

## **Dangerous Cells Made Safer**

Added Layer of Protection Never Before Available



- New BIOCONTAINMENT layer for gene engineered cells and organisms
  - CRISPR/Cas9
  - Zinc Finger Nucleases
  - TALENS
  - Lenti virus vectors
  - Adenovirus vectors
- First and only closed incubator, closed hood, closed lab
- No path from cell space to people or room

## BioSpherix Xvivo System - closed incubation and handling

If you work with cells carrying dangerous microbes, viruses, vectors, or prions, now add a level of protection never before available. The *Xvivo System* is the first and only incubator/hood/equipment combination that is totally closed. It isolates cells inside while you work safely outside. It never exhausts into the room. All spills and splashes created during normal handling and processing of cultures are contained, including aerosols from FACSs and 3D printers. Make any BSL1, BSL2 or BSL3 lab culturing cells safer for people. Plus, optimize conditions for the cells. Keep them safer too!



Spills, spatters, aerosols - no worry! All are 100% contained and 100% isolated.





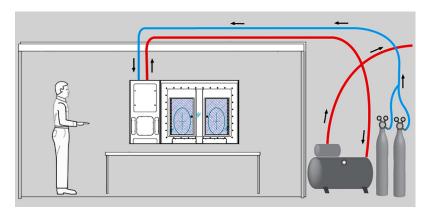
Accommodate any/all equipment including robots, FACSs, mixers, 3D printers, etc.



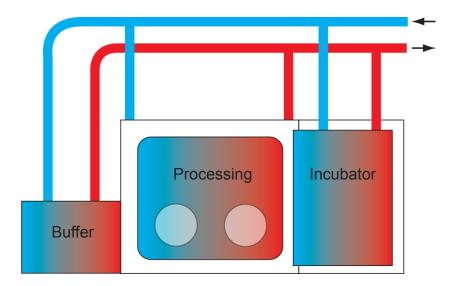
Unlimited scale up. Unlimited scale out. Seamless migration to automation. Mobile. Flexible. Fast.

## Are You Sure You're Not Exposed?

## Protect Technicians with an Entirely Enclosed Process



All cell parameters everywhere inside are optimized all the time. Clean physiological HEPA clean gas is brought into the system directly from remote gas source for ventillation and control. All gas leaving the system is safely routed to a remote location outside the room. Risk of technician exposure is virtually zero. Nothing exhausts into the room. No intermixing between room air and potentially dangerous internal cell atmosphere.



Each individual module is independently supplied and exhausted. Each module can be independently ventilated and isolated from the others. A contamination in one chamber can be contained in that chamber. Sterilization and decontamination are easy and appropriately risk based.

- No mixing of cell ecosystem and room air
- Isolate between inside and outside as well as between chambers
- Ventilate
  each chamber
  individually as
  needed, safely
- No routing of large ducts necessary
- Unlimited modular expansion can accommodate any equipment, any scale