

MEDICAL ALLEY

— IN SPACE —

The innovations of Medical Alley can be found throughout the world, but the region also has a presence in space. Numerous technologies from Minnesota companies have assisted the terrestrial and extraterrestrial efforts of NASA, as well as the next generation of space travel.



Humanetics received a multi-million-dollar grant to test their drug, BIO 300, against mixed fields of neutron and gamma radiation. Protection against such radiation, and its devastating effects on cardiac functions, will potentially assist in long-duration missions.



Mayo Clinic has been working with NASA since the 1950s and is advancing the next generation of space exploration: humans on Mars! Mayo is working with NASA to study the effects of extended space travel on humans and what strategies could safely ease the health toll on those astronauts.



In 2017, **Medtronic** tested their Micra™ Transcatheter Pacing System by launching it within a NASA rocket where the device survived 140°F+ temperatures and gravity 20 times stronger than on Earth.



Though entirely earthbound, **Minnetronix** was one of eight U.S. manufacturers chosen by NASA's Jet Propulsion Laboratory to manufacture a ventilator built in response to the COVID-19 pandemic.

Medical Alley companies also protect the very infrastructure of space programs. **Ecolab**, via its subsidiary **Nalco Champion**, ran experiments on Microbiologically Influenced Corrosion (MIC) onboard the International Space Station. Since the days of the Apollo program, **3M's** Nextel™ ceramic fabric has been used by NASA to protect shuttles and satellites from extreme heat and space debris.

LEARN MORE ABOUT ALL OF MEDICAL ALLEY'S INNOVATIONS AT [MEDICALALLEY.ORG](https://www.medicalalley.org)

