



## **Space Adventures' Client, Anousheh Ansari, to Perform Research on the ISS for the European Space Agency**

Vienna, Va. – September 15, 2006 – Space Adventures, Ltd., the world's leading space experiences company, announced a scientific agreement between the European Space Agency (ESA) and Anousheh Ansari. During her eight-day stay onboard the International Space Station (ISS), Mrs. Ansari has agreed to conduct a series of experiments on behalf of ESA.

On Sept. 18, Mrs. Ansari is scheduled to launch onboard a Soyuz TMA spacecraft from the Baikonur Cosmodrome in Kazakhstan en route to the ISS. She will be joining the Expedition 14 crew which includes NASA astronaut Michael Lopez-Alegria and Russian cosmonaut Mikhail Tyurin.

"This ESA research program aims to study the response of the human body to the microgravity environment aboard the space station," said Maurizio Belingheri, directorate of Human Spaceflight, Microgravity and Exploration in the Human Exploration Promotion Division of ESA. "The experiments are designed with the objective of optimizing the conditions for human permanence in space and to cast light on common diseases affecting people on Earth."

"We, at Space Adventures, commend Anousheh for her commitment to exploration and her participation in these ESA experiments during her spaceflight," said Eric Anderson, president and CEO of Space Adventures. "Anousheh is a true space ambassador and is dedicated to using her experience to educate as many people as possible. Her continuation of Space Adventures' collaboration with ESA will help advance our understanding of life in space, as well as, serious health conditions here on Earth."

The first experiment, called Neocytolysis, has been designed to better understand the mechanisms behind anaemia. In space, the blood which is normally held in the body's extremities by gravity shifts and causes high red cell density in blood vessels. This induces a response, which aims at resetting the mass of red blood cells by means of their selective destruction, in turn causing temporary anaemia in astronauts upon their return to Earth. While considered a natural process for astronauts due to their specific environmental condition, this experiment should assist in determining the cause of anaemia as a result of other pathological conditions and will contribute to the development of solutions for this serious disease.

The second experiment aims to understand how changes in muscles influence lower back pain. In astronauts, this pain is probably due to the atrophication during weightlessness of a deep muscle corset which maintains posture on Earth. This leads to ligament strain, which may in turn cause lower back pain. Understanding this process will provide critical data to help better understand and thus treat this condition.

The Chromosome-2 experiment is designed to better understand the effects of space radiation on ISS crew members, specifically changes that may occur in white blood cells. The results of this study will enable scientists to assess the implications for human space inhabitancy and to optimize radiation shielding for future space exploration missions.

With the Sample experiment, Mrs. Ansari will assist in collecting more data to detect and record the different species of microbes that have made a home for themselves on the ISS. The study will reveal how microbial populations are affected by spaceflight, and show if and how their genetic mutation rate has been affected by the special conditions in orbit.

Space Adventures, the only company to have successfully launched private explorers to space, is headquartered in Vienna, Va. with offices in Cape Canaveral, Fla., Moscow and Tokyo. It offers a variety of programs such as the availability today for spaceflight missions to the International Space Station and around the moon, Zero-Gravity and jet flights, cosmonaut training, spaceflight qualification programs and reservations on future suborbital spacecrafts. The company's advisory board includes Apollo 11 moonwalker Buzz Aldrin, Shuttle astronauts Sam Durrance, Robert Gibson, Tom Jones, Byron Lichtenberg, Norm Thagard, Kathy Thornton, Pierre Thuot, Charles Walker, Skylab astronaut Owen Garriott and Russian cosmonaut Yuri Usachev. For more information, please visit [www.spaceadventures.com](http://www.spaceadventures.com).

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