

DEPARTMENT OF OCEAN SCIENCES



GRADUATE RESOURCE MANUAL



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Graduate Life at the Department of Ocean Sciences (DOS)

This Resource Manual is to assist you and your research at the OSC. Often, it is difficult to get the best solutions to your questions unless you ask the right question or the right people. Sometimes, your supervisor may not have all the right answers (it could happen!), therefore, this guide will help you to make the best use of the OSC people and resources, making your time at the OSC a positive experience.

Mental Health

Student Wellness & Counselling Centre

<https://www.mun.ca/studentwellness/>

Students with urgent mental health concerns should avail of the following community-based services:

- 24-hour mental health crisis line: If you are experiencing a mental health and/or addictions crisis, need support, or health information, please contact 811 to speak with a registered nurse trained in crisis intervention.
- Mobile Crisis Response Team: Call 811.
- 24-hour Walk-in Psychiatric Assessment Unit at the Waterford Hospital Site on Waterford Bridge Road: (709) 777-3021 or (709) 777-3022.
- Health Sciences Emergency Department on Columbus Drive in St. John's: (709) 777-6335.

Graduate Students Union (GSU)

<http://www.gsumun.ca>

This is your graduate student association, which is located on the 2nd floor of Feild Hall (above Bitters). You are automatically a member of this organization once registered as a graduate student at Memorial (full time or part time). The website for the GSU goes into detail about the services and volunteer opportunities it offers.

To stay on top of grad student issues it is recommended that you sign up for the grad student listserv 'gsu-l'. This will provide you with information about grad student events, health plan information, housing, or just general discussions about timely issues that pertain to grad student life at Memorial. Instructions on how to sign up for gsu-l can be found on the website or just email gsu@gsumun and ask to be added.

Every department has a graduate student rep that sits on the Board of Directors of the GSU. This person is responsible for representing the views and needs of the students in their department to the GSU and relaying information back to the students. There is a listing of all the BOD reps on the website, with contact info.

Ocean Sciences Graduate Student Association (OSGSA)

The OSGSA is a group created by graduate students, for graduate students, who work and study at the Ocean Science Centre (OSC). The OSGSA aims to improve graduate life at the OSC by providing graduate support in terms of academic development and social events. The OSGSA is comprised of an executive board and includes all students at the OSC.

OSGSA Facebook page: <https://www.facebook.com/groups/265439050285972/>

ISA Facebook page: <https://www.facebook.com/InternationalizationOfficeMUN/>

Twitter: <https://twitter.com/munosgsa>

OSGSA Executive Committee

Chairperson - Victoria Heath (vlsheath@mun.ca) Treasurer - Chantelle Clermont (crclermont@mun.ca)
Seminar Series Coordinators Stephan Hamisch (shamisch@mun.ca), Aidan Hicks (aidanh@mun.ca)
Communications Coordinator - TBA
Graduate Development Coordinator - Eleanor Barry (eabarry@mun.ca)
Graduate Studies Representative - Colleen McBride (cembride@mun.ca)
Sustainability Coordinator - TBA
Graduate Student Food Coordinator - Sara Jobson (smjobson@mun.ca)
Special Events Coordinator – Rahana Ebrahim (raebrahim@mun.ca), Lauren Pollard (ljpollard@mun.ca)
Graduate Student Union Representative - Sara Jobson (smjobson@mun.ca)
Tidepool Editor-in-Chief – TBA
Tidepool Associate Editor – TBA
Fundraising Coordinator - TBA

Commented [F11]: This will all change likely within the next couple of months, when the elect/appoint new people

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[Bitters Restaurant & Lounge](#)

This is your graduate student pub. It is temporarily closed for renovations. In the past, it was the Friday gathering place for a lot of the students, staff and faculty of the OSC. The food here was great and affordable; there were happy hour drink specials. Bitters also hosted Trivia on Thursday nights.

[School of Graduate Studies \(SGS\)](#)

IIC-2012, Bruneau Centre for Research and Innovation

Memorial University of Newfoundland

230 Elizabeth Avenue

St. John's, NL, Canada, A1C 5S7

Phone: (709) 864-2445

Fax: (709) 864-4702

Email: sgs@mun.ca

Office Hours: 8:30 a.m. - 5:00 p.m.

www.mun.ca/sgs

The SGS website contains information for your graduate program.

- Graduate Registration Procedures and Course Offerings
- Information for Prospective Students and Applicants
- Information for Current Students
- Calendar
- Contact Information
- News and Events
- Graduate Ceremony Awards
- Policies and Guidelines
- Forms
- Request for Recreation Fee Exemption
- Graduate Programme In Teaching
- Graduate Research Integrity Programme (GRIP)
- Graduate Programs
- PhD Oral Defences
- On-line Application Form

International Graduate Students

864-7991 www.mun.ca/isa

The best resource for international grad student specific issues is the International Student Advisor, located in Courte Real, Burton's Pond.

Housing in St. John's

There are many housing options in St. John's, but sometimes it is difficult to know where to look. There are a number of on-campus graduate housing options.

Battery Facility Graduate Student Accommodations
Feild Hall
Burton's Pond Apartments

Another great option is to live off-campus.

MUN Graduate housing provides the following useful webpages for finding accommodation.

<https://www.mun.ca/become/graduate/graduate-life/graduate-housing/><https://www.mun.ca/sgs/current-students/searchable-awards-and-scholarship-database/finding-a-place-to-live/>

Helpful Hints

- Sign up for demonstrating labs at the end of each semester or very early in the semester you are going to demonstrate. DOS will also have a number of TA position available. Check with Donna Inkpen dinkpen@mun.ca at the beginning of each semester.
- You need to fill out your payroll deduction form (to have your tuition automatically removed from your fellowship) **EVERY** semester. The comptroller's office does not carry over this information. Many students forget and then get slammed with a huge bill from the University for Unpaid Tuition for the year, which is not fun.
- Sign up for CISTI (online journal source) at the library. This will save you money in photocopying and a trip to the library. You can have the journal articles sent to your OSC mailbox.
- Working after-hours or weekends at the OSC? Check out the DOS shuttle service document
- Other grad students are an invaluable source of information; don't be shy about asking them questions.

Department of Ocean Sciences Staff

Administrative

General Office OS 3017

Department Head (Interim) - Dr. Matt Rise 864-7478

mrise@mun.ca

Commented [F13]: Will change 1 July to Pat

Deputy Head Undergrad (Undergraduate Student Officer) – Dr. Pat Gagnon 864-7663

pgagnon@mun.ca

Commented [F14]: Will presumably change to Iain McGaw 1 July

Deputy Head Graduate and Research (-arine Biology Graduate Officer)- Dr. Ian Fleming 864-3586

ifleming@mun.ca

Commented [F15]: Will change to Chris Parrish 1 September

Associate Director Facilities and Operations – Dr. Javier Santander 864-3268

jsantander@mun.ca

Commented [F16]: This is currently Chris Parrish but will change 1 September – check with Pat

JoAnne Greening 864-3708

jsgreening@mun.ca

Intermediate Clerk Stenographer

- Front desk attendance / Ordering office supplies
- Distributing forms, mail, cheques, etc.
- Booking of the Challenger Room
- Paging
- Procurement card purchases
- Stockroom supplies
- First aid supplies

Donna Inkpen 864-2767

dinkpen@mun.ca

Intermediate Secretary

- Secretarial matters
- Processes stipend payments
- Contact person for Graduate Studies and Biology Department
- Procurement purchasing / Petty cash reimbursement

Marsha Roche 864-3709

Administrative Staff

maroche@mun.ca

- Handles financial matters concerning MUN policy and travel
- OSC access card (after hours)
- Travel issues / Telephone issues
- OSC Safety Committee- Co-Chair
- Safety Announcements and Notifications

Victoria Heath 864-2459

Outreach and Engagement Coordinator

OS 4010A

vlsh Heath@mun.ca

- **Oversee engagement activities, including summer marine education program, school program and associated graduate student teaching positions, and all outreach initiatives**

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Laboratory and Field Services

John Evelyn 864-3707
Supervisor
jevily@mun.ca

- Planning, directing and coordinating of technical and operational services of the facilities
- Keys and building access
- General use equipment

Facilities Service /Workshop (Located above Dive Shop)

The Workshop designs and manufactures a variety of on-site specialised equipment and structures. In co-operation with Facilities Management and Technical Services, is responsible for the operation of the physical laboratory and equipment.

The workshop is responsible for the day-to-day functioning of the physical laboratory, and research facilities.

- Contact them about all facets of research designs, equipment and set-ups.
- Work orders should be completed for all job requests. (There is no charge for this assistance.)

Contacts:

Facilities Service Supervisor -John Evelyn	864-3707 Jevily@mun.ca
Stephen Hartery	864-3236
Damian Whitten	864-3236
Gord Nash (Water Quality Specialist)	864-2722 z12gwn@mun.ca

Facilities Services Technician

Desk in catwalk between AX and OSC

Responsible for after-hours, weekend and holiday security and ensures the proper functioning of the OSC operating systems. PLEASE MAKE SURE TO LOG IN AFTER-HOURS

Contacts: 864-3275 (709-727-5739)
Bob Caddigan
Harry Young
Trevor Newman
Perry Cahil
Randy Cahill (Part- time)

Field Services

Field Services maintains a variety of Scuba gear for year-round cold-water diving, benthic trawls and drags, seines, plankton nets, niskin bottles, underwater video camera and a portable air compressor and generator. The unit operates a 4 m zodiac, 7 m Boston Whaler and 5 ton multi-purpose vehicle with aeration and recirculating seawater holding tanks (2500 L) suitable for transporting live specimens long distances.

For all Field Services requests, email field services at **Kyle Warman** - kbwarman@mun.ca or fsu@mun.ca

The dive staff:

	864-3244
Kyle Warman	kbwarman@mun.ca
George Bishop	gbishop@mun.ca

Facilities Management at OSC

Boiler Room
Annex building

Responsible for the functioning and maintenance of the facility.

Contacts:

Greg Tremblett	864- 7514
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Email: gtremblett@mun.ca

Cell: 691-2865

Aquarist/Fish Health

OS 2006

Christine Vickers - Aquarist/Research Assistant 864-3248 cvickers@mun.ca

Keah Holder - Research Assistant 864-3248 kjhodder@mun.ca

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OSC Shuttle

<https://www.mun.ca/facilities-management/shuttle-bus/>

The Shuttle runs Monday through Friday (except for holidays). Please view the shuttle schedule for more details. **Please make sure to sign up for the shuttle email and download the MUN Safe App**

OSC Taxi Policy - <https://www.mun.ca/osc/graduate-students/osc-taxi-policy/>

Students may coordinate a cab for the transportation to OSC on weekends and holidays. Only a single cab ride to and from the facilities is permitted. Please coordinate with other students for taxi services. If you think you will need to come in on holidays and weekends, please ask a graduate student to add you to our email list.

Laboratory and Building Safety

Safety

Department of Ocean Sciences

Occupational Health & Safety Committee Members

John Evely (Employer co-chair)

Dr. Iain McGaw

Greg Tremblett

Gord Nash (Worker co-chair)

Rebecca Sandrelli

Christine Vickers

Trevor Newman
Guests regularly include but are not limited to: Jon Collins, EHS Advisor to DOS;
Associate Director OSC Facilities and Operations

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Fire

Emergency Number

9 - 911

Fire Evacuation Procedures

If You Discover Smoke or Fire

- Vacate fire area, closing all doors behind you.
- Activate the nearest fire alarm pull station.
- Evacuate the building via the nearest safe exit.
- Once outside, stand clear of the building.
- **The designated meeting point is in the back right corner of the main parking lot.**
- Do not re-enter the building until authorized by Fire Department or Campus Enforcement and Patrol.

On Hearing the Fire Alarm

- Evacuate the building via the nearest safe exit.
- Once outside, stand clear of the building.
- ***The designated meeting point is in the back right corner of the main parking lot.***
- Do not re-enter the building until authorized by Fire Department or Campus Enforcement and Patrol.

General Instructions

- Attempt to extinguish the fire only if fire is small and you can do so safely.
- Keep yourself between the fire and an exit.
- Familiarize yourself with the locations of fire alarm stations, emergency exits, and fire extinguishers in your area.
- Elevators are not to be used as a means of exit during a fire emergency.

Emergency Phones

Centrex Phone Locations – in the event VoIP phone service is lost.

Room	Phone #	People with access
OSC Basement (Loading Bay)	864-2068	All Faculty/Staff/Students
OSC / AX Catwalk	864-3275	All Faculty/Staff/Students
Annex Tank room AX2000	864-2068	All Faculty/Staff/Students
Boiler Room AX2002A	864-3231	Facilities Management Staff
Workshop DV 2000	864-3236	Laboratory Services Staff

First Aid

- First aid kits and eye wash stations are located in every lab throughout the OSC.
- Please familiarize yourself with their location in your workspace.
- Additional first aid supplies (burn cream, analgesics) are available in main office and workshop.
- AED is located outside the Challenger Room
- Splints and blankets are located in storage totes in three locations (JBARB, CDRF and outside Challenger Room)
- Pocket Ventilators are available: Workshop DV 2000, Danny Boyce AC-1011

Eye wash stations are located in all laboratories

- Fire extinguishers are located outside of laboratories
- Fire blanket located at the Annex side of catwalk

- In case of emergency, showers are located in the Dive shop as well as at the bottom of Annex stairwell (Facilities Management)

After Hours Emergency Number 9 - 911

Lab Safety

- Personal protective equipment (PPE) – lab coats and gloves provided by supervisors; safety glasses, masks and ear plugs provided by OSC
- Training courses in WHMIS and radiation safety are provided by MUN; first-aid/CPR provided by supervisors
- Disposal of chemical waste
- Chemical spills – Spill kit located at the Annex side of catwalk and the workshop
- Transportation of chemicals/samples for field trips (road)
- Transportation of chemicals/samples (air)
- Transportation of chemicals/samples (within facility)
- Dry ice shipments
- Liquid nitrogen handling and availability

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Contact:
Marsha Roche 864-3709

Field Safety

The Department of Ocean Sciences Field Safety Policy applies to all faculty, staff and students who are involved in off-campus field activities related to research or teaching at Memorial. The aim of the policy is to make field work safe and the experience enjoyable, worthwhile and valuable.

The terms “field activity” or “field work” is to be interpreted broadly and will include, for example, work aboard ships, coastal field studies, land-based field studies or work at field stations, e.g. the Bonne Bay Marine Station. A visit to a ship at the dock, for example, will not count as field work. Field Trips can be for part of a day or extended over several weeks.

Safety Procedures for Academic and Research Field Work -
https://www.mun.ca/osc/media/production/memorial/academic/faculty-of-science/ocean-sciences/research-staff/Field%20Safety_August%202022.pdf

[Memorial University Laboratory Safety](https://www.mun.ca/health_safety/)
https://www.mun.ca/health_safety/

Memorial University provides a safe and healthy work environment for students, staff, faculty, and researchers who are required to use the lab facilities within the University. The very nature of laboratory activities involves some measure of risk. The scope of this document is to:

- Provide general guidelines and basic rules that would be considered the minimum requirement for the safe operation of a laboratory at Memorial University.
- Protect laboratory workers and supervisors from health and safety hazards.
- Define responsibilities of supervisors and those who use laboratory equipment and facilities.
- Provide a standard of safe laboratory practices which allows the University to meet the requirements of the Occupational Health and Safety Act and Regulations.

Please read the entire document before undertaking your lab work.

Scent Free

- MUN is a scent-free workplace.

Faculty, staff, students and visitors are requested to voluntarily refrain from wearing scented items such as perfumes, colognes or hair spray.

The Newfoundland and Labrador Lung Association indicates that 15-20% of the Canadian population has some kind of breathing problem. The chemicals found in scented products can adversely affect asthma, allergies, emphysema, and bronchitis.

[Ocean Sciences General Use Areas](#)

[General OSC Equipment](#)

- OS-3010: distilled water, Mill-Q water, ice machines, autoclave, freeze dryer, drying oven.

PLEASE

Maintain all common areas and equipment so that it is available for others.

Clean up after each usage.

Do Not homestead!

No student should use equipment without first checking with his or her supervisor or lab personnel.

Please do not leave chemicals in unmarked containers or inappropriate locations in the buildings.

Ensure that the chemicals are properly labelled.

All chemicals must be disposed of properly.

Contact:

John Evelyn

864-3707

[Sample Storage](#)

There are currently two storage rooms on the premises. These areas are for preserved samples (formaldehyde, ethanol, glutaraldehyde, etc) only. Please contact Silas if you need to avail of this space. Please don't put anything in these rooms without first contacting Silas Jones.

Contact:

Silas Jones : swj754@mun.ca

864-4469

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[How to get supplies](#)

Orders for Stores can be placed through HSMS and can be accessed through the Environmental Health and Safety (EHS) assistant system via my.mun.ca.

All faculty have been set up in HSMS. When you want to add a student to your profile please have the student contact Marsha Roche (864-3709).

If there are items that you do not see on the Stores listing, please contact Marsha with the relevant details of the item.

Orders from Stores will be delivered to the Department by Mail Services. If you have an emergency situation and cannot wait for the Mail Services delivery there is always the option of visiting the Stores counter In the Core Science Facility (CSF-1151) and picking up your order.

Computer Print Cartridges and Batteries

OS 3016 (Lunch Room)

Aquarist Services

As researchers have differing levels of fish husbandry experience, please ask about your requirements and responsibilities in caring for your animals.

All researchers must provide a copy of their Animal Care Protocol.

Tank-rooms and Cold-rooms

- Tanks of various sizes and configurations are available for rent in common tank areas.
- Tanks may be supplied with freshwater or seawater, with seasonal temperature control.
- Large fish nets and disinfectants are available by the sink outside of Surgery in the Annex Tank-room.
- Requests for tanks should be made a few days prior to your requirement, to allow sufficient time for disinfection and set up of tanks. Users are responsible for daily maintenance and feeding of their animals, and removal of all materials and tank cleaning when finished with the tank. (Charging of tank fees will be continued until cleaning is completed.)
- Frozen herring is available for feeding of animals.

Biosecurity

Disinfect hands (foam) and shoes (footbath) when entering and leaving the Annex tank-room. Common sense and respect for other users and their animals is our best defence against transmission of disease from tank to tank.

PLEASE

Do Not contaminate other user's tanks or equipment.

Do Not borrow personal nets or equipment.

Keep the tank area clean.

Do Not leave large aluminium nets in Virkon disinfectant net bath.

Contacts:

Christine Vickers

864-3248

Feed Freezer

OS 1008

- The walk-in freezer in the basement is for storage of pelleted fish food and frozen herring to feed research animals.
- There is also limited space available for the short-term storage of research samples. All samples must be sealed in containers, identified, with date of removal recorded in the binder in the freezer.
- Unidentified and abandoned samples will be sent to the disposal freezer.

Do Not keep needless or unmarked samples in the freezer.

Any samples which are not marked or properly containerized will be disposed of without notice.

Contacts:

Christine Vickers 864-3248

Surgery

AX 2000

- The Surgery Room is available for sampling and surgical procedures on research animals as well for food preparation. All users must clean and disinfect their equipment and work areas when finished.
- The white board may be used to schedule sampling days. Although not exclusive use, this helps others to schedule their sampling days.
- Leave tank location on white board for Field Services collections.
- Use chain mail gloves when cutting fish for feeding.

PLEASE

Clean and disinfect your workspace when finished.

Place all organic material (fish and fish parts) into garbage bags and place in the Fish Disposal Freezers.

Contacts:

Christine Vickers 864-3248

Fish Disposal Freezer

Located in the basement of OS building.

All organic waste must not go in the regular garbage. Organic waste includes dead animals and animal feed – anything that will rot in the garbage cans.

All organic samples must be securely bagged and placed in the proper disposal freezer, so that it can be transported for disposal.

PLEASE

Make sure that bags are tied securely and will not leak. Double bag if necessary.

Contacts:

Christine Vickers

864-3248

Dr. Joe Brown Aquatic Research Building (JBARB)

www.mun.ca/osc/jbarb

The Dr. Joe Brown Aquatic Research Building (JBARB) provides state-of-the-art facilities designed to support research, training, pre-commercial production, and small-scale commercial trials, on various species for marine aquaculture. A critical component of the new 1,300 m² facility is a sea water system designed to deliver high quality, temperature controlled, flow through and re-circulating water. There are areas for broodstock conditioning, hatchery and nursery operation, first feeding, and on growing. Live food production facilities have daily production capabilities of 1,000 L algae, 1 billion rotifers, and 500 million *Artemia*.

Contacts:

Danny Boyce, Facility and Business Manager (OS 4007) 8691 dboyce@mun.ca

1st Floor (Broodstock, Hatchery, First Feed Room, Paired Mating, and Offices) 3026

2nd Floor (Live Feed Areas, Filtration Room, and Fish Physiology) 2678

OS - 4005A Fish Health / Water Quality lab

Hatchery and First Feed Aquaculture Staff

Jennifer Monk 864-3026 jmonk@mun.ca

Jill Porter

Taylor Sheppard

Daisy Archibald 864-3036 darchibald@mun.ca

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Live Feed Aquaculture Staff

Denise Tucker 864-3026 dtucker@mun.ca

Biosecurity

Implementation of Dr. Joe Brown Aquatic Research Building (JBARB) Biosecurity Protocols

Biosecurity is defined as management practices that prevent non-infected, healthy animal populations from being exposed to infectious or parasitic agents.

Disease causing organisms are often spread by vectors, such as people or equipment. If these vectors are properly disinfected at critical control points then exposure to disease causing organisms will be greatly reduced.

The Joe Brown Aquatic Research Building (JBARB) abides by regulations set forth by The Department of Fisheries and Oceans, Canada (DFO) and the Provincial Department of Fisheries and Aquaculture (DFA) in order to obtain license (s) for the transfer of live fish to and from our facility. If protocols below are not followed the JBARB is subject to disciplinary actions from governing agencies who provide us services (licenses and veterinary services etc.).

Bio-Security is an evolving process and requires expertise and input from varied sources. An all-encompassing, failsafe protocol has not been developed to date. To decrease disease risk to the JBARB, cooperation is needed at all levels and departments. Protocols outlined below are to be followed by all people entering the Aquaculture Research Development Facility. Please also read "Facts about biosecurity".

- Entering and exiting the building is only permitted through the link area only, unless an emergency is in progress.
- All other doors are **fire exit** doors only.
- The exit door (with footbaths) next to the cold room and the exit door in the broodstock room are for building related items only (feed delivery, salt delivery, fish transfers etc.). These doors are not to be used for an alternative entry or exit door, to and from the parking lot.
- Hand wash and footbath stations for each room are present. Please use these effectively.
- Personnel traffic flow should be minimized to decrease the risk of pathogen transfer.
- Tours must be authorized by the DOS Head (Dr. Garth Fletcher), OSC Deputy Head (Dr. Annie Mercier), Facility Managers (Danny Boyce or John Evely). Please sign in all guests in book provided on table in link before entering the facility.
- Tours through the facility will be minimized. If a tour is necessary, footwear must be disinfected (i.e. rubber boots and plastic booties are provided). Hand wash stations must be utilized and guests should leave their hands in their pockets for the remainder of the tour.
- If guests have recently visited other farms or facilities, footwear must be changed and lab coats worn. Rubber boots and lab coats are provided in the link before entering the facility.
- Keys are issued to personnel working in the JBARB only. All other people will have to be admitted to the building by JBARB staff upon request.
- Outside contractors entering the building have to be accompanied by JBARB/OSC staff at all times and follow protocols outlined above.

Cold-Ocean Deep-Sea Research Facility (CDRF)

The CDRF is a shared user research facility that is available for your use. It contains a variety of analytical equipment and unique lab spaces with current, high quality instrumentation and facilities. The CDRF is staffed by a manager and RAs who are available to help with your experimental design and execution. The facility includes:

- A full histology suite to prepare microscope slides from tissues
- Confocal, epifluorescent and brightfield light microscopes
- Scanning electron microscope
- Fluorescent activate cells sorter (FACS / flow cytometer)
- A deep-sea lab with two pressure chambers to recreate deep-sea conditions to 3000m and a smaller system for use with small organisms including high hydrostatic pressure microscopy
- Several Aquabiotech recirculation aquarium units for environmental stress testing
- The containment zone (CZ) which houses wet and dry labs for aquatic disease research

The facility is supported by user fees. Trial use of the equipment and consultation can be done without charge to assess which tools will work best for your purposes. Staff can train students on all the equipment so that they may work independently, or they can process samples with you or as a service.

Please make an appointment with the CDRF Manager, Cassandra Gardner during the planning stages of your thesis for assistance with accessing the facilities and the technical aspects of your work. Users of the equipment will be given instructions on how to book time in advance of their usage. Additional information can be found at www.mun.ca/osc/cdrf/.

Cassandra Gardner, Manager 864-3258 clgardner@mun.ca

Zhiyu Chen, Research Assistant 864-2722

Biosafety

If your research will use potentially biohazardous materials (viruses, bacteria, parasites, cell lines, GMOs, etc.) you must complete a few extra steps before your research can begin. This includes registering yourself as a biosafety worker, conducting biosafety training and completing a biosafety application. You should see the MUN biosafety portal for details on providing this information and speak to your supervisor about it:

www.mun.ca/health_safety/OHSMS/BSMS/

Biosafety is administered at MUN by the institutional biosafety office (BSO, 709-864-8250, bsso@mun.ca) and decisions on biosafety applications and other matters are made by the Institutional Biosafety

Committee (IBC). Biohazard work must be conducted in a lab which has been certified for such work. At the DOS this includes the CDRF containment zone for all *in vivo* animal work as well as some individual researcher labs for *in vitro* or small-scale *in vivo* work. Since the DOS consists of many different spaces with aquatic habitats and is adjacent to the ocean, it is imperative that correct biosafety standard operating procedures be understood by new students to prevent spread of disease outside of these specific areas.