Ergonomic Tips for Common Lab Tasks

Seated Work

- Adjust the chair height so you are sitting with the feet on the ground or a footrest.
- * When seated ensure that:
 - * Hips and knees are about the same height.
 - * There are a few inches between the edge of the seat and the back of the leg.
 - * Back support is adjusted to the curve of the back.
- Lean back on the chair. For microscope and bench work, tilt the back rest forward for back support.

Maximize Posture

- Minimize neck bending.
- · Keep the shoulders down.
- Keep the elbows close to the sides of the body.

Take Breaks

- Frequently change tasks.
- Take mini/stretch breaks often.

Microscope

- Ensure there is leg/knee space underneath the bench, sit as close to the microscope as possible, and sit upright with the back supported.
- If the microscope can be moved, move it closer, with the eyepiece height/angle/ distance adjusted.
- Minimize reach by using adjustable microscope stands.
- Support the forearms with forearm rests.
- Use external monitors, if feasible and available, to better position the neck.

Phlebotomy

- Sit while drawing blood to avoid bending at the waist.
- If standing is unavoidable, prop the patient's arm up on a pillow or arm support to reduce bending
- If available, elevate the phlebotomy chair.

Ergonomics Division

Duke Occupational and Environmental Safety Office
www.safety.duke.edu/ergonomics
ergonomics@mc.duke.edu
919-668-ERGO(3746)

Biosafety Cabinet/Fume Hood

- Elevate the chair and sit as close as possible (for BSC).
- Place equipment/supplies as close as possible, as defined by manufacturer on safe working distance from sash.
- Use a stainless steel turntable and/or hanging pipette stands to reduce reach.
- Avoid keeping the arms in elevated positions.
- Use the following:
 - * Short pipettes instead of long ones, if possible.
 - * Non-porous/removable/cleanable edge padding which does not block the air slots.

Pipettes

- Use the following:
 - * Electronic pipettes with ergonomic grips, if available.
 - * Pipette tips that are easy to eject.
 - * Short pipettes instead of long ones, if possible.
 - * Low receptacles and pipette stands.
- Avoid raising the arms for long periods.
 Otherwise, use arm supports.