

Planetary Society and a veteran observer of JPL, also rejects the idea that NASA's Mars programme is underfunded, or that more money will necessarily fix the problem. "You can do things wrong at any price," he says.

But the programme is clearly showing signs of strain. Weiler's office quietly announced its decision last week to postpone indefinitely a planned Mars airplane demonstration flight in 2003, even though industry teams were invited to bid for the project a few weeks ago.

The next landing will be more difficult than the 1997 Pathfinder landing, yet is being done at lower cost. The Mars Polar Lander will use legs rather than airbags to touch down on the planet's surface, and a large boulder in the wrong place could spell disaster.

Recent high-resolution photos of the targeted landing area show that a small fraction of the site appears rougher than expected. Science planners were not worried enough to switch to a back-up site last month but, as with any planetary landing, they will be crossing their fingers at the critical moment.

The Polar Lander will also use a new kind of descent engine with pulsed rocket jets, which raised concern among the members of the accident review board. "This type of powered descent maneuver has always been considered to be very difficult and stressing for a planetary exploration soft landing," they wrote.

But planetary scientist David Paige of the University of California, Los Angeles, a principal investigator for the Lander mission, says he is confident that the JPL team has looked carefully at potential problems. **Tony Reichhardt**

Professors use web to catch students who plagiarize ...

Berkeley

A computer-based service to detect student plagiarism is being used by a growing number of university teachers across the United States, and may soon be tested in Britain. The service was developed by a doctoral candidate at the University of California, Berkeley.

Called Plagiarism.org, the service was launched last spring. It allows academics, journal editors — and even students — to rapidly compare articles against thousands of papers available through the Internet. The Internet has itself made plagiarism far easier through simple cuts and pastes.

One German researcher says he has already found the programme so effective that he plans to scrutinize all manuscripts submitted to his recently launched publication, the *Journal of Medical Internet Research* (see below).

Plagiarism.org was set up by neurophysiology doctoral student John Barrie. According to Doug Zuidema, head of the Office of Student Conduct at the University of California at Berkeley, the university is negotiating a contract with the company.

"We hope to negotiate an agreement for all faculty and students on the campus to have access to the service," says Zuidema. Plagiarism.org is already negotiating for a pilot study to be carried out at selected British universities through the UK Higher



Education Funding Council.

The program originated from Barrie's experience in grading neurobiology papers, when he became suspicious that students were plagiarizing material. In some cases they were taking material from online companies that sell articles over the Internet via websites such as Schoolsucks.com and Cheater.com.

After working as a teaching assistant with psychopharmacologist David Presti, Barrie created the service and enlisted the help of several Berkeley graduates as partners. Last spring, he used the system to check the papers of about 320 juniors and seniors in Presti's upper-division neurobiology class.

When a paper or article is run through the Plagiarism.org vetting system, a printout is generated on which apparently plagiarized material is highlighted. This is done by linking apparently cribbed sections to their sources, typically published articles.

At the beginning of the semester, Presti had told the students that their papers would be checked for plagiarism. Afterwards, Barrie examined the papers and found that 15 per cent of the students had plagiarized material.

One student author from Presti's class, for instance, appeared to have based virtually his whole article on sections of published work lifted from six web addresses.

"Clearly this is a serious problem; we have to do more analysis of it," says Paul Licht, dean of Berkeley's College of Biological Sciences. "I'm not sure whether I'm more discouraged that they committed plagiarism, or that they continued to do so after they were warned."

Presti and Berkeley officials are reviewing possible action against the students. They could be given a failing grade for either the paper or the class, or, more seriously, be charged with violating the code of student conduct.

Rex Dalton

... and author gets similar paper retracted

San Diego

Gunterh Eysenbach of the department of clinical social medicine at the University of Heidelberg, and editor of the *Journal of Medical Internet Research*, plans to publish a report on the uncovering of apparent plagiarism by three physicians from the Royal Infirmary in Edinburgh, Scotland.

After their article, entitled 'The quality of surgical information on the Internet', was published in the August issue of the *Journal of the Royal College of Surgeons of Edinburgh*, the authors sent out e-mail alerts to those interested in online medicine.

Eysenbach saw the alert, read the paper and recognized phrases in it as appearing to come from an

article that he had written for the *British Medical Journal* in October 1998. "I am not a native English speaker, so it takes hard work to write good English sentences," says Eysenbach. "I recognized the anguish of my work."

Eysenbach also discovered that other material from his journal's website had been used without attribution in the article. Aware of Plagiarism.org (see above), he registered with the US service's website and submitted the article by the Edinburgh physicians, without disclosing what he already knew.

According to Eysenbach, the analysis detected the apparent plagiarism, as well as the improper use of other published material. "About 50 per cent of the

article is affected," he claims, adding that the senior author — Christopher Oliver, a trauma surgeon at the Royal Infirmary in Edinburgh — initially offered several explanations, from denial to forgetting references.

Ultimately, he says, Oliver agreed to retract the article and apologize. Oliver says that "it was an accident; there was no intent to plagiarize". He added: "I have better things to do than plagiarize his work. It was an omission on my part not to give references."

Although he acknowledges his retraction and apology, Oliver says that "If you ran [this system] on every article [in the medical literature] that comes out, you would find this happening all over the place." **R.D.**