THE UNIVERSITY OF MICHIGAN

SENATE ASSEMBLY

Minutes of Assembly Meeting, April 19, 1976

ATTENDANCE

Present: Professors Adams, Aupperle, Baublis, Bornstein, Browder, Rucknagel, Coon, Malvitz, Corpron, Crichton, DeKornfeld Downen, Edwards, A., Edwards, O., Eisley, Elving, Faulkner, Gordon, Gray, Harris, J., Harris, R., Jones, Kachaturoff, Kaplan, Kish, Lands, George, Lehmann, Lindberg, Livermore, Lytle, Merte, Nesbitt, Olson, Rabkin, Seger, Sherman, Romani, Soucek, Votaw, Weeks, West, Williams, Winans, Zorn, Dernberger, Gikas, Magrill, Hoch, Colburn, Johnson, Cartwright, Horsley

Absent: Professors Angus, Brazer, ~~Cartwright~~, Child, Christensen, Cosand, Crawford, Deskins, Diamond, Fekety, Flynn, Smith, Guinn, Hildebrandt, ~~Horsley~~, Kessler, Asgar, Mullen, Murphey, Portman, Proctor, Scott, Stross, Van der Voo.

Guests: Calvin Luker, Chairman, University Council; Alvin Zander, Associate Vice-President for Research and Prof. L. O. Brockway.

CALL TO ORDER

The meeting was called to order by Chairman Johnson at 3:25 p.m.

APPROVAL OF MINUTES

The minutes of the Assembly meeting of March 15, 1976 were approved.

ANNOUNCEMENTS

Chairman Johnson took pleasure in welcoming the newly elected members of the Assembly, expressing appreciation for their willingness to assume these new responsibilities, and assuring them that the minutes of SACUA meetings they would be receiving should help keep them informed of developments.

The attention of the Assembly was directed also to a Town Meeting Bicentennial program, sponsored by a score of community groups and supported by the University and its Committee on University Relations. Faculty participation was urged in the all-day program scheduled for May 8, 1976 at Huron High School.

SACUA ELECTIONS

Having previously received the report of the Nominating Committee, chaired by Professor Magrill, the members of the Assembly were asked to vote on the nominees proposed for vacancies on SACUA, there being no further nominations from the floor. Elected to three-year terms (replacing Professors Dernberger, Gikas, and Magrill) were Professors Lawrence Jones, Margaret Leary, and Shaw Livermore; elected as a replacement for Professor Kaplan, who will be on a one-year sabbatical leave, was Professor Richard Corpron.

On behalf of their colleagues, Chairman Johnson took special pleasure in expressing appreciation to Professors Dernberger, Gikas, and Magrill for their dedicated service on SACUA.

NOMINATIONS AND APPOINTMENTS

Approved unanimously for two-year terms on the Office of Student Services Policy Board were Professors Noah Sherman and Frizell Vaughan, replacing Professors Foster and Powers.

RULES OF UNIVERSITY COMMUNITY

As Chairman Johnson noted, the members of the Assembly had received for consideration a proposed addition to the Rules of the University Community concerned with regulating and controlling the possession of dangerous weapons on campus. On hand to respond to whatever questions or comments might be forthcoming was Calvin Luker, Chairman of the University Council, which had passed the suggested addition to the Rules now before the Assembly. A motion for approval having been offered by Professor Lehmann and seconded by Professor Lands, the matter was accordingly opened to discussion.

While no sentiment in opposition to the proposal itself emerged, it was clear that several members of the Assembly were concerned about its treatment of the matter of sanctions. Professor Baublis, for example, saw the proposed addition to the Rules as being unduly lenient on this score, while Professor Elving questioned whether the sanctions suggested would constitute an appreciable deterrent. At the same time, the ambiguity of such a penalty as "work assignment" troubled Professor Bornstein. Indeed, citing an incident experienced personally, Professor Lytle felt moved to propose an amendment that would substitute the word "dismissal" for the term "work assignment."

In response, Mr. Luker pointed out that the University Council itself had discussed the matter of penalties at some length, cognizant as it was of concerns similar to those being raised. In fact, advice had been sought from Mr. Daane, the University's General Counsel, on a series of related questions. Inasmuch as the Rules of the University Community and the University judiciary system were currently under general review, however, the language of the present proposal had seemed appropriate at this time, particularly since it was aimed at maintaining some consistency with present procedures.

In response to a question concerning the legal limits of penalties that can be imposed by the University, Chairman Johnson sought clarification from President Fleming, in the audience at the time. There are, to be sure, some options available to the University internally, Mr. Fleming explained, among them such possibilities, for example, as the withholding of a degree or transcript, temporary layoffs, discharge (following appropriate grievance procedures), and such actions with respect to faculty as are specified in the regental bylaws. Where appropriate, a matter may be referred to the civil authorities.

All things considered, Professor Lytle felt disinclined to withdraw his amendment, though, as pointed out by Parliamentarian Colburn, its passage would amount to referring the matter back to the Council. In any case, the amendment was subsequently defeated (by a vote of 26 to 17), and the earlier motion to support the proposed addition to the Rules of the University Community passed unanimously.

RESEARCH POLICY IN MOLECULAR GENETICS & ONCOLOGY

Having received copies of the report of Committee B recommending University policy in the field of molecular genetics and oncology, the Assembly was now prepared to discuss a position with respect to this significant area of research. As Chairman Johnson reminded the members, SACUA had devoted many hours to the profound issues involved. Not only had it

kept in close touch with the Research Policies Committee, President Fleming, and Vice-Presidents Overberger and Zander, but it had also lent its full support to providing the university community with necessary information and with appropriate forums in which to debate the issues openly. Indeed, with the cooperation of the administration, the Research Policies Committee, and representatives of the University Values Committee, a two-day forum, open to the broader community, had provided a stage for meaningful dialogue.

The time was now at hand, Chairman Johnson noted, for the Assembly to air its views in order to arrive at a position that could be communicated to the administration and the Regents. So that discussion might proceed most expeditiously, he suggested that the Assembly hear, in succession, from Vice-President Zander, chairman of Committee B, Professor Livermore, author of its minority report, and Professor Brockway, chairman of the Research Policies Committee. Thereafter the matter was to be opened to discussion from the floor, first by members of the Assembly, subsequently by such members of the audience as might wish to comment. The exchange of views would, it was hoped, eventuate in some action by the Assembly.

Invited to elaborate on the report of his committee, Vice-President Zander indicated that he would speak in turn to its charge, its recommendations, and its response to reactions to date. The charge itself was straightforward, though challenging--to develop and recommend policies or a review process for research in recombinant DNA and related aspects of molecular genetics at the University. In effect, this was to involve not only an examination of the problems but also considered judgment on whether such research should continue here and, if so, under what conditions. The task was not uncomplicated. For one, the field is a new one, so that one cannot readily draw upon the body of experience available in more established areas, nor is the expert knowledge required widely available. For that matter, though half the committee was from scientific fields, the remainder from non-scientific areas, there was no microbiologist among them. Too, the issues faced were in large measure matters of judgment on which reasonable people could differ.

Under the circumstances, Associate Vice-President Zander pointed out, the committee saw a need to impose some limits on its task. It would confine itself to matters on this campus, not beyond; it would propose groundrules for appraising a certain set of projects, not the whole field. Broad and searching questions were, indeed, raised and explored, but in the last analysis the goal was to provide some practical answers. Lest, however, the report of Committee B make it appear that its perspective was unduly circumscribed, Professor Zander hastened to add that by far the largest part of the committee's deliberations was devoted to thorough discussion of ethical matters. The minutes and files of the committee are, in fact, open to anyone who seeks reassurance on this score, he indicated.

In tracing the origins of Committee B for the information of the Assembly, Professor Zander referred as well to Committees A and C, the former, composed of experts in the field, to be concerned with planning for future work in tumor viruses, recombinant DNA, and the safety of facilities, while Committee C (the Biological Research Review Committee),

to be appointed at a later time, would be charged with insuring the safety of given laboratories in relation to the research planned for them. As he reminded those present, at its meeting of December 15, 1975 the Assembly had passed a resolution urging that funds appropriated by the Regents in November for implementing the research in question not be expended until the report of Committee B became available. The committee met the projected deadline, its report was transmitted to Vice-President Overberger on March 22, 1976 and subsequently became the subject of discussion by many groups.

Reviewing the new technology briefly, Vice-President Zander directed attention to the cost/benefit question in particular. No one would dispute the need for a greater understanding of the dynamics of heredity, he assumed. Speculation about benefits that would accrue has ranged all the way from the production of such proteins as insulin, growth hormones, the missing factor in the blood of hemophiliacs, and specific antibodies to the possibility of enhancing the nitrogen-fixing properties of plants, a development with important implications for agriculture. On the other hand, there was no minimizing the fact that this new field of research entailed some potential hazards. Like most new ventures, it carries its share of uncertainty. Too, it is understandable that anxiety should exist with respect to the potential for creating new microorganisms whose properties are not fully known and whose containment poses special problems.

For these reasons, Vice-President Zander emphasized, the scientific community itself has devoted serious attention to means for reducing and curtailing possible dangers. In 1974 a group of microbiologists asked for a moratorium on several types of research until such time as the potential risks could be evaluated more fully. The moratorium has been observed and will remain in effect with respect to research of the higher orders of risk. Meanwhile the National Institutes of Health, with the help of a committee of 20 biologists (among them Professors Chu and Freter, of The University of Michigan) have worked through several drafts of guidelines that should go far toward providing the kind of direction for which a need is felt. Not only do these guidelines set forth necessary methods of containment, both physical and biological, but they speak both to experiments that are permissible, with necessary safety precautions, as well as about those that should not be performed. In addition, they specify the roles of both the principal investigator and the review committee.

Aside from debating the issues on their merits, Committee B was responsive to criticisms directed at its operation, Professor Zander indicated. Having already assured the Assembly that ethical considerations had received their full share of attention, he noted in addition that the committee had benefited from the six meetings held on this topic under the auspices of the University Values Committee, of which Professor Livermore was, in fact, chairman. To the charge that the committee had not had sufficient concourse with critics, he replied that in several instances those invited had not accepted, whereas, on the other hand, considerable time had been spent with several of the most ardent critics, who had been

willing to meet with the committee. With respect to the insistence on the part of some that the Biological Research Review Committee should contain a large proportion of community citizens, he noted that the matter is not as simple as it may seem. Since the University itself is responsible for the research to be conducted, there are legal aspects to consider. Too, as Professor Zander pointed out, there is the matter of setting a precedent, so that one needs to think carefully about the possibility of having community participation in decision-making in the present area extend to curricular and other matters that the University has customarily regarded as its own province.

In the last analysis, Vice-President Zander concluded, Committee B had found itself avoiding extreme positions of either kind. That is, the committee was neither willing to assert that research of whatever nature must always be permitted to go forward, nor was it willing to state that there are limits to what science should explore. Rather, its members took the position that, given appropriate controls, the research in question should proceed. Without discounting the element of risk, the committee saw the NIH guidelines as providing the basis for necessary safeguards, adding additional provisions of its own. The proposal for creation of a Biological Research Review Committee served to buttress this conviction, particularly when the latter's work was to be reappraised periodically. Inclusion of a member of the Research Policies Committee as well as a non-University person was likewise meant to provide additional reassurance.

All in all, Vice-President Zander felt, the committee had worked hard at a complex task, taking very seriously not only its substantive considerations but its ethical aspects as well. It should be noted, he stressed, that while the Committee B report was recommending that ". . . recombinant DNA research should, in principle, go forward so long as it is submitted to appropriate controls", it was at the same time proposing that no research of more than moderate risk be undertaken at the University at this time. In any case, the report was available for full discussion by all interested parties. He hoped, therefore, that the results of such deliberations would be communicated to the executive officers and the Regents, with whom final decisions rest.

Thanking Associate Vice-President Zander for his comprehensive report, Chairman Johnson called in turn upon Professor Livermore, who as a member of Committee B had written a statement of dissent. Its nature, Professor Livermore felt, had been clearly stated in an appendix to the committee report, hence he would simply underscore a few points. He had been designated by the Assembly to serve on the committee, he reminded his audience. As such, however, he had nevertheless felt free to represent his own convictions, not having been otherwise instructed.

His dissenting view, Professor Livermore explained, had not rested on the degree of adequacy of the precautionary measures to be observed. In fact, he had come to be persuaded that those in charge would act responsibly, limiting the dangers attendant upon such research. On this matter, then, he shared the majority opinion. Where he diverged was on the issue of the radical manipulation of genetic material. He had actually approached the question without pre-set notions and, in fact, arrived at his conviction rather late in the discussions, having however, experienced a nagging unease on the subject for some time.

The prospect of altering life in some fundamental way is simply awesome, Professor Livermore asserted. He just could not bring himself to believe that existing mechanisms would be capable of reserving for strictly human benefit such a dramatic capability. Like his colleagues, he was very sympathetic to the desire of scientists to broaden the limits of knowledge, always an exciting prospect. Yet, he insisted, the powerful capability of actually changing the order of life must be considered alongside the basic question of freedom of inquiry. For, once available, the new technology will become a possession, and the inability of society to manage it properly could well bring disastrous consequences.

Recognizing full well that he was an advocate for one position, Professor Livermore hoped some would share his concern, and, if so, communicate such sentiments to the administration and the Regents. Thanking him for his forthright expression of views, Chairman Johnson next introduced Professor Brockway, chairman of the Research Policies Committee.

Noting that at this point one had the benefit not only of the views of Committee B but also of the discussions that had taken place at the forums which the Research Policies Committee had had a part in arranging, Professor Brockway pointed out that his committee had registered its support for the recommendations of Committee B. Rather than banning all research of the kind under discussion or lending it complete approval, it seemed reasonable to propose that research of, at most, moderate risk be undertaken, provided that it proceed only under appropriate safeguards. Three matters, however, required prompt elaboration, he felt.

For one, the structure and function of the Biological Research Review Committee needs to be defined as soon as possible. Its composition deserves early attention, the NIH guidelines as supplemented by Committee B need to be clearly set forth, and there is need for fuller specifications of the procedures bearing on monitoring functions and the assessment of hazards. Another matter equally in need of attention relates to the manner in which the Biological Research Review Committee itself is to be appraised periodically, and, finally, the matter of community representation, presumably of an expert type, remains to be settled. In urging speedy action on these fronts, Professor Brockway indicated that his committee had not taken it upon itself to make recommendations but would be prepared to do so if requested.

Thanking the three presenters again for their explicit contributions, Chairman Johnson opened the meeting to discussion by members of the Assembly. Comments were not long in coming, Professor Weeks urging that, whatever the outcome, the Assembly do more than convey to the Regents a tally of votes. In his opinion the University community had proceeded in admirable fashion, having provided ample opportunity for the open expression of diverse points of view in a prudent attempt to engage all in meaningful dialogue. It was the essence of this spirit of thoughtful problem-solving that he hoped would be communicated to the Regents. Speaking for himself, Professor Rucknagel described his own efforts to resolve the problem, being both geneticist and physician, weighing risk and benefit, and having finally come out on the side of the policy being proposed by Committee B.

A subsequent motion by Professor Kaplan that the Assembly endorse the report of Committee B prompted further discussion. In seconding the motion, Professor Lands took comfort from the fact that not only had the issues been fully debated in open forum, but, also, the establishment of Committee C would serve to provide necessary reassurance that research efforts in this new field would remain under appropriate surveillance. In a subsequent series of supporting statements Professors Faulkner, Nesbitt, Elving, and Baublis spoke, respectively, to such aspects as the need to make an eventual decision, the benefits promised by this line of research, the ability shown by the University to cope with potential hazards, and the adequacy of the precautionary measures planned.

By contrast, Professor Olson recalled for his colleagues the nature of the dissent voiced by Professor Livermore. He shared the latter's concern yet at the same time supported the report of Committee B, hence hoped for continuing deliberation as the research program unfolds. With respect to the motion on the floor, he was concerned, therefore, that, in proposing support for the report of Committee B, it made no reference to the existence of a dissenting statement. His remarks prompted a series of further comments on alternate sides of the issue. Professors Kish and Zorn, for example, cautioned against acting too hastily, noting that, while there had been a good deal of meaningful dialogue, the subject remained one on which even experts can differ. Hence, a case could be made for further reflection before action is taken. Professor Kaplan, on the other hand, while recognizing the spirit of Professor Livermore's dissent, remained concerned lest a prohibition against research in a given field became a precedent for setting limits on research more widely. By way of reassuring members of the Assembly in the present instance, Professor Rucknagel pointed out that, in the opinion of experts in the field, the possibility of such research going out of control would require the occurrence of a large number of low probability events, each tending in the same direction. In any case, he suggested, additional assurance could be bought by having the Research Policies Committee, in concert with Committees A and B, implement more detailed guidelines.

With members of the Assembly having had their say, Chairman Johnson opened discussion to members of the general audience, a number of whom had come prepared to make statements on one side of the question or on the other. Professor Ross, for example, hoped the Regents would receive more than a simple motion supporting the report of Committee B. Having, as they do, responsibility for the final decision, he hoped they would not only become thoroughly acquainted with the nature and significance of the decision involved but would themselves proceed with special care in this important matter. Chairman Johnson gave assurance that such had been, and would continue to be, the case, particularly since the Regents planned for representative input from all parties as well as from the broader community.

Additional notes of caution were sounded by members of the audience. Professors Schwartz and Wright were both of the opinion that the views of proponents were more widely known than were those of opponents, hence hoped that decisions would await broader conversance with the issues. As Professor Wright noted, copies of a critique of the report of Committee B

provided members of the Assembly with points that should be weighed carefully before action was taken. Professor Heirich pointed to yet other serious eventualities that might be overlooked, namely, the applications to which the new technology might be put in such areas as biological warfare, terrorist activities, or industrial uses resulting in environmental damage (though Professor Adams contended that such activities are even now hardly dependent on the results of DNA research). A representative of the Ann Arbor community added his voice, insisting that the people had had little chance to understand or digest the issues, nor, he felt, was there sufficient opportunity for public participation in the important decisions to be taken.

Others, however, expressed positive feelings. While recognizing that, as a microbiologist, he might be suspect, Professor Neidhardt, chairman of Committee A, which had endorsed the report of Committee B, pointed to a series of statements by members of his committee as evidence that each had, in turn engaged in serious self-analysis and weighed the issues most carefully. Professor David Jackson took occasion to point out that the scientific community has, in a crude way, long possessed some of the capacities now being discussed (as in the areas of selective breeding). Applications to man remain at best many years in the future, despite what he saw as Professor Livermore's assumption of a social imperative to use any and all techniques man has at his disposal. Speaking to the freedom of inquiry side of the coin, Professor Stich deplored the generalized fear of advances of science and technology and the concomitant feeling that society has lost the capacity to cope with such progress. Research in DNA, he cautioned, could become the sacrificial victim of such an anti-intellectual spirit, and allowing the inference that the intellectual community cannot manage its affairs rationally could well be the first step toward the institution of repressive measures.

In moving toward closure, Chairman Johnson reminded those present of the wide range of opportunities for making their views known. The Regents solicit opinions, Vice-President Overberger and Associate Vice-President Zander welcome reactions, and SACUA not only continues its active interest in the matter but also takes pains to convey to the Regents the full spirit of meetings such as the present.

Subsequently, the previously offered motion to support the report of Committee B was passed in a voice vote.

With discussion having run its course, Professor Rucknagel nevertheless urged that time be taken to lay plans for necessary next steps. To this end, he offered, in succession, three recommendations pertaining to the Biological Research Review Committee, proposals that Chairman Johnson felt would be best considered one at a time. Accordingly, the Assembly voted on and approved the first of the three proposals, namely,

> That the Research Policies Committee, in consultation with Committees A and B, formulate the charge of the Biological Research Review Committee, including a procedure for the selection of personnel, and return its recommendations to the Assembly for consideration.

A second recommendation proposed

> That the Biological Research Review Committee and the Division of Research Development and Administration assume responsibility for monitoring, bacteriologically and serologically, personnel engaged in DNA research.

A motion to table this second recommendation passed.

A third recommendation proposed

> That the Assembly urge the National Institutes of Health to assume formal responsibility for monitoring, bacteriologically and serologically, personnel associated with DNA research.

A motion to table this third recommendation passed.

NOTE OF APPRECIATION

In recognition of his dedication to the work of SACUA and the Assembly, Professor Weeks moved that the Assembly express its sincere appreciation to Chairman Johnson for the effective leadership he had provided during the past year in a very central position of responsibility in university governance.

The motion received the enthusiastic endorsement of the members of the Assembly.

OTHER BUSINESS

In the closing minutes of the session Professor Rabkin took occasion to point out that, while he had voted in favor of the Assembly motion to support the recommendations of Committee B, he had pause for thought on another score. For though he too took comfort in the openness with which the present question had been debated in the university community, a larger issue awaited future discussion, namely, the broad question of freedom of inquiry. It was appropriate, he felt, to have concluded that research of specified levels of risk be permitted to continue under appropriate safeguards. One should note, however, the implications of such an action, setting as it does a precedent whereby the university community might take it upon itself to curtail the pursuit of knowledge in such other areas as it might deem forbidden territory in the future. The problem is not uncomplicated, Professor Rabkin admitted, but its very nature is such as to deserve continuing serious consideration by the Assembly.

ADJOURNMENT

There being no further business, the meeting was adjourned at 5:53 p.m.

Erasmus L. Hoch
Secretary