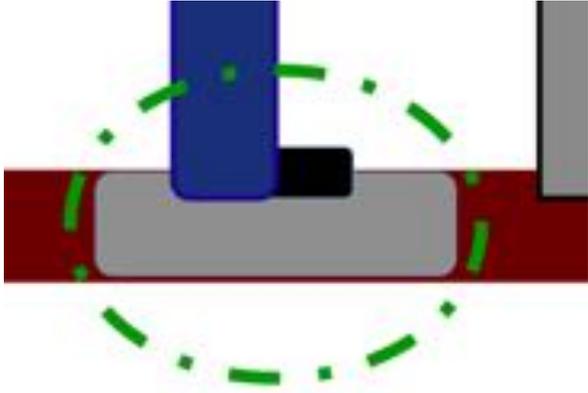
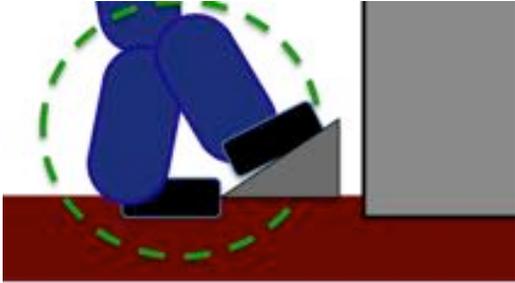
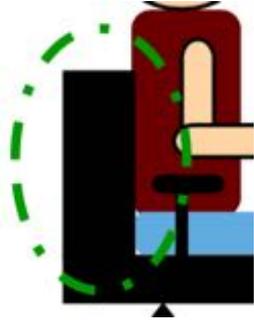
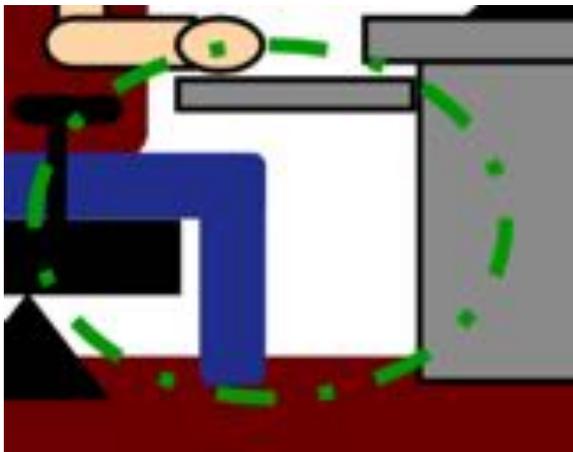


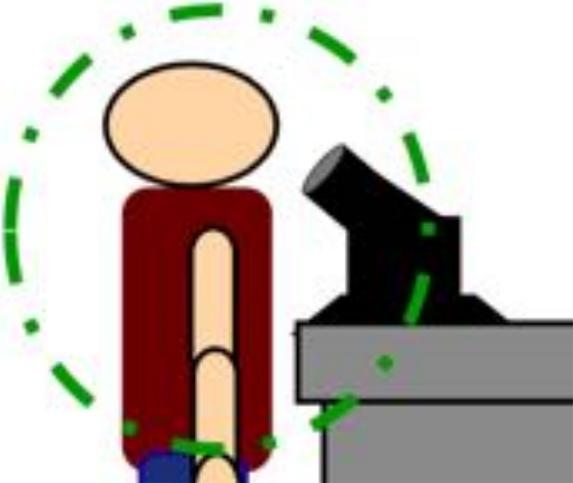


## Laboratory Ergonomic Reference Guide

Seated/ Standing Work		
Feet	Anti-fatigue mats should be utilized when tasks require standing for long periods of time.	
	Feet should be supported by floor or footrest whether sitting or standing.	
Back/ Shoulders	Chair should support back from lumbar region up to shoulders.	
	The chair should be adjustable to accommodate tasks (height, backrest, armrests)	
	Neutral spine posture should be maintained and shoulders should not be hunched.	

Benchwork/ Hoods/ Biosafety Cabinets

<p>Workspace Bench/ Surface</p>	<p>Contact edges should be rounded, sloped, or be padded.</p>	
	<p>Bench should be at about elbow height to allow for relaxed shoulders.</p>	
<p>Legs</p>	<p>There should be ample leg room whether sitting or standing.</p>	
<p>Back/ Shoulders</p>	<p>Neutral spine and neck posture should be maintained and shoulders should not be hunched.</p>	
<p>Neck</p>	<p>Neutral neck posture should be maintained.</p>	

Microscopes		
Microscope	Microscope should be placed at edge of workstation top where the controls can be comfortably reached.	
Back/ Shoulders	Neutral spine and neck posture should be maintained and shoulders should not be hunched.	
Neck	Neutral neck posture should be maintained.	
Materials	All necessary materials should be placed within arm's reach.	
Pipettes		
Pipettes	Electronic pipettors should be utilized if available and appropriate for task, especially for prolonged work.	
	Arm and wrist should remain in neutral posture through tasks.	
	All supplies should be placed within arm's reach.	
Micromanipulation		
Forceps	When available and appropriate, forceps with locking mechanisms should be used to reduce prolonged pinching.	

Cap openers	Cap openers should be used when necessary.	
Clamps/ holders	Clamps and holders should be used to support materials for prolonged periods.	
Miscellaneous		
Breaks	Frequent breaks should be taken when tasks involve repetitive motions or performance of activities for extended lengths of time.	
Bottle dispensers	Bottle dispensers should be used for liquid transfer when available.	
Storage	Items should be stored in a place way from bench cutouts. Frequently used items should be placed close to the area of use. Supply storage should allow for heaviest items to be stored at lowest shelves.	
Platforms	Temporary platforms should be used if tasks require arms to be elevated above chest level for extended periods of time.	
Supplies	All necessary supplies should be within easy reach of workstation.	*Please reference Workstation Setup Guide
Computers	If tasks require computer work please reference Office Ergonomic Reference Guide.	

**References**

University of Cincinnati- Environmental Health & Safety. (n.d.). Laboratory Ergonomics Self-Assessment Checklist.  
 UC Riverside- Environmental Health & Safety Ergonomics Program. (2008). Laboratory Ergonomics Checklist.  
*Laboratory Ergonomics Checklist* [PDF]. (n.d.). Mettler Toledo.  
*Health and Safety Guide to Laboratory Ergonomics* [PDF]. (n.d.). National Institute of Environmental Health Sciences.