

Biomatrica® Media Backgrounder

As an innovative biostability company, Biomatrica offers technology to stabilize biological samples such as DNA, RNA, proteins, cells and assays at room temperature. Biomatrica's products allow researchers to be more efficient and secure by providing room-temperature handling, storage and shipping products that prevent the degradation of biological samples. Biomatrica will change the life sciences by allowing streamlined processes that involve sample management and handling.

The genomic age and development of high-throughput technologies has resulted in a vast pool of samples that require an integration of storage, organization and analysis. All biological material such as nucleic acids, proteins, enzymes, viruses, cells and assays are handled and stored in cold environments (4°C, -20°C, -80°C and liquid nitrogen). The management of cold environments is costly, and problems arise during transport, storage and experimental design. Even short-term storage of biological material at room temperature and repeated freeze/thaw cycles results in sample degradation and loss of activity.

Biomatrica offers an innovative platform technology based on a proprietary dissolvable sample matrix that "shrink wraps" biological material at room temperature, creating a tremendous cost-saving infrastructure for life science firms. The technology is based on the science that allows creatures (like tardigrades) to live in extremely dry environments. This technology can be applied to thousands of products being developed in the biotechnology, diagnostics and pharmaceutical industries, as well as millions of samples generated from genome mapping and sample archiving for personalized medicine, forensics and the military.

Compared to freezers, Biomatrica's products save energy, shipping and storage costs, organizational hassles, and prevent degradation. Unlike paper and drying DNA, Biomatrica's products:

- Offer quick and easy extraction by "just adding water"
- Provide 100 percent recoverability allowing for picogram quantities
- Ensure consistent recoverability for reproducible results

Researchers feel more confident and secure because their samples won't degrade or be lost when freezers lose power, and more efficient because samples are in easy reach.

Biomatrica's products stabilize DNA and RNA. Biomatrica's DNA products, sold through Qiagen beginning in 2008, are based upon a technology called DNA SampleMatrix®. Biomatrica's RNASTable™ directly stabilizes RNA, a notoriously unstable molecule. Methodologies today limit RNA preservation to stabilizing the tissue that holds the RNA. Also available is SampleWare®, a software package for tracking and organizing samples via barcode and RFID tags.

Biomatrica was co-founded by husband and wife Rolf Muller, Ph.D. and Judy Muller-Cohn, Ph.D. The couple was inspired to develop Biomatrica's technology when they lost an entire freezer of samples due to a power outage. They are pleased to offer products that not only ensure sample security but also reduce energy needs. Biomatrica won the "Most Innovative Product of the Year Award" from CONNECT, a globally recognized public benefits organization fostering entrepreneurship in San Diego.

Based in San Diego, Biomatrix has partnered with institutions such as the University of California system, the Scripps Research Institute, the U.S. Navy, CalState LA, National Institute of Justice, GlaxoSmithKline and Qiagen. For more information on Biomatrix and its products, please visit the Web site www.biomatrix.com, call 858-550-0308 or email contact@biomatrix.com.