



Organovo Collaborates With UCSF Team to Develop 3D Bioprinted Tissues for Skeletal Disease Research

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SAN DIEGO, SAN FRANCISCO and SPRINGFIELD, Va., June 13, 2016 (GLOBE NEWSWIRE) -- Organovo Holdings, Inc. (NYSE MKT:ONVO) ("Organovo"), a three-dimensional biology company focused on delivering scientific and medical breakthroughs using its 3D bioprinting technology, today announced a collaboration with the University of California, San Francisco ("UCSF") to develop 3D bioprinted tissues for skeletal disease research. The collaboration has been made possible by a generous gift from the Methuselah Foundation ("Methuselah") as part of its ongoing University 3D Bioprinter Program.

Musculoskeletal diseases are the second leading cause of disabilities worldwide, while inherited skeletal disorders affect 2.4 out of every 10,000 births. A better understanding of bone formations and constructs is critical to *in vitro* modeling of bone disease to promote development of drugs for bone growth and repair.

"Partnerships with world-class institutions can accelerate groundbreaking work in finding cures for critical unmet disease needs and the development of implantable therapeutic tissues," said Keith Murphy, Chairman and CEO, Organovo. "This collaboration with UCSF, which combines their expertise with our own, is another important step in this direction. With the devoted support of the Methuselah foundation, leading researchers are able to leverage Organovo's powerful technology platform to achieve significant breakthroughs."

"When we study skeletal diseases, such as bone cancer or heterotopic ossification, most of the research occurs in a two-dimensional environment, such as a petri dish. That tells us a lot about how cells interact with other cells, but not how they function in a natural three-dimensional scaffold," said Dr. Edward Hsiao, assistant professor, UCSF School of Medicine. "This type of 3D bioprinting creates better mechanisms for combining inorganic scaffolds with live cells and will likely have key implications for how we repair damaged skeletal tissues, as well as many other tissues in the body."

The partnership also includes the UCSF labs of Tamara Alliston, Chelsea Bahney, Jeff Lotz and Robert Nissenson.

Under Methuselah's University 3D Bioprinter Program, Methuselah is donating at least \$500,000 in direct funding to be divided among several institutions for Organovo bioprinter research projects. This funding will cover budgeted bioprinter costs and key aspects of project execution.

"We at the Methuselah Foundation have been a long-time supporter of academic and industry research in 3D bioprinting, regenerative medicine, and tissue engineering," said David Gobel, CEO, Methuselah Foundation. "Our University 3D Bioprinter Program puts Organovo's breakthrough 3D bioprinting technology in the hands of the brightest scientists at tissue engineering centers of excellence."

About Organovo Holdings, Inc.

Organovo designs and creates functional, three-dimensional human tissues for use in medical research and therapeutic applications. The Company develops 3D human disease models through internal development and in collaboration with pharmaceutical and academic partners. Organovo's 3D human tissues have the potential to accelerate the drug discovery process, enabling treatments to be developed faster and at lower cost. The Company recently launched its initial product of the planned exVive3D portfolio offering, the exVive3D Human Liver Tissue for use in toxicology and other preclinical drug testing. Additional products are in development, with the anticipated release of the exVive3D Human Kidney Tissue scheduled for the third quarter of calendar year 2016. The Company also actively conducts early research on specific tissues for therapeutic use in direct surgical applications. In addition to numerous scientific publications, the Company's technology has been featured in The Wall Street Journal, Time Magazine, The Economist, and numerous other media outlets. Organovo is changing the shape of life science research and transforming medical care. Learn more at www.organovo.com.

About University of California, San Francisco

UC San Francisco (UCSF) is a leading university dedicated to promoting health worldwide through advanced biomedical research, graduate-level education in the life sciences and health professions, and excellence in patient care. It includes top-ranked graduate schools of dentistry, medicine, nursing and pharmacy; a graduate division with nationally renowned programs in basic, biomedical, translational and population sciences; and a preeminent biomedical research enterprise. It also includes UCSF Health, which comprises two top-ranked hospitals, UCSF Medical Center and UCSF Benioff Children's Hospital San Francisco, and other partner and affiliated hospitals and healthcare providers throughout the Bay Area. Learn more at www.ucsf.edu/news.

About Methuselah Foundation

The Methuselah Foundation is a non-profit medical charity working to create a world where 90 year olds can have the health profile of 50 year olds, by 2030. By opportunistically leveraging resources, enabling partnerships, and awarding prizes and grants, we accelerate disruptive developments in biomedical engineering that will eradicate needless suffering and extend healthy human life. For more information please visit: www.methuselahfoundation.org and www.neworgan.org.

Forward-Looking Statements

Any statements contained in this press release that do not describe historical facts constitute forward-looking statements as that term is defined in the Private Securities Litigation Reform Act of 1995. Any forward-looking statements contained herein are based on current expectations, but are subject to a number of risks and uncertainties. The factors that could cause the Company's actual future results to differ materially from current expectations include, but are not limited to, risks and uncertainties relating to the Company's ability to develop, market and sell products and services based on its technology; the expected benefits and efficacy of the Company's products, services and technology; the market acceptance of the Company's

products and services; the Company's business, research, product development, regulatory approval, marketing and distribution plans and strategies; the Company's ability to successfully complete the contracts and recognize the revenue represented by the contracts included in its previously reported total contract bookings and secure additional contracted collaborative relationships. These and other factors are identified and described in more detail in the Company's filings with the SEC, including its Annual Report on Form 10-K filed with the SEC on June 9, 2016. You should not place undue reliance on these forward-looking statements, which speak only as of the date that they were made. These cautionary statements should be considered with any written or oral forward-looking statements that the Company may issue in the future. Except as required by applicable law, including the securities laws of the United States, the Company does not intend to update any of the forward-looking statements to conform these statements to reflect actual results, later events or circumstances or to reflect the occurrence of unanticipated events.

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