
THE MIT FACULTY NEWSLETTER

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DOES MIT NEED A FACULTY NEWSLETTER?

by Vera Kistiakowsky

In recent years we have witnessed events at the national level which have serious implications for the universities and colleges. These include systematic cuts in the support for higher education, funding for civilian basic and applied research which has not kept up with increasing costs, efforts to undermine programs intended to increase the participation of minorities and women in academia, and disturbing cases of imposition of restrictions on scholarly activity. In the current climate of fiscal constraint, these events have and will continue to have an impact at MIT.

A group of faculty members which has been discussing the recent events concerning the Department of Applied Biological Sciences has concluded that difficulty in communication prevents faculty consideration of the problems except in crisis situations. There exists no channel for the exchange of information between faculty members and for the discussion of problems at MIT, since neither Tech Talk nor the faculty meetings serve these purposes. Therefore, we decided to explore the desirability of a newsletter, and one purpose of this zeroth edition is to see whether there is support for such a publication. It is only being sent to approximately 10% of the faculty, so we would be grateful if you would share it with your colleagues.

The MIT Faculty Newsletter would be issued periodically during the academic year. It would contain contributions (750 words or less) submitted by any member of the faculty, as well as regular features written by the editors. We hope that the newsletter would be broadly representative of faculty opinion. In order to accomplish this we need two things, volunteers for the editorial board, and sponsors who will contribute the money for reproduction and distribution.

Ideally, we would like one editor from each department, but a rock bottom minimum would be one from each school. If you are interested in being an editor, please contact Vera Kistiakowsky (3-7596).

If you are willing to be a sponsor, please send a check made out to *The MIT Faculty Newsletter* to Vera Kistiakowsky, 24-522, MIT. Your check will be held until we determine whether or not there is adequate interest to warrant such a newsletter. If not, it will be returned to you. If there is sufficient interest, it will be deposited in a bank account opened for *The MIT Faculty Newsletter*. We also welcome your suggestions about what the newsletter should contain, and later, when it starts to come out, we want your contributions, comments and further suggestions. Some possible topics which might be addressed are the past reconfiguration of the Department of Psychology and the proposed reconfiguration of the Department of Humanities.

A second reason for this zeroth edition is to make available to you information on and a discussion of what has occurred with respect to the Department of Applied Biological Sciences before the next faculty meeting. Because of the very limited time that this deadline left us for publication, this issue is very brief and not a real sample of what we envisage for future editions.

FACULTY MEETING

There will be a faculty meeting on

Wednesday, March 16th at 3:15

at which at least one resolution arising from the administration decision to disband the Department of Applied Biological Sciences will be presented. The discussion will deal with issues that are much broader than this particular incident and are important to all MIT faculty. We urge you to come to contribute to the debate and to the vote.

PLEASE PASS THIS ON TO YOUR COLLEAGUES

Editorial board for this issue: Jean Jackson, Carl Kaysen, Jonathan King, Vera Kistiakowsky, James Melcher, and Phillip Morrison

Editorial office for the moment: 24-522 MIT

Course XX phaseout announced

At a special meeting of the faculty of the Department of Applied Biological Sciences on Wednesday, January 6, the Dean of the School of Science, Gene M. Brown, announced that the department would be phased out over the course of about a year and a half. Some department members would be absorbed into other departments, although Applied Biological Sciences would retain its name for the duration of the transition.

According to Dean Brown, the reason for the decision, made with the concurrence of President Paul Gray and Provost John Deutch, is to use the human and other resources of the department to strengthen parts of the diverse areas now under Applied Biological Sciences. Dean Brown said, "The difficulty of trying to have a focus in an area—biotechnology—that is not a discipline had become increasingly clear."

On December 31, he had informed department head, Professor Gerald N.

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Course XX phaseout announced

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Wogan, of the decision, who then called the department faculty members together for the special meeting. The department includes work in toxicology, molecular pharmacology, biochemical engineering, and food-related science, among other areas.

The department had its origins at MIT as the "industrial biology option" in the Department of Biology and became a separate entity in 1944 as the Department of Food Technology. By 1962 it was known as the Department of Nutrition, Food Science, and Technology. A shortened version—Department of Nutrition and Food Science was in use by 1966.

In an interview, Dean Brown gave assurances that all matters relating to the change "will be handled in a cautious, not a precipitous manner." Some faculty

members in the Department had, in fact, already begun to move into chemical engineering.

Faculty reassignments and transitions, Dean Brown said, will be made with individual guidance and support. He said that graduate students would be allowed to complete work in the area in which they started even if that required four or five years. The department has 86 graduate students.

Dean Brown said that the goal of the action "was not to reduce the number of faculty supported or the total financial resources being spent on the Department's work, but rather to focus resources on the strongest intellectual opportunities within areas of interest." However, he agreed, "It is clear that the number of faculty will be reduced..." —Eugene F. Mallove

Gray, Deutch statement on ABS

The President and the Provost have released the following statement on the decision to close the Department of Applied Biological Sciences:

The faculty and students in the Department of Applied Biological Sciences are engaged in work that is important to MIT and to the larger society, particularly in such fields as biotechnology and toxicology, which have been identified by the department as holding particular promise for the future.

The decision to close the department as such was made late in December, when Dean Brown discussed his five-year plan for the School of Science with us. The principal reason for this decision is the fact that this department's programs do not rest on one or two basic scientific disciplines, but rather are built on applications from several disciplines—some of which are represented in significant strength in other academic departments at MIT. As a result, the department has had continuing difficulty in achieving a coherent sense of mission and intellectual focus.

It is our judgment that the individual programs in the department can be pursued effectively, in many cases more effectively, within other academic units having similar research and educational interests. Accordingly, the decision to phase out the department as an administrative entity was based on intellectual judgments concerning the most appropriate organizational settings for the wide range of activities it currently contains.

This move should be seen as one of reconfiguration, as we work to locate academic homes for current tenured and nontenured faculty that will permit individual faculty groups and programs to pursue their research and teaching more effectively. We are confident that suitable arrangements will be reached for all faculty in the near future and that all graduate students will be able to continue their studies in an orderly manner, and we have asked the Dean of Science to make sure that these arrangements are completed as quickly as possible.

THE DISSOLUTION OF THE DEPARTMENT OF APPLIED BIOLOGICAL SCIENCES IS THE CONCERN OF THE WHOLE FACULTY

By Jonathan King

In announcing its intention to dissolve the Department of Applied Biological Sciences the MIT Administration has taken a step which not only directly harms the ~200 members of that department, but has serious implications for the Institute as a whole.

The closing down or weakening of an entire area of intellectual activity is a serious matter, only to be undertaken after careful review, debate, and evaluation in appropriate forums. It is too serious a matter to be left to the judgement of a handful of individuals.

The decision the Provost and Dean communicated to the Chair of ABS during the Christmas/New Year's break was taken without peer review, without announced criteria, and without opportunity for the department to respond to the proposal. While admitting at the Feb 17, meeting of the faculty that the necessary procedures for evaluation of the department and the proposed reorganization had not been followed, the Provost argued, without supporting evidence, that the decision was intellectually justified because, "...this department's programs do not rest on one or two basic scientific disciplines, but rather are built on applications from several disciplines..."

The Intellectual Issues

ABS represents those aspects of biological science and technology at the interface of humans and other organisms in their actual environments, whether natural or industrial. Students come to the department in part because of their concerns with pressing human and agricultural problems, whether human nutrition in developing countries or microorganisms in industrial processing plants. Their interests are different from biology and chemistry graduate students. The international stature of many of the members of the department in their fields reflects their success in applying biological knowledge to the solution of pressing practical problems.

A certain duality and complementarity underlies the academic organization of MIT and most other universities: basic science is organized and represented in one department; the applied aspect in another. Disciplinary purity is an inappropriate litmus test for a department of applied science or engineering. For historical reasons, ABS is in the School of Science. But ABS cannot be judged by the criteria applied to the Department of Biology; the role and mission are different. Engineering research is judged by a test of use - and not just of the elegance or cohesion in the conceptual aspects.

The Damage Done

The harm caused by this action should not be underestimated. For ABS faculty members, their disciplinary unit has been dispersed; their reputations tarnished; their ability to provide for their existing students and to attract new students is put in question; their ability to carry out the terms of grants and contracts is threatened, and therefore their ability to obtain continued support; the list goes on.

But this dissolution has much broader impact. The current efforts to place members of the faculty into other departments or administrative units bear no relation to the plans of those departments. These faculty members will have to be integrated into the departments if their scientific work is to continue. This cannot be done without reorganization of plans and priorities within departments; with respect to teaching, internal networks, student advising, resource allocation, etc.

Similarly the ability to recruit new faculty and new students to all departments of the Institute will be clouded by the knowledge of this arbitrary action and the concern that it could happen again.

The Question of Accountability

At MIT the administration has great authority in academic matters unfettered by the strictures of a State legislature, or strong faculty, student, or alumni organizations. It is probably one of the last remaining institutions in the U.S. where the meetings of the Faculty are chaired by the President, and not by the Faculty's own Chairman. Despite the lack of formal accountability, the administration certainly bears the intellectual and moral responsibility to open the decision-making process on matters of such import before the final decision is arrived at.

The Provost and the Dean in fact disregarded processes and procedures that are intended to prevent major policy errors; they took an action that greatly damaged the students, staff, faculty and future functioning of the Institute. The faculty and students are being forced to bear the burden of their actions.

How to Proceed

The dissolution of the department is being treated as a fait accompli. In an environment which prides itself on the maintenance of academic freedom and rational discourse, certainly the possibility of rescinding the decision should not be ruled out until it is clear that the current course is the best option.

Our colleagues whose professional fates are currently being

decided by the administration find themselves in an extremely vulnerable position, and are not able to participate freely in discussions of the situation. For the rest of the faculty to sit by and simply observe this wounding of the Institute would be a serious failing in responsibility to themselves, their students, and to the public resources which support their work.

A first step in addressing these issues would be to attend the upcoming meeting of March 16. Motions have been introduced which attempt to partially rectify the situation, describe the role and responsibilities of the Faculty, and define the accountability of the Administration.

Chemical and Engineering News, January 25, 1988

MIT to close applied biology department

Massachusetts Institute of Technology has decided to phase out its department of applied biological sciences over the next year and a half. The move is being met with shock and outrage from the department's faculty, graduate students, alumni, and supporters.

John M. Deutch, MIT provost and professor of chemistry, says that the department's future has been under discussion for some time. Its name was changed from the department of nutrition and food science four years ago and at that time it was given a new charter to try to weave together toxicology, biotechnology, and nutrition, according to Deutch.

"The programs didn't coalesce in a way that meets MIT standards and that would justify a separate department," Deutch says. The administration asserts that the department's strongest components—toxicology and biotechnology—can fit better in other departments such as chemical engineering or biochemistry. "This is not an action taken on the basis of dollars, but is based on intellectual reasons," says Deutch.

Some observers, however, think that the decision was a long-term cost-reduction measure made hastily and without sufficient thought as to the effect the closure would have on both the university as a whole and the department's faculty and students. Even those who agree with the university's reasoning

think the closing was handled badly. The faculty was taken completely by surprise when the decision was announced.

"It's devastating to people's careers and the integrity of certain programs," says Anthony J. Sinskey, a full professor in the department who specializes in applied microbiology. "There is merit in the decision, but the faculty was not involved in any discussion. It's unfortunate that the administration doesn't recognize the role of applied biology as an interface between biology and engineering or biology and chemistry. There has been a tremendous amount of cross-fertilization, a mixture of students with backgrounds in engineering and basic sciences."

Alumni note that the department has had a significant impact on the biotechnology industry. "It's been a

leader in applied aspects of biotechnology in industry," says Robert J. Linhardt, associate professor of pharmaceutical and medicinal chemistry at the University of Iowa's college of pharmacy in Iowa City. Linhardt did postdoctoral work at the doomed MIT department. "I could name 25 people in responsible positions at biotechnology firms who went through the department," he says.

Tenured faculty members are being asked to find positions at other departments within the university, although Deutch says "it's not clear whether all the faculty will be retained." Some of the assistant professors have already been told to "pack up their bags and go," as one department member put it. Graduate students will be allowed to complete their research projects, according to Deutch.

Pamela S. Zurer, Washington

CAMBRIDGE

MIT plans to abolish bioscience section

*Some faculty angered
over area's phaseout*

By Allison Bass
Globe Staff

In a move that has stunned and angered some faculty and students, the Massachusetts Institute of Technology has announced plans to abolish the 43-year-old department of applied biological sciences.

MIT officials say they plan to phase out the department over the next 18 months because it is not meeting the intellectual standards expected of a department at MIT. Gene Brown, dean of the school of science and one of the chief architects of the move, said most of the research could be easily transferred to other departments.

However, some faculty said yesterday the department has an "international and national reputation" and closing it could deprive MIT of valuable research in areas such as nutrition, toxicology (the effect of poisons in the environment) and biotechnology. The department brings in \$13 million a year in research grants, compared to \$16 million each for the biology, chemistry and electrical engineering departments.

"This department has a strong international and national record, and I think a lot of people are concerned that this kind of research may not be continued at MIT — at least under a single administrative unit," said Louis Menand 3d, political science professor.

Faculty members said the department has had a significant impact on the biotechnology industry, spawning many spinoff companies over the years. One alumnus said he could name at least 25 people in responsible positions at biotechnology companies who either taught or graduated from the department.

Other faculty members also expressed anger and disappointment at the sudden move.

"I'm disappointed that MIT saw fit to minimize the significant contribution our program in nutrition and metabolism has made," said Vernon Young, a professor of nutrition in the now-defunct department. "As a formal teaching program, there will not be any further program in nutrition at MIT."

While no jobs will be immediately lost, MIT officials said some tenured and nontenured faculty may end up leaving the institute. They said "every effort" would be made to place tenured faculty in other departments, but no job guarantees have been extended to faculty, or to secretaries and other support staff. Four nontenured assistant professors may lose their jobs when their current contracts expire. Graduate students in the department will be allowed to finish their degrees.

Some professors yesterday criticized the way the decision was carried out. No senior faculty were informed in advance, and when the decision was announced last month, it came as a "shock" to many.

"I think it's disgraceful that they did what they did . . .," said a tenured professor in the department who asked that he not be named. "The amount of consideration they gave to faculty members was close to zero."

One assistant professor said he had started his job only two days before the decision was announced. "I was invited here for a tenure-track position and I moved my family here from Wisconsin," said Kim Lewis, who had received offers from other universities last fall but chose MIT. "Now all my plans are messed up."

John M. Deutch, MIT's provost, acknowledged that the "specific timing of the announcement came abruptly." But he said it had been known for several years that the administration was questioning the value of the department.

The department has shrunk over the years, losing some prominent faculty to other departments; it now lists about 24 faculty, compared to 31 in chemistry and 51 in biology.

"Any strong academic community should consider from time to time whether all of the departments are as strong as they should be," Deutch said. "This was an action taken to strengthen academic performance."