

Research Service Center Newsletter

July 2021

Laboratory Safety and Services

Chemical Hygiene Plan and Inspections

The Chemical Hygiene Plan and lab inspection are part of a federally mandated program. Few labs had a complete plan prepared. Follow-up inspections will be scheduled for those labs that did not have their Chemical Hygiene Plan prepared.

Biological Approval Form (BAF)

Any work with potentially biohazardous materials must be approved by the Institutional Biosafety Committee (IBC) before it can begin. To seek IBC review, use the forms, templates, and inspection checklists found at <https://biosafety.wsu.edu/forms-templates-inspection-checklists/>.

A form must be completed if you are a WSU-affiliated principal investigator and you currently do or plan to do any of the following:

- Possess, store, transport, or work with recombinant or synthetic nucleic acid (r/sNA) molecules (i.e., DNA, RNA)
- Work with human tissues, fluids, or cell lines
- Work with other potentially biohazardous materials
- Engage in teaching, diagnostic, or extension activities that involve potentially biohazardous materials

An amendment is needed if a change affects the biological risk of the work, calls for the use of additional biohazardous materials, or would require changes in the biosafety manual or an additional facility review.

Examples:

- Addition of personnel who will be working with the biohazard
- Addition of a new piece of equipment that produces aerosols
- New procedures that produce aerosols
- Changes in responsible parties for the proposal
- Changes in work locations
- A BSL-1 proposal adding a Biosafety Level 2 (BSL-2) agent
- All additions of agents to Biosafety Level 2 (BSL-2) and BSL-3 biological approval forms

Proper Attire

Now that warm weather is here, please remember that proper attire for a laboratory includes long pants or skirt and closed-toe shoes. Shorts, capris, and sandals are not appropriate. The WSU Safety Policies and Procedures Manual (SPPM) states:

1. Appropriate clothing must be worn, including a protective apron or laboratory coat to protect against chemical splashes or spills, cold, heat, moisture, and radiation. Use protective apparel—including face shields or goggles, gloves, and other special clothing or footwear—as needed.
2. Skin, eyes, and respiratory tract should always be protected from possible exposure by use of appropriate laboratory clothing, goggles/face shields, and respirators. For additional information see the [Fact Sheet Eye and Face Protection](#).
3. Jewelry should be removed from wrists and hands to prevent chemicals from collecting underneath, contact with electrical sources, catching on laboratory equipment, and/or damage to the jewelry itself. For the same reasons, jewelry that loosely dangles from neck or ears should not be worn.
4. To prevent spreading contamination to family and friends, laboratory coats should be removed before leaving the laboratory.
5. Loose apparel should be confined.
6. Long pants should be worn at all times.
7. Open-toe shoes or sandals should not be worn in the laboratory. For additional information, see the [Fact Sheet Foot and Leg Protection](#).
8. If laboratory coats are contaminated with hazardous chemicals, they should be removed immediately and properly laundered or disposed of as hazardous chemical waste.
9. If laboratory clothing is cleaned by a linen service contractor, contractor employees must be informed if contamination of laboratory clothing presents a danger to cleaning service employees.

New Program for SDS

WSU Health Sciences Spokane has contracted with a new outside company, [KHA online SDS \(KHA\)](#), for maintaining its inventory of safety data sheets (SDSs). To access the WSU Health Sciences Spokane SDS database, use the following information:

- **Username:** wsu@sdsmobile.app **Password:** SdS21

KHA Online SDS App

An app can also be downloaded through the App Store or Google Play by searching for “KHA SDS Mobile.” Contact the Lab Services group (spok.labservices@wsu.edu) if you would like to schedule a training session for your laboratory on KHA use and features.



Contacts:

- Merle J. Heineke – Phone: 509-358-7889, E-mail: merle.heineke@wsu.edu
- Megan Chastain – Phone: 509-358-7541, E-mail: megan.chastain@wsu.edu
- Olga Shiva – Phone: 509-358-7873, E-mail: olga.shiva@wsu.edu
- Ze Liu – Phone: 509-358-7633, E-mail: ze.liu@wsu.edu
- WSU Spokane Laboratory Services – E-mail: spok.labservices@wsu.edu

Vivarium/Program of Laboratory Animal Resources (PLAR)

Updated rates for FY2022: PLAR has updated the FY22 animal per diem rates with modest increases to specific cost centers to cover normal inflation and increased supply costs due to COVID-19. These updated rates went into effect on July 1, 2021, to carry forward to July 1, 2022. We repeat the fiscal analysis each year, but for planning and grant proposal submission please plan for a 3 percent increase each year to cover anticipated increases in supply and labor costs. To see the updated rates, [go to the PLAR per diem rates web page](#). If you have further questions, please email ocv.spokane.vet@wsu.edu.

Hematology Analysis: PLAR is able to offer in-house hematology analysis for labs wishing to include complete blood counts or analysis as part of their experiments. Please contact jennifer.kopanke@wsu.edu if you are interested in learning more.

Contacts, Spokane:

- General PLAR inquiries – E-mail: ocv.spokane.vet@wsu.edu
- Jennifer Kopanke, DVM – Phone: 509-358-7825, E-mail: jennifer.kopanke@wsu.edu
- Rob Archuleta – Phone: 509-358-7975, E-mail: robert.archuleta@wsu.edu
- For PLAR animal emergencies – Phone: 509-592-6884

Contacts, Main Office (Pullman):

- General Office of the Campus Veterinarian inquiries – Phone: 509-335-6246, E-mail: or.ocv.alert@wsu.edu
- For emergencies if unable to reach the PLAR emergency contact – Phone: 509-330-1871

Research Service Centers

The Microscopy, Flow Cytometry, Mass Spectrometry, and Imaging Research Service Centers have a new calendar system on SharePoint. If you have not received your invitation to the calendar, contact Megan Chastain and she will create your account.

Contact:

- Megan Chastain – Phone: 509-358-7541, E-mail: megan.chastain@wsu.edu

Flow Cytometry

A biosafety cabinet has been installed for the SONY Cell Sorter. This allows Biosafety Level 2 research to be performed on the SONY Cell Sorter.

New flow cytometry users need to complete training prior to operating the Gallios independently. Depending on past experiences, it may take several sessions to become completely familiar with the equipment and software. Please plan in advance.

Contacts:

- Ze Liu – Phone: 509-358-7633, Email: ze.liu@wsu.edu
- Olga Shiva – Phone: 509-358-7873, E-mail: olga.shiva@wsu.edu

Mass Spectrometry

As a reminder, run at least one blank before running samples to ensure the instrument is not contaminated. Subsequently, run three blanks after running samples to keep the instrument clean.

Standards and internal standards need be used to verify that retention time and peak shape/intensity are within the expected range. Standards will also demonstrate that the instrument is operating successfully. If standards are not used, the Mass Spectrometry Service Center is not responsible for any questionable data.

It is imperative that all users of mass spectrometry equipment document their usage. The rate charged is calculated as expenses divided by hours of usage. Failure to record usage results in a higher rate.

Contacts:

- Ze Liu, Phone: 509-358-7633, Email: ze.liu@wsu.edu
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Microscopy/Histology/Imaging

Microscopy – With more users returning to campus, there has been an upward trend in the number of objectives being moved between microscopes. The moves are being done incorrectly. **Please do not modify or move equipment on the microscopes without explicit permission from Microscopy Service Center staff.** Misuse fees will be assessed for repeat offenders. If problems persist, microscopes will have their software settings locked down to prevent part swaps, and changes to configurations will need to be booked in advance.

Histology – Please submit samples using the [Histology Sample Submission Form](#) available on the Histology Research Service Center website.

Imaging – After a huge effort on the part of the manufacturer, the Quantum has been repaired.

Contacts:

- Megan Chastain – Phone: 509-358-7541, E-mail: megan.chastain@wsu.edu
- Olga Shiva – Phone: 509-358-7873, E-mail: olga.shiva@wsu.edu

Genomics

The Genomics Service Center now offers custom sequencing service. Genomics staff will work with you to design custom methods of library prep and sequencing for your research projects.

Contact:

- Dr. Yiyong (Ben) Liu, Phone: 509-358-6741, E-mail: yiyong.liu@wsu.edu
- Dr. Jing Wang, Phone: 509-368-6546, E-mail: jing.wang9@wsu.edu

Nuclear Magnetic Resonance

Contact:

- Dr. Gang Chen, Phone: 509-368-6576, E-mail: gang8.chen@wsu.edu

Biomedical Engineering and Design (BMED)

The BMED Research Service Center now has the ability to do 3D printing using three new types of materials: carbon-fiber-reinforced nylon filament for load-bearing and structural parts; high-temperature-resistant polymer (capable of withstanding 238°C/460°F); and ceramic (capable of withstanding 1100°C/2012°F). Please email or call if you wish to find out more or would like to discuss a design. You may also fill out the [new work request form](#).

Contact:

- Will Clegern, Phone: 509-368-6750, E-mail: will.clegern@wsu.edu
- Dominic Brenner, Phone 509-368-6918, E-mail: dominic.brenner@wsu.edu