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**FOR IMMEDIATE RELEASE**

### **NIH funds Center to Advance Protein Structure Determination**

*"Accelerated Technologies Center for Gene to 3D Structure" funded by the National Institute of Health, Institute of General Medical Sciences' Protein Structure Initiative and the National Center for Research Resources*

July 1, 2005 - An NIH funded center led by deCODE biostructures and The Scripps Research Institute has been established to integrate innovative technological advances in structural biology as part of the NIGMS Protein Structure Initiative. The work of the Accelerated Technologies Center for Gene to 3D Structure ([www.atcg3d.org](http://www.atcg3d.org)) is focused on the development, operation and deployment of novel approaches in miniaturization, integration and automation with an aim towards lowering the overall cost of gene to structure for all researchers. Primary initiatives include whole gene synthesis for the production of optimized protein constructs and parallel protein purification with integrated small-scale biophysical characterization from deCODE biostructures (Bainbridge Island, WA), micro-capillary based crystallization technologies from the University of Chicago (Professor Rustem Ismagilov, Chicago, IL) and Micronics, Inc. (Seattle, WA), and the tunable Compact X-ray Light Source from Lyncean Technologies, Inc. (Dr. Ronald Ruth, Stanford, CA). The Center is led by Dr. Lance Stewart at deCODE biostructures and Professors Peter Kuhn and Raymond Stevens at The Scripps Research Institute (TSRI, La Jolla, CA). Fully developed instruments and refined methods will be deployed into the Center's laboratory at The Scripps Research Institute for final integration, testing and operation. The initial target application area is oncology, specifically focusing on eukaryotic protein families and more challenging proteins such as multi-protein kinase complexes, DNA-bound transcription factors, and integral membrane proteins. The established technologies will be commercially available to the scientific community through Emerald BioSystems (a subsidiary of deCODE biostructures), Lyncean Technologies, and Micronics.

"We and others have effectively demonstrated the power of structure-based drug design for identifying promising compounds, but the method can be made faster and more robust. This new Center was created to take structural biology to the next level", states Lance Stewart, Vice President of deCODE biostructures and Principal Investigator of the new Center. Kuhn at TSRI further adds "Significant advances have been made in the area of structural biology technology development over the past 5 years with the initial

pilot phase of the NIGMS PSI, but, quantum leaps in technological innovations are still needed for the availability of protein structure for all researchers in basic biology, chemistry and medicine". Stevens formulates the vision of the Center to "develop and integrate the technologies towards the goal of the protein structure equivalent of the DNA sequencer."

### ***About deCODE biostructures***

deCODE biostructures, located in Bainbridge Island, WA, is a leading provider of contract research services with capabilities that span the entire gene-to-structure landscape including gene synthesis, gene construct engineering, large-scale protein production and purification, high-throughput crystallization screening, pre-formulation screening of small molecules, X-ray diffraction data collection, model building, and refinement. The work of deCODE biostructures can be integrated with the services of sister company, deCODE chemistry, a leading provider of contract research services in pharmaceutical discovery and development based in Woodridge, Illinois. Together, these groups can offer to clients a structure-based approach to drug design with a full range of contract services all the way through the manufacture of compounds for clinical trials. deCODE biostructures and deCODE chemistry are wholly-owned subsidiaries of deCODE genetics, Inc., a biopharmaceutical company headquartered in Reykjavik, Iceland.

Emerald BioSystems, a subsidiary of deCODE biostructures, was launched in January 2005 to commercialize a complete line of liquid-handling robotics, software and consumable products discovered and developed through the work of deCODE biostructures in its goal to eliminate bottlenecks in the gene-to-structure path. Emerald BioSystems also operates from Bainbridge Island, WA.

### ***About Micronics***

Based in Redmond, Washington, Micronics is a leading provider of laboratory-on-a-card ("lab card") design, development and production services on behalf of clients worldwide. Micronics' patented microfluidics and microplumbing technologies, coupled with its expertise in integrating protein crystallography, molecular and immunoassays on-card, allow it to fundamentally modify the way in which fluids are processed and assays are performed at greatly reduced volumes, time and cost. Micronics uniquely integrates other components into its lab cards as well, such as printed reagents, membranes, sensors, valves and electrodes. Micronics is believed to offer the most sophisticated and rapid lab card prototyping facility in the world today. For additional information, see [www.micronics.net](http://www.micronics.net).

### ***About The Scripps Research Institute and Scripps Florida***

The Scripps Research Institute in La Jolla, California, and Palm Beach County, Florida, is one of the world's largest, independent, non-profit biomedical research organizations. It stands at the forefront of basic biomedical science that seeks to comprehend the most fundamental processes of life. Scripps Research is internationally recognized for its research into immunology, molecular and cellular biology, chemistry, neurosciences, autoimmune, cardiovascular, and infectious diseases, and synthetic vaccine development.

The Scripps Research Institute employs approximately 3,000 scientists, postdoctoral fellows, scientific and other technicians, doctoral degree graduate students, and administrative and technical support personnel in 14 buildings overlooking the Pacific Ocean in La Jolla, a part of the City of San Diego.

Scripps Florida will be a 350,000 square-foot, state-of-the-art biomedical research facility to be built on 100 acres of undeveloped land in Palm Beach County. Scripps Florida will focus on basic biomedical science, drug discovery, and technology development, employing more than 500 researchers and support staff by 2010. Palm Beach County and the State of Florida have provided start-up economic incentives for development, building, staffing, and equipping the campus.

Scripps Florida is now operating with more than 100 researchers and technicians at a 40,000 square-foot facility on the campus of Florida Atlantic University in Jupiter.

### ***About Lyncean Technologies, Inc.***

Lyncean Technologies, Inc., located in Palo Alto, CA, has developed a new generation of compact X-ray sources - miniature synchrotron light sources. These powerful home-lab-size X-ray sources will enable scientists in academics and industry to pursue state-of-the-art synchrotron radiation applications in their own laboratories. Lyncean's first product, the Compact Light Source, is optimized for protein crystallography and will deliver monochromatic pencil beams of tunable hard X-rays comparable in quality and flux to some of the most productive synchrotron beamlines in use today.

### ***About University of Chicago***

Founded by John D. Rockefeller, the University of Chicago is a private, non-denominational co-educational institution of higher learning. More than 75 recipients of the Nobel Prize have been researchers, students or faculty at the University, including two 2004 Nobel laureates, alumnus Frank Wilczek in physics and alumnus Irwin Rose in chemistry.

deCODE biostructures website: [www.decodebiostructures.com](http://www.decodebiostructures.com)

The Scripps Research Institute website: [www.scripps.edu](http://www.scripps.edu)

Micronics website: [www.micronics.net](http://www.micronics.net)

Lyncean Technologies website: [www.lynceantech.com](http://www.lynceantech.com)

University of Chicago website: [www.uchicago.edu](http://www.uchicago.edu)

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*If you would like more information or to set up an interview with Lance Stewart or any of the other researchers, please contact Jessica Lambert by phone at: (630)783-4858 or by email to: [jlambert@decode.com](mailto:jlambert@decode.com).*