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LETTERS

Agricultural Research at Berkeley

Marcia Barinaga's News & Comment article of 11 March, "A bold new program at Berkeley runs Into trouble" (p. 1367), raises appropriate questions about the future directions of research at both the University of California and the nation's agricultural experiment stations. Unfortunately, her treatment of the issue is strongly biased.

By parading a series of "red herrings" concerning my proposal to realign the California Agricultural Experiment Station, Barinaga diverts attention from the issue at hand—debilitating reductions in state budget support and disproportionally large losses of faculty and staff in agricultural production departments on the campuses at Berkeley, Davis, and Riverside during the past 4 years.

Since 1990–1991, state support for the systemwide experiment station has been reduced by $15 million—about 16%—as a result of California's fiscal crisis. Three early retirement incentive programs implemented to accommodate these budget cuts have contributed heavily to a total loss of 74 full-time researchers—about 11%—in the experiment station. An additional round of retirements will occur in the forthcoming academic year. Nearly 30% of the systemwide losses in experiment station faculty to date have taken place in two departments—entomology and plant pathology; nearly 45% of the retirements projected for 1994–1995 at the Berkeley branch of the experiment station are expected to occur in the same two departments. At Davis, substantial losses also have been incurred in departments such as agronomy and range science, animal and avian science, vegetable crops, and pomology, with more to come in 1994–1995. These losses jeopardize the capacity of the experiment station to maintain excellence in its mission-oriented, agriculturally focused research programs. My proposal addresses the issue by consolidating agriculturally focused research on two campuses—Davis and Riverside—allowing Berkeley to focus its remaining resources on fields in which it has a comparative advantage, such as natural resources.

The dispute arises from the desire of the Berkeley campus to retain agriculturally focused resources formerly deployed in departments such as entomology and plant pathology and, in effect, redirect their use to self-proclaimed "bold new programs" involving ecology and environmental sciences. Under circumstances of less severe budget restrictions, such redirection of agricultural experiment station funds might be justified if a significant relationship to agriculture could be demonstrated. However, that is not the reality of today.

The experiment station budget has been substantially downsized with little prospect for recovery. We can no longer afford three departments of entomology and plant pathology and three programs in soil science. Nor can we responsibly concur in redirection of agriculturally focused resources at Berkeley when such research programs are in jeopardy in the systemwide experiment station as a whole. Experiment station resources are not fungible for use in support of university research in general or in the abstract, but are for specific, legislatively mandated, mission-oriented research purposes related to agriculture. Underlying the struggle at Berkeley is the desire of some faculty and administrators to redirect experiment station resources to self-defined disciplinary research that has no demonstrable relevance to agriculture.

Finally, I must object to Barinaga's use of pejorative quotations and innuendo. A representative sample of viewpoints beyond the Berkeley campus would have resulted in a more objective characterization of the issues.

Kenneth R. Farrell
Vice-President–Agriculture and Natural Resources, Office of the President, University of California, Oakland, CA 94612–3560, USA

Barinaga's article presents a limited view of the realignment of Agricultural Experiment Station (AES) resources in the University of California as proposed by Vice President Kenneth Farrell. The viewpoint expressed is one that is held by some faculty who seem interested in "circling the wagons" to protect resources at all costs, independent of programmatic needs.

The reality is that the University of California and the AES have experienced unprecedented budgetary cuts in the past 4 years. This budgetary climate has required that we rethink business as usual.

Vice President Farrell has proposed that the Division of Agricultural and Natural Resources (DANR) must consolidate and reduce program duplication. This movement will require a realignment of AES resources. Each of the three campuses must scrutinize its relationship to the total mission of DANR in the context of its academ-

ic planning and priorities. These resources should not be treated as an entitlement. There needs to be more discussion regarding the challenges we face in evaluating this proposal; some of the basic issues about how this systemwide program must change to meet these challenges. None of the three campuses involved can assume that past history will dictate the use of these resources. In reality we must be prepared to develop new directions to meet the challenges within the university and to continue to meet our mission-oriented responsibilities in agricultural and environmental sciences for the state of California.

Barbara O. Schneeman
Dean, College of Agriculture and Environmental Sciences, University of California, Davis, CA 95616–8571, USA

I, and other colleagues, were disappointed by the one-sided article about the reorganization of the College of Natural Resources (CNR) at the University of California (UC), Berkeley. Vice President for Agriculture and Natural Resources Kenneth Farrell heads the three Agricultural Experiment Stations (AES) divisions in the UC system, but the funds are controlled by the UC Office of the President. The CNR appointments (full-time employees) vary, but are roughly 75% for AES research and 25% for instruction. Unfortunately, some UC Berkeley administrators and AES faculty appear to have forgotten this ratio and to have helped erode the AES research mission.

The article implies that dissenters were tools of agribusiness and that Farrell was opposed to the new ecosystems-environmental thrust, but it is safer to say that he was ignored by UC Berkeley, which is seeking to appropriate resources he controls for legally mandated AES responsibilities and to reallocate them for the development of biotechnology at Berkeley. Although biotechnology has made tremendous scientific breakthroughs and changes are needed in the AES, ravaging CNR for the "promise" of patent revenues will have important future costs. I can only hope that this new direction does not make the university a tool of the biotechnology industry and that the resolutions of important environmental issues are not subverted for the sake of biotech profits.

Last, the method of reorganization was anathema to Berkeley traditions of faculty self-governance; all authority has been centralizing in the CNR dean's office, and a top-down administration has been imposed.

Andrew Paul Gutierrez
Department of Environmental Science, Policy and Management, University of California, Berkeley, CA 94720, USA

I would like to comment on Barinaga's article "A bold new program at Berkeley runs into trouble." I am confident that an accurate analysis of the budgets of most land-grant universities would show that a substantial amount of funding has been refocused into high-profile–high-tech programs and away from traditional production-related agricultural research. However, this redistribution of funds has, in general, remained cloaked in the mantle of traditional agriculture (for example, filling a plant breeding position with a basic plant molecular biologist who works with *Arabadopsis*), so that the fiefdoms of the U.S. Department of Agriculture (USDA) and experiment station administrators are not disrupted. It appears that the Berkeley faculty are being punished for their direct frontal assault on the policy prerogatives of the old boy network that still controls the distribution of most USDA research funds.

Alan H. Goldstein
California State University, Los Angeles, CA 90032, USA

Response: Farrell's characterization of my article is far from the mark. Since he doesn't say what he thinks my "bias" is, I can't respond specifically, but in fact my article was not written out of any preconception about the situation at Berkeley. On the contrary, it was based on more than two dozen interviews—not only with Berkeley faculty, as Farrell seems to imply—but with faculty and administrators at UC Davis and other top land-grant colleges around the country, with members of an outside committee that reviewed Berkeley's program, and with the director of the Board on Agriculture at the National Research Council in Washington, D.C. The views of that large sample are accurately and fairly represented in the story. Indeed, one piece of evidence that my article was not biased is the fact that the point of view Farrell expresses in his letter was represented, both in his words and in those of a Berkeley professor, in the article.—***Marcia Barinaga***

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Blood Type and the Risk of Gastric Disease

In their 17 December report (p. 1892), T. Borén *et al.* (*1*) present compelling evidence that *Helicobacter pylori* did not bind to the Lewis^b (Le^b) blood group antigen in the presence of blood group A determinant, which suggests that individuals with blood type O may have increased *H. pylori* receptors, making them more susceptible to