

2.3 Standard Operating Procedures

Standard Operating Procedures (SOPs) must be written for all machinery used in academic and research laboratories. Written SOPs ensure that machine operators have readily available documentation to reference which outlines each step of the task(s) they will perform. One SOP is permissible to cover instances where multiple, functionally identical machines, are used in the same location (i.e., One SOP to cover multiple functionally equivalent benchtop drill presses in a single laboratory space). Individual SOPs are necessary where groups of machines differ substantially from one another in ways including but not limited to:

- Operating controls are unique and different from other equivalent machines.
- Safeguarding systems are unique and different from other equivalent machines.
- Machine has been modified or has non-standard features.
- Machine is used in a non-conventional manner or for a purpose not intended by the manufacturer.

Machine SOPs must include details on all tasks* which an operator would be expected to perform. See **Appendix H** for an outline of the basic information that is required on machinery SOPs. All SOPs for machinery use are to be reviewed at least annually. Updates to written SOPs must be made when any changes to the scope of operation occur. Students must sign off on the SOPs for the machines they will operate to acknowledge that they have read and understand the document. All SOPs and acknowledgement signature records are to be uploaded to BioRAFT so that they are readily accessible.

* **Note:** Standard Operating Procedures do not typically need to go into specific details regarding how a piece of stock will be worked to achieve specific dimensions. As an example, an SOP for a CNC milling machine should be able to address all key elements of operation that an operator would need to perform. The SOP should explain how to load a program, but not how to write the program, or what the finished part will be. Laboratory Safety is available to answer questions and provide assistance regarding what topics should be covered in SOPs.