

Dr. Matt Mountain is the Director of Space Telescope Science Institute (STScI) located on the Johns Hopkins University campus in Baltimore, MD. STScI, which operates under a contract of NASA, holds a staff of approximately 400 people. This is inclusive of 250 scientists and engineers who collectively run the science operations for the Hubble Space Telescope (HST) and its planned successor, the James Webb Space Telescope (JWST).

Unlike HST which is optical, ultraviolet and near-infrared, JWST observation will be mainly in the infrared. The potential science to be done with the 6.5 meter infrared telescope includes observing the motions of young planetary systems around other stars to imaging the first ever galaxies to form in the Universe. This telescope is due to launch in 2011 with the possibility to slip to 2013 due to cost overruns and instrumentation constraints. This, coupled with HST retiring sooner than expected, means a challenge for the Institute, however; as the former director of the Gemini Observatory, which operates two identical 8-meter telescopes in Hawaii and Chile, Dr. Mountain is no stranger to budgetary and instrumentation challenges. During his leadership at Gemini, he learned that tight budget constraints can be another way of stimulating creativity by partnering between science, engineering and project management.

Matt, who is a member of the JWST working group has been seriously functioning to find ways of preserving the telescope performance as much as possible in a cost-efficient manner. Simultaneously, Dr. Mountain understands NASA's reluctance to commit to a future servicing mission until there have been two safe shuttle flights. Both the current and previous NASA Administrators have stressed that the decision is not financial but a safety issue. Currently, the shuttle operates under new constraints involving inspection requirements, use of spacewalk time and other factors which may limit its utility as a repair platform for Hubble. If the shuttle plan to be flown in the spring of 2006 is successful, then at that time NASA could be prepared to execute a Hubble mission in late 2007.

JWST may pose more of a challenge being that it will be stationed approximately 1.5 million kilometers from Earth. This distance is too far for rescue missions. This means the finished telescope must have no flaws or deficiencies and its parts must be wear-resistant. Dr. Mountain is aware that the Institute cannot be still on its limitations. He quotes in his interview with Nature magazine in September 2006 when he first took this challenging position *"This is a very successful institution with very motivated staff, and I think they feel that their past record justifies their continued existence. That's an understandable motivation, but it's not sufficient. We're going to have to earn our future."*