Stress and Laboratory Safety

As we reach the one-year mark of COVID operations, we have heard the phrase “new normal” applied regularly to how we conduct our research and education. This new normal has created stressors that carry physical and mental health risks that have far-reaching effects. Whether through additional concerns about loved ones, reduced contact with friends and family, increased child-care for parents, altered lesson planning for classes, or diminished quality of interactions with research colleagues and lab groups, these stressors can lead to a decrease in mental and physical acuity that increase opportunity for mistakes in the laboratory.

Our laboratories and shops are hazardous places; research with high voltage, flammable and/or toxic chemicals, compressed gases, cryogens, and machinery is commonplace. It is essential that we are focused and prepared for working with these materials and equipment. When you are tired, anxious, or distracted, you may overlook a key step in setting up an experiment, forget to add or neutralize a chemical at the right time, drop a sample, skip a leak check on a cylinder connection, or fail to turn off equipment in your hurry to leave. This may create a dangerous situation for you and others. When you are preoccupied with other concerns, take a minute to consider whether you are ready for the project that you are about to undertake. Materials and equipment will still be there later, let’s make sure those who use them are as well.

Positions in research and higher education are challenging by nature. Challenges may have acute stressful moments but overall tend to be energizing and lead to satisfaction; unrelenting stress is draining and demoralizing. Because the source of chronic stress is more constant than acute stress, the body never receives a clear signal to return to normal functioning. This chronic stress may disturb immune, digestive, cardiovascular, sleep, and reproductive systems. We may experience headaches, sleeplessness, sadness, anger, or irritability. Over time, continued strain on your body from stress may contribute to serious health problems, such as heart disease, high blood pressure, diabetes, and other illnesses, including mental disorders such as depression or anxiety.¹

COVID-19 vaccinations are occurring and we should see relief from this “new normal” of COVID operations within months. Until then, if you are feeling stressed, UW-Madison has resources for students, staff and faculty to help:

- Graduate and Undergraduate Students: University Health Services offers both physical and mental health services.
- Graduate Student Employees, Staff, Postdocs and Faculty: The Employee Assistance Office offers confidential consultation services for you and your families.

Stay Safe Badgers - Jesse

¹ National Institute of Mental Health, 2020