

TO: Dr. Shirley Ezell  
Associate Vice President for Academic Affairs

FROM: Tenured Faculty of Biochemical and Biophysical Sciences

DATE: June 11, 1993

RE: Proposed Merger: Departments of Biology and Biochemical and Biophysical Sciences

A request to merge the two diverse departments of Biology and of Biochemical and Biophysical Sciences has been submitted to your office. Consequently, we now respond to the June 8 memorandum of Dean John Bear. The Department of Biochemical and Biophysical Sciences is strongly opposed to the merger and is extremely disturbed that one outstanding department of the University is being destroyed without any regard for the consequences.

Usually when any major restructuring of a university is undertaken, formulation of a set of clearly defined aims and goals is the first step. It is generally not a principle of sound management to first propose a new organization and then later to assess whether anything useful might result. Despite repeated requests it has not been made clear to the faculty in either department what the long term goals of any merger truly are. No significant faculty consultation has occurred as to the wisdom, benefits or desirability of such a re-organization. Furthermore, when a change in departmental structure of this magnitude is proposed, it is common practice at academic institutions for an advisory committee from outside the university to be asked to furnish an objective evaluation of the benefits and drawbacks of such a move. No such evaluation has taken place.

In Dean Bear's proposal, two stated justifications for selecting a single department rather than a school are: (1) it will be simpler and (2) most of the combined faculty favor a single Department.

Since when has expediency been the criterion for making a crucial decision. This merger will have a long term impact on the careers of 30 faculty, on the education of thousands of undergraduate and graduate students, and on research programs that generate over \$2 million annually in extramural funding. These units are the focal point of the university's interaction with the Texas Medical Center. This merger will send the message that life sciences is of

shrinking importance at UH to our colleagues at the Medical Center and also to potential donors and foundations with an interest in the life sciences.

It also is a misconception that the majority of combined faculty favor a single department. The majority of faculty in both departments favor having neither a single department nor a school. This choice, however, was not an option in any polling. The poll recently conducted by John Butler did not ask whether the faculty were in favor of a merger, rather it asked which name for the merged unit would the faculty be in favor of. The results of this somewhat disingenuous (and as the questionnaire stated "non-binding") poll probably did show support for a single department. However the Biochemistry Department is virtually unanimously opposed to this structure. The results of the poll therefore merely reflect the size discrepancies between the departments. This is akin to stating that in a referendum of both Romans and Christians the population was overwhelmingly in favor of feeding the Christians to the lions.

Our department has been tarnished with an image of low teaching. In fact our undergraduate enrollment has doubled in the past 10 years and is higher than Physics or Geosciences and comparable to Chemistry. Our faculty offer a high ratio of different graduate and undergraduate classes relative to our faculty numbers and these classes are always well subscribed. Legislators clearly plan to reward moderate class sizes, precisely those offered by our faculty. Regardless, a problem of insufficient credit hours could be remedied in many ways. Most obviously Biochemistry faculty would gladly participate in lower level freshmen biology teaching. Sharing this instructional duty would relieve a significant burden on Biology and bring in a dramatic increase in credit hours to Biochemistry. Please recognize that any form of reorganization only means a reshuffling of credit hours that already exist in the College and will not generate any net increase. Similarly, were Biochemistry a required course for Biology majors (as it is in most other universities in Texas and across the U.S.) our department would nearly double its credit hours.

Dean Bear has stated that undergraduate to faculty ratio in the new unit will be improved (from 1:75 down to 1:50). This minor change will not have any noticeable impact on Biology students. However the change for Biochemistry students will be a catastrophic change from 1:8 to 1:50. In other words a small improvement in the Biology statistics will result in a catastrophic change for Biochemistry majors. Furthermore, it is believed that the graduate enrollment will increase from 100 to 120 both by the maturation of Biology tenure track faculty and by increased collaborative research. Any increase due

to maturation of Biology faculty and increase in their research funds will occur irrespective of any merger.

Despite repeated testimonies by faculty in Biochemistry (and perhaps also in Biology) it appears not to be recognized that the disciplines of Biology and Biochemistry are quite different. Certainly some research methods are common between the two disciplines, but the scientific questions differ. This is like saying that because both Math and Computer Science work with numbers they really should be a single department. A hallmark of the transition from a minor to a major university includes the presence of multiple life science departments. Biochemistry is usually the first to appear. Most major universities have Departments of Biochemistry (see attachment). In Texas such schools as Sam Houston State and Stephen F. Austin have single departments of Biology. Comprehensive universities such as Texas A&M, Texas Tech, UT-San Antonio and Rice have distinct Biochemistry or Biochemistry/Molecular Biology Departments. Only at UT-Austin is biochemistry not independent, it is part of Chemistry. In fact that Department has recently changed its name to Chemistry and Biochemistry in recognition of the growth of the latter.

It is wishful thinking that any increase of funding will result from cooperative research efforts between faculties of these departments. Whereas virtually every member of the Biochemistry faculty has collaborative projects (and numerous collaborative grants) with faculty in Chemistry, Chemical Engineering, Computer Science, Pharmacology, Ophthalmology, and departments at the Texas Medical Center, there are no collaborative projects between Biology and Biochemistry. This reflects the distinct disciplinary differences. In fact a single department would result in loss of identity of some crucial disciplines, notably those in Biology. Programs in physiology, ecology, population genetics, entomology, microbiology and plant sciences are all aspects of the Biology effort. In a merged unit many of these would certainly become so dilute as to be lost.

An increase in overall effectiveness has been stated as another benefit of the reassignment of staff into a single unit. However the Biochemistry Department has been significantly understaffed for its number of faculty, its research efforts and expenditures, and the courses offered. The efficiency of our staff ranks among the best in the University. Any problems that exist with inefficiency should be addressed at its source. They do not stem from current activities in Biochemistry.

In the section "Reason for Request" Dean Bear states that Biochemistry has been recognized as an above average department. When any individual faculty member performs meritoriously they receive commendation and reward. But the message here seems to be that when a unit as a whole does so it must not be rewarded. The proposed restructuring will not improve but will rather detract from the operations of this department. Yet the only apparent benefit will be an administrative reshuffling of teaching load and credit hours. This can be achieved by a number of simpler solutions that do not destroy the unit.

Lastly we would like to address the major reason why this restructuring will ultimately fail. The two departments at present operate under totally different cultural systems. The units are administered differently, have widely disparate missions, and dissimilar approaches to faculty development. Each system may have its proponents, but the goals and the departmental cultures within each are inevitably intertwined. Attempts to "average" the two philosophies by merging the two departments will likely result in a hybrid unit which will be unable to excel at either mission. Therefore an ill-planned and ill-advised intent to merge in the absence of a suitable framework, a strong leader and clearly stated long-term and short-term goals is only a recipe for failure.

We urge that the request for a merger be denied. We request that an external study of all life sciences on this campus be undertaken. We are confident that the outcome will be to strengthen the Biochemistry Department so that it can attain the international prominence toward which it is heading. While we recognize that some feel academic and administrative problems presently exist in the life sciences, those issues can be more simply remedied by other means. Our faculty strongly support a complete re-evaluation of both undergraduate and graduate course teaching with an eye towards modernizing and eliminating any duplication. This can be simply done by the two departments with a mandate from the Dean. Our faculty would gladly participate in the freshman teaching program or in other joint teaching efforts. Our faculty would support a merger of administrative and support functions in order to increase the overall operating efficiencies of the units. These changes could address the perceived problems in the life sciences without requiring the abolition of our department.