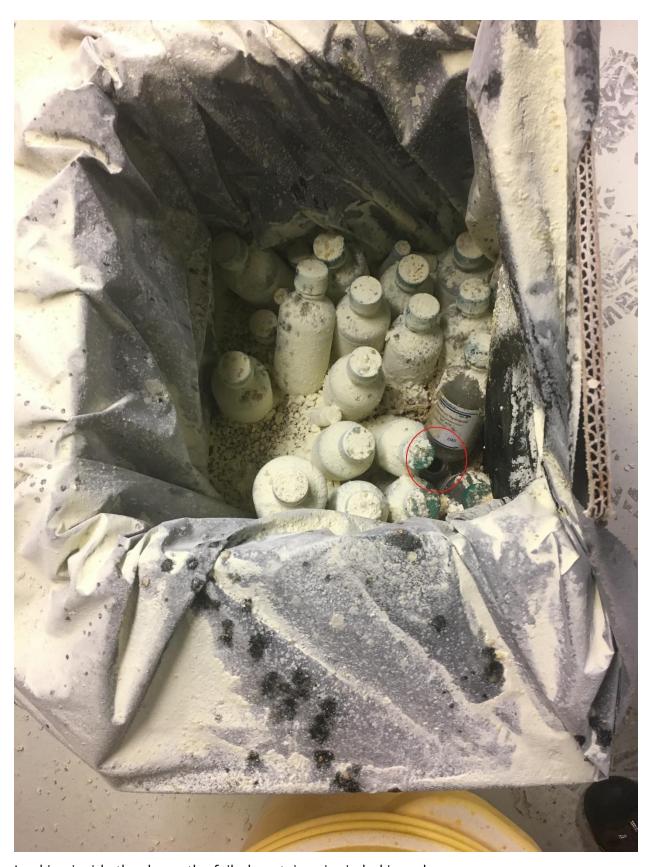
Department Manager/Director

(any additional signature authority, as needed) Date

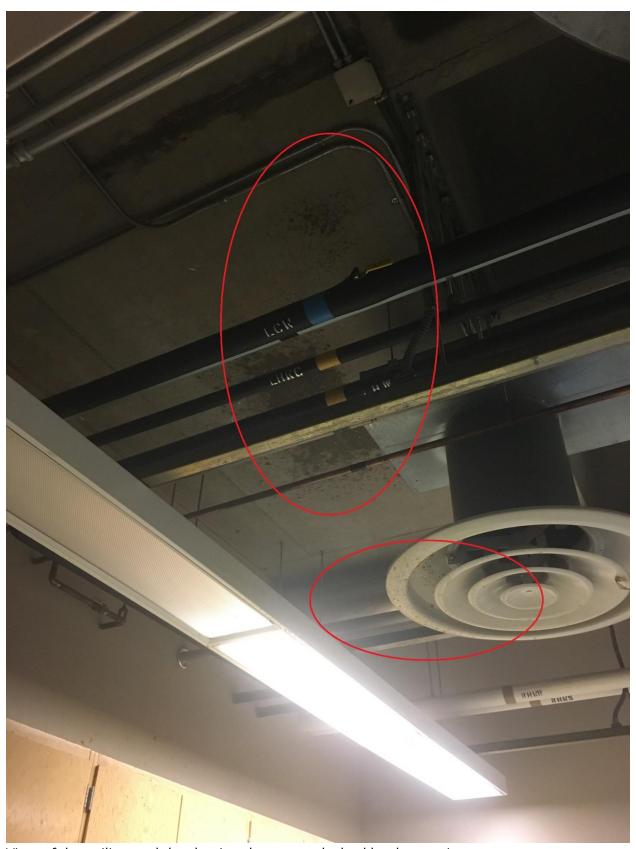
APPENDIX A: EVENT PHOTOGRAPHS



View of the room after event stabilized. Cardboard box in center of the room is the drum that had the ruptured container.



Looking inside the drum, the failed container is circled in red.



View of the ceiling and the ducting that was splashed by the venting contents



Two views of the actual container. The container itself actually failed thru the cap, the eating away of the container was done after the pressure had be equalized.



View of the top of the container, showing plastic cap and plastic threads.



University of Washington Accident / Incident Report

Report Number: 2019-07-002 Contact EH&S at 206-543-7262

Person Reporting Incident		
Last Name:	First Name:	
Phone:	Email:	
Occupation/Position:	Department: ENG: Electrical Yazdan-Shahmorad Lab JM St	
Date Reported(yyyy/mm/dd):2019/07/01	Time of Reporting:02:16 PM	4
Person Involved or Affected		
Last Name:	First Name:	
Phone:	Email:	
Occupation/Position:	Department: ENG: Electrical Yazdan-Shahmorad Lab JM St	
Incident Details		
Date of Incident(yyyy/mm/dd):2019/07/01	Time of Incident:1:00 PM	When Shift Begins: N/A
Campus:Not assigned to Campus	Incident Location/Parking Education Building	Lot:Health Sciences
Room: I-wing, 3rd floor	Other: Washington National	Primate Research Center
T 11 + D + 11 +	·	

Incident Details:

I had finished a training session with macaques in the Washington National Primate Research Center. I was wearing full PPE throughout. I had removed my PPE and stepped into the human area of the lab and washed my hands. I removed my scrubs top and placed it in the used scrubs bin. As I did so, my right index finger was nicked on a piece of the inside of the used scrubs bin. Within minutes I had washed my hands again and found Melinda Young, a biosafety specialist, to get her opinion. She looked at the nick and listened to my story (similar to what is reported here) and did not believe that it would be considered an exposure but instructed me to write an OARS report. She helped me apply a simple adhesive bandage from a first aid kit.

Attachment: No

Su	pe	rv	is	0	r

Last Name: Yazdan-Shahmorad	First Name:Azadeh
Phone:+1 206 543-6127	Email:azadehy@uw.edu
Occupation/Position: ASSISTANT PROFESSOR	Department: ENG: Bioengineering

Classification

Level 1:

Injury requiring first aid,

Type of Incident

Injury Description: Cut, Laceration, Puncture, Scratch, Abrasion (Open Wound),

Body Parts Affected: Fingers,

Cause of Injury or Damage: Broken Glass, Splinter, Sharp Furniture Edge, etc.,

Possible Causes

Equipment:

Environment: Sharp Objects,

Policies / Procedures:		
Human Factors:		
Suggested corrective action by the affected party		
Visually inspect new containers that will have things put in or taken out of them to check for sharp edges that may nick fingers or hands.		
Supervisor's Comments		
Root Causes: (Please look at all the factors that may have contributed to the accident. Such factors may include equipment, environment, policies, procedures, and personnel.) The student finished his training, removed his PPE and stepped into the human area of the lab. After changing out of the scrubs had a scratch on his finger from the hospital grade laundry bin that was missing reusable fully-compatible collection bag.		
Recommendations/Preventive Measures: We have immediately found a larger scrub collection bag with thicker fabric that has a better fit to protect the user from the mechanical hinge of the device.		
Corrective Actions Target Date (yyyy/mm/dd): 2019/07/02	Corrective Actions Complete Date (yyyy/mm/dd): 2019/07/02	
Other Comments:		
EHS Review		

Phone Number:

Department:

Email:

First Name:

Last Name:

Comments:

Occupation/Position:



Policies / Procedures:

University of Washington Accident / Incident Report

Report Number: 2019-07-022	Cor	ntact EH&S at 206-543-7262	
Person Reporting Incident			
Last Name: Hickner	First Name:Michelle		
Phone:	Email:mhickner@uw.edu		
Occupation/Position: RESEARCH SCIENTIST/ENGINEER 3	Department: ENG: Mechanical	l Engineering-Staff	
Date Reported(yyyy/mm/dd):2019/06/28	Time of Reporting:11:38 AM	4	
Person Involved or Affected			
Last Name:	First Name:		
Phone:	Email:		
Occupation/Position:Undergraduate Student	Department:		
Person was in Paid Position:No			
Incident Details			
Date of Incident(yyyy/mm/dd):2019/06/27	Time of Incident:5:15 PM	When Shift Begins: N/A	
Campus: Seattle	Incident Location/Parking	Lot: ENGINEERING ANNEX	
Room: 101A	Other:		
Incident Details:			
staff used several fire extinguishers to keep the fire from growing large until the fire department arrived. The fire department used water to douse the car and then pulled it outside the building. NRC was called by UW EH&S to remove the battery from the car. One student, was working on the car when the battery caught fire, and sustained burns on three fingers. The received medical attention from the firefighters on site, and from the Virginia Mason clinic in UVillage. Another student sought medical attention from the firefighters for smoke inhalation and was quickly cleared by them. Attachment:Yes			
Supervisor			
Last Name:Hickner	First Name:Michelle		
Phone:	Email:mhickner@uw.edu		
Occupation/Position:RESEARCH SCIENTIST/ENGINEER 3	Department: ENG: Mechanical	l Engineering-Staff	
Classification			
Level 2: Fire or Explosion,			
Type of Incident			
Injury Description: Burn (Thermal, Chemical, Electri	cal),		
Body Parts Affected: Fingers,			
Cause of Injury or Damage: Electricity, Fire, Explos	Cause of Injury or Damage: Electricity, Fire, Explosion,		
Possible Causes			
Equipment: Defective Tools, Equipment,			
Environment: Fire. Explosion.			

Human Factors: Inadequate Training,

Suggested corrective action by the affected party

Supervisor's Comments

Root Causes:

(Please look at all the factors that may have contributed to the accident. Such factors may include equipment, environment, policies, procedures, and personnel.)

We haven't yet been able to inspect the battery after the fire (EH&S is holding it until we have an agreed-upon work plan), so any guesses about the technical root causes are speculation. One possibility is that a battery cell or other accumulator component was mechanically damaged when the car was shipped back from Lincoln, Nebraska, the previous week. The damaged component might have shorted or a cell ruptured when moved slightly by the work happening on the car, or it might have caught fire at that time even if the work was not happening.

Recommendations/Preventive Measures:

I encourage UW EH&S to develop a battery-safety and high-voltage safety program designed for students and researchers who are building custom systems. This type of electrical and fire safety is quite different from the training that is appropriate for facilities electrical workers, who face different hazards. The training should include information about proper storage of different types of batteries, since they are similar but a bit different than most liquid chemicals.

The formula team should do visual inspections after each time the car is transported, and electrical diagnostics after significant shipping, such as cross-country or trans-atlantic shipping. Students should wear safety glasses any time they are working on the car, and have a policy of work gloves or high-voltage "recommended" while working near the accumulator.

The battery that caught fire underwent several design reviews, and recently passed technical inspection at competition, but future battery designs should undergo a design review from someone with a specific custom-battery/accumulator safety experience.

Corrective Actions Targe 2019/08/30	et Date (yyyy/mm/dd):	Corrective Actions Complete	te Date (yyyy/mm/dd):
Other Comments:			
Second Higher Authority Review			
Last Name:Kuykendall	First Name:William	Phone Number:+1 206 685-7061	Email:billkuyk@uw.edu
Occupation/Position: RES	SEARCH SCIENTIST/ENGINEER 3	Department: ENG: Mechanica	l Engineering-Staff
Comments:			
EHS Review			
Last Name:Haggard	First Name: Angelina M	Phone Number:+1 206 616-3442	Email:ahaggard@uw.edu
Occupation/Position:	•	Department:	
Comments:			



Root Causes:

University of Washington Accident / Incident Report

Report Number:2019-07-023	Contact EH&S at 206-543-7262	
Person Reporting Incident		
Last Name:	First Name:	
Phone:+1	Email:	
Occupation/Position:	Department: SOM: Bioengineering: Dr. Zheng Lab	
Date Reported(yyyy/mm/dd):2019/07/09	Time of Reporting:01:48 PM	
Person Involved or Affected		
Last Name:	First Name:	
Phone:+1	Email:	
Occupation/Position:	Department: SOM: Bioengineering: Dr. Zheng Lab	
Incident Details		
Date of Incident(yyyy/mm/dd):2019/07/09	Time of Incident:11:30 AM When Shift Begins: N/A	
Campus: Seattle	Incident Location/Parking Lot:	
Room:Brotman 417	Other:SLU, Brotman 419	
Incident Details:		
Broke a mercury thermometer.		
Attachment: No		
Supervisor		
Last Name: Zheng	First Name: Ying	
Phone:+1 206 543-3223	Email:yingzy@uw.edu	
Occupation/Position: ASSOCIATE PROFESSOR	Department: SOM: Bioengineering	
Classification		
Level 1: Property damage only,		
Type of Incident		
Injury Description: None,		
Body Parts Affected: None,		
Cause of Injury or Damage: None,		
Possible Causes		
Equipment:		
Environment:		
Policies / Procedures:		
Human Factors: Other,		
Suggested corrective action by the affected par	rty	
Supervisor's Comments		

(Please look at all the factors that may have contributed to the accident. Such factors may include equipment, environment, policies, procedures, and personnel.) Equipment fall down when moving boxes in the lab.			
Recommendations/Preventive Measures: Be careful when moving boxes			
Corrective Actions Target Date (yyyy/mm/dd): 2019/07/09 Corrective Actions Complete Date (yyyy/mm/dd): 2019/07/09		e Date (yyyy/mm/dd):	
Other Comments:			
EHS Review			
Last Name:	First Name:	Phone Number:	Email:
Occupation/Position:		Department:	
Comments:			



University of Washington Accident / Incident Report

Report Number: 2019-07-055 Contact EH&S at 206-543-7262

Person Reporting Incident		
Last Name: McKenna	First Name:Michael	
Phone: 9709884713	Email:mimc7580@uw.edu	
Occupation/Position: RESEARCH ASSISTANT (E S UAW ASE)	Department: ENG: Chemical E Student	Ingineering- Nance Lab JM
Date Reported(yyyy/mm/dd):2019/07/19	Time of Reporting:07:04 PM	1
Person Involved or Affected		
Last Name:	First Name:	
Phone:	Email:	
Occupation/Position:Undergraduate Student	Department:	
Person was in Paid Position:No		
Incident Details		
Date of Incident(yyyy/mm/dd):2019/07/19	Time of Incident:5:45 PM	When Shift Begins: N/A
Campus:Seattle	Incident Location/Parking	Lot:BENSON HALL
Room: 220	Other:	
Incident Details:		

IP poked their finger with a needle. Very minor, but did draw blood. Wound was washed for 15 minutes with warm water and bandaged.

Attachment: No

Supervisor

Supe	el VISOI
Last	Name: Nance

Phone:+1 206 543-2216	Email:eanance@uw.edu
Occupation/Position: ASSISTANT PROFESSOR	Department: ENG: Chemical Engineering-Faculty

First Name:Elizabeth

Classification

Level 1:

Injury requiring first aid,

Type of Incident

Injury Description: Cut, Laceration, Puncture, Scratch, Abrasion (Open Wound),

Body Parts Affected: Fingers,

Cause of Injury or Damage: Needles, Medical Sharps, Scalpels, etc. (Clinical, Research, Teaching),

Possible Causes

Equipment:

Environment:

Policies / Procedures:

Human Factors: Inattention, Rushing,

Suggested corrective action by the affected party

Need to pay more attention when using sharp objects.

ON FILE: Affected/Injured Employee's date of birth, gender, date of hire, and hours of employment.

Supervisor's Comments

Root Causes:

(Please look at all the factors that may have contributed to the accident. Such factors may include equipment, environment, policies, procedures, and personnel.)

A small syringe needle was being used to remove bubbles in tissue sections being places on slides. This is the most effective way to remove these bubbles, but introduces increased risk of contact with a sharp.

Recommendations/Preventive Measures:

The affected party has indicated that they will take even more caution when using the needle for air bubble removal. The lab will look into fine tipped stiff brushed paint brushes for air bubble removal, which would eliminate this potential risk of contact with a sharp.

Corrective Actions Target Date (yyyy/mm/dd):
2019/07/20

Corrective Actions Complete Date (yyyy/mm/dd):
2019/07/26

Other Comments:

Needles are no longer allowed in the cryo stat for removing air bubbles. Instead a fine-tipped stiff brush paint brush will be used.

EHS Review			
Last Name:	First Name:	Phone Number:	Email:
Occupation/Position:		Department:	
Comments:			



Supervisor's Comments

University of Washington Accident / Incident Report

Report Number: 2019-07-079	Contact EH&S at 206-543-726		
Person Reporting Incident			
Last Name:	First Name:		
Phone:	Email:		
Occupation/Position	Department: ENG: Collaboration Core - WNF JM Studen		
Date Reported(yyyy/mm/dd):2019/07/28	Time of Reporting:05:44 AM		
Person Involved or Affected			
Last Name:	First Name:		
Phone:	Email:		
Occupation/Position	Department: ENG: Collaboration Core - WNF JM Studen		
Incident Details			
Date of Incident(yyyy/mm/dd):2019/07/26	Time of Incident:7:00 PM When Shift Begins:8:30 A		
Campus:Seattle	Incident Location/Parking Lot:BENSON HALL		
Room:	Other:		
Incident Details:			
Went to grab needle and right finger poked.			
Attachment:No			
Supervisor			
Last Name:Nance	First Name:Elizabeth		
Phone:+1 206 543-2216	Email:eanance@uw.edu		
Occupation/Position: ASSISTANT PROFESSOR	Department: ENG: Chemical Engineering-Faculty		
Classification			
Level 1: Injury requiring first aid,			
Type of Incident			
Injury Description: Cut, Laceration, Puncture, Scra	atch, Abrasion (Open Wound),		
Body Parts Affected: Fingers,			
Cause of Injury or Damage: Needles, Medical Sharps, Scalpels, etc. (Clinical, Research, Teaching),			
Possible Causes			
Equipment: Other,			
Environment:			
Environment.	Policies / Procedures:		
Policies / Procedures:			

Root Causes:

(Please look at all the factors that may have contributed to the accident. Such factors may include equipment, environment, policies, procedures, and personnel.)

The needle was being used to remove air bubbles on tissue slices being placed on slides in the cryosection. The use of a needle to do this is not necessary, and it is being done in a cold (-20C) environment.

Recommendations/Preventive Measures:

It is unclear to the PI when the use of a needle to remove air bubbles became part of the cryosectionng procedure, as it was not part of the equipment or experimental training procedure. In response to this second incident, this practice is now banned in the lab, and all lab members using the cryostat will be retrained, regardless of their prior use of this practice or not. The goal of this training is to reiterate best practices for obtaining slices that do not have air bubbles, since the presence of air bubbles (popped or not) makes the slices non-usable for publication. Additionally, ALL lab members in the lab are required to undergo a in-person refresher on safety training, including sharps usage and disposal, immediately. These training sessions will take place 7/29 and 7/30/19 and attendance and participation will be signed off by the PI.

Corrective Actions Target Date (yyyy/mm/dd):	Corrective Actions Complete Date (yyyy/mm/dd): 2019/07/29
--	---

Other Comments:

It is unclear to the PI when the use of a needle to remove air bubbles became part of the cryosectionng procedure, as it was not part of the equipment or experimental training procedure. In response to this second incident, this practice is now banned in the lab, and all lab members using the cryostat will be retrained, regardless of their prior use of this practice or not. The goal of this training is to reiterate best practices for obtaining slices that do not have air bubbles, since the presence of air bubbles (popped or not) makes the slices non-usable for publication. Additionally, ALL lab members in the lab are required to undergo a in

EHS Review					
Last Name:	First Name:	Phone Number:	Email:		
Occupation/Position:		Department:			
Comments:					



University of Washington Accident / Incident Report

Report Number: 2019-07-081 Contact EH&S at 206-543-7262

Report Number 2019-07-061	Contact Ends at 200-343-7202
Person Reporting Incident	
Last Name:	First Name:
Phone:	Email:
Occupation/Position:	Department: ENG: Chemical Engineering- Nance Lab JM Student
Date Reported(yyyy/mm/dd):2019/07/29	Time of Reporting:10:51 AM
Person Involved or Affected	
Last Name:	First Name:
Phone:	Email:
Occupation/Position:	Department: ENG: Chemical Engineering- Nance Lab JM Student
Incident Details	
Date of Incident(yyyy/mm/dd):2019/07/29	Time of Incident:10:00 AM When Shift Begins:9:00 AM
Campus:Seattle	Incident Location/Parking Lot:BENSON HALL
Room: B23	Other:
Incident Details:	
flask. The pipette was not getting into the hose bent, broke the glass pipette and stabbed my hand hand. I washed it with running water for 5 mins a	ee on into the vacuum to suck out the media from my T75 easily. I pushed it harder to insert it and my hand I. It gave me a 1/2 cm diameter stab wound on my left and put a bandage on it.
Attachment:No	
Supervisor	
Last Name:Nance	First Name:Elizabeth
Phone:+1 206 543-2216	Email:eanance@uw.edu
Occupation/Position:ASSISTANT PROFESSOR	Department: ENG: Chemical Engineering-Faculty
Classification	
Level 1: Injury requiring first aid,	
Type of Incident	
Injury Description: Cut, Laceration, Puncture, Sc	ratch, Abrasion (Open Wound),
Body Parts Affected: Hands, Wrists,	
Cause of Injury or Damage: Broken Glass, Splinter	, Sharp Furniture Edge, etc.,
Possible Causes	
Equipment: Using Equipment Improperly,	
Environment:	
Policies / Procedures:	
Human Factors: Failure to Follow Established Prot	ocol/Procedures,
Suggested corrective action by the affected party	

Supervisor's Comments				
Root Causes: (Please look at all the factors that may have contributed to the accordance, and personnel.) The pasteur pipet was a fresh pipet that had not bee line in a biological safety cabinet, and the tubing hand slipped and caught the end of the pipet.	en used yet. It was being inserted into the vacuum			
Recommendations/Preventive Measures: We scheduled a safety re-training and in addition to discussed ways to insert the pasteur pipets into the your hand into them. Unfortunately these pasteur pir refresher on best orientation and approach to insert	e vacuum line to minimize risk of breaking or jamming pets have to be used in this setup, but this			
Corrective Actions Target Date (yyyy/mm/dd): 2019/07/29	Corrective Actions Complete Date (yyyy/mm/dd): 2019/07/29			
Other Comments: We scheduled a safety re-training and in addition to discussed ways to insert the pasteur pipets into the your hand into them. Unfortunately these pasteur piperesher on best orientation and approach to insert	e vacuum line to minimize risk of breaking or jamming pets have to be used in this setup, but this			

The in-person safety re-training was required by all lab members before continuing work in the lab. To accommodate all lab members, three sessions were scheduled - one on 7/29 at 1pm, and two on 7/30 at 3:30pm and 4:30pm. completed the in-person saf

EHS Review					
Last Name:	First Name:	Phone Number:	Email:		
Occupation/Position:		Department:			
Comments:					



U-WIDE HEALTH AND SAFETY COMMITTEE

July 10, 2019 Meeting Minutes | 1:00 pm - 2:30 pm | UW Bothell

	Elected Members* (HSC Group)		Appointed Members* (HSC Group)		Environmental Health &Safety (EH&S) Staff**
Χ	Leslie Anderson, Co-Chair (1)		Paul Zuchowski (3)		Katia Harb
	Fieta Robinson (1)		Katie Beth (3)		Denise Bender
Χ	Ryan Hawkinson (1) alternate	Х	Beth Hammermeister (4)	Х	Erin McKeown
	Sterling Luke (2)		Liz Kindred, Co-Chair (5)	Х	Angelina Haggard
	Jeff Mellema (2)		Nicole Sanderson (7)	Х	Manisha Konnur
	Carol Harvey (4)		David Zuckerman (10)		
Χ	Ann Aumann (5)		Sonia Honeydew (9)		
Χ	Natassia Stelmaszek (6)		Lori Anthony (6)		
Χ	Kelly Carter-Lynn (7)				
	David Hirschberg (8)				
Χ	Hannah Wilson (8)				
Χ	Kameron Harmon (9)				
Χ	David Warren (10)				
	Faculty Senate*				
Х	Lesley Colby				
	Labor Union Representation*		Ex-Officio Members**		Ex-Officio Members**
	Paula Lukaszek, WFSE Local 1488		Tracey Mosier, UW Facilities		Felicia Foster, Atty General's Office
X	Christine Kang, UAW 4121		Chris Pennington, UW Facilities		Lt. Chris Jaross, UWPD
	Vacant, SEIU Local 1199	X	Steve Charvat, Emergency Management		
			Megan Levy, Emergency Management		Vacant, Transportation Services
			Barry Morgan, Emergency Management	X	Ken Nielsen, Risk Claims Services
			Rick Gleason, DEOHS		Vacant, Capital Planning & Development



Agenda

- 1. UW Seattle EHS Welcome & EHS related items
- 2. Campus and Bothell History: Tyson Kemper
- 3. UWB EM Intro: CERT/Stop the Bleed programs: Darren Branum
- 4. Gabe Barnes UWB Wetlands Walking Tour
- 5. Christy Cherrier: School of STEM Walking Tour

Recorded by Manisha Konnur

- 1. UW Seattle EHS Welcome & EHS related items: Leslie Anderson called the meeting to order at 1:05pm, asked everyone to introduce themselves. Angelina Haggard introduced Erin McKeown, the new Accident Prevention Manager.
- **2. Campus and Bothell History:** Tyson Kemper, Grounds Supervisor at UW Bothell presented on the UW Bothell Campus history.
- **3. UWB EM Into: CERT/ Stop the Bleed programs:** Darren Branum, Emergency Preparedness Manager presented on Stop the Bleed and Emergency preparedness program.
- 4. Gabe Barnes took the U-Wide member for UWB Wetlands Walking Tour.
- 5. Christy Cherrier took the U-Wide members for Discovery Hall Walking Tour.



University-Wide (U-Wide) Health and Safety Committee Meeting Agenda

August 14, 2019

1:00 - 2:30 PM

William H. Foege Bldg. N-130A

Agenda Item	Lead	Process	Time
Call to Order and Introductions	Leslie Anderson, co-chair Denise Bender	Robert's Rules of Order	5 min
Approval of Meeting Minutes	Leslie Anderson, co-chair	Robert's Rules of Order	5 min
Organizational Group Reports*	Committee Members	Discussion	25 min
Union Reports	Union Representatives	Discussion	10 min
Ex-Officio Reports	Ex-Officio Members	Discussion	10 min
EH&S Strategic Plan	Katia Harb Senior EH&S Director	Presentation	20 min
EH&S and WA Labor & Industries Updates	Denise Bender Assistant Director, Occupational Safety & Health	Discussion	5 min
2020-21 Health & Safety Committee Elections Timeline	Angie Haggard	Discussion	5 min
Good of the Order	Leslie Anderson, co-chair	Discussion	5 min
Adjourn	Leslie Anderson, co-chair	Robert's Rules of Order	

^{*}Organizational Group Reports include topics covered at their most recent meeting

Please send ideas for agenda items to the co-chairs Leslie Anderson and Liz Kindred at least 2 weeks prior to our meetings.