ARC-ISS USER GUIDELINES DURING COVID-19 / SARS-2 PANDEMIC

PHASE 2 – RAMP UP PHASE

Updated March 1, 2021

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CONTEXT FOR OPENING IN MIDST OF SARS-2 PANDEMIC

The Analytical Resources CORE, ARC, is enabling a return to normal research service activities, consistent with best safe practices during the pandemic. The return to a normal routine will take place in stages. As we learn more about the SARS-2 / Covid-19 viral pandemic then this will guide our response. COVID-19 / CV19 / SARS-2 are used interchangeably, imprecisely, in this document to refer to the virus or acute symptoms caused by the virus.

STAGING THE PHASING IN OF RESEARCH SERVICES

Please watch for, observe and pay attention to notices, signage etc. that will provide up to date information about the ISS Staging and your personal responsibilities, our expectations during that stage.

PHASE 2: RAMP UP

As of July 20, 2020, we have begun rolling out our Phase 2 operations. These are providing more of our traditional, self-service operations in a few key laboratory areas that can be carefully monitored and controlled so that we reduce the potential for spread of Covid-19.

PHASE 3: RETURN TO FULL OPERATIONS

This would be the pre-Covid-19 operational model, allowing full access to trained users in all laboratories, tours for visitors, in-person training, classroom group exercises, etc.

It is difficult to imagine at this time, returning to full operations any time soon.

PHASE 2 GUIDELINES

CSU BASE LINKS AND DOCUMENTS

COVID-19 Symptom Self-Reporting Form: (Note: this is required if one experiences COVID-19 symptoms, regardless of the day of the week or whether one comes to CSU campus or not.)

OVPR Documents & Links

GENERAL SAFETY PROTOCOLS

USE OF PPE

We will be limiting the number of people in the lab so that we can practice safe social distancing. Watch for postings regarding maximum lab occupancies and limited hours of operation. We will follow the emerging and fluid guidelines provided by our administration that may include sentinel testing, skin temperature measurements, live virus exposure, antibody presence, etc. Sanitizer solutions will be available at every station.

We require that you wear a mask in our ISS laboratories during this time, and until further notice for two reasons. This reminds everyone you come in contact with that the virus potential has not been depleted and helps reduce the viral load spread from the breath of individuals who are unwitting, or asymptomatic carriers of covid-19. Everyone is expected to practice these measures so that we can reduce exposure and viral loads. Masks also remind us that a primary infection route is by picking up virus on your hands, then touching your face. The mask helps you to stop this infection behavior. Masks should cover mouth and nose.

USE OF DISINFECTANTS AND SANITIZER

Use sanitizer solutions provided to disinfect hands prior to entering the lab and before using equipment.

Sanitizer solutions will be available at every station. Use sanitizer solutions provided to disinfect hands prior to entering the lab and before using equipment.

Wipe down workstations (keyboard, mouse, other surfaces) prior to leaving the lab.

Never wear gloves while using the keyboard or mouse.

Where provided, please remove and dispose of cellophane covers over, e.g., keyboards after your use and replace with new sheets from roll provided.

SOCIAL DISTANCING

We will be limiting the number of people in the lab so that we can practice safe social distancing.

Do not congregate around instruments or around our sample submission stations. Conduct your business and leave.

TRAFFIC PATTERNS AND OCCUPANCY LIMITS IN LABORATORY

Pay very close attention to traffic control patterns as they will evolve over the course of our return to full service.

We will strictly limit the number of people in the laboratory so that there should be no more than one person per 50 square feet (1 meter included radius) of space around an instrument.

Room-specific guidelines on traffic patterns and occupancy limits can be found for CHEM1, C4, and Yates 101 laboratories below.

INSTRUMENT SCHEDULING AND SERVICE REQUESTS

Instruments are available for fully trained users to operate. Training and refresher sessions are available for all new and returning users. Previously trained users who have not used an instrument since the university shut-down in March 2020 should submit a service request on the ARC-ISS iLabs website. Following, ISS staff will reach out to the user with information they will need in order to access the ISS labs, including this document, a laboratory access quiz, and information on the ARC slack communications. New users seeking training should submit a service request under the “Training” tab in order to initiate the process (see Instrument Training section below).

Once a user has completed the lab access tasks and the refresher session on the instrument with an ISS staff member, they may sign up for time on the instrument independently as long as they follow all of the lab and reservation policies.

Full service work is available for those who are not yet trained on an instrument and is initiated via a service request in iLabs. Users drop off their samples on the table just inside of Yates 101 or on the table outside of the ARC main lab (Chem C1). ISS staff operate the instrument while the user is remotely connected via RemotePC and can participate in data collection via the computer interface. Typically, ISS staff and the user speak on the phone to coordinate.

Conditions for use and access that <u>may be imposed</u>, include:

- *<u>Remote Operations</u> may be required where access is provided to load sample(s) and then the investigator returns to their remote location. ISS can provide RemotePC access to computers for remote control of instruments or data processing.*
- *<u>Where possible, first-come-first-serve</u> remains the default mode of prioritization for scheduling instrument time/services.*

Exceptions Include:

- *<u>Critical Research / Priority Use</u> evaluated by Department Heads / Research Associate Deans / ARC Head may Override default priorities (e.g. critical research may have to be prioritized).*
- *<u>Triage</u> - The ISS Director may limit scheduling time in the event instrument demand exceeds capacity.*
- *<u>Maximum Occupancy –</u> ARC-ISS Staff may override maximum occupancy limits to enter ISS laboratories and may ask users to leave the laboratories, if needed.*

COMMUNICATIONS AND REMOTE OPS

ILAB

ILab will be used for requesting, scheduling, and recording instrument time.

SLACK

Slack will be used for self-service use of instruments. I.e. When entering Yates 101 for self-use of instruments, users must message the #iss-yates101 channel to alert the user base and ISS staff both when entering and leaving the laboratory.

Join here: https://join.slack.com/t/csu-arc/signup. For more info: Slack User Guide. Join other relevant lab and instrument Slack channels to stay informed about general lab or instrument specific updates.

REMOTE PC

ARC-MMA provides RemotePC software on all instrument computers and workstations to allow users the ability to manipulate instrument experiments, access data, and perform data processing remotely from their own computers. Please request access by contacting Rebecca Miller (rebecca.miller@colostate.edu) or other ISS staff.

STAFF SUPPORT

ARC staff continue to be available virtually to students, research personnel and faculty by appointment, Teams, Zoom, Slack, etc. In person visits may also be possible by pre-arrangement with staff, following guidelines and directives for these activities.

INSTRUMENT TRAINING

User training is now available for all self-use instruments and will be carried out in a combination of virtual and in-person instruction.

Previously trained and untrained users may submit a Training service request on the ISS iLabs website to notify that they would like to schedule a refresher session or a new user training session, respectively, on the instrument. ISS staff will reach out to the user with information and tasks required for accessing the labs. The user and ISS staff will coordinate on an instrument time, and the user should bring their own samples to run.

For previously trained users, and the ISS staff member will be present and 6 ft away in order to answer any questions and provide input.

Training for new users will involve a combination of virtual and in-person training. For in-person training sessions that require ISS staff and users to be closer than 6 ft, both will be expected to wear a face mask and a face shield. This close contact will be kept to a minimum and will be intermittent as much as the training allows. If users do not already have their own face shield, disposable ones will be provided by the ARC for users during training. Training sessions will be limited to 1 or 2 trainees.

Users who have completed training or a refresher session may then sign up independently on instrument calendars as long as they follow the lab access rules below.

Training on the TEM involves an 8 week course with Dr. Roy Geiss, including 2 hours per week of lecture (virtual) and 2 hours per week of one on one time on the TEM (in person).

LABORATORY SPECIFIC GUIDELINES

ARC-ISS SPECIFIC GUIDELINES

ROOM OCCUPANCY LIMITS

Maximum occupancies per ISS lab rooms:

Building & Room Number	Lab	Maximum occupancy
Yates 101	SEM, TEM, profilometer, sample preparation	4

Chemistry C4	X-ray (XPS)	3
Chemistry C3	400NMRs, Materials, Spectroscopy (Ellipsometer, CAG)	10
Anatomy/Zoology W013	TEM, sample preparation	1

We will be posting the above maximum room occupancy values on entrance doors and ask that you follow those guidelines.

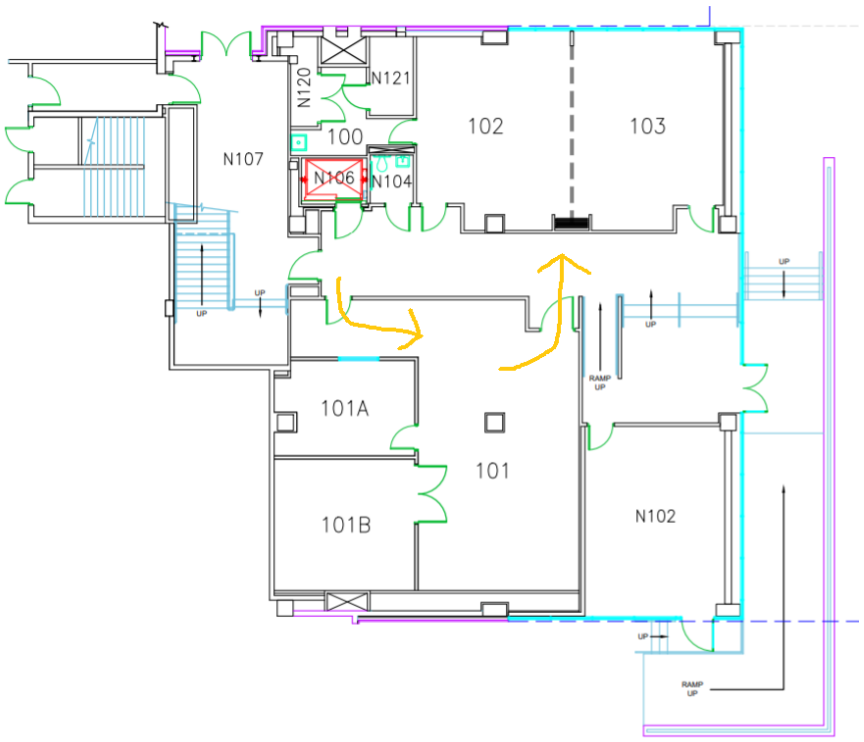
TRAFFIC FLOWS

Please follow posted instructions related to walkways and flow patterns through the lab.

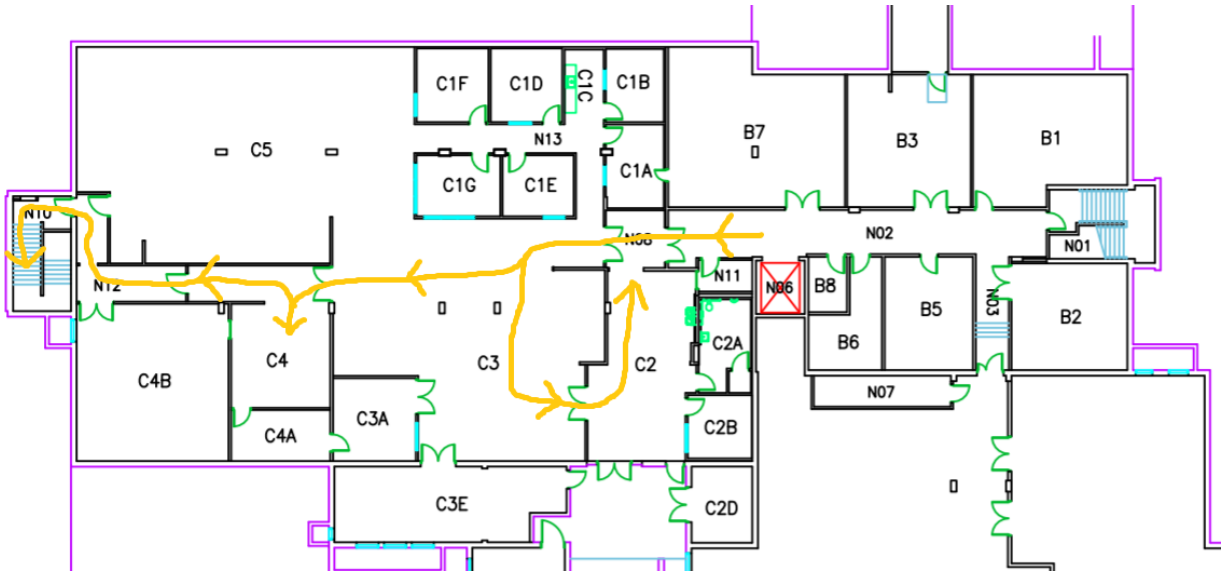
- *Yates 101: one enters the key-card access door at the northwest side of the lab and exits through the double doors at the northeast side of the lab.*
- *Chem C1: one enters through main double doors at end of B-wing access corridor, on east side into C01.*
    - *C4 XPS: enter through east double doors to C1 and exit the door on the west side of C4 to the stairwell corridor.*
    - *C3 Ellipsometer & CAG: enter through east double doors to C1 and exit into C2 via double doors on east side of C3.*
- *A/Z W013: enter and exit through the one, main entrance door.*

Generally, follow traffic patterns and flow instructions such as floor marking, etc. that are provided and follow the chained / roped off routeways where you encounter them.

Yates 101:



Chemistry C3 or C4:



YATES 101 ACCESS RULES

Previously trained users and newly trained users may operate the ISS instruments within Yates 101 upon following the outlined procedures below.

Previously trained and untrained users may submit a Training service request on the ISS iLabs website to notify that they would like to schedule a refresher session or a new user training session, respectively, on the instrument. ISS staff will reach out to the user to give them this document, a link to the Yates 101 access quiz, and information for joining the #iss-yates101 channel on the ARC slack. Once the quiz has been completed and they have joined the slack channel, they will schedule a time on the instrument in coordination with the ISS staff member. The user should bring their own samples to run.

For previously trained users, and the ISS staff member will be present and 6 ft away in order to answer any questions and provide input.

Training for new users will involve a combination of virtual and in-person training. For in-person training sessions that require ISS staff and users to be closer than 6 ft, both will be expected to wear a face mask and a face shield. This close contact will be kept to a minimum and will be intermittent as much as the training allows. If users do not already have their own face shield, disposable ones will be provided by the ARC for users during training. Training sessions will be limited to 1 or 2 trainees.

Users who have completed training or a refresher session may then sign up independently on instrument calendars as long as they follow the lab access rules below.

- *When entering Yates 101 for self-use of instruments, users must message the #iss-yates101 channel to alert the user base and ISS staff. Upon leaving, add a check mark to the message.*
- *Users may only enter Yates 101 during the allotted reservation time and cannot arrive early to carry out sample preparation. Please reserve the total amount of time that will be needed in Yates 101. Buffer enough time for sample preparation, data collection, removal of samples, and disinfection of surfaces.*
    - *After entering Yates 101, use hand sanitizer (on the lab bench just inside the northwest entrance door).*
    - *Users must wear a face mask and safety glasses at all times in the lab.*
    - *When encountering someone in Yates 101, please keep a distance of at least 6 ft.*
    - *When finished, disinfect all surfaces that have been contacted. Disinfectant spray and paper towels are provided.*
    - *Exit via the northeast double doors. Make sure that all doors (entry & exit) are firmly closed and locked when you leave. The northwest entrance door tends to remain ajar when left to swing shut.*
    - *After exiting, make sure to message the ARC Slack channel #iss-yates101 to alert the user base that you have left the lab.*

- *During the user's reservation, a time extension may be added through the iLab KIOSK only if there is no one signed up within 30 minutes of when the user will finish. A 30-minute buffer must always be left between different users' reservations.*
- *During self-use, it is not permissible to bring a colleague (or anyone else) along into Yates 101. TeamViewer or RemotePC may be used to allow the operator to share the screen of the instrument with their colleague.*
- *The ISS retains the right to limit scheduling time in the event demand exceeds supply.*
- ***Follow Staff instructions and if asked to leave when Staff are present then please do so immediately.***

CHEM C3 & C4 ACCESS RULES

Previously trained users and newly trained users may operate the XPS, contact angle goniometer, and ellipsometer upon following the outlined procedures below.

Previously trained and untrained users may submit a Training service request on the ISS iLabs website to notify that they would like to schedule a refresher session or training session, respectively, on the instrument. ISS staff will reach out to the user to give them this document, a link to the Chem1 access quiz, and information for joining the #mma-chem1-general and/or #mma-c4-general channels on the ARC slack. Once the quiz has been completed and they have joined the slack channel, they will schedule a time on the instrument in coordination with the ISS staff member. Users should bring their own samples to run.

For previously trained users, the ISS staff member will be present and 6 ft away in order to answer any questions and provide input.

Training for new users will involve a combination of virtual and in-person training. For in-person training sessions that require ISS staff and users to be closer than 6 ft, both will be expected to wear a face mask and a face shield. This close contact will be kept to a minimum and will be intermittent as much as the training allows. If users do not already have their own face shield, disposable ones will be provided by the ARC for users during training. Training sessions will be limited to 1 or 2 trainees.

Users who have completed training or a refresher session may then sign up independently on instrument calendars as long as they follow the lab access rules below.

- *Users may then enter CHEM C3 or C4 only during the allotted reservation time. Time needed for sample preparation (i.e. pumping down on an XPS sample in the intro chamber) should be communicated to instrument user base via the appropriate slack channels (i.e. #iss-xps for XPS sample preparation). Buffer enough time for sample preparation, data collection, removal of samples, and disinfection of surfaces.*
    - *Before entering, message the #mma-chem1-general or #mma-c4-general Slack channels if you are going to be working in Chem C3 or C4, respectively.*
    - *Use hand sanitizer located at the sample drop-off station just outside of the east entrance doors to C1.*
    - *Users must wear a face mask and safety glasses at all times in the lab.*

- *When encountering someone in CHEM C3 & C4, please keep a distance of at least 6 ft. In C4, XPS and PXRD (DaVinci) users will need to communicate with one another to avoid being within 6 ft. of one another, taking turns at their respective consoles.*
- *When finished, disinfect all surfaces that have been contacted. Disinfectant spray and paper towels are provided.*
- *Exit via the outlined traffic patterns (see maps below).*
    - *C4 XPS: enter through east double doors to C1 and exit the door on the west side of C4 to the stairwell corridor.*
    - *C3 Ellipsometer & CAG: enter through east double doors to C1 and exit into C2 via double doors on east side of C3.*
- *Leave a checkmark on your original message in the ARC slack channels to indicate you are exiting the lab.*

- *During the user's reservation, a time extension may be added through the iLab KIOSK only if there is no one signed up within 30 minutes of when the user will finish. A 30-minute buffer must always be left between different users' reservations.*
- *During user self-service, it is not permissible to bring a colleague (or anyone else) along into CHEM C3 or C4. TeamViewer or RemotePC may be used to allow the operator to share the screen of the instrument with their colleague.*
- *The ISS retains the right to limit scheduling time in the event demand exceeds supply.*
- ***Follow Staff instructions and if asked to leave when Staff are present then please do so immediately.***

ANATOMY & ZOOLOGY W013

Previously trained and untrained users may submit a Training service request on the ISS iLabs website to notify that they would like to schedule a refresher session or training session, respectively, on the instrument. ISS staff will reach out to the user to give them lab access information and tasks as well as to set up time on the instrument. Users should bring their own samples to run.

For previously trained users, the ISS staff member will be present and 6 ft away in order to answer any questions and provide input.

Training for new users will involve a combination of virtual and in-person training. For in-person training sessions that require ISS staff and users to be closer than 6 ft, both will be expected to wear a face mask and a face shield. This close contact will be kept to a minimum and will be intermittent as much as the training allows. If users do not already have their own face shield, disposable ones will be provided by the ARC for users during training. Training sessions will be limited to 1 or 2 trainees.

Users who have completed training or a refresher session may then sign up independently on instrument calendars as long as they follow the lab access rules below.

- *Users may enter A/Z W013 only during the allotted reservation time.*
- *Message the appropriate slack channel to indicate entering the lab.*
- *Use hand sanitizer located at the sample drop-off station just outside of the east entrance doors to C1.*
- *Users must wear a face mask and safety glasses at all times in the lab.*
- *When finished, disinfect all surfaces that have been contacted. Disinfectant spray and paper towels are provided.*
- *Leave a checkmark on your original message in the ARC slack channels to indicate you are exiting the lab.*
- *During the user's reservation, a time extension may be added through the iLab KIOSK only if there is no one signed up within 30 minutes of when the user will finish. A 30-minute buffer must always be left between different users' reservations.*
- *During user self-service, it is not permissible to bring a colleague (or anyone else) along into A/Z W013. TeamViewer or RemotePC may be used to allow the operator to share the screen of the instrument with their colleague.*
- *The ISS retains the right to limit scheduling time in the event demand exceeds supply.*
- ***Follow Staff instructions and if asked to leave when Staff are present then please do so immediately.***

ACCESS QUIZ

YATES 101 ACCESS QUIZ

1. I can arrive in Yates 101 prior to the time I scheduled in iLab to prepare my sample(s). True False
2. CSU guidelines require that you wear the COVID-19 appropriate PPE in Yates 101 even when you are alone. True False
3. The maximum occupancy of Yates 101 is four. True False
4. After I am done with my work, I should leave the lab and an ISS staff member will disinfect my workspace. True False
5. I can bring a colleague with me to Yates 101 when I have an instrument booked for self-service. True False
6. During self-use, I can extend my instrument reservation time only if the extension allows for a 30-minute buffer between the end of my altered reservation and the beginning of the reservation for the person after me. True False