

Manned Mars Expedition

It seems incredible that scientists are debating the relative merits of a manned expedition to Mars (Letters, 2 Oct., p. 10). The proposed venture recognizes a grand purpose of science in life and would provide inspiration and motivation in the education of generations to come.

The search for knowledge is the noblest endeavor of mankind. The great strength of mind that has fueled men in the enterprise of science must never be diminished by any special definition of its goals. There is only one science and that is basic science. This means we must look at what is there to see and what the universe is about—piloting in uncharted waters, exploring, and learning. We have an obligation to communicate effectively these, the best ambitions of civilization, to a public suspicious of the many expensive and esoteric research efforts that they have already underwritten. We can do so by undertaking the visible and magnificent challenge to reach and explore Mars.

This is a goal worthy of an ambitious society, possessed of an audacious need to know. The products of this effort will be an addition to the sum of what is known in our civilization, coupled with a renewed enthusiasm for the learning process. The knowledge we gain will challenge us to make the most of our future by tempting us with visions of that more appealing time. It is the enthusiasm we generate in our explorations that will anticipate new technology and new hope, direct our thinking, and shape our ability to meet new challenges.

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Horowitz is timely in calling our attention to revival of the old billion-dollar proposal for quarantining a Martian sample in Earth orbit. A corollary to this is suicide by astronaut-scientists who examine the sample, lest they return the Green Plague to Earth in their contaminated bodies.

The idea that Martian bugs are dangerous is based on faith rather than on science. Although no life on Mars was detected by the Viking mission, the believers in the Martian "Andromeda Strain" still insist on quarantine of returned samples. The absence of detectable life on Mars is regarded by the devout as a test of faith in their belief, rather

than as scientific disproof of the existence of danger.

How blest are they who have not seen,
But yet whose faith has constant been,
For they eternal life shall win,
Alleluia!

(Doubting) THOMAS H. JUKES
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Sports Medicine

I would like to comment on the article "Arthritis institute tackles sports" by William Booth (News & Comment, 21 Aug., p. 846). The term "sports medicine" is not restricted to the world of the orthopedic surgeon, as might be inferred from Booth's article. It encompasses many scientific and clinical specialties concerned with problems associated with sports and exercise. These include biomechanics, physiology, and molecular biology, as well as psychology, general practice, orthopedic surgery, immunology, endocrinology, hematology, cardiology, epidemiology, and many other areas of basic and clinical science. The caliber of work of these specialists can only be assessed by comparing it with that of peers working in the nonexercise and nonsports areas.

As president of the American College of Sports Medicine (ACSM), I note that many of our members are nationally recognized as good scientists. They serve on or chair peer review study sections of the National Institutes of Health (NIH), direct NIH program projects and training grants, and have multiple R01 and National Science Foundation research grants; they also receive established investigator or research career development awards.

In the clinical arena, most practitioners, as in other branches of medicine, are not trained in research. However, with the ACSM's continuing education programs and the dissemination of the latest scientific findings, the "on the field" approach to treatment of the injured footballer or of the runner suffering heat stroke is as appropriate as the treatment given by an internist to an asthmatic or by a cardiologist ministering to a heart-attack victim.

Such practices by an attending physician must be based on a valid understanding of the problem. For example, the catastrophic injury study now being carried out at the University of North Carolina dates back to 1931. This center has an affiliation with the sports medicine section of the American Association of Neurological Surgeons. The findings and recommendations of the study

in 1975 led to rule changes in football that have since reduced the incidence of quadriplegia by two-thirds. Currently, a \$1-million, 4-year study of the risks of cumulative head injury in amateur boxers is being funded by the U.S. Olympic Foundation and is being carried out by a joint team of epidemiologists, neurologists, and neuropsychologists at the Johns Hopkins School of Medicine. The epidemiological observations of Jeremy Morris in England helped draw attention to the link between inactivity and coronary heart disease. As a corollary, the use of exercise programs as part of the prevention and treatment of coronary heart disease is based on the findings of Paffenbarger (1) and of Kannel and his colleagues (2). Some of these areas of research appear to be discounted in Booth's article as not being worthy of NIH support because the term "sports medicine" does not evoke an image of scientific investigation similar to that implied by the term "basic science."

It is important to correct any misconception of what constitutes "sports medicine." The ACSM represents 42 professions and, within these professions, exercise and sports medicine have received and continue to receive rigorous scientific scrutiny.

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REFERENCES

1. R. S. Paffenbarger and W. E. Hales, *N. Engl. J. Med.* **292**, 545 (1975).
2. W. B. Kannel, *Can. Med. Assoc. J.* **96**, 811 (1967).

Correction: AIDS Commission

A recent article by William Booth on the President's AIDS commission (News & Comment, 16 Oct., p. 262) incorrectly states that commission member Cory SerVaas, publisher of the *Saturday Evening Post*, drives her AIDS Mobile around the country. SerVaas does not drive the traveling van that offers free AIDS testing. Rather, she often flies to meet it as it travels around the country, stopping at shopping malls and churches by prearrangement with local civic and religious groups.

SerVaas denies saying that homosexuals are "deviants." "We have helped homosexuals for many years," she says, pointing out that although her group primarily tests people who have a low risk of being infected, such as recipients of blood transfusions and women who may become pregnant, members of high-risk groups such as homosexuals and drug addicts are not excluded.