

I would like to receive funding to continue my PhD course in Planetary Science at the University of Arizona.

Planetary science is the study of this and other solar systems. Current hot topics that have attracted public attention include the search for ice on the cold, permanently shadowed poles of the Moon, analysis of pictures of the surface of Mars, and study of comet Hale-Bopp

Not one UK university has a planetary science department. Prestigious US universities like Caltech and MIT have excellent planetary science departments but in March 1997 a Visiting Academic Program Review Committee began its report on the University of Arizona's planetary science department by stating "The Visiting Committee believe that this department constitutes the best and most distinguished research and teaching department in this discipline in the world."

The department's involvement in spacecraft missions is prodigious. It includes design of the camera on Mars Pathfinder whose pictures entranced the world in the summer of 1998, design of an instrument to study Earth's atmosphere that flew on the Space Shuttle with John Glenn in the autumn of 1998 and construction of an instrument currently in orbit around Jupiter onboard the Galileo spacecraft.

I am currently in my first year of the PhD program here. My funding this year comes from department sources. However the department is not able to support me indefinitely. Most of my fellow students are supported by NASA or National Science Foundation fellowships. Funds from these US government agencies are not available to me as a UK citizen.

After completing my PhD I expect to return to a postdoctoral position in the UK and perform research in planetary science. Planetary science is an expanding field and I expect the individual scientists currently doing planetary science research in the UK to have spawned research groups by the time I complete my PhD.

Scientists from the US and the UK have a long tradition of collaborative research. Planetary science is a field in which the UK is currently underrepresented. In the very long term I hope to increase the UK's scientific clout in this field and offer UK students the chance to study this fascinating subject at both undergraduate and graduate level in their own country, where the funding problems I am experiencing will be relieved.

On a practical note, as I am currently studying in the US it will be difficult for me to attend interviews in late January 1998. If video-conferencing is possible then I believe that the department has suitable facilities for this. I will be in the UK during late December 1998 and early January 1999. Please email me if you wish to discuss this further.