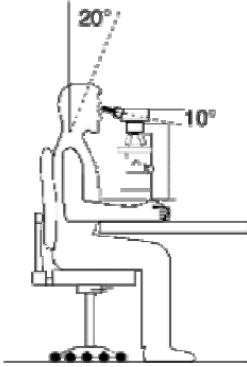


Lab: _____
 Lab Manager: _____


Evaluator: _____
 Date: _____

Laboratory Ergonomics Checklist


Laboratory Benches	Response	Suggestions if Response is No:	Comments
If employees stand, is anti-fatigue matting supplied?	<input type="checkbox"/> Yes <input type="checkbox"/> No	Order anti-fatigue insoles or anti-fatigue matting for areas with prolonged standing. See recommended products at: http://www.safety.duke.edu/Ergonomics/Catalog/Laboratory.htm	
Is the height of the bench appropriate for the majority of the workers or for the work that is performed?	<input type="checkbox"/> Yes <input type="checkbox"/> No	Ensure appropriate height for the majority of workers in the lab or for the particular piece of equipment being used. Use easily adjustable height chairs where possible.	
Is there adequate leg and foot room at all seated work areas?	<input type="checkbox"/> Yes <input type="checkbox"/> No	To create foot room, modify benches, remove drawers and/or move equipment.	
Are work areas free of contact stressors, such as bench tops with sharp edges?	<input type="checkbox"/> Yes <input type="checkbox"/> No	Apply padding to the edge of sharp work surfaces to reduce contact stress on arms and elbows. See recommended products list for examples.	
Are frequently used items within easy reach?	<input type="checkbox"/> Yes <input type="checkbox"/> No	Rank items from most used to least and put the most frequently used items closest to you.	
Laboratory Chairs	Response	Suggestions if Response is No:	Comments
Can all laboratory chairs be adjusted to accommodate all employees who need to use the chairs?	<input type="checkbox"/> Yes <input type="checkbox"/> No	Chairs and stools should provide numerous adjustments, including adjustable backrest and seat height. If they do not, see recommended seating section of recommended products.	
Can employees comfortably rest their feet on the floor, a foot ring, or footrest?	<input type="checkbox"/> Yes <input type="checkbox"/> No	Check foot rings for adjustability or supply adjustable footrests for taller lab stools. See recommended products list. Otherwise, feet should be flat on the floor.	



Do employees know how to adjust the chairs?	<input type="checkbox"/> Yes <input type="checkbox"/> No	Read chair manuals, refer to the chair vendor's web site of instructions, or try the various levers and buttons. See computer workstation section for more adjustment suggestions. Consider a chair in-service, provided by the vendor.	
Are chairs free of armrests or can arms be moved out of the way to allow for freedom of movement?	<input type="checkbox"/> Yes <input type="checkbox"/> No	Remove armrests from chairs.	
Are the chair casters appropriate for the flooring?	<input type="checkbox"/> Yes <input type="checkbox"/> No	Contact the chair's vendor. Rubber or locking casters should be used for hard floors, and vinyl casters for carpeted surfaces.	
Microscopes <input type="checkbox"/> N/A	Response	Suggestions if Response is No:	Comments
Do employees work with neutral shoulder postures (without rounded shoulders or in a hunched position)?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<p>Move chair close to microscope and sit upright against back rest of chair/stool. Raise microscope so eye piece is eye level by using books or a microscope adjuster shown in recommended products list.</p> 	


Do employees work with neutral neck postures (without excessive neck flexion >25 degrees)?	<input type="checkbox"/> Yes <input type="checkbox"/> No	Adjust angle of eyepiece to allow for neutral neck posture.	
Is the work area free of contact stresses between sharp edges and the forearms?	<input type="checkbox"/> Yes <input type="checkbox"/> No	Purchase edge padding and/or arm supports for non rounded edges. See recommended products list for recommendations.	
Is the microscope pulled out to the edge of the workbench?	<input type="checkbox"/> Yes <input type="checkbox"/> No	Move microscope closer to edge of workbench.	
Have employees been trained how to properly sit at a microscope workstation?	<input type="checkbox"/> Yes <input type="checkbox"/> No	Contact ergonomics to schedule an in-service.	
Are microscope work breaks provided?	<input type="checkbox"/> Yes <input type="checkbox"/> No	Provide frequent short breaks (every 20 minutes) to stretch and move around.	
Pipetting <input type="checkbox"/> N/A	Response	Suggestions if Response is No:	Comments
Is manual pipette use minimized?	<input type="checkbox"/> Yes <input type="checkbox"/> No	Minimize manual pipetting. Consider options from recommended products list such as electronic or latch mode pipettes.	
Are electronic pipettors provided?	<input type="checkbox"/> Yes <input type="checkbox"/> No	If pipetting for more than 5-10 minutes at a time, consider electronic pipettes.	

<p>Are latch-mode pipettors provided?</p> 	<input type="checkbox"/> Yes <input type="checkbox"/> No	<p>If pipetting for more than 5-10 minutes at a time, consider latch mode pipettes.</p>	
<p>Is the pipettor designed to minimize contact with the hand on sharp edges?</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No	<p>See recommended products list for electronic and latch mode pipettes without sharp edges.</p>	
<p>Have employees been trained how to properly operate the pipettor (e.g., pickup tips, eject tips, program electronic pipettor, etc.).</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No	<p>Train employees on pipette use.</p>	
<p>Is pipetting frequency minimized (less than 2 hrs per day)?</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No	<p>Limit periods of continuous pipetting to 20 minutes or less. Vary activities and rotate pipetting tasks among several people.</p>	
<p>Are frequent breaks provided?</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No	<p>Take frequent short breaks (e.g., 2 minutes for every 20 minutes of pipetting).</p>	
<p>Is the pipettor electric or multi-channeled to allow for computer-activated multiple dispensing instead of finger-activated dispensing?</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No	<p>Consider purchasing new Pipettes. See recommended products list.</p>	

Fine Motor Skills <input type="checkbox"/> N/A	Response	Suggestions if Response is No:	Comments
Are vials with the fewest amounts of threads allowable used?	<input type="checkbox"/> Yes <input type="checkbox"/> No	Use plastic vials with fewer threads to reduce twisting motions during capping and uncapping of lids.	
Is dissection or micromanipulation tasks with forceps performed less than 5 hours per week?	<input type="checkbox"/> Yes <input type="checkbox"/> No	Split micromanipulation tasks between lab workers and take breaks often to stretch and change postures.	
Are frequent micro breaks provided?	<input type="checkbox"/> Yes <input type="checkbox"/> No	Provide frequent micro breaks (20 seconds each).	
Microtomes/Cryostats <input type="checkbox"/> N/A	Response	Suggestions if Response is No:	Comments
Do employees use neutral postures when operating the microtome or cryostat (without excessive bending of the wrist)?	<input type="checkbox"/> Yes <input type="checkbox"/> No	Coach employees to use alternate postures.	
Is the workstation at a height and distance that allows the arms to be as close to the body as possible?	<input type="checkbox"/> Yes <input type="checkbox"/> No	Adjust the chair or move the equipment closer to minimize reaching.	
Do employees have access to an automatic microtome/cryostat?	<input type="checkbox"/> Yes <input type="checkbox"/> No	Purchase an automatic microtome to replace manual unit.	
Are frequent breaks provided?	<input type="checkbox"/> Yes <input type="checkbox"/> No	Provide frequent breaks.	

Laboratory Hoods and Biosafety Cabinets <input type="checkbox"/> N/A	Response	Suggestions if Response is No:	Comments
Are anti-fatigue mats used if employees stand for prolonged periods?	<input type="checkbox"/> Yes <input type="checkbox"/> No	Order anti-fatigue matting for standing areas. See recommended products list for examples.	
Are materials inside the hoods/biosafety cabinets as close as possible so as not to require reaching?	<input type="checkbox"/> Yes <input type="checkbox"/> No	Move most frequently used items closest to you to minimize reaching.	
Are lighting levels inside the hoods/biosafety cabinets appropriate?	<input type="checkbox"/> Yes <input type="checkbox"/> No	Make sure that lights in hoods/BSCs are working properly. Replace bulbs when necessary.	
Do employees work with neutral neck/back postures?	<input type="checkbox"/> Yes <input type="checkbox"/> No	Use proper sitting posture and positioning.	
Are frequent breaks provided for prolonged hood/cabinet use?	<input type="checkbox"/> Yes <input type="checkbox"/> No	Provide frequent micro breaks (20 seconds each every 20 minutes).	
Computer Workstations <input type="checkbox"/> N/A	Response	Suggestions if Response is No:	Comments
Can top of screen for monitors be adjusted to each individual's eye level? 	<input type="checkbox"/> Yes <input type="checkbox"/> No	Instruct users to adjust the monitor to eye height; or Adjust the chair so that eye height matches monitor height (Note: Ensure feet are on the floor or on a footrest and thighs are parallel to the ground, and keyboard is at appropriate height); or Replace with adjustable monitors or monitor arms.	

<p>Are monitors positioned directly in front of individuals?</p> 	<input type="checkbox"/> Yes <input type="checkbox"/> No	<p>Position the monitor directly in front of the body.</p>	
<p>Are monitors positioned so they do not face or back up to a window?</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No	<p>Move monitors so they are 90 degrees to the window.</p>	
<p>Are keyboards positioned directly in front of the body?</p> 	<input type="checkbox"/> Yes <input type="checkbox"/> No	<p>Position keyboards directly in front of the body.</p>	
<p>Are keyboards and input devices height adjustable?</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No	<p>Adjust the keyboard/input devices to match elbow height; or Adjust the chairs so elbow height matches keyboard and input device height (Note: Ensure feet are on the floor or on a footrest and thighs are parallel to the ground); or Install adjustable keyboard/input device trays.</p>	

<p>Are input devices positioned as close to the keyboards as possible?</p> 	<input type="checkbox"/> Yes <input type="checkbox"/> No	<p>Position input devices closer to the keyboards</p>	
<p>Are headsets available for employees who frequently use the computer and phone simultaneously?</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	<p>Purchase headsets</p>	
<p>Is task lighting sufficient for tasks such as reading and writing?</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	<p>Purchase task lights</p>	
<p>Are other frequently used items (calculator, reference books) within reach?</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	<p>Move frequently used items closer</p>	
<p>Are document holders available for employees who frequently reference documents?</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	<p>Purchase document holders</p>	

*Adapted from the NIEHS Laboratory Self-Assessment Checklist

NOTE: You should follow up on all “No” responses. Please contact the Duke Ergonomics Division for assistance if necessary at ergonomics@mc.duke.edu, or 688-ERGO (3746).

Additional Comments:
