laboratory experiments would remain in effect.

Alan Goldhammer, of the Industrial Biotechnology Association, says RAC's decision will greatly facilitate the production of recombinant pharmaceuticals such as human insulin and human growth hormone. To date, he notes, manufacturers have voluntarily adhered to NIH's containment standards for production of these drugs.

For NIH-funded researchers, which currently are required to seek RAC approval for field testing genetically engineered organisms, the committee has clarified its definition of "deliberate release into the environment." It defines it "as the planned introduction of recombinant DNA-containing microorganisms, plants, or animals." Such releases would be exempt from NIH notification requirements if conducted under "accepted scientific practices in which there is adequate evidence of biological and/or physical control." Standards defining what constitutes "adequate evidence" are to be set out in a series of appendices for plants, animals, microorganisms, and vaccines.

This recommendation was criticized as premature by RAC member Frances Sharples because only the appendix for plants now exists. Said Sharples, "We are being asked to approve changes in the guidelines which reference documents that don't exist. I think that is really questionable. . . . "

A majority of the board, though, sided with Gerard J. McGarrity, a consultant to RAC. "From a practical standpoint," McGarrity said, "it is much better to have the superstructure and the mechanism approved." He noted that RAC likely will have three or more months to work on the appendices before Wyngaarden acts on RAC's recommendations. ■ **MARK CRAWFORD**

. . . German Moratorium Urged

A German parliamentary commission has recommended a 5-year moratorium on all experiments involving the environmental release of genetically engineered viruses and microorganisms, to allow time for further research on the potential ecological side effects.

The commission has also suggested a ban on all experiments on human embryos that are still capable of achieving full maturity, as well as on the genetic screening of newborn babies for diseases that cannot be treated, although it welcomes prenatal screening for diseases where medical intervention could be beneficial.

The proposals have been made to the government following a 2-year study of the potential social consequences of genetic engineering by a committee made up of representatives of each of West Germany's four main political parties, as well prominent members of the scientific, religious, and industrial communities.

The commission's broad conclusion is that, in general, the potential benefits of genetic engineering are likely to outweigh the social and environmental risks. And it gives its support to a wide range of applications, suggesting that in agriculture, for example, these could lead to safer and more efficient food production.

Its broad endorsement was rejected by one member of the commission, the representative of Germany's environmentalist party, the Greens. This opposition had been widely expected following the party's decision last year to oppose all industrial applications of such techniques, and to demand stringent controls on their use in other areas, such as antenatal surgery (*Science*, 4 April 1986, p. 13).

However, the commission's recommendations would require the government to strengthen its current regulations. For example, it suggests that the voluntary guidelines covering research in the private sector should be made binding.

They would also require the government to take a tougher line on agricultural experiments. Revised research guidelines issued last summer place a general ban on experiments that involve the environmental release of microorganisms, but add that exemptions to this ban can be granted by the federal safety committee.

The 5-year moratorium on all such experiments has been recommended "because we do not currently know enough" says Klaus Schmölling, the executive director of the commission. "During the delay there would be the possibility of doing a lot of research, and [then] we will be in a better position to decide what to do next."

It is expected to be several months before the government publishes its response to the commission's report. It is already caught between two strong and conflicting pressures. On the one hand, several research groups and their industrial sponsors are arguing that West Germany is well placed because of its strong chemical industry to exploit the agricultural applications of genetic engineering. On the other, the strong showing of the Greens in last month's federal elections, where they increased their representation in the German Parliament by more than 50%, suggests that public sensitivity toward issues such as the environmental release of genetically engineered organisms is far higher in West Germany than elsewhere in Europe. ■

DAVID DICKSON

Briefing:

Minnesota Gets Institute for Theoretical Physics

A Minneapolis lawyer and real estate developer, who has been interested in physics ever since he read about it in the encyclopedia as a boy, has given the University of Minnesota $1 million to create an institute for theoretical physics. William I. Fine has guaranteed that once the institute is founded he will provide at least another $1 million. The university intends to match his gift, and expects additional support from grants and contracts. A search committee is looking for someone to become the director of what will be one of the few institutes in the country devoted to theoretical research in physics. Two others are at the University of California at Santa Barbara and at Princeton University. ■ **B.J.C.**

Comings and Goings

Lawrence E. Shulman, whose research has focused on rheumatic diseases such as lupus and scleroderma, has been named first director of the new National Institute of Arthritis and Musculoskeletal and Skin Diseases at the National Institutes of Health. The arthritis institute was established after a long battle within the Administration and on Capitol Hill over the virtues of adding a new institute at NIH. Although NIH officials argued that a new institute would create needless administrative expense, proponents of a separate arthritis institute persuaded Congress that the field is ripe for a concerted research attack on this disease that afflicts millions of citizens. Shulman, who was head of arthritis research at Johns Hopkins before joining NIH in 1976, has been acting director of the new institute since it officially came into being last April. ■ **B.J.C.**