

Hazard Assessment and Control Program (HACP) for BMSC Researchers under adjusted COVID-19 activities

The Bamfield Marine Silences Centre continues to support research, scholarship and creative work during COVID-19, but at a reduced capacity.

Please submit applications to the Head of Research Services (research@bamfieldmsc.com) at least 30 days prior to start date. **Applications received prior to March 15 will have priority.** The approval process will take into consideration:

- Ability to undertake research while meeting BMSC’s COVID-19 safety protocols, assessed through the completion of this Hazard Assessment and Control Plan (HACP), and justification for number of HQP/family coming to BMSC
- University Affiliation (WCUMSS members will be given priority for 2021)
- Researchers with ongoing research programs will be given priority for 2021
- PIs will have priority over grad students. Grad students will have priority over undergrads
- On campus availability that maintains our HACP for safe housing and work environments
- Approval from home institution to conduct field work

Please provide applicable information for sections I–VI

I. General Information & Contact Information

Researcher Name	
Faculty/Department	
University	
Research Location	Bamfield Marine Sciences Centre
Research Dates	
Research Proposed (New/Ongoing)	
Justification for Priority Research (if applicable)	
Faculty Contact Information	Name: Email: Phone #:

Researcher Contact Information

Primary Investigator	Name: Email: Mobile phone number:	
Additional personnel	Name: Position: Email: Mobile phone number:	Justification for visiting BMSC
Additional personnel	Name: Position: Email: Mobile phone number:	Justification for visiting BMSC
Add additional personnel as necessary		

BMSC Contact Information

Bamfield Marine Sciences Centre, Bamfield, BC 100 Pachena Road, Bamfield, British Columbia, V0R 1B0 Telephone: 250-728-3301 Email: info@bamfieldmsc.com http://www.bamfieldmsc.com/	
Head of Research Services (HRS)	Tao Eastham E-mail: research@bamfieldmsc.com Work: +1 (250) 728 3301 ext. 255 Cell: +1 (604) 868-1465
Director	Dr. Sean Rogers Email: director@bamfieldmsc.com Phone: +1 (403) 473-3498

II. Academic Purpose & Program Description

*See attached Research Application

III. Research Schedule/ Itinerary

In order to ensure a safe environment for researchers and staff, we require a schedule of your average daily routine while at BMSC. The schedule should include **which buildings, labs, and specialty equipment** (boats, cable tank, flume, confocal, etc.) your team requires, and **when you will be using each space**.

If your application is approved, schedules must be posted outside each space you are working in. This will help coordinate housekeeping, animal care, and maintenance to work around your schedule in order to keep facilities clean, compliant, and operational while maintaining social distancing.

If your research requires animals, please schedule a 1 hour window each day where animal care can enter your lab to perform daily checks.

We understand that research is fluid and that not all research programs are easy to schedule, but we appreciate your efforts in working with us during this unprecedented time.

The following buildings/spaces will be available to researchers during summer 2021:

Building	Labs	Dates required	Time of day
Rix	Wet lab Dry lab Chem lab Confocal room Office spaces available in upper Rix classrooms		
Eco Physiology	Lower South Lower North Upper South Upper North		
COTC	Wet lab Dry lab		
Cable Tank	Cable Tank		
Fluid Dynamics	Flume room		
Offices	Various spaces around campus can be reserved through Research Services		
Foreshore & docks	Various vessels can be booked through the foreshore including the Alta, Barkley Star, Stickleback, Raider and the Copes. See diving and foreshore HACP, as necessary.		

The following buildings/spaces will be closed to research during summer 2021:

Cafeteria	Cafeteria Fireside lounge Ross lecture hall (laundry services will remain open)
Main Building	Library
Stickleback labs	Only open to pre-authorized users and animal care
Whale lab	Restricted for education staff only
Foreshore	Rowboats

IV. Research Logistics

<p>Transportation: How are you traveling to Bamfield and how will you minimize exposure to COVID-19 while on rout (e.g., limit carpooling)</p>	
<p>Student Selection: BMSC is only accepting a limited number of researchers during the COVID-19 pandemic. Are your graduate students/research assistants necessary for your research? Has their travel been approved by their member institution? Some universities have prohibited field research or have limited travel for critical research only.</p>	
<p>Contingency Plan: If the pandemic gets worse and/or there is a local outbreak - BC may impose strict lockdowns. What is the contingency plan if your research program is cancelled.</p> <p>(e.g., unexpected animal care/euthanizations, radiation safety, etc.)</p>	
<p>Emergency Response: In the event of an emergency, who is your university contact?</p>	<p>Name: Email: Mobile phone number:</p>

V. Hazard Assessment and Control Program

The overarching priority of BMSC's COVID-19 Response is the health and safety of everyone at the BMSC. This includes establishing hazard assessments and control programs (HACP) for everyone to reduce the chance that staff will acquire or bring the virus to the workplace. Please review the following sections carefully to ensure your understanding of provincial and federal advisories, and BMSC protocols for adjusted COVID-19 activities.

Summary of current advisories for preventing spread of COVID-19

If a staff member or approved researcher is coming from outside of Canada, it is expected that they will follow the current guidelines set by the PHAC: [Travel Health Advice](#)

All BMSC staff and approved researchers must follow the guidelines set out by the [BC Centre for Disease Control \(BCCDC\)](#) and the [Public Health Agency of Canada \(PHAC\)](#).

To prevent spread of the disease, the following protocols are to be adhered to: [Prevention](#)

- *Frequent hand washing with soap and water (or use of alcohol-based hand rub when soap is not available).*
- *Physical distance from others by 2 m.*
- *[Wear a face mask](#) when in public spaces and when physical distancing is not possible.*
- *Stay home when you are sick*

If a staff member or researcher becomes sick while at BMSC, they must follow the mandatory self isolation protocols set out by BCCDC. [When You're Sick](#)

- *Self isolate for a minimum of 10 days from the start of symptoms.*
- *Cover your coughs and sneezes with a tissue or into your elbow.*
- *Wash your hands for at least 20 sec with soap and water.*
- *Avoid touching eyes, nose, and mouth.*
- *Do not share household items.*
- *Flush with the toilet lid down.*
- *Wear a face mask when you are in the same room as others.*
- *At the end of 10 days, reassess your symptoms. If your temperature is normal, you may return to normal activities.*

The COVID-19 pandemic is new and unexpected. When faced with uncertainty, it is more important than ever to [take care of your mental health](#). The Canadian Government continues to offer [Digital tools to help Canadians access services and get information on COVID-19](#).

Resources

ALL BMSC HACPs will use the following reliable sources for public health information:

BC Centre for Disease Control	COVID-19
Public Health Agency of Canada	Coronavirus disease (COVID-19) outbreak updates, symptoms, prevention, travel, preparation
Health Link BC	HealthLink BC - 24/7 Health Advice You Can Trust
Worksafe BC	WorkSafeBC COVID-19

Table 1: BMSC protocols for adjusted COVID-19 activities for maintaining a safe working environment

Activity	Hazards Identified	Severity	Likelihood	Risk Score	Controls and Eliminating Actions	Severity	Likelihood	Risk Score
BMSC Researchers / clients working in close proximity	Exposure to COVID-19 through contact with people and contaminated surfaces	2	B	Medium	<ul style="list-style-type: none"> • Stay home or in your cabin, if you are sick • Physical distance from others by 2 m • Wear a mask when in public spaces or when working in close proximity (less than 2m) to others • Seminars and public gatherings on BMSC campus (including happy hours or gatherings in cabins) are suspended until BC order is lifted • Frequent hand washing with soap and water (or alcohol-based hand sanitizer) • BMSC cafeteria is closed until further notice • When possible, researchers will be provided with their own cabins, with private bathrooms and kitchens. Under some circumstances (e.g. partners, family members, or colleagues already living as roommates) may share a cabin. • Wherever possible, research teams will have their own lab and office spaces to ensure physical distancing • Coordinated scheduling between researchers and support staff (animal care, housekeeping, maintenance, etc.) to ensure that physical distance is maintained wherever possible 	2	C	Low
Boat operations	Exposure to COVID-19 on surfaces	2	B	Medium	<ul style="list-style-type: none"> • Researchers using boats should adhere to BC guidelines for physical distancing (i.e. maintain 2 m of physical distance, wear a mask) • BMSC vessels have new passenger limits described in Appendix B • To minimize sharing of gear, researchers requiring boating equipment and PPE, will be provided with their own radio, chart, safety kit, and PFDs for the duration of their stay • Boat controls and contact points are to be wiped down with bleach solution before and after each use. • Passengers and crew must declare a state of good health before boarding vessels 	2	C	Low

Lab spaces	Exposure to COVID-19 on surfaces and contact with people	2	B	Medium	<ul style="list-style-type: none"> • Wherever possible, research teams will have their own lab and office spaces to ensure physical distancing • Coordinated scheduling between researchers and support staff (animal care, housekeeping, maintenance, etc.) to ensure that physical distance is maintained wherever possible • Increased lab cleaning <ul style="list-style-type: none"> ○ Labs are supplied with bleach solutions, and all hard, commonly touched surfaces (e.g. door handles, sink taps, etc.) are cleaned 2x per day ○ Labs contain signage for proper hygiene and cleaning protocols 	2	C	Low
Interactions with Bamfield community	Exposure to COVID-19 through contact with people and potential spread to community	2	B	Medium	<ul style="list-style-type: none"> • Researchers will minimize contact with the Bamfield community and respect local community guidelines and closures 	2	C	Low
Researchers and staff members travelling to BMSC	Exposure to COVID-19 through contact with people	2	B	Medium	<ul style="list-style-type: none"> • If a staff member or approved researcher is coming from outside of Canada, it is expected that they will follow the current guidelines set by the PHAC: Travel Health Advice • While traveling to BMSC, researchers should adhere to BC guidelines for preventing the spread of COVID-19 [e.g., frequent handwashing and maintaining physical distance (2m)] • International travellers must follow the current guidelines set by the Public Health Agency of Canada (PHAC), and complete their 14-day quarantine prior to arriving at BMSC 	2	C	Low
PPE	Exposure to COVID-19 through contact with people, surfaces	2	B	Medium	<ul style="list-style-type: none"> • Wash hands frequently, at the very least upon entrance and exit from lab spaces • Follow disinfection protocol in lab spaces • Respect everyone's space and maintain physical distance with BMSC staff and researchers (2m=6ft) • List specific PPE that will be required by your group 	2	C	Low

Table 2: Group specific protocols for adjusted COVID-19 activities for maintaining a safe working environment

Please use Table 2 to outline any activities your group will be performing that were not outlined in Table 1

List the specific strategies your group/lab/department will use to reduce risk of transmitting or contracting COVID-19 in the table below. Use table 3 to estimate the severity and likelihood of risk, *before* and *after* controls and eliminating actions have been implemented.

Activity	Hazards Identified	Risk Score			Controls and Eliminating Actions	Risk Score		
		Severity	Likelihood			Severity	Likelihood	Score

Table 3. Risk Level Assessment Matrix

Hazards are assessed for by risk by considering the Severity & Likelihood of the hazard causing injury or damage		Severity		
		3 – Low Concern/Stress	2 – Moderate Medical Aid	1 – High Fatality/Critical Illness
Likelihood	C – Unlikely (Unlikely to occur)	Low	Low	Medium
	B – Likely (Likely to happen)	Low	Medium	High
	A – Certain (Almost certain)	Medium	High	High
Risk Rating				
Low – Continue working				
Medium – Report to Supervisor to discuss controls and develop plan				
High – Stop all work and develop a plan				

VI. Approvals

I have performed this Research Hazard Assessment and Control Program, and will abide by the recommendations put forth to the best of my ability.

Name:

Position:

Signature:

Date:

I have attached proof from my university for permission to travel (e.g. approved travel forms)

OR

I have been granted approval to work at BMSC by my Department Chair, Dean, or Direct supervisor, and they have signed off (below) on this Research Hazard Assessment and Control Program.

Name:

Position:

Signature:

Date:

This Hazard Assessment and Control Program has been reviewed and approved by the Bamfield Marine Sciences Centre.

Name:

Position:

Signature:

Date: