Letters

Federal Project Grants

As federal project grants do a disservice to society and to science, regardless of which Greek is being fed, Szent-Györgyi's argument (Letters, 2 June, p. 966) that such grants favor the "Apollonian" over the "Dionysian" is irrelevant.

The project grant business, thoughtlessly and amateurishly contrived by Congress, has severely damaged education and the institutions which we expect to support teaching, scholarship, and true research.

If we must accept funds from the inept hand of the federal government, why not profit from our 110 years of experience with the Morrill Act (*1*)? Eliminate the counterproductive proposal game and the dependence on civil servants for scientific decisions and channel the funds through the institution, which is far better able to appreciate the established investigators and to identify the promising young ones. Then, perhaps, faculties in this country can get back to scholarship, education, and true research.

CHARLES M. BLAIR
3625 Coronado Drive,
Fullerton, California 92632

Notes

1. Officially, the Land Grant Act, passed by Congress in 1862. It provided for the foundation and maintenance of colleges where a "leading objective" included the teaching of agricultural and mechanical arts. The Act appropriated land and provided annual cash grants to the institutions for these purposes.

The Hue Massacre

Signer and Galston (Letters, 13 Oct., p. 114) cast doubt on Le van Than's ascription of guilt to the Communists for the massacre in Hue during their occupancy of that city from 30 January to 25 February 1968. Douglas Pike was in the city at or a little before the time of the Communist take-over and returned for a careful follow-up in November 1969. His findings, published in monograph form (*1*), establish beyond the shadow of a doubt that roughly 5000 citizens were executed by the Communists as an essential part of their strategy of terror. This is exclusive of 2600 civilian casualties attributed to military action. I was in Hue myself when the identifiable remains of 428 persons, 75 percent of them civilians, were found in Da Mai Creek 10 miles south of Hue in a wild, unpopulated, virtually inaccessible area. It is ridiculous to suppose that those were the victims of U.S. ordnance. Helicopter hearses spent 2 days blasting a hole in the double canopy cover to clear an area in which they could land.

ELLISTON FARRELL
296 Saint Joseph Avenue,
Long Beach, California 90803

Reference

1. D. Pike, *The Viet-Cong Strategy of Terror* (privately printed, Saigon, Vietnam, 1970).

Marvin Gardens Revisited

A lengthy paper has recently appeared in which the author reports that Marvin Gardens maps in Margate, New Jersey (*1*). The author correctly states that Marvin Gardens is unique among the Monopoly loci in that it maps exterior to Atlantic City. We wish to point out, however, that 7 years ago we published in *Science* (Letters, 9 July 1965, p. 137) the definitive paper on this subject, in which we reviewed the Marvin Gardens problem (*2*), outlined the basis of our hypothesis that Marvin Gardens was located near the distal end of the Ventnor Avenue strand (which protrudes exterior to Atlantic City into Margate), and confirmed that in fact Marvin Gardens mapped at this Margate locus. It is not our intent to imply that the author of the recent report intended to usurp unfairly credit for this important finding. We merely wish to make clear where proper credit should be assigned for elucidation of the Marvin Gardens singularity, and to reaffirm the necessity of making a careful search of the literature before beginning experimental work, especially in areas where funding is limited (*3*).

ALBEY M. REINER
Department of Microbiology,
University of Massachusetts,
Amherst 01002

EDMUND BECKER
Searle Medidata Inc.,
Waltham, Massachusetts 02154

References and Notes

1. J. McPhee, "The search for Marvin Gardens," *New Yorker* **48**, 45 (9 September 1972).
2. With the exception of Marvin Gardens, each of the 20 Monopoly loci, comprising 2 doublet and 6 triplet codons in a circular linkage map, previously had been mapped in Atlantic City.
3. Our work was supported from funds obtained by periodically passing GO.

Ideal Setting

I get rather tired of the "scientific" reports on who is more inferior—children of black fathers and white mothers or of black mothers and white fathers. Why doesn't some really scientific observer come down to the English-speaking West Indies and investigate the results of interracial marriages where there is no social stigma. I am sure the social sciences department of the University of the West Indies would be glad to assist, the climate is wonderful, and the Yankee dollar goes a long way.

You might be surprised at the results.

LOUIS E. FAY
Department of Physics,
University of the West Indies,
St. Augustine, Trinidad, West Indies

High Voltage Accelerators

The report "High Voltage Engineering: Accelerating away from science" by William D. Metz (News and Comment, 14 July, p. 151) contains two quotes that give a misleading impression of my opinion of the High Voltage Engineering Corporation (HVEC), in which the Chalk River Nuclear Laboratories has demonstrated its faith on several important occasions.

At the present time we are in the midst of installing an HVEC voltage-upgrading kit with operation guaran-

teed up to 13 million volts and a tube voltage warranty to 15 million volts. This is the first such kit ever produced and sold by HVEC. The model MP (Emperor) tandem accelerator is rated at 10 million volts, and no MP has ever operated substantially above this value except HEVC's own machine in brief tests prior to their shipping the kit to us early in January 1972. We are therefore in unknown territory and, not unexpectedly, are encountering difficulties. In solving our problems we have had, and I am certain will continue to have, complete, friendly, and helpful cooperation from HVEC.

The Chalk River Nuclear Laboratories have always maintained a close relationship with HVEC, which began when Chalk River funded HVEC for a design study, and subsequently the construction, of the first tandem. The success of this venture (the EN tandem) led to the purchase by Chalk River of one of the first MP tandems, and recently to our decision to be the first to upgrade an MP to 15 million volts. In this nearly half-million-dollar upgrading program, by far the largest and most important item was the purchase of new stainless steel accelerating tubes from HVEC. The kit was accepted from HVEC on 1 September 1972 and has been operating very satisfactorily for 2 months at voltages over 13 million. We expect to be able to operate these tubes eventually at 15 million volts. Our recent acquisition of the new high gradient tubes can only be interpreted as a substantial vote of confidence in the capabilities of the High Voltage Engineering Corporation.

J. C. D. MILTON
Nuclear Physics Branch,
Chalk River Nuclear Laboratories,
Chalk River, Ontario, Canada

I read with interest the report on the High Voltage Engineering Corporation. My quoted statement that we "have had more than our fair share of little annoyances with detailed designs" is correct, but incomplete. An EN accelerator manufactured for us by HVEC in 1959, guaranteed to 5 million volts, ran reliably for 10 years at up to 6 million volts and was only shut down so that it could be replaced by a larger model (the Super FN), guaranteed to 9 million volts on terminal.

This accelerator was installed 2 years ago and is basically a sound machine; it has been tested at 10 million volts and is run regularly to 9.5 million volts for research. We have had trouble with many detailed design problems, but the Super FN is, to some extent, one of a new generation of accelerators, and some problems were to be expected. These problems have been solved as they have occurred, and HVEC has noted the changes we have made for consideration in their future installations. The accelerator has become increasingly reliable and, before a recent tank opening to replace a belt, which had run for almost 10,000 hours, had run for several months without any need to open the pressure tank.

With a new generation of machines that run at considerably increased voltage gradients, the possibilities for testing in the plant are limited. HVEC has given us all the help we could reasonably expect in correcting faults, and the Super FN accelerator is now settling down to the reliability we had learned to expect from the previous machine.

K. R. CHAPMAN
Department of Physics, Florida
State University, Tallahassee 32306