



## **Claremont BioSolutions' SimplePrep™ Products Deployed in NASA Wetlab-2 Project Slated for June 28th Flight to International Space Station aboard SpaceX CRS-7**

*NASA's WetLab-2 Sample Preparation Module (SPM) utilizing ClaremontBio's rapid lysis and RNA isolation technologies set to perform sample prep for gene expression studies on the ISS.*

Claremont BioSolutions, LLC, a pioneer of rapid sample preparation devices, today announced that its SimplePrep™ technologies have been integrated into a sample prep module intended to enable real-time quantitative gene expression analysis on board the International Space Station (ISS) as a part of the NASA's WetLab-2 Project.

On June 28, 2015, SpaceX CRS-7 will launch from Cape Canaveral Air Force Station in Florida, as part of a series of resupply missions to the ISS. Included in this payload is the WetLab-2 Sample Preparation Module (SPM) which utilizes ClaremontBio's rapid lysis and RNA isolation technologies. The company worked with the WetLab-2 team at NASA's Ames Research Center to adapt this technology to rapidly prepare biological samples as part of the fully enclosed WetLab-2 SPM, eliminating potential exposure to the ISS environment. SimplePrep™ components are easily integrated, disposable, operate in a flow-through configuration, and do not use harsh chemicals or require additional equipment.

Once on board the ISS, the WetLab-2 module will be used to study how spaceflight affects gene expression in microbes and mammalian cells to shed light on molecular and cellular mechanisms in microgravity environments. The customized OmniLyse® and RNAexpress™ components of ClaremontBio's SimplePrep™ technology will seamlessly lyse bacteria, yeast, and mammalian cells and isolate total RNA for downstream analysis. As part of NASA's flight qualifications, ClaremontBio's technology was rigorously tested for over two years, including efficiency and reproducibility tests in non-orbital, in-flight microgravity conditions.

ClaremontBio's President and Co-Founder, Robert Doebler said "This is an exciting time for Claremont BioSolutions; in addition to having our OmniLyse® and RNAexpress™ devices traveling to the ISS, WetLab-2's Sample Prep Module provides unique validation of our technology to add to a growing list of published data that demonstrate superior performance of our miniaturized sample prep devices." He went on to say, "Collaborations such as this demonstrate the ability of our interdisciplinary team to address needs in challenging areas of biological research. We appreciate this unique opportunity to work with the team at NASA Ames and we welcome further opportunities to apply our bioengineering expertise."

Expanding on its product line of stand-alone sample prep components, ClaremontBio has nearly completed development of an instrument to automate the operation of one to eight disposable integrated SimplePrep™ cartridges to perform cell lysis and nucleic acid extraction in minutes. ClaremontBio's CEO, Gary Blackburn, said "We are pleased that the versatility of our SimplePrep™ technologies will enable RNA analysis in space. Rapid, simple, and disposable appears to be a universal need in life sciences."

About Claremont BioSolutions, LLC.

Claremont BioSolutions ([www.ClaremontBio.com](http://www.ClaremontBio.com)) is a privately held, emerging growth technology company specializing in miniaturized, disposable devices, as well as automated multiplexed instruments, that provide solutions to what is recognized as the "bottleneck" of nucleic acid diagnostics – sample preparation. The company has developed proprietary disposable devices that employ micromotors capable of performing very



rapid and efficient mechanical tissue homogenization, cell lysis, and nucleic acid extraction.

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