

Bacteria Provide Cleanup of Oil Spills, Wastewater

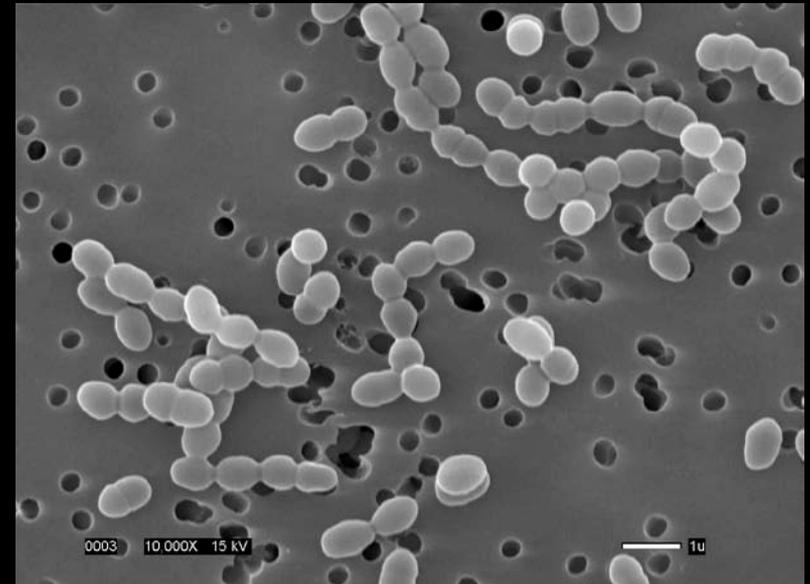


Marshall Space Flight Center

***Micro-Bac International Inc.
Round Rock, Texas***

Originating Technology/NASA Contribution

- ◆ All resources onboard the International Space Station (ISS) are limited and must be carefully managed and recycled
- ◆ Even before ISS construction, NASA investigated ways water could be purified and reused by astronauts living in orbit



Partnership

- ◆ Through Small Business Innovation Research (SBIR) contracts, Micro-Bac developed a phototrophic cell for water purification
- ◆ The cell contained strains of photosynthetic bacteria isolated to break down toxic chemicals astronauts could encounter on the ISS
- ◆ The company commercialized the bacterial formulation it developed for the SBIR project

Product Outcome

- ◆ The NASA-derived microbial solution is part of a product line formulated for the remediation of wastewater and organic wastes
- ◆ The innovation is also applied for the cleanup of crude oil spills
- ◆ The technology was called on to mitigate the ecological impact of the 2010 oil spill in the Gulf of Mexico