

## The Semeniuk Laboratory Guide

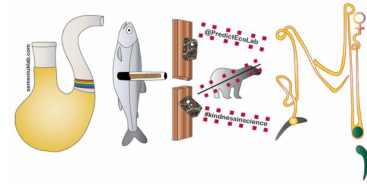
*The following statement of values and code of conduct has been collaboratively constructed by Semeniuk lab members. Although this was done to ensure a diverse input of experiences and considerations for lab members, undoubtedly this guide will inadvertently fail to address all aspects of lab values and behaviours. To continually assess and update our practices of inclusivity and standard operating procedures, this document will be updated on a regular basis, based on the social and scientific zeitgeist. Laboratory Guide last updated **August 19, 2020**.*

### Laboratory Values Statement

The Semeniuk Laboratory runs on principles of academic integrity and respect. We are committed as a group to fostering a collaborative environment, where individuals can grow on professional and personal levels, free from a culture of unhealthy or detrimental academic competition. Members of our lab group work closely together, with collaborations often spanning several degrees of academic positions (undergraduates, graduate students, postdocs, faculty members, etc.). We strongly believe this teamwork-based model is essential to our success by facilitating mentorship of early-career scientists and promoting viewpoint diversity via inclusion of diverse perspectives. To that end, we highly encourage inquiries from individuals coming from a diverse background or otherwise under-represented groups in STEM. While we whole-heartedly encourage open discourse and the practices of transparent communication, our lab group has a zero-tolerance policy for **unfair discrimination based on any aspects of an individual's identity** (e.g., ethnicity, religion, sexual orientation, gender-identity, political viewpoints, etc.). As cultural norms evolve, so too does our understanding of what it means to be successful in science. Following the theme of our Laboratory's research, individual behaviour can translate to population scale patterns. In other words, the actions taken by individuals in our lab such as asking questions, voicing concerns, or helping others, are all critical for the success of our laboratory as a whole.



University  
of Windsor



## **Laboratory Operating Procedures**

**SAFETY FIRST** – If something is unsafe or if you lack the necessary training or safety equipment, don't do it. If you see someone else doing something unsafe, *even if it is not in your laboratory*, correct their behaviour, or let a senior laboratory member know (Principle Investigator, Post Doc, Research Associate, senior grad student, etc.). Be alert and always look for potential safety issues. Make sure you have completed all required University training modules (e.g. WHMIS expires every year). Wear appropriate clothing, footwear, and Personal Protective Equipment when needed.

**ASK QUESTIONS** – If you are uncertain about a step in a procedure, need to use equipment you are unfamiliar with, find that equipment is looking or behaving differently from usual, or just want to confirm that the way you have previously done a task is still the accepted way, stop and ask.

**LABORATORY SUPPLIES** – laboratory managers and PI's want to make sure you always have the supplies and equipment you need, but they aren't doing a continuous inventory. If you open the last box of gloves, alcohol swabs, test tubes, falcon tubes, batteries, etc. make sure you stock up on them YOURSELF at the Biology Stockroom. For more bulk and expensive items, check with your laboratory manager and supervisor first! Remember, orders don't get placed, filled, and delivered imminently. Placing rush orders due to bad planning or inconsideration is expensive and stressful for everyone involved.

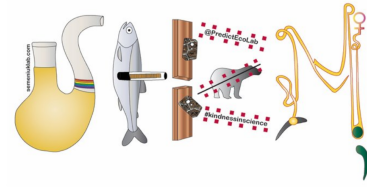
**RESPECT THE LABORATORY MANAGERS**- laboratory managers have many duties to perform that it is not practical for them to drop whatever they're doing to help without advance notification. Please plan ahead if you require help, either by reaching out during designated hours or sending an email to book an appointment. Laboratory managers will also post a schedule of when they're free to assist on your project. Please be respectful and treat them well - they are a rare commodity that want the best for our lab.

**ANIMAL CARE** – although Animal Care Guidelines and Procedures are tedious, it's ultimately for the good of the animals. Due to the projects in our lab, almost all of our lab members are required to take the ACC online training and in-person session. Regardless, animal care training looks good on a CV anyway. Animals should be checked on *every day*, for feeding and checking water quality, room conditions, and equipment running properly (yes, this can mean Christmas Day, your birthday, or Mother's Day). Although this is primarily the graduate student's responsibility, other lab members are expected to help in instances of vacation, GA or fieldwork conflicts, or personal/family emergencies (see "We're a Team!").

**DOCUMENT YOUR MISTAKES** – Aside from the obvious of always reporting large problems and accidents, if you make a procedural mistake, damage a piece of equipment, get problematic assay results, or even just think you might have done one of those things, stop and ask for help sorting out the problem and planning a way forward. The sooner you stop instead of pushing forward, the easier it is to find a solution and the less time, supplies, and energy is wasted.



University  
of Windsor



**EQUIPMENT MAINTENANCE** – If any piece of equipment isn't functioning properly, let a lab manager know so it can be repaired or replaced. Always read the manual before you use the equipment. There are often good YouTube video tutorials. The Honda Pilot, trailer, and other vehicles are common resources, so if you notice something is wrong/broken/shaking etc., please let your PI and/or lab supervisor know. Do a quick walk around the vehicle (circle check) before each time you use it – make sure the tires look good and note anything that may have been damaged by a previous user. Do NOT use any equipment if it has an issue affecting safety – it can be repaired quickly or an alternative will be found.

**SECURITY** – Hallways and vehicles are not secure. Nothing of value should ever be left out or in a vehicle overnight – not at GLIER, on campus, at a motel, etc. Our gear is appealing to thieves and anything lost is lost for good. ALWAYS LOCK LAB DOORS. Don't let people you don't know through the front door at GLIER or into the Computational Facility – it's OK to ask them to wait outside and to contact the person they need to see.

**CLEAN UP AFTER YOURSELF** – Labs and offices are common spaces and can get cluttered very quickly. a) If you are done with an experiment, put away all the equipment and supplies you have out, in a bin, or on a cart. Ask a lab manager for help if you aren't sure where things go – this means they can be found again in the future.

b) Samples must to be boxed, labelled (with FIRST AND LAST NAME, DATE, SPECIES, and SAMPLE DESCRIPTION; i.e., fin clips in RNALater, brains in formalin, etc.), properly stored, and their location recorded on the appropriate sheet. Do not leave samples jumbled in a freezer in the bags that they shipped in. Ask if you need help finding a space to store something.

c) Do not put chemicals into unlabelled vessels and do store chemicals in a safe location.

d) If you empty a filled pipette box, FILL IT BACK UP.

e) When returning from the field you may arrive late or need to lay stuff out to dry. Please wash/sanitize any equipment and let it dry completely before putting it away. Large items are generally stored in the shed in the courtyard, while smaller items that are expensive or temperature-sensitive are stored in 246.

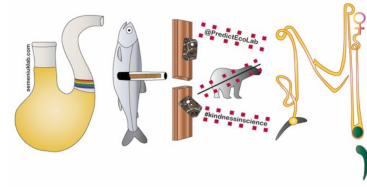
f) If you have been housing fish or eggs in the aquatic facility, drain the system completely. This includes all hoses and pipes. Equipment can be washed with dish detergent and hot water, or with Virkon solution (provided by Animal Care) and rinsed *really* well. Canister filters need to be disassembled, filter sponges and bioballs rinsed out and left to dry. Likewise, UV sterilizers need to be drained and allowed to dry.

**PURCHASING** – Getting reimbursed through a grant is a big ordeal, so if you need to purchase anything (shop towels, batteries, Tupperware to hold fish, totes, SD cards, hard drives, etc.), your lab manager and supervisor have Purchasing Cards for that! Make sure you shop around for the best price, and let your supervisor/lab manager know BEFORE purchasing.

**FOLLOW THE LAW** – driving a field vehicle while under the influence (drugs or alcohol), or using a handheld device while driving, will result in user privileges being immediately revoked, and possible expulsion from the lab. You are responsible for any tickets you receive for traffic or safety violations.



University  
of Windsor



## **Scientific Methods**

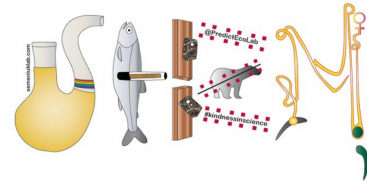
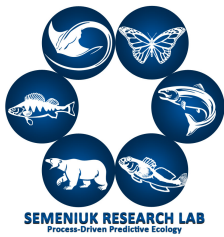
**FIELD DATA** – Data should be recorded on Rite in the Rain paper – ask for a notebook in advance of your field season. Lab data may be recorded on printer paper. These sheets must be organized, protected, and stored properly. This data should be digitized and backed-up as soon as possible.

**BACK UP THAT DATA** – There should always be more than one copy, and if there isn't, treat it as a priceless artefact until it can be copied again (i.e. never left in a car alone, packed in checked luggage, left out in common areas of a field site/house). We have lots of hard drives – back up spreadsheets, data files, etc. every one or two weeks. A copy of ALL of your data (videos, spreadsheets, Solomon Coder files, R scripts, JMP files, Prism figures, etc.), labelled and organized meaningfully, needs to be left with the lab upon graduation or leaving the lab – see the checklist below. Yellow field books and field notes stay with lab, although you are free to take a copy.

**PUBLISH** – Lab members are expected to publish their research in peer-reviewed journals; ALL Semeniuk grad students, regardless if they're enrolled in GLIER or Biology are expected to submit a manuscript before graduating. Funding, collaborators, and partners are dependent on getting work published. Once you have graduated or left the lab, you will be required to write a plan and timeline for paper completion. Extreme delays may eventually necessitate changes in authorship order.



University  
of Windsor



## **Professional Development**

**TRAVEL** – Fieldwork and conferences are one of the best parts of academic life, but it is a privilege. Being disrespectful or selfish at a field site (i.e., sleeping in while others are working, not helping others when your samples are collected) will result in the end of your trips for field work. If you want to attend a conference, make a budget including hotel, travel, and registration, and present it to your supervisor along with a synopsis of what you will gain from the conference. Master's students within their first 2 years of research are entitled to \$500 from Graduate Studies (apply for this after your travel) and \$500 from the Faculty of Science (need to apply for this at least 60 days in **advance** of travel). PhD students are entitled to a bit more money. Your lab manager or supervisor can pay for travel on a University Travel Card, but you need to assist with the entire process. If you miss early bird registration or abstract submission deadlines, you will not be allowed to attend the conference due to grant restrictions. Please let your supervisor know **amounts** BEFORE making any registration or conference purchases. \*Please note that per diems are not covered by your supervisor for conferences\*.

**AFTER A CONFERENCE** – It is a great idea to have a lab roundtable and discuss neat talks you heard, and people you met that could be potential collaborators, invited speakers, etc. Take lots of notes at the conference – a copy of these notes will be kept in a file for all future lab members. If you're late in organizing your receipts and incur a late-fee charge on the VISA, you will be responsible for covering this charge (University policy).

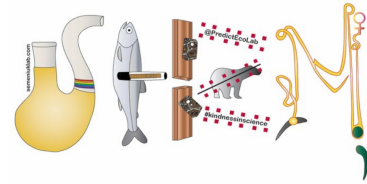
**UWINDSOR EMAIL & ETIQUETTE** – Your @uwindsor.ca account should be used for official correspondence with outside individuals and organizations. Emails to the outside world should always be polite and courteous. If in doubt, or just for a second opinion, get another lab member or your supervisor to proofread it before sending. Please be as clear and concise in your emails (with politeness!) about why you are corresponding with your Supervisor. Vague emails will not be responded to (e.g., request to meet about XX without a clear agenda). The supervisor/lab manager may need to prepare for your meeting to best serve you, and the more information, the better. All our time is limited, and we need to know how much time to allocate. Sometimes an email response will suffice!

**OUTREACH, SOCIAL MEDIA, PUBLIC MEDIA AND INTERVIEWS** – The Semeniuk lab is always up for doing outreach events. We also have a twitter account you can tag (@PredictEcoLab). *Pictures taken in Animal Care facilities/rooms* (i.e., Room 110) **may NEVER be posted to social media**, regardless whether you have a private account. Make sure any lab-related or lab-tagged pictures (i.e., #fieldwork, #eider, #behaviour, @PredictEcoLab, #gradschool, @UWindsor, etc) depict environmental responsibility, respect to animals, and adhering to permit restrictions, University regulations, and not breaking any laws. **Make sure all partners and collaborators are recognized in the article or tagged in the post, and ask permission first if you're posting photos of a collaborative field site or lab.** Remember, you are ambassadors representing the Semeniuk Lab, GLIER and the University of Windsor.

**COMMITMENT** - Being a graduate student is not a 9am-5pm “job”. It is akin to a training internship. What you get out of your degree will be dictated by how much you put into it. Striking a work-life balance isn't easy. Health comes first, and we recognize the external pressure you're under. We still expect a high degree of commitment to your degree. Actions such as leaving at 3:00p.m. or engaging in extracurricular volunteer activities must be backed up by **evidence** of a strong work ethic to reassure your supervisor that you are taking your studies seriously. You are getting paid for your internship!



University  
of Windsor



## **Personal Behavioural Conduct**

**BE ETHICAL** – Adhere to the highest level of standards related to ethical practices of data collection, analysis and reporting. If you are working with animals, treat them humanely. Maintain immaculate housing conditions. Euthanize if they are suffering. Collect as much data as you can from all animals to make the most of terminal sampling, even if it's not for your project. Don't forge, fabricate, or skew data, and make sure credit/co-authorship/ acknowledgements are given where they are due.

**RESPECT** – All laboratory members will respect the diversity in our lab and recognize that they are ambassadors for our lab and our institution when interacting with all stakeholders and the public. Harassment, racism, sexism, and any other form of discrimination based on a person's beliefs, sexual preference, heritage, or disability will not be tolerated and is strictly against university policy.

**WE'RE A TEAM!** A lot of our projects are complicated or have time constraints, which means your lab members could need a lot of hands on deck. We help out/collaborate with other labs as well, especially if we have experience (i.e., behaviour trials, bleeding fish, ponding, analyzing videos using Ethovision or Solomon Coder). Even if you study polar bears or eiders, be prepared to step up if someone needs help processing salmon! And vice versa! If you say you'll help, don't break your commitment, and arrive on time. Your lab members will also need input and feedback on presentations and writing.

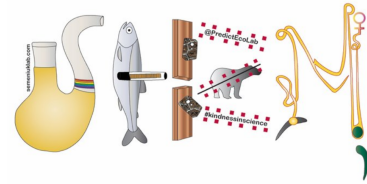
**CONFLICTS WITHIN THE LAB** – if you have problems, issues, or concerns, sharing them with your supervisor as soon as possible is best. Emails or texts to peers should be respectful and professional. When responding to emails, it's best to read, wait, and then respond.

**MENTAL HEALTH** - The Semeniuk Lab takes the issue of mental health seriously. Everyone can experience a bad day where you need some time to rejuvenate, but there is a difference between making bad days a habit (i.e., making excuses for underperforming), and experiencing true, chronic mental health issues. If you find yourself in trouble, please reach out, and I'll help you find the resources you need to get better.



University  
of Windsor





## **Additional Information and Contacts**

- Laboratory Primary Investigator  
Dr. Christina Semeniuk  
Great Lakes Institute for Environmental Research  
University of Windsor  
Email: [semeniuk@uwindsor.ca](mailto:semeniuk@uwindsor.ca)  
Phone: 519-253-3000, ext. 3763
- Laboratory Manager  
Theresa Warriner, MSc.  
Great Lakes Institute for Environmental Research  
University of Windsor  
Email: [warrinet@uwindsor.ca](mailto:warrinet@uwindsor.ca)  
Phone: 519-253-3000, ext. 6350
- Office of Academic Integrity  
Dr. Danieli Arbex  
Academic Integrity and Student Conduct Officer  
CAW Student Centre, Room 117  
519-253-3000 ext. 5072
- Sexual Misconduct Response and Prevention Office  
Dr. Dusty Johnstone  
[dustyj@uwindsor.ca](mailto:dustyj@uwindsor.ca)  
Room 105 Dillon Hall  
Office of the Provost
- Graduate Student Counselling Services  
Dr. Suzanne Brown  
(519) 253-3000 Ext: 4616  
[Suzanne.Brown@uwindsor.ca](mailto:Suzanne.Brown@uwindsor.ca)  
Room 293 CAW Student Centre  
Student Counselling Centre



University  
of Windsor