

Cell Culture—Make Your Lab a Better Place



It's in your hands

The Eppendorf PhysioCare Concept® is based on 3 spheres, developed as a holistic solution to harmonize the workflow in your laboratory with your health and well-being.

■ Sphere 1—The User

Ergonomic design and product alignment optimized to the needs of the individual

■ Sphere 2—The Lab

Uncomplicated integration of instruments in your lab and its specific requirements

■ Sphere 3—The Laboratory Workflow

General support to enhance processes around the lab and the whole company

This paper offers useful information and tricks around the spheres of your personal bench area.



Sphere 1—The User

Check if your cell culture equipment is ergonomic

- Your pipette controller should have an ergonomic hand grip as well as a light weight—as you use that device up to several hours per day.
- Use serological pipettes with color coded volumes to focus your mind on the cells instead of fitting pipettes.
- Fix pipette holders at inner side wall of the biological safety cabinet (BSC) instead of at back wall to reduce reaching distance.
- Use pipettes with spring-loaded tip cones for lower tip attachment forces.
- Use smart color-coding for fitting pipette tip boxes to reduce your search for the correct tip size.
- Your BSC should be equipped with strong, glare-free, and shadow free light to enable good working conditions.
- Position a small trolley below BSC for stuff you constantly need, e.g. isopropanol, additional pipettes, glove box,...
- Use small work trays within BSC for backbone saving cleaning process below the work tray.
- Use cell culture dishes with rim for safe grip.
- Aspiration system for cell culture waste: sensor-controlled, no bending below BSC to check status anymore.
- Position CO₂ incubator with door opening towards BSC to enable easy and fast access.



Sphere 2—The Lab

Check if your cell culture lab is ergonomic

- Choose a BSC with low noise level for stress free working conditions.
- Set up the BSC in a quiet corner to allow for concentrated work. Additional benefit: Less risk of contamination.
- Lab chairs should be adjustable in height, should be rotatable and should have casters for a better sitting position and easy access to other work positions.
- The distance between incubator and BSC should be no more than 1–2 m at maximum to have fast and easy access.
- The water bath for medium warm-up should be near the BSC to shorten distances.
- The cell counter should be located besides BSC or at opposite bench for easy access.

Sphere 3—The Laboratory Workflow

Check if your cell culture workflow is ergonomic

- Keep clear separation in BSC: one side clean, one side dirty for a better workflow.
- Training of all users in proper working conditions.
- Define one person to be responsible for filling up consumable supply in the lab.
- Limit the consumable supply in the lab instead of storing a year-supply near the BSC.

> Learn more about the Eppendorf PhysioCare Concept and its 3 spheres at www.eppendorf.com/physiocare