

Are you on board?

The Beagle 2 Mars lander has had some unusual backers — among them British pop stars and artists. Declan Butler finds out how one researcher's publicity drive got the project off the ground.



Colin Pillinger (above) has boosted the profile of his Beagle 2 project by collaborating with figures such as artist Damien Hirst, whose dot painting (right) will calibrate the lander's camera.



For a man with a reputation as a political animal, Colin Pillinger's appearance might seem rather incongruous. The planetary scientist, based at the Open University in Milton Keynes, UK, speaks in a rural drawl and opts for a leather jacket and checked shirts rather than sharp suits. Scarecrow straggly hair and muttonchop whiskers complete a look that might be said to be more in keeping with his sideline in farming than with his role in publicizing a multi-million-pound space mission.

But Pillinger's image is deceptive. When the Mars Express mission, under the auspices of the European Space Agency (ESA), blasts off on 2 June, it will carry the Beagle 2 lander — a device whose existence justifies Pillinger's claim to be a "professor of PR". If it hadn't been for Pillinger's ability to generate publicity, and his belief in his work, ESA's mission could have been going to Mars without a landing craft.

The political manoeuvring behind Beagle 2 dates back to 1997, when ESA decided to develop a craft that would travel to Mars and study the planet from orbit. Like other ESA spacecraft, the agency planned to fund Mars Express and its launch, whereas member nations were to design and pay for the instruments it carried.

Pillinger, who was renowned for his studies of martian meteorites, wanted to include a lander that would search for evidence of past or present life by analysing rock, soil and atmospheric samples. The plan had the backing of ESA, but the Particle Physics and Astronomy Research Council (PPARC), the main UK funding body for such projects, gave the idea a cool reception. Officials say that Beagle 2's budget was initially poorly defined, and that the council's space funding was already committed elsewhere.

But Pillinger knew what buttons to press.

It was originally claimed that the mission would cost about £25 million (US\$41 million) — a snip for such an ambitious project, and that sponsorship and advertising would provide two-thirds of the cost. M&C Saatchi, a London-based advertising firm, was signed up to search for sponsors and even sell the name of the mission.

Media interest moved up a notch when Blur, a successful British pop band, agreed to compose a nine-note tune that the lander will beam back to Earth to signal its safe arrival. Damien Hirst, an artist famous for suspending animals in tanks of formaldehyde, provided a further publicity boost when he designed the painting that Beagle 2 will use to calibrate its onboard camera.

The strategy paid off. In August 1999, the UK government agreed to plough £5 million into Beagle 2. About 20 companies, including the McLaren Formula One team, also offered to help. And after being impressed by Pillinger's formal science proposal, the PPARC pitched in £5 million.

The resulting lander has attracted much acclaim. At 65 kilograms and 0.95 metres across, the ratio of instruments to mass is unprecedented, says Steven Squyres, an astronomer at Cornell University in Ithaca, New York, and part of the team behind NASA's Mars rovers (see opposite page). "To put together a package that capable with

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the technical and financial challenges they faced is just incredible," he adds.

But Beagle 2's financing did not turn out quite as planned. Industrial companies gave help in kind, but the larger aerospace firms worked for free only at the start of the project. M&C Saatchi has ended its involvement following the departure of Matthew Patten, head of the company's sponsorship arm and the project's internal champion.

The Beagle 2 team decline to discuss the costs involved, saying that some sponsors wanted to remain anonymous. But *Nature* has learned that costs for the mission may stand at around £40 million — about £15 million above original estimates. The shortfall has been made up by the government and ESA, although two-thirds of the £17 million contributed by ESA must be repaid by the British government.

Pillinger refused to discuss this and other matters with *Nature*, citing a disagreement over some correspondence from him that was published in the magazine in December 1996. Some of those who have worked with him say that he can be cantankerous. According to one astronomer, he can be "astoundingly tactless", and is liable to call people who he thinks are wrong "bloody fools".

Yet space researchers are ultimately full of admiration for Pillinger, and for the way in which he has overcome a lack of initial interest in his Mars project. "Something like Beagle 2 doesn't happen without someone with the vision and drive to force it through," says Squyres. And Pillinger could yet find that the budget is no longer an issue. If the lander finds evidence of life on Mars, sponsorship deals should be much easier to strike in the future.

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