

## synopsis

Biomedical Technology Newsletter

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### SANYO MDF-C8V -80°C — Eurofins Medinet European freezer project: Over one hundred freezers ordered!

Eurofins Medinet is a member of the Eurofins Pharma Services Group, which currently employs over 700 people around the world working in highly automated laboratories under strict quality systems and serves the needs of Eurofins' current and fast-expanding client base. The portfolio offered by Eurofins Pharma Services spans nearly the entire product development cycle for the pharmaceutical industry — from discovery through clinical trial phases, through post registration and marketing. Very few companies offer such a broad technical and geographical portfolio.

With facilities in France, the United States of America, Singapore, China and the Netherlands, and truly global coverage via standardized partners in, for example, South Africa, India and Japan, the aim is to set a new standard in clinical laboratory services.



Laboratorium Eurofins

The Eurofins Medinet laboratory facility in the Netherlands is located in Breda. In the past year a large pharmaceutical clinical trial was started which had to be regulated from the location in Breda. A critical point in these clinical trials is the pre-analytic phase, which means the conditions of the samples before testing. Part of the pre-analytical phase is the storage of the sample. If a sample is stored incorrectly, for example in a wrong container or at the wrong temperature, it can have a great influence on the test results.

At first, the regulation of sample storage and sample logistics was that the samples were collected at the different sites and sent immediately one by one on dry ice to the Breda laboratory where they were stored at the right temperature.

To optimise the storage conditions of the samples, a project was started between Eurofins Medinet and SANYO E&E Europe.

Eurofins Medinet was looking for a freezer which was compact, reliable, provided a stable temperature, was customer friendly and could be transported fast and easy. Also, the freezers had to be sent by the supplier to the different sites all across Europe.

SANYO was the supplier who could meet these demands with the MDF-C8V. This freezer is 84 litres -80°C with a stable temperature due to its special designed compressor, a compact design due to VIP insulation, and is easy to use because of its “plug and play” installation.

All the deliveries could be handled in a short period of time because the European stock is in Etten-Leur and the stock was filled with about 125 units of MDF-C8V.

Deliveries outside of the Netherlands were done using an external transportation company; deliveries in the Netherlands were done with SANYO's own trucks.



MDF-C8V

To date, SANYO MDF-C8V -80°C freezers have been sent to over 100 different locations all across Europe. The clinical trial samples are now collected at the different sites under the same conditions in the MDF-C8V and when needed the samples are sent to the Breda laboratory together. In this way all the samples have the same storage and logistics.

Up until now there have not been any major difficulties with the deliveries, and Eurofins Medinet has complimented SANYO on doing all the work so quickly and smoothly.

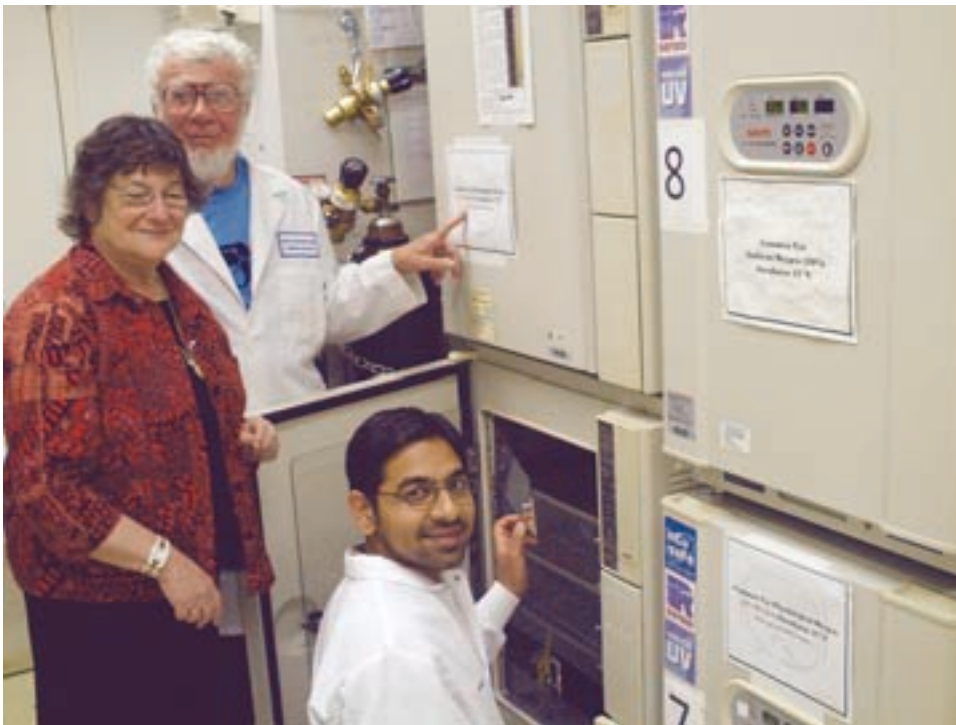
## Kyoto-Prize-Winning Herzenberg Team Praise the SANYO MCO-18M Incubator

Leonore and Kyoto Prize Laureate Leonard Herzenberg are professors in the Genetics Department at the Stanford University School of Medicine. They jointly run a biomedical research laboratory and technology development group that is celebrating its 50th anniversary in November of 2009. Known throughout the world for their seminal contributions to immunogenetics, flow cytometry, biomedical software and monoclonal antibody technology, the Herzenbergs and their Research Associate, Dr. Kondala Atkuri, are pioneering a shift to cell culture incubators that maintain physiological oxygen levels of cells to improve responses in studies of mitochondrial disorders, lymphocyte development, lymphocyte function and HIV.

Their current research includes immunology, primary cell culture, human disease and redox. They conduct a good portion of their testing with the SANYO MCO-18M and MCO-175M. The Herzenberg laboratory operates broadly across traditional barriers to research that ranges from basic molecular-, genetic-, and cell-based studies to clinical trials and patient studies in diseases involving immunological and redox abnormalities. They have recently published a series of studies collectively showing that freshly isolated lymphocytes, macrophages and fibroblasts respond more similarly in vitro and in vivo when the cells are cultured at incubator oxygen levels (5-10% O<sub>2</sub>) that more closely approximate the oxygen levels that cells encounter in vivo. Recognizing the importance of

maintaining cultured cells in this way, Dr. Atkuri has been encouraging his colleagues to shift to cultured cells at "more physiological oxygen levels." To this end, he currently runs what he playfully calls the "Low Ox Hotel" at Stanford, where he invites colleagues to use his incubators to determine whether physiological oxygen is better for their cells. The results, he says, "have been spectacular." They initially tested SANYO tri-gas incubators in a collaborator lab and were impressed with the design and accuracy in maintaining gas percentages. They are safe, precise, and easy to use and maintain the desired culture conditions with great accuracy. "In our years of experience with cell culturing, we have not seen an

incubator that is so trouble-free and reliable, that requires so little servicing and that is serviced so well," Dr. Atkuri said. Additional SANYO advantages they have identified include: fast gas equilibrium that minimizes oxygen level variability, top-quality heat sensors, copper alloy and UV technology that minimizes contamination, customizable shelf designs that optimize storage space and multi-door access that minimizes gas waste and variability. SANYO is proud to play a vital role in award-winning research that has the potential to change the lives of so many as we learn more about diseases and disorders.



Kyoto Prize winning Herzenberg Team and Research Associate, Dr. Kondala Atkuri working in the Lab at Stanford University



The Herzenbergs examining cell cultures in the SANYO MCO-18M "Low-Ox Hotel"