Laboratory Ergonomic Tips

Sitting Work

Person What can I do?	Environment How can I change the surroundings?	Task How can I change the task process?
• Maintain neutral postures • Keep elbows close to sides • Avoid sitting on the edge of the chair	• Utilize adjustable chairs with back support • Feet should be supported – footrest, chair rung or floor • Adjust height of chair to alight arms with height of work surface	• Bring items as close as possible • Get out of the chair every hour to change positions briefly • Implement stretch breaks every hour

Standing Work

Person What can I do?	Environment How can I change the surroundings?	Task How can I change the task process?
• Wear supportive shoes • Use anti-fatigue mats • Prop up a foot on ledge if able	• Work surface should be at elbow height (slightly above for light precession work, or slightly below for forceful work)	• Bring items as close as possible • Limit height and of equipment on bench top

Computer Work

Person What can I do?	Environment How can I change the surroundings?	Task How can I change the task process?
• Maintain neutral positions	• Feet supported on the ground or on a footrest • Top of monitor in line with eye level • If data entry is required a document holder beneficial	• Every 20 minutes rest your eyes by either closing your eyes for 20 seconds or by looking at an object in the distance

Manual Handling

Person What can I do?	Environment How can I change the surroundings?	Task How can I change the task process?
• Maintain the neutral S-curve in your back • Pivot your feet and never twist • Ensure a good grip on the object	• Store heavier items at mid-level and lighter items at higher and low level	• Consider a 2 person lift for items weighing greater than 40lbs

Fume Hood / Biosafety Cabinets

Person What can I do?	Environment How can I change the surroundings?	Task How can I change the task process?
• Set a digital timer as a reminder to stretch • Avoid resting arms on sharp edges	• Remove unnecessary items from hooded area • Most frequently used items closest to the front • Explore turntable options for busy fume hoods • Avoid sharp edges • Ensure adequate leg room and le support	• Alternate tasks so no one worker is working in the fume hood for extended periods • Stretch breaks once every hour

Pipetting

Person What can I do?	Environment How can I change the surroundings?	Task How can I change the task process?
• Alternate hands • Relax your grip • Avoid wrist twisting • Use only the force that is required to operate the pipette	• Select the right pipette (shorter pipettes and tips, electronic, and multi-channel)	• Rotate tasks • Short breaks every 20-30 minutes • No more than 4 hours daily

Microscope Use

Person What can I do?	Environment How can I change the surroundings?	Task How can I change the task process?
• Maintain upright neutral neck position • Avoid resting arms on hard edges	• Adjust the eye pieces and height of the microscope to proper level • Consider adjustable arm supports • Consider camera system that will eliminate looking through the eye pieces • Consider slanting the microscope that will adjust line of vision to a neutral position	• Rotate tasks • Short breaks every 20-30 minutes

Other Lab Work

Person What can I do?	Environment How can I change the surroundings?	Task How can I change the task process?
	• Use an automatic microtome where able • Build up grip on tools that require small grip (foam or similar soft product)	• Limit capping and uncapping tasks to less than 30 minutes per employee

Occupational Health and Wellness
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