NASA Signs First Major Contract For Private Biotech Development

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WASHINGTON -- Pressing its efforts to commercialize space technology, NASA will announce today its first major contract with the private sector to develop commercial and medical biotechnology products.

The five-year agreement gives StelSys LLC the rights to 13 patents for NASA's Bioreactor technology -- which the agency plans to use in the space station -- for use in researching infectious disease and developing a liver-assist device for patients who need transplant surgery.

StelSys would pay NASA a $100,000 licensing fee and a royalty of 5% of the company's profits, capped at $2 million.

NASA hopes to sign up more companies so that they can use space-station technology in a way that benefits both the companies and the space program, NASA administrator Daniel Goldin said.

"This represents a new way of thinking in government," he said.

"Right now, we're spending $1.3 billion to run our space station. But if we can get private companies to use it and benefit from it, hopefully those companies can help us to fund its operation, and we can concentrate our efforts on leaving Earth orbit."

The NASA Bioreactor patents will allow StelSys scientists to see cells in a way conventional research can't -- in three dimensions rather than two.

By spinning a cell in a fluid-filled medium, the reactor process creates a near-weightless environment, allowing the cell to grow and multiply more freely in three dimensions. Confined by gravity, the traditional petri-dish method of growing cells can produce only single-cell, pancake-like structures.

The added dimension lets scientists grow and study cells that more closely resemble the cells in the human body, said Kathie Olsen, chief NASA scientist.

StelSys is a joint venture of Fisk Ventures Inc., a Racine, Wis., venture-capital company, and In Vitro Technologies Inc., a Baltimore contract-research organization that serves drug companies.

"We've got what we would characterize as a high-risk but high-reward project in front of us," said Paul Silber, president and CEO of both StelSys and In Vitro.

"The technology is still in the early stages of the research process," he said, but the company hopes to discover "some exciting new opportunities."

Credit: Staff Reporter of The Wall Street Journal