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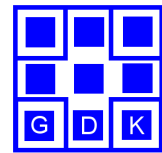
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Further information about the Alliance of German Cryobanks is available under following link:

**[www.cryobanks.org](http://www.cryobanks.org)**

or under the following address:

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**Gemeinschaft  
Deutscher  
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**An Alliance of Cryobanks to support Science and Research in Cryophysics, Cryomedicine & Cryotechnology as well as Standardisation of Processes.**

**HelmholtzZentrum münchen**  
Deutsches Forschungszentrum für Gesundheit und Umwelt

## **The cryo-conservation of biological samples for new procedures in the regenerative medicine and biology**

Long-term, safe storage of living cells or tissues in small volumes is already possible with modern cryo-technology. There is a fast growing need for cryo-banks. In existing facilities, there are large differences in technical equipment and expertise in freezing and thawing procedures. A cryo-conserved sample is little use without identity and characterisation data and documentation of the freezing and thawing procedure. There needs to be evaluation and registration of existing cryo-banks; harmonisation of equipment and standardisation of processes. At national level, this will be done by the existing cryobanks under the direction of the "Gemeinschaft Deutscher Kryobanken e.V."

## **Cryo-banks preserve the fundamental national bio-resources for the future**

Samples are stored inside a cryo-tank and temperature (including that of the insertion / extraction apparatus should be below  $-140^{\circ}\text{C}$ . Future cryo-banks also need laboratories for preparing and analysing samples and a databases for documentation and administration. As samples and data have to endure for a human life lifetime, the organisation and the handling needs to be controlled by an independent body, which

can also ensure that the latest research results are used. Also non-living samples have to be stored under clean, standard, modern conditions, as in the Environmental specimen bank of Germany. Bio-samples of different origin and composition are a unique and irreplaceable treasure for future research. Bio-samples for reference or use improve our life standards and those of following generations.

## **Cryo-conservation opens new perspectives for life- and environmental sciences.**

Cryo-technology is needed in applications of medical and pharmaceutical science, biotechnology, environment protection and to improve food for humans and animals.

Cryo-physical research opens new perspectives in all these areas and the basis for further research is the storage of functional living cells reference materials. Cryo-technology research needs public funding.

## **The Gemeinschaft Deutscher Kryobanken e.V. provides a platform enabling the construction of a virtual cryobank**

In 2005, some research, clinical and industrial cryo-banks formed a voluntary network, the Alliance of German Cryobanks (Gemeinschaft Deutscher Kryobanken

(GDK)). The common aim is it to enhance transparency to the customer through registering cryo-banks and presenting their individual key aspects of activity. The development of common safety measures, standardised procedures and the dissemination of knowledge should ensure the highest standards of science, technology and therapeutic use. Existing collections are scientific goldmines and, today, each exists in isolation. The Alliance of German Cryobanks (GDK) is necessary to safeguard these national resources, as existing cryobanks can only guard against a disaster by using a network like the GDK. In case of a disaster, time-limited outsourcing of samples at a safe cryobank partner is possible. The GDK is an association, which can stimulate scientific, technical and organisational cooperation and build up a virtual cryo-bank in Germany.

Cryo-banks in Germany and in its neighbours welcomed to join the alliance and co-operate in these activities.