

ORGANISMS

Cryopreservation of Organisms

| Cryopreservation of organisms. Applications

The same principles applied to our devices for cryopreservation of cells, tissues and organs are the ones that we used to design our larger and reinforced lightweight capsules for cryopreserving bigger biological materials including plants, animals and even human bodies wherever possible.

Protection of endangered species by adequate cryopreservation of specimens of animals and/or certain plants are the main uses of our cryo-capsules for animal and larger vegetal world.

The case of endangered species may be one of the clearest, because specimens of those species can be cryopreserved when they are endangered in the hope that near-future technology will allow us later the recovery or the individual himself, or either potentially to be cloned from the DNA of such species.

Today 40 organs of mammals have been cryopreserved in Spain and subsequently transplanted with successfully reuse. Thus, the scientific community is betting that in the short/medium term it will be possible with a complete organism.

From GIBiomed we have developed this and other cryopreservation solutions necessary to help achieving this historic milestone in biomedicine.

In the case of plants and fungi, there are also a number of them that are extinguishing every year and that could be key in treating present or future diseases, to create nutraceuticals or animal or human consumption.

| Human cryopreservation

In the case of human bodies, much progress has been achieved both scientifically and legally in recent years, and there are countries where it is possible to cryopreserve a person after his death.

Human cryopreservation in GIBIOMED capsules opens the door to another form of conservation of our loved ones. GIBiomed has already developed also a solution of human body transport thermoplastic capsule to provide to public or private institutions, or even individuals.

These GIBIOMED capsules are also compatible with the existing long-term cryopreservation centers operating in the U.S. and Russia whose model is being studied in other countries and communities worldwide.



| Technology

Our solution is prepared and dimensioned to accommodate all types of organisms and has all the guarantees for the maintenance and control of the cryogenic temperature.

Additionally, different capsules are prepared to have all the parameters associated with cryopreservation of an organism and access to this information from anywhere in real time through its connection via internet.



| Transport / Storage of human bodies for cryopreservation

For persons who have decided to be cryopreserved with some of the different institutions that already offer this service in countries like Russia, the United States, or others that will offer these facilities in the near future, we have developed a capsule with temperature control that greatly simplifies the transport of the body to the corresponding cryopreservation center, while adding the necessary reliability.

These capsules could also be used themselves under adequate medical/technical supervision not only in the cryopreservation intervention but also as a long-term storing units in any country where no specific human cryo-storage facilities are available.

Built with thermoplastic material, the capsules are lightweight and are designed to facilitate and control the transport and storage at very different external weather conditions.