

Contacts:

**Dharmacon:**

Susan Strong  
Vice President, Marketing  
303-604-9499

**Media:**

Stephen Gendel & Barbara Lindheim  
GendeLLindheim BioCom Partners  
212-918-4650

## **RNAi Global Initiative Members Advance Standards for Genome-Wide RNAi Research in Second Meeting**

*--Dharmacon and 14 Leading Research Institutes Collaborate to Accelerate Biomedical Discovery Using Genome-Wide siRNA Library--*

**LAFAYETTE, Colo., May 24, 2006** — The Genome-Wide RNAi Global Initiative (RNAi Global), an alliance of Dharmacon, Inc., and 14 leading international research centers pioneering the use of whole-genome RNAi screening, today announced progress toward its fundamental goal of developing internationally accepted standards for conducting research using the first complete siRNA library targeting genes across the entire human genome.

Genome-wide siRNA libraries have the potential to fundamentally change biological research and accelerate drug discovery and development. However, experience with previous breakthrough technologies has shown that intra- and inter-laboratory variations are common at the outset and can limit the ultimate utility of early results. The initial data presented at the second meeting of RNAi Global in Washington, D.C. in April demonstrated that without uniform standards, the results of experiments may not be comparable between laboratories.

“To accelerate generation of meaningful experimental output, twelve members of the RNAi Global Initiative conducted the same experiments using the same protocols in the most extensive multi-site comparative RNAi screen conducted to date,” said William S. Marshall, Ph.D., vice president of technology and business development for Fisher Biosciences. “By comparing this large data set we were able to identify several critical areas of potential variation and the key information required for inter-laboratory experimental comparison. Understanding this inherent variation in research results is the principal reason Dharmacon took the unique step of forming a working consortium to develop the experimental parameters necessary to facilitate inter- and intra-laboratory comparisons.”

Stefan Wiemann, Ph.D, Group Leader at the German Cancer Research Center (DKFZ) added: “The absence of accepted research standards for the new tool of microarrays in the 1990’s cost the life sciences research community many years of progress. By tackling the need for standards early-on, RNAi Global is accelerating the way we will be able to work with genome-wide siRNA libraries, which in turn has the potential to accelerate disease and drug research.”

The standardized RNAi screening experiment that each member conducted was part of the effort to propose standards that was discussed during the first meeting of RNAi Global last October. Researchers from the member institutions analyzed the results of the joint screening experiment, and shared their insights and observations at the April meeting, and now they have begun discussing aspects of the proposed research protocols at select scientific conferences. After collecting additional input from other experts in the field, RNAi Global representatives plan to publish a draft of the proposed standards in a peer-reviewed journal.

“Members of RNAi Global are already using the genome-wide siRNA library to conduct ongoing research, so it is crucial to develop standards expeditiously,” said Michael White, Ph.D. associate professor of cell biology at UT Southwestern Medical Center. “As we begin publishing the findings we have made using the genome-wide siRNA library, it is essential that they be comparable both within and between laboratories, and the work of RNAi Global is now enabling us to move rapidly in that direction. In addition, the open discussions within RNAi Global on other aspects of genome-wide screening is fostering exchange of expertise in other areas such as assay development, lab automation, and statistical analysis.”

Genome-wide siRNA libraries have the potential to fundamentally change biological research by dramatically increasing scientists' ability to understand disease mechanisms and facilitate faster drug discovery and development. RNAi Global provides a forum for member institutions to share research protocols, establish experimental standards and develop mechanisms for exchanging and comparing screening data. The second full meeting of the group was held April 5-7 in Washington, D.C., where the results of initial pilot screening activities were shared. This ongoing interaction between RNAi Global members is expected to help researchers optimize high-throughput human genome-wide siRNA screening and accelerate drug discovery.

The membership of RNAi Global, which is already scientifically and geographically diverse, is expected to expand further as additional not-for-profit research institutions from North America, Europe and Asia join in the coming months. Membership is open to all not-for profit research institutions that are interested in an active, participatory role in identifying and setting biomedical research standards using Dharmacon's genome-wide siRNA library for biomedical research. The next meeting will take place in the fall of 2006.

### **About the siARRAY<sup>®</sup> Human Genome siRNA Library**

The siARRAY<sup>®</sup> Human Genome siRNA Library from Dharmacon consists of SMARTpool<sup>®</sup> siRNA reagents or SMARTselection<sup>™</sup> designed siRNA reagents—individual duplexes or targeting all unique human genes in the NCBI RefSeq database—conveniently arranged in 96-well plates for easy storage and rapid preparation. SMARTpool siRNA reagents provide significant benefits for genome-wide siRNA screens including reduced initial screening costs, simplified sample management as well as reduced false positive and false negative “hit” results. The Human siGENOME siRNA Library is designed to accelerate functional genomics research and to make siRNA SMARTselection technology accessible to all researchers for detailed analysis of gene families and metabolic pathways.

### **About the Genome-Wide RNAi Global Initiative**

The Genome-Wide RNAi Global Initiative is an alliance of leading international biomedical researchers, established to increase and accelerate the utility of human genome-wide siRNA libraries. RNAi Global will provide a forum for member institutions to share research protocols, establish experimental standards and develop mechanisms for exchanging and comparing screening data. Membership is open to not-for-profit biomedical research institutions across North America, Europe and Asia. RNAi Global is being coordinated under the auspices of Dharmacon, Inc. Its members include The Campbell Family Institute for Breast Cancer Research at Princess Margaret Hospital and Samuel Lunenfeld Research Institute at Mount Sinai Hospital, both with The University of Toronto; Cancer Research UK (CRUK) funded scientists at the London Research Institute and the Institute of Cancer Research (ICR); Fox Chase Cancer Center; The German Cancer Research Center (DKFZ); Harvard Medical School; UNMC Eppley Cancer Center at the University of Nebraska Medical Center; Netherlands Cancer Institute (NKI); The Scottish Centre for Genomic Technology and Informatics based at the University of Edinburgh Medical School (GTI); The University of Cambridge scientists at the Cambridge Institute for Medical Research and MRC Cancer Cell Unit The University of Texas M. D. Anderson Cancer Center; University of Texas Southwestern Medical Center, Vrije University Medical Center (VUMC), Stanford School of Medicine and Yale University.

### **About Dharmacon**

Dharmacon is a business unit within the Fisher Biosciences group and the world's leading provider of reliable, high quality RNA oligonucleotides, small interfering RNA (siRNA) and related RNA-interference (RNAi) products and technologies. Using its core expertise in chemistry, biology, bioinformatics and production, Dharmacon has developed industry-leading siRNA design, chemical modification, and delivery technologies for maximizing the efficiency of gene silencing. Dharmacon's proprietary *SMART*selection™ and *SMART*pool® technologies result in potent and specific gene-silencing agents that can accelerate life-science research and drug discovery. Dharmacon's *siGENOME*™, a comprehensive and flexible siRNA collection, offers guaranteed silencing reagents for all unique human, mouse and rat genes. The company's advanced siRNA modification technologies further enhance silencing specificity, stability, and *in vivo* performance. For more information about Dharmacon products and services visit [www.dharmacon.com](http://www.dharmacon.com) or call 303-604-9499.

### **About Fisher Biosciences**

Fisher Biosciences, a unit of Fisher Scientific International Inc. (*NYSE: FSH*), manufactures and supplies a wide range of products and services across the general-chemistry and life-sciences arenas. From fine and high-purity chemicals, clinical diagnostics, proprietary protein-research and cell-culture products, and sterile-liquid-handling systems, to innovative RNA-interference technology and high content screening, Fisher Biosciences serves scientific-research, healthcare, drug-discovery, and general industrial customers around the world. For more information please visit [www.fisherbiosci.com](http://www.fisherbiosci.com).