

# Astronaut tipped to lead NASA science division

**John Grunsfeld, repairman for the Hubble Space Telescope, is set to become associate administrator for the science mission directorate.**

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John Grunsfeld, an astrophysicist and astronaut who fixed the Hubble Space Telescope, has been chosen to lead NASA's science mission directorate, according to several sources with knowledge of the selection.

Grunsfeld is currently deputy director of the Space Telescope Science Institute in Baltimore, Maryland, which operates Hubble. He would replace Ed Weiler, who resigned his post as NASA associate administrator in September.

"John is a very capable guy," says Weiler. "He knows both the human and robotic sides. He's a very solid citizen."

The two have known each other for decades. They first met in the mid-1970s when, as a teenager in Chicago, Illinois, Grunsfeld attended science workshops taught by Weiler at the Adler Planetarium. Grunsfeld went on to study physics at the Massachusetts Institute of Technology in Cambridge, before undertaking a PhD in high-energy astrophysics at the University of Chicago.

He became an astronaut in 1992, and ended up flying on the space shuttle five times. Three of those missions were to fix the Hubble telescope. This could have helped him to get the nomination — NASA administrator Charles Bolden is himself a former shuttle pilot, and has shown an affinity for fellow astronauts. "Clearly, he's Charlie's pick," says one person with knowledge of the selection. NASA spokesman Trent Perrotto says no appointment has yet been made official.

## Positive experience

Grunsfeld would seem to have the ideal background for the job of managing the US\$5.1-billion science budget at NASA. First, he is a scientist — one of the few astronomers to have both touched Hubble and used data from it. Grunsfeld also has knowledge of NASA bureaucracy, having worked in Washington DC advising the administrator as the agency's chief scientist from 2003 to 2004. In 2004, he was put in the awkward position of having to defend then-administrator Sean O'Keefe's decision to cancel Hubble's final servicing mission (which was later reinstated, and ended up going ahead in 2009).

Since leaving NASA in 2009, Grunsfeld has been practising his management skills, looking after the approximately 500 employees of the Space Telescope Science Institute. He even has experience with NASA's next flagship astronomy mission: the \$8-billion James Webb Space Telescope, which, after it launches at the end of the decade, will also be managed by the Baltimore institute. As a result, Grunsfeld has had to develop a relationship with some of Webb's defenders on Capitol Hill, among them Senator Barbara Mikulski (Democrat, Maryland). Just last week, as part of the Senate's powerful appropriations committee, Mikulski helped to pass legislation that steers \$530 million to Webb in 2012 alone.

But one scientist familiar with the pick says that NASA-funded scientists who work outside astronomy — in Earth science, planetary science and heliophysics — could question Grunsfeld's leadership. "His entire reputation is based on fixing space telescopes," says the scientist. "I think it will be a real tough slog for him."

Yet Weiler says that he himself faced similar prejudice when he began his first stint as leader of the agency's science division in 1998, after having been Hubble's chief scientist for many years. "Clearly this Hubble astronomer was going to do terrible things to planetary," he says sarcastically. Ultimately, Weiler feels that he did not neglect planetary science — in fact, he was one of the Mars programme's



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John Grunsfeld was one of the astronauts involved in fixing the Hubble Space Telescope.

biggest defenders. “I just made sure my decisions were based on peer review and competition. That’s what John will have to do,” he says.

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