Dr. Mamta Patel Nagaraja

Flight controller in the Mission Control Center
NASA (USA)

Space Exploration

Spaceflight requires technology and engineering solutions for successful robotic and human-based exploration. This seminar will discuss the International Space Station, the future Orion vehicle, and the Mars Science Laboratory called Curiosity. With contributions from around the world, space exploration is truly an international cooperative endeavor.

Biomedical Effects of Space Exploration

On Earth, our bodies have adapted to the force due to gravity, which keeps our cells, bones and muscles strong. When the effects of gravity are removed, the human body undergoes dramatic changes. This seminar will discuss these alterations, including bone loss, increased intracranial pressure, short term compromised immune system, and many others.

Salão Nobre do Instituto Superior Técnico

10,00 – 12,30 horas

5 de Abril de 2013

Mamta Patel Nagaraja

*

Dr. Mamta Patel Nagaraja currently works at NASA, managing the Agency-wide Women@NASA program, training astronauts, and working as a flight controller in the Mission Control Center.

Recently, Mamta received one of the 120 interview slots for the next astronaut candidate selection from an initial pool of over 6,000 applicants. In the community, Dr. Nagaraja serves on the board of directors for the Women in Aerospace organization and co-founded a trust fund for the Shastri School for the Deaf in Bangalore, India.She is also an avid health enthusiast currently training for the Alaska marathon and playing recreational lacrosse.

Mamta holds a Bachelor of Science in aerospace engineering from Texas A&M University, a Master of Science in mechanical engineering from the Georgia Institute of Technology, and a Doctor of Philosophy in biomedical engineering from Georgia Tech and Emory University.

Mamta Patel Nagaraja

(Longer Bio)

Dr. Mamta Patel Nagaraja currently works at NASA, managing the Agency-wide Women@NASA program, training astronauts, and working as a flight controller in the Mission Control Center. As part of her efforts, Dr. Nagaraja founded the NASA GIRLS and BOYS programs, which are virtual mentoring opportunities for middle school students. Dr. Nagaraja has also trained astronauts who flew aboard the U.S. Space Shuttle and fly aboard the International Space Station (ISS). Further, she has worked numerous spaceflight missions, supporting the astronauts from Mission Control for the communications system of the ISS. In her career, she has been awarded two of the Agency's highest recognitions, the NASA JSC Center Director's Award for mentoring and NASA's Exceptional Service Medal for significant contributions to the ISS program. Additionally, Dr. Nagaraja received one of the 120 interview slots for the 2013 astronaut candidate selection from an initial pool of over 6,000 applications.

In the community, Dr. Nagaraja is part of the National Science Foundation FabFems program, a young professional of the World Affairs Council, serves on the board of directors for Women in Aerospace, and plays recreational lacrosse. She performs speaking engagements through NASA's Speaker's Bureau and volunteers regularly for the D.C. metro community, and she is a co-founder and contributor to a trust fund for the *Shastri School for the Deaf and Dumb* of Bangalore, India. Dr. Nagaraja has completed an around-the-world trip, performing outreach in developing countries and hiking to the base camp of Mt. Everest. She is an avid health-enthusiast, running marathons and half marathons across the world, and she founded Team Asha Atlanta, a marathon training group that raises money for education programs in India.

Dr. Nagaraja holds a bachelor of science in aerospace engineering from Texas A&M University, a master of science in mechanical engineering from the Georgia Institute of Technology, and a doctor of philosophy in biomedical engineering from Georgia Tech and Emory University. She has previously published several scientific articles and a novel based on her doctoral dissertation called *Your Bones Under the Microscope*.

TÉCNICO LISBOA

American Corners Portugal

EMBASSY OF THE UNITED STATES OF AMERICA LISBON