

**FALL 2020
REOPENING PLAN**



**SUMMER RESEARCH
PROGRAM**

RESEARCH

Summer Research Program (SRP)

For 12 years, the School of Science (SoS) Summer Research Program has provided opportunities for students to participate in faculty-directed research projects. Typically, the Summer Research Program (SRP) involves up to two dozen faculty from the departments of Biology, Chemistry and Physics, Mathematics, and Computer Science and Software Engineering, working with an average of 60-70 undergraduates as teams of research assistants in our labs or in the field. However, this year in June, the program began with a number of our faculty developing innovative ways to begin their research projects while abiding by social distancing restrictions, creating a “remote” version of the 2020 School of Science Summer Research Program on June 1.

Below you will find explicit responses to each of the limitations addressed by the State in order to begin on-campus research as part of the SRP.

Limitations for All Stages

Research meetings and presentations should be held virtually whenever possible to eliminate person-to-person contact.

- The 2020 SRP has been operating remotely since June 1, 2020. Only students and faculty whose research makes direct use of laboratory instrumentation, glassware, equipment, and related laboratory facilities will make use of the scientific laboratories in Edison Hall. The majority of research group meetings will take place either virtually or in outdoor spaces on campus. Small meetings (no more than five people) pertaining to instruction associated with laboratory equipment or topics that cannot be managed well remotely will take place indoors, with all safety and health restrictions in place.
- The SRP concludes with a symposium that will be conducted remotely this year. Students will present oral summaries of their projects through a Zoom meeting.

Any research/lab materials should be regularly cleaned and sanitized according to CDC guidelines.

- Regular daily cleaning of all laboratories, bathrooms, hallways, banisters, etc. by the Monmouth University custodial crew will be conducted according to CDC guidelines. Additionally, each laboratory will follow a protocol of wiping down benchtops, keyboards, tablets, computer mice, instrumentation, and doorknobs with bleach wipes, or 10% bleach followed by 70% ethanol, to clean all bench surfaces prior to and after work. Vespene may be used as an alternative.



Research labs must abide by general safeguarding measures detailed in Executive Order No. 155 (face coverings, social distancing, cleaning protocols, etc.).

- Everyone will be required to wear a cloth face mask and/or face shield at all times on campus. This includes outdoor activities, as well within any building. A facemask will be provided to all students and faculty upon resumption of the SRP.
- All work in the lab must maintain a minimum of six feet of space between researchers in all directions. For most lab spaces, this will limit the main lab to approximately one person per 150 square feet and will limit student workrooms to single occupancy. When student rooms are being used by a single occupant, the doors should be closed to reduce airflow between sections of the lab.
- Each laboratory room will have a posted floor plan that indicates safe arrangements for work while multiple people are in the lab.
- Where possible, each lab researcher should have a dedicated space at which most research occurs. Each researcher should also have a separate space for personal items.
- Gloves should be worn for use of any equipment that cannot be easily sanitized (for example, computer keyboards). Gloves should always be changed after any contact with hazardous materials to prevent spread to common surfaces.
- Hands should be washed often, and hand sanitizer will be provided when sinks are unavailable. Avoid touching your face.
- Work at fume hoods and biosafety cabinets will be limited to a single person with the exception of those areas that are large enough to maintain distancing.
- If safety concerns regarding a particular experiment or procedure require that two researchers must work closer than the distancing guidelines, a specific protocol for that activity will be provided for review and it must detail precautions that will be taken. For example, time spent doing such work should be minimal, and both researchers should wear a face mask, gloves, and a face shield if possible.

Additional Considerations

Have researchers enter labs in shifts to limit capacity and interaction.

- Whenever possible, shifts will be established to minimize the number of people in the lab. For example, students may split the day into two parts or work on different days.

Researchers should undergo training on appropriate safeguards while conducting research.

All students in the SRP will complete specific training on self-protection, universal precautions, and comprehensive training specific to COVID-19 from the CDC and NIH, including:

- Infection Control Guidance
- Guidance About Hand Hygiene
- Using PPE: PPE Donning and Doffing: CDC Sequence for COVID-19



- Potential Exposure at Work
- Evaluation and Testing
- General Guideline - How to Protect Yourself and Others

Additionally, faculty mentors will determine which, if any, of the following training courses may be necessary to schedule for students based on the nature of their research projects:

- Hazard Communication
 - In accordance with the OSHA Standard, Monmouth University's written Hazard Communication Plan works hand-in-hand with Community Right to Know Laws to keep employees informed about the hazardous substances they may encounter in their work area and the protective measures to work safely with those substances.
- Bloodborne Pathogens
 - The purpose of Monmouth University's Bloodborne Pathogens Exposure Control Plan is to eliminate or minimize employee occupational exposure to blood or certain other bodily fluids.
 - Our students will be closely supervised by faculty mentors. All students and staff have the responsibility that all required procedures are followed at all times. This practice is consistent with our standard operating procedures in our laboratories.

Institutions should limit the use of shared laboratory equipment to the extent possible.

- Our research laboratories mostly operate independently. The shared laboratory equipment is predominantly located in dedicated instrument rooms. Access to any shared laboratory equipment will be expressly limited to one person at a time.

Consider a soft start or "waves" as you enter each stage for restart in order to build up capacity.

- One of the advantages to the on-campus SRP is that it will allow us to test protocols and procedures for laboratory cleaning, social distancing, and other health guidelines with a limited audience. We anticipate at most 30 students and 12 faculty present at any one time, but more often those numbers will be much smaller. Operating on this smaller scale allows us to assess our practices and make changes prior to the full reopening of Monmouth University for fall classes in September.

