



Axiom Space Establishes Winston-Salem Presence in the Regenerative Medicine Hub

Partners with WFIRM and ReMDO to Biomanufacture in Space

WINSTON-SALEM, NC, April 18, 2022 – Regenerative medicine manufacturing in space is the next frontier and will be possible due to a new three-way partnership between Axiom Space, which is building the world’s first commercial space station, the RegenMed Development Organization (ReMDO), the first organization dedicated to advancing regenerative medicine manufacturing scale-up and automation, and the Wake Forest Institute of Regenerative Medicine (WFIRM), an international leader in translating scientific discovery into clinical therapies.

ReMDO and Axiom Space today announced their plans to leverage the translational regenerative medicine expertise of the WFIRM team and Axiom’s leadership in commercial space infrastructure development to advance in-space regenerative medicine biomanufacturing.

To facilitate the work to speed up the translation of regenerative medicine technologies, Axiom is establishing a Winston-Salem presence by officially signing on as a tenant in ReMDO’s Innovation Accelerator, with access to its test bed. ReMDO’s test bed and WFIRM provide a supportive research environment for companies to develop their products and gain access to unprecedented resources.

This partnership offers the opportunity to expand the commercial space economy and support biomedical commercial innovations and manufacturing for biomedical applications in low orbit on Axiom’s space station will operate 250 miles above Earth. Research done on the space station will be free from the constraints of gravity, providing great potential and benefits.

Axiom Space made international news earlier this month with its Axiom Mission 1 ([Ax-1](#)), the first private mission to the International Space Station (ISS) which launched from NASA’s Kennedy Space Center in Florida. Ax-1 is the first of several planned missions to the ISS and an important step toward Axiom’s goal of constructing its space station to serve as a global research and commercial hub. The Axiom Station will initially be attached to the ISS and will separate from it before NASA decommissions the ISS at the end of this decade.

“This partnership paves the way for an entire commercial industry on board Axiom’s space station that will enable our scientific research teams to advance biomanufacturing to bring new

treatments that cannot be developed on Earth and treatments for conditions that affect the human body when exposed to the harsh environment of space travel,” said Anthony Atala, MD, director of WFIRM. “We can literally take the regenerative medicine field to a whole new level.”

The Innovation Accelerator is a key component of the regenerative medicine ecosystem called the Regenerative Medicine Hub (RegenMed Hub™) and is positioned to be a national leader in regenerative medicine innovation. The RegenMed Hub™, based in the [Innovation Quarter](#), brings together and draws upon the resources and talent available through the Wake Forest enterprise – Atrium Health Wake Forest Baptist, the School of Medicine, and the University. A number of regenerative medicine start-ups and established companies already operate in the RegenMed Hub™ and the region, offering expansive resources for entrepreneurs and life science professionals.

“As a member of the Innovation Accelerator, Axiom Space brings exciting capabilities that exist no where else in the world,” said Josh Hunsberger, PhD, Chief Technology Officer of ReMDO. “In addition to our initial focus, we anticipate other opportunities will result from this collaboration that will lead to regenerative medicine breakthroughs.”

Christian Maender, Director of In-Space Manufacturing and Research at Axiom Space, agreed. “We are very pleased to establish this collaboration and look forward to working together with this world-renowned team to build and expand the commercial space economy for biomedical applications in low Earth orbit,” he said. “Regenerative medicine has been identified as important focus area for commercial space initiatives that has the opportunity to provide new hope for breakthrough treatments and aligns with our mission to improve life on Earth and foster possibilities beyond it.”

Media Contact for WFIRM: Bonnie Davis, bdavis@wakehealth.edu; 336-493-6184

Media Contact for Axiom Space: media@axiomspace.com

About the Wake Forest Institute for Regenerative Medicine: The Wake Forest Institute for Regenerative Medicine is recognized as an international leader in translating scientific discovery into clinical therapies, with many world firsts, including the development and implantation of the first engineered organ in a patient. Over 400 people at the institute, the largest in the world, work on more than 40 different tissues and organs. A number of the basic principles of tissue engineering and regenerative medicine were first developed at the institute. WFIRM researchers have successfully engineered replacement tissues and organs in all four categories – flat structures, tubular tissues, hollow organs and solid organs – and 15 different applications of cell/tissue therapy technologies, such as skin, urethras, cartilage, bladders, muscle, kidney, and vaginal organs, have been successfully used in human patients. The institute, which is part of Wake Forest School of Medicine, is located in the Innovation Quarter in downtown Winston-Salem, NC, and is driven by the urgent needs of patients. The institute is making a global difference in regenerative medicine

through collaborations with over 400 entities and institutions worldwide, through its government, academic and industry partnerships, its start-up entities, and through major initiatives in breakthrough technologies, such as tissue engineering, cell therapies, diagnostics, drug discovery, biomanufacturing, nanotechnology, gene editing and 3D printing. More information can be found at www.wfirm.org

About the RegenMed Development Organization: The mission of the RegenMed Development Organization (ReMDO) is to accelerate the discovery and translation of regenerative medicine therapies. ReMDO is a 501(c)3 non-profit organization that manages a clinical translation initiative that includes thought leaders, representatives from leading US research centers, government representatives, and companies of all sizes. ReMDO conducts research to de-risk technologies and speed up the translation of regenerative medicine to clinical practice and to the global market. ReMDO manages the world's first and only professional organization dedicated solely to advancing the regenerative medicine field, the Regenerative Medicine Manufacturing Society (RMMS), and the Regenerative Medicine Manufacturing Innovation Consortium (RegMIC), which manages a private-public partnership of industry and academic members focused on scaling up technologies. More information can be found at <http://remdo.org/>

About Axiom Space: Axiom Space is guided by the vision of a thriving home in space that benefits every human, everywhere. The leading provider of human spaceflight services and developer of human-rated space infrastructure, Axiom operates end-to-end missions to the International Space Station today while privately developing its successor – a permanent commercial destination in Earth's orbit that will sustain human growth off the planet and bring untold benefits back home. More information about Axiom can be found at www.axiomspace.com.

##