

Plan for Ongoing Use and Maintenance of Animal Colonies Housed in the ISELF Vivarium and WSB 291 suite during COVID-19 Pandemic.

April 10, 2020

(updated September 2021)

Vivarium

All animals housed in the Vivarium are mice (*Mus musculus*) representing two strains: C57 BL/6J and NOD/ShiLtJ. Both strains are available commercially through The Jackson Laboratory in Bar Harbor, ME. As of August 26, 2021, the size of the mouse breeding colony, including animals of both strains, is about 160 individuals. Additionally, there are approximately 75 mice currently being used in experiments.

At its convened meeting on April 3, 2020 (via Zoom), the IACUC determined to maintain the breeding colonies of both strains during the current COVID-19 pandemic. The IACUC also determined that ongoing experiments involving animals housed in the Vivarium will continue through the experimental endpoints indicated in the IACUC protocols covering the experiments in question. At its convened meeting on September 4, 2020, the IACUC was advised that new experiments involving our animal colonies had been initiated and that further experiments would be conducted in accordance with approved animal use protocols. As of August 26, 2021, numerous experiments involving animals housed in the Vivarium have been initiated during the COVID-19 pandemic – only the most recently initiated experiments (begun within the last month) remain ongoing. Indeed, animal use activities in the Vivarium have remained consistent with pre-pandemic levels, although these activities incorporated all COVID-19 guidance from the Centers for Disease Control and Prevention (CDC), the Minnesota Department of Health (MDH), and the St. Cloud State University Bring Huskies Home Team, which has guided the institutional response to COVID-19.

Since the May, 2021, convened meeting of the IACUC, the incidence of COVID-19 in the state of Minnesota has increased slightly, with daily infection totals varying from several hundred to as many as 1,839 during the last 30 days. Brian Lorenz continues to monitor all information available from the Bring Huskies Home Team, as well as the Situation Update on the MDH COVID-19 website (<https://www.health.state.mn.us/diseases/coronavirus/situation.html#cases1>) to determine whether additional precautionary measures are warranted. On August 5, 2021, St. Cloud State University reinstated a mask mandate for all persons, regardless of vaccination status, who enter a building owned or leased by the university. That mandate remains in effect.

Additionally, the State of Minnesota has implemented a COVID-19 vaccination mandate for state employees. Employees working in person will be required to show proof of vaccination and attest to their vaccination status by September 8, 2021. Those who are not vaccinated will be required to show proof of a negative COVID-19 test at least once per week to work on-site at all public workplaces around the state.

No other COVID-19 precautionary measures are in place in the Vivarium at this time.

Consistent with information provided in previous versions of this document, the PI for all protocols involving experimental use of animals in the Vivarium is Dr. Marina Cetkovic-Cvrlje. Brian Lorenz maintains two additional protocols. One protocol covers breeding activities for both strains of mice, while the other is a holding protocol, which is used in the event that animals need to be transferred from a protocol that was placed in a suspended status by the IACUC.

In the interest of perpetuating IACUC-approved animal use activities in the Vivarium during the COVID-19 pandemic, the breeding colony will be maintained per the current IACUC-approved mouse breeding protocol as follows:

- Between 6 and 10 breeding pairs of mice of each strain will be maintained in order to perpetuate production of young mice to be used in active animal use protocols and as future breeders.
- Following discussions with the IACUC on September 4, 2020, Dr. Cetkovic-Cvrlje and the various undergraduate and graduate student researchers indicated on her approved animal use protocols will be permitted to perpetuate ongoing experiments involving mice housed in the Vivarium and initiate new experiments as described in active protocols.

As of August 26, 2021, and until further guidance relating to the management of university spaces is provided, the ISELF Vivarium is being managed as follows:

1. Vivarium users are required to wear surgical, multi-layered cloth, or N95 masks at all times when in the Vivarium. Surgical masks were ordered in early May, 2020; approximately 1,600 remain in stock in Biology stockroom. At this time, nearly all student users of the Vivarium wear commercially available or university-distributed cloth masks, which has minimized demand for surgical masks. Nonetheless, Brian Lorenz will ensure that surgical masks are available at all times in the Vivarium surgical suite for all animal users.
2. Vivarium users will not be permitted to enter the Vivarium if they are displaying symptoms of a respiratory infection of any type.
3. Vivarium users will wash their hands with soap and warm water, dry hands and put on exam gloves before handling anything in the Vivarium. Users will wear exam gloves at all times while working in the Vivarium.

This is standard operating procedure in the Vivarium, regardless of any protocols that may have been implemented, modified, or discontinued within or outside of the Vivarium in response to COVID-19.

4. Vivarium users will wash their hands before exiting the Vivarium.
5. Any sanitizable surfaces upon which animal care and use activities are performed will be cleaned immediately following use with 70% EtOH.

WSB 291 Suite (frog facility)

All animals housed in the WSB 291 suite are African clawed frogs (*Xenopus laevis*), which are available commercially through Nasco (www.enasco.com). As of August, 26, 2021, approximately 150 individuals are housed in this space.

At its convened meeting on April 3, 2020 (via Zoom), the IACUC determined to maintain the entire colony of frogs during the current COVID-19 pandemic. There are currently two IACUC-approved protocols for instructional use of frogs and no such protocols for research use. All animals will be maintained as described in the current IACUC-approved holding protocol for frogs. No changes in colony size or the distribution of individuals among holding tanks are planned.

As of August 26, 2021, and until further guidance relating to the management of university spaces is provided, the WSB 291 suite is being managed as follows:

1. Users will be required to wear surgical, multi-layered cloth, or N95 masks at all times when in the WSB 291 suite and inside all other campus buildings. Brian Lorenz will ensure that surgical masks are available at all times in the WSB 291 suite.
2. Users will not be permitted to enter this space if they are displaying symptoms of a respiratory infection of any type.
3. Users will wash their hands with soap and warm water before and after handling anything in this space.
4. Any sanitizable surfaces upon which animal care and use activities are performed will be cleaned immediately following use with 70% EtOH.

Brian Lorenz oversees all animal care and use activities performed in either the ISELF Vivarium or WSB 291 suite. Either he or his student employee, Erika Laho, will provide all animal care to the colonies housed in these spaces for the duration of the COVID-19 pandemic. In the event that either Brian or Erika is unable to come to campus for any reason, Dr. Timothy Schuh (Biology) will provide back-up support for management of these spaces, including animal care.

All information contained in this plan for animal care and use is subject to change as circumstances surrounding the COVID-19 pandemic evolve. Any such changes will be made in consultation with, and reported to, the IACUC.