

Pharmacologist Theodore Brody: People don't realize the "acute situation research is in."

Money squeeze threatens some research projects

By PHILLIP E. MILLER Associate Science Editor, News Bureau

Financial support for basic research in the sciences is getting the axe. Damage to MSU research projects is minimal compared to what is happening nationally, but what lies ahead is not certain.

"We have reached the era when research proposals have to be mission-oriented if they are to stand a good chance for support," said John Nellor, assistant vice president in the Office of Research Development.

"The shifts are evident. Humanities and arts are getting more while physics, physiology, chemistry and other hard sciences are getting less."

Science funding has leveled off in recent years and deep cuts are drawing the life-blood from projects all over the nation.

It is not a random attack of anti-inflation measures, according to the Senate Appropriations Committee's report on biomedical research and education.

". . . Not only did the Administration request a cut in health research projects," the committee reported, "but also asked that we cut research training projects. The implication of this action is unmistakable. The cutback in health research is not intended to be temporary.

"Lurking below the surface of the budget and the House allowance for Brody, along with some other researchers on campus, believes that the bias described by Finch is a myth.

"It isn't true," said Brody. "For example, in the most prestigious medical schools in this country, only about 4 per cent of the graduates eventually find their way into academic medicine. Contrary to what Finch says, medical schools are in great need of basic medical scientists and teachers."

Brody added: "Furthermore, the bulk of the research is performed by non-M.D. scientists. There is a critical need for more of the Ph.D.-trained basic medical scientists. Already, 10 new medical schools in the nation are being planned. Existing schools already have shortages of basic medical scientists and teachers in many specialties. Our pharmacology society receives a letter every day about academic and industrial positions for pharmacologists."

"I don't think that people are fully aware of the acute situation that research is in," he said. "Another real danger is that NIH (National Institutes of Health) will cut back training funds. This is a serious threat to graduate education in the medical sciences. Already NIH has told us that training cuts this year will be extensive. We don't know what we will do if NIH cuts funds for training." NIH-SPONSORED research has already dropped 3 per cent from 1967 levels, although funds to medical schools have risen 7 per cent in the same period.

"As the organization and delivery of health services become more structured," NIH Director Robert Q. Marston, "increased visability given to the health dollar and its uncontrollable nature will make strong competition among health areas. Research, in such circumstances, might fare poorly as compared with immediate health care needs. Finally, the support of research does not of itself have strong popular appeal."

Pharmacology researchers are not the only MSU scientists being threatened.

"NIH told me," said Loran L. Bieber, assistant professor of biochemistry, "that my research proposal to the Institute of Arthritis and Metabolis Diseases had very good ratings, but that they don't have funds to support it. In effect, they have approved but not funded the same research project they supported in the past. Now we will be unable to replace a technician and a postdoctoral fellow."

* * * CHEMISTRY has also felt the recent (Continued on page 4)

MSU Faculty News

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Events building, book store on Council agenda

Several reports are scheduled for today's meeting of the Academic Council, which begins at 3:15 p.m. in the Con Con Room of the International Center.

Items on the agenda include:

--Report from the University Curriculum Committee, which includes two changes relating to language and foreign studies requirements for the B.A. degree in the College of Social Science.

-A report on revisions of the report from the committee on antidiscrimination policies. The committee has added sex to its definition of discrimination on the campus and has altered the recommended procedures for resolving complaints of alleged discrimination.

-A report on the new Center for Environmental Quality.

-A status report on the proposed All-Events Building. As a result of concern over the facility, a committee has been formed to study the question of campus building priorities.

-A report on the status of the MSU Bookstore.

* * *

THE CHAIRMAN of the University Business Affairs Committee, Robert W. Little, is expected to report on a recommended change in book pricing policies at the MSU Book Store.

The proposed policy change, which has been referred to Roger Wilkinson, acting vice president for business and finance, would instruct the book store to buy back books at 50 per cent of original value and re - sell them at 65 per cent of value. The latter figure is 10 per cent lower than the current rate of 75 per cent of value.

Some favor collective bargaining

health research training is a subtle budget policy with 'long-term implications for the production of future teachers of physicians and medical technicians, the supply of which is falling further behind with every passing day."

This approach is dangerous to the whole health education system, said MSU's chairman of pharmacology, Theodore M. Brody. * * *

SECRETARY of Health, Education and Welfare Robert H. Finch made the "subtle budget policy" clear in a recent address to the Mayo Graduate School Alumni Association:

"So long as our support programs take the form, largely, of research grants and institutional grants, we practically force a bias toward the lab rather than the G.P.'s consulting room . . . toward the clean test-tube rather than the dirty work of treating sick bodies."

More faculty voice in budget?

At least four proposals relating to collective bargaining for faculty are in various stages of consideration on this campus.

Before the Committee on Committees is a proposal from the MSU Chapter of the American Association of University Professors to establish a standing committee on budget allocation and faculty compensation.

A motion now before the Board of Trustees, however, would give the University Committee on Business Affairs jurisdiction in budget allocation. The University Committee on Faculty Affairs now has jurisdiction in faculty compensation.

The AAUP proposal would divest these two committees of these responsibilities. Local AAUP President Jack Stieber, professor of economics and director of the School of Labor and Industrial Relations, said the faculty affairs committee already has too much to do. But Erwin Bettinghaus, assistant dean of communication arts and chairman of

Bargaining at CMU, page 4

the faculty affairs committee, explained that his committee spent several years reviewing and proposing amendments to the faculty bylaws, also in the committee's jurisdiction. Now, with that completed, the committee has been able to concentrate more on faculty compensation, Bettinghaus said.

To further complicate the matter, the

McKee Committee (on student participation in academic governance) is considering a proposal to establish a standing committee to be responsible for the bylaws, thus leaving the faculty affairs committee free to consider only faculty compensation.

* * *

THE AAUP proposal for a standing committee on budget allocation and faculty compensation states that the committee "Shall be consulted by the University administration in formulating the annual budget, in allocating funds to the various University functions and activities, and in determining adjustments in faculty salaries and other (Continued on page 2)

Collective bargaining raises questions

Some prefer to call it collective negotiations or professional negotiations. But that's a game of semantics: It's still collective bargaining. And the model is that of adversaries seeking compromise.

One group represents one interest; another group represents the other side. They negotiate, recognizing that conflicts will be reflected. No side is necessarily right, Albert Blum, professor of labor and industrial relations, explains.

Jack Breslin, executive vice president and chief negotiator for the University, doesn't see it as an adversary relationship. He describes the situation as "trying to work out working relationships with people in the central administation."

At any rate, collective bargaining for faculty is still the exception rather than

relatively few models in higher education - and those include the State University of New York system and Central Michigan University.

Some people question the need and applicability of collective bargaining in higher education. They talk about existing university governance systems in which faculty have strong, albeit advisory, voices through their senate and committee structures.

At MSU, Richard Featherstone, professor of administration and higher education, says, "We now have a faculty organization dealing on an advisory basis with all administrative bases. It's been a long time coming."

OTHERS question the boundaries of collective bargaining. Should a contract include non - financial items? Just what, in an academic community, is - or

the rule in higher education. There are should be - bargainable? How does collective bargaining affect academic freedom? What would become of the existing governing structure? And will the system become rigid?

> Contracts in the New York City University system cover such items as salary schedules, procedure governing access to personnel files, workload, grievance procedure with binding arbitration, direct access to the board of trustees, periodic consulation with the chancellor and campus presidents, statement on academic freedom, sabbatical leave, facilities for faculty (such as number of secretaries per faculty and minimum space requirements) research support, travel allowance by allocations, distinguished professorships, welfare fund, staff housing and disciplinary actions.

Charles Belnap of the Michigan Association for Higher Education, which represents the Central Michigan University faculty, said that "any time you negotiate you have to have a statement of academic freedom."

* * *

THERE ARE some who question the industrial model for collective bargaining in higher education.

Fred Vescolani, professor of administration and higher education, says he thinks the industrial model in education "stinks... because the nature of business - industry - labor does not fit" in higher education.

"There is no comparison," he says, 'between an Oldsmobile supervisor and a school principal, between a worker and a teacher."

He would prefer to see a professional organization along the lines of the American Bar Association or the American Medical Association. The National Education Association, he says, would need a reorientation of philosophy to serve in that capacity, and he says he thinks "that's not possible at this stage."

* * *

ANOTHER QUESTION on the, applicability of collective bargaining to higher education involves division of units. Should department chairmen be represented with faculty or should they be considered administrative? Can different colleges be represented by one group? How should part - time and non

- tenured be classified as compared to full - time and tenured faculty?

At this point in the history of collective bargaining in colleges and universities, these questions are still being asked and to some degree worked out - in New York and in Mt. Pleasant.

Here at MSU, three unions are involved in collective bargaining with the University. These are AFSCME Local 1585, which includes all skilled trades; the power plant operating, engineers; and the Fraternal Order of Police, with which campus police are affiliated.

The Administrative - Professional Association which includes about 300 persons, does not now seek to bargain collectively, according to William D. Kenney, assistant director of financial aids for program development and president of the A-P Association.

THE ASSOCIATION'S intent, Kenney says, "is to establish a kind of working relationship in which A-P representatives can deal with the administration along professional lines. We are striving for a relationship that is new and different ... and have not structured ourselves within a union framework."

* * *

BOARD OF TRUSTEES member Clair White says he has long been a supporter of collective bargaining, partly because he is concerned with what he calls politicking in the departments and up through administrative channels on salary raises.

When he is faced with a list of salary increase recommendations, White says, "I'm not in a very good position to know whether they are sound recommendations or whether they are just internal patronage."

It will probably take some time before all the questions and implications of collective bargaining in higher education are resolved.

In the meantime, very little has been written on the question of conflict and the means of resolving conflict at the college or university level, according to David Harris, a doctoral candidate in education. Harris is doing research on the potential for conflict between faculty and administration at the university level, for which collective bargaining is one means of resolution.

- BEVERLY TWITCHELL

Compensation considered

The 1969 annual report of the University Faculty Affairs Committee covers six issues concerning faculty compensation and fringe benefits in which the committee was involved.

- That the current disability insurance program be examined for possible reduction in rates with the University contributing to the program.

Faculty voice in budget...

(Continued from page 1)

economic benefits. The committee shall be informed by the University administration of any actions taken on matters which have been discussed with the committee."

Stieber said the proposal is not a substitute for collective bargaining but is instead something the group thinks is more acceptable to faculty at this time.

But Albert Blum, professor of labor and industrial relations, said he thought the AAUP proposal was a step toward unionization. Blum is chairman of the Professors' Organizing Committee, which is studying the question of collective bargaining.

This group has been meeting for about a year, involving 40 to 50 faculty, according to Blum.

He said that the Professors' Organizing Committee is looking outside the existing committee structure because committees haven't done anything. And, he said, committee members "cannot criticize the administration because they are part of the 'establishment.'

* * *

BLUM SAID he didn't think his group is interested in budgetary allocations. Its main concern is faculty compensation.

"We want money," he said. "It is the administration's role to argue back or to find it and give it to us. The faculty are competent to talk about their well being, but not about whether we need a nwe heating plant.

"We're just opposed to unilateral decisions on the use of funds."

He cited as an example the recent granting of mid - year salary increments to 325 faculty members. Blum said that "there was no consultation with faculty as far as we know," on the criteria used in granting the increments.

far has tried to be free of any national organization.

Blum said the group's idea is to tell the administration to "stop studying and you'll find the way (to finance requests)," just as a way was found to give raises to blue - collar workers last fall, even though they had been told earlier that there was no money.

Executive Vice President Jack Breslin, who headed the team that negotiated with the AFSCME union last fall, said that it was not a case of finding the money to give the raises, but a situation similar to deficit spending.

"Sooner or later," he said, "someone pays the price of these increases. It's not true that the University has unlimited funds."

The Professors' Organizing Committee probably will meet this term to develop a program, and it hopes to have a general mailing out this year, Blum said. He also said "some deans" have expressed support for the group's efforts.

MARVIN D. SOLOMON, professor of natural science, surveyed the University College faculty recently on their sentiment toward organizing the college for collective negotiations.

* * *

Of the 109 faculty who responded to Solomon's poll, 82 favored organization and 27 opposed it.

Solomon said he initiated the poll because of comment by Charles C. Killingsworth, University Professor of labor and industrial relations, during discussions of the Massey Report on student participation in academic

Faculty participation now, Blum said, is "meaningless."

"It isn't a question of good intentions (on the administration's side). I want to

be involved in decisions affecting me, and I want recourse," Blum said.

He said the University must find a way to finance a collective demand "or. face the consequences . . . which may be an unhappy faculty."

BUT HE doesn't like the word "strike."

"I cannot really imagine our refusal to teach, unless a proposal were so patently unfair...," Blum said. But he said he didn't think either would happen.

He emphasized that his committee so

governance.

Killingsworth mentioned that with passage of the Massey (now the McKee) Report, all segments of the University would have a voice except the faculty since students would be sitting with the faculty on committees and in the Academic Council, probably with voting privileges.

Solomon said he is not connected with any organization nor did he have contact with any organization while conducting the poll.

He wasn't sure what his next step would be, other than notifying the University College faculty as to the poll results.

"We've got to discuss this," he said. "I think I'm going to cast about for advice."

He said he would talk to the Michigan Education Association, and probably to the president of the AAUP.

Five recommendations were made regarding fringe benefits:

- That a comprehensive study be made of fringe benefit policies at comparable institutions. (That study has been completed and the committee will toward additional work further recommendations.)

- That all faculty be provided with professional liability insurance as a paid fringe benefit.

- That all faculty be provided with professional liability insurance as a paid fringe benefit.

- That substantial improvements be made in the basic medical and major medical care packages available to faculty, and the University pay a portion of the medical insurance premium for faculty as it does for other employes. (These recommendations were accepted and are now in effect.) elated group of

(Rates have been reduced, but the committee reports that it "will continue to press its request that the University assume the burden of the disability insurance as a paid fringe benefit for all faculty.")

- That the University investigate the possibility of increasing the term insurance coverage available to the faculty. (This is being done by the Office of the Vice President for Business Affairs and a decision is expected within a couple of months.)

* * * A SUBCOMMITTEE was established last fall to consider a proposal on faculty compensation. The proposal relates to the level of compensation desirable for faculty and the manner in which increased levels of compensation can best be achieved. The subcommittee has been working with the Office of the Provost on this question and expects a set of recommendations early this year.

Osteopathy: Questions and a response

The letter. . .

The Faculty News welcomes letters. They should be sent, with the writer's name, to Faculty News, 296-G, Administration Building. We reserve the right to edit letters, when necessary, to meet space requirements.

Sir:

A very important matter is being considered on this campus and I find it is not openly and fully debated. In fact, because I read Nature each week, I know more about the debate over the proposed Human Science curriculum at Oxford University, England, than I know about the proposed College of Osteopathy at MSU. The State News, the State Journal, and the minutes of the Academic Council give me some information, but not enough of the kind of information I want.

I want to know more about osteopathy. In the Oct. 30 issue of the State News the reporter stated: "Basically, osteopaths differ in that their theory of disease and method of treatment rests upon the supposition that most diseases are due to deformation of some parts of the body and can be cured by some form of manipulation."

Since I am a biologist much interested in biological theories, I would like answers to questions that came to mind when I read the above statement in the State News. I hope that answers to my questions will come out in the public press as the discussion about a College of Osteopathy goes forward.

The osteopaths' theory of disease differs from what other theory or theories of disease? Does the osteopaths' theory of disease include, exclude, or complement the other theory or theories?

Are there other postulates to the osteopathic theory besides the one given: "Most diseases are due to deformation of some parts of the body?" What are the facts that make this postulate plausible?

Since any theory gives special meanings to some words, one needs a couple of definitions. What does "deformation" mean? Is this used purely in a gross anatomical sense or does its meaning extend to the cellular and molecular levels? What extent and limitations are placed on the word "most?"

* * *

THE POSTULATE says "due to deformation." If there are other postulates to this theory, will they give us any clues concerning the origin of deformations? Or must we assume they arise de novo?

When did the osteopathy theory first appear as a viable theory? Who were the most active proponents of the theory? What are the references to the first few papers or books that presented the theory in its viable form? (Editor's Note: The following letter was written to the Faculty News by Ralph Lewis, professor of natural science. Material in response to his questions was provided - at our request - by J. George Abdilla of the Michigan Association of Osteopathic Physicians and Surgeons, Inc., Farmington. The information here is excerpted from a book, "Osteopathic Medicine: An American Reformation," by George W. Northrup (copyright, 1966). The excerpts are printed with permission of the American Osteopathic Association, publisher of the book. Additional information on osteopathy is available from the Education Department, American Osteopathic Association, 222 E. Ohio, Chicago, Ill. 60611.)

. . . The response

ITS BEGINNINGS

(Andrew Taylor Still, the founder of osteopathic medicine) believed that drugs of his day were either inert therapeutic agents or toxic burdens imposed upon an already diseased body...

He believed that man should be studied as a total unit. He believed that within the body of man were those substances necessary for the maintenance of health and, hence, if properly stimulated, might also be the substances necessary for the cure of disease. He did not believe that disease was strictly an outside agent inflicting its evil on the body but considered instead that it was a normal body response to an abnormal body situation.

In his search for the positive quality of health, he came to a startling conclusion. . .that the skeleton and its supporting muscles and ligaments were subject to certain mechanical laws and therefore were the objects of stresses and strains. Within his philosophy was the concept that man, among his other attributes, was a mechanism subject to mechanistic law.

Dr. Still observed, through careful study of the patient, that when joints restricted in motion due to mechanical locking or other related causes, were normalized, certain disease conditions improved. He also noted that not only was there a local response to pain in the

body structure, but he believed that he noticed an improvement in the function of other systems of the body as well.

* * *

MANIPULATION THERAPY

Fortunately and sometimes unfortunately, manipulative therapy has been the hallmark of osteopathic medicine. It has been fortunate in the fact that manipulative therapy is a powerful and valuable method of treatment in the maintenance of body unity in health and in the prevention and treatment of its diseases. It has been unfortunate because large segments of the public have not always understood that the therapy was but one means of expressing the unifying principle as formulated by Andres Taylor Still ... Osteopathic manipulative therapy is far more than massage: It is based upon specific diagnosis, indicated or contra-indicated by the individual requirements of the patient, and scientifically applied through the training and experience of skilled body organs and systems sharing in the common rights and property of a biological community...

The unifying forces in the body are the nervous and circulatory systems... The skull and spine are part of nature's protective covering for this vital system of the body. The spinal nerves emerge from between the segments of the spine in specially constructed sheaths and are transmitted all over the body... Anything causing abnormal irritation to these nerves can and does affect widespread body function.

Because these nerves cross between joints and through muscles and are also responsible for their function, any abnormal alteration in the function of the musculoskeletal system can cause aberrations in the normal and healthy unity of the body. When this balanced interrelation of body systems is disturbed in any manner, disease processes are prone to develop. * * *

HEALING POWER OF NATURE

The recognition of the mechanical factor of "vis medicatrix naturae" is distinctly osteopathic in its concept. Until the advent of osteopathic medicine, it was a missing link in the study of man.

Basically, all treatment should be designed to support, stimulate and in some instances initiate the body's trend toward health. Relief, removal or repair is necessary and helpful, but is primarily designed to cope with the byproducts of disease rather than with the disease itself. It is in the field of prevention and the support of health that osteopathic medicine maintains an emphasis.

A PRINCIPLE TENET

The structure - function concept has always been a cornerstone of osteopathic principle and practice...

No careful student of biological man can escape the validity of this approach

(structure - function concept). Whether one alters the gross structure of the body by manipulative therapy or whether one "manipulates" the molecular structure of a cell by radiation, chemicals and means yet to be determined, the resulting altered function cannot be denied.



without that permitted the disease to grow in the first place.

THEORY OF DISEASE

Disease is a total body response. It is not merely a stomach ulcer, a broken bone or a troublesome mother-in-law. It is a disturbance of the structure-function of the body and not an isolated or local insult. Slowly but surely there is a growing recognition that disease is multi-caused. The understanding that multiple causes of disease can arise from remote but interconnected parts of the body will ultimately emerge into a unifying philosophy for all of medicine. When this occurs, it will embrace many of the basic principles of osteopathic medicine.

The role of osteopathic lesions (which restrict motion, e.g., sprains) as dysfunctions of various body joints has been demonstrated as a frequent cause of malfunction and pain in the musculoskeletal system itself. It has been equally well demonstrated that these disorders will imitate disease in other organs and body systems. However, it is the contention of osteopathic medicine that the musculoskeletal system and those osteopathic lesions that occur in it can and do affect the function of other organs of the body.

If disease is a process rather than a "thing," and it involves total man, (then) the musculoskeletal system, its disorders and its treatment must receive increased emphasis in the understanding and management of human illness.

New show focuses on sight, sounds

A half-hour television series designed to "relate the essence of the University to the Lansing community" has debuted on WJIM-TV.

The program, "MSU: Sights and Sounds," is the product of graduate and undergraduate students in television and radio. It is seen at 4 p.m. Saturdays. Its executive producer is Chuck Demery, a graduate student in TV-radio and WJIM newsman.

What are the references to the early crucial works that describe the experimental or observational activities carried out to test predictions from the theory?

What modifications have occurred within the theory since it was first stated in a workable form? What are the classes of facts that are interrelated, explained, or understood in terms of the present postulates of the theory?

These are legitimate questions to ask of any theory. And since a college of osteopathy is a possible addition to our University, I imagine that many faculty members and students would also like answers to these questions.

Ralph W.Lewis Professor of natural science osteopathic physicians.

Even though the diagnostic technique be important and the manipulation skilled, manipulative therapy must be predicted upon a sound and general knowledge of all of medicine...

* * *

BODY UNITY

It is a known biological fact that when man is in a state of health he is healthy all over. Equally when he is sick, he is sick all over, b_{i} . The body is a commune – an interrelated group of * * *

TREATMENT

The removal of diseased gall bladder or the use of an antibiotic to combat germs that cause disease is a valuable and acceptable practice of osteopathic physicians. However, osteopathic medicine does not believe that the removal of diseased organs or the shooting of "desperado" germs with magic antibiotic bullets rids the biological community of total man of disease or constitutes the sole answer to man's health problems. It does little to rid the body of the proper environmental conditions within and Demery said he hopes the series will attract faculty involvement as a means of communicating faculty projects and research to viewers outside the campus community.

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University Senate useless?

Collective bargaining for faculty at CMU

Central Michigan University is the first four - year college in Michigan whose faculty have elected to negotiate a contract through collective bargaining.

The CMU faculty voted by a narrow margin last fall in favor of representation by the Michigan Association for Higher Education (MAHE), a branch of the Michigan Education Association.

Neither the administration nor the Board of Trustees took any part in the campaigning before the election, according to Charles House, assistant to CMU's president, and Lloyd Cofer, member of the Board of Trustees.

Charles Belnap of MAHE said last week that contract proposals probably would be presented this week. But the CMU administration has not yet selected its negotiating team.

The negotiating team for the faculty includes seven people, all holding doctorates and representing various departments, according to Gordon Gilchrist, assistant professor of industrial education and technology, and president of CMU's MAHE chapter.

House said the administration has at least three options in selecting its negotiating team: Someone from the present administration, the University attorneys, or a professional employee negotiation attorney's firm.

ROGER M. BUSFIELD JR., chairman of CMU's Board of Trustees, said that the five academic deans would probably serve as a back - up team for an administration negotiator since they are more familiar with situations in their schools.

Busfield said that the board prefers to keep the president and provost "outside the negotiating situation," because, as chief academic officers of the University, "they should not have to bear the brunt of hammering that (a contract) out."

The decision to negotiate collectively has left some question on the status of the University Senate, though senate revision has been under consideration for three years, according to Elbert R. Bowen, professor of speech and former president of the senate.

Bowen said he didn't know how collective bargaining would affect the senate's standing committees.

"We're wondering if the senate itself will be useless," he said. * * *

THERE IS a "gentlemen's agreement," Bowen said, that with collective bargaining, a faculty senate would be responsible for non - financial areas. Some faculty feel that a purely faculty senate would be left powerless, Bowen said, and so they prefer to have administrators involved.

The senate at CMU now includes faculty, deans and central administrators.

Proposals based on the two alternative senate structures have been discussed by the existing senate and are now before the senate's executive board. They will be presented to the faculty, and Bowen thinks that a vote on them will take place within a month.

But senate structure could depend on what happens at the bargaining table.

"Some argue," Bowen said, "that you can't debate salary if you don't also debate work load - such things as class size, etc."

If the "work load" - academic as well as financial concerns - is included in contract proposals, and thus becomes bargainable, the faculty would have to decide what the senate role, if any, would become.

* * *

DEPARTMENT chairmen at CMU are divided over whether they should be classified as faculty or administration, according to Jerry M. Anderson, chairman of the department of speech and dramatic arts, and former MSU faculty member.

Department chairmen are now classified as faculty and thus are represented by MAHE. Because some chairmen teach, and because communication is primarily downward from the chairmen to the faculty, Anderson said he would prefer to be aligned with the faculty.

On the other hand, he said, alignment with faculty would put chairmen across the bargaining table from the deans.

And department chairmen have in the past been involved in salary determination. Anderson's department was almost completely autonomous, he said, with some "givens," such as total amount available.

If, under collective bargaining, the department chairmen were to lose their responsibilities in salary and hiring, Anderson said he would prefer to be aligned with the administration. * * *

THE TRUSTEES have said, but not officially, that the senate may have to forfeit some of its prerogatives to the bargaining unit, such as grievances, faculty compensation and fringe benefits, according to Lloyd Cofer. This is unofficial, Cofer said, because the bargaining unit has not yet officially approached the board.

The board also has some doubt that Public Act 379 – the basis for collective bargaining in public institutions applies to state colleges and universities. This could result in a "friendly suit," according to both Cofer and Busfield.

A petition has been circulated among CMU faculty to limit what is bargainable and to provide for a secret ballot on the ratification of a contract. Thomas Delia, associate professor of chemistry, is a member of the faculty group that opposes collective bargaining and circulated the petition. Delia said the petition has been circulated, but he didn't know how many faculty had signed it. And he said he wasn't sure if the petition would even make any difference.

His group is now "providing information" to see if some faculty might reconsider their decision on collective bargaining. The group also is waiting "to see what happens when they come up with a contract," he said.

If the contract covers non - financial areas, Delia said his group might campaign to have it voted down. But an election to de - certify the union cannot be conducted until 90 days before the first anniversary of the vote for collective bargaining, which was last September. If a contract has been settled before then; nothing can be done, Delia said.

There are 524 full - time (and thus voting) faculty at CMU.

- BEVERLY TWITCHELL

Science faces money squeeze.

(Continued from page 1)

anti-research volley, though they were retrenched for it.

"Last year we dropped about 10 per cent, " said Department Chairman Jack B. Kinsinger. "We haven't found it extremely bad yet but we have had more refusals to our research proposals. We may fare well, however, because we sent in more proposals than usual for this year. Our Centers of Excellence National Science grant (from Foundation) helped us considerably, although some of our younger faculty members are hurting for funds."

Physics students nearing graduation are increasingly concerned about the growing deemphasis on research, said Aaron Galonsky, professor of physics. Projects all over the nation have been discontinued.

microbiology and public health. "It's a time for regrouping. For example, my project on the ultra structure of bacterial spores has been stopped after eight years of backing by the Navy. Sen. (Mike) Mansfield wouldn't see a connection between the research and usefulness to the Navy."

Gerhardt's loss of funds is related to the defense department's 20 per cent reduction in its support of basic research. Projects that do not comply the new military-relevance with requirement. designed by Sen. Mansfield, are being curtailed.

The kind of funds for research greatly affect the stability of a research group. The Agricultural Experiment Station research, for instance, is about 50 per cent state-supported.

"This means that a lab technician, a 'post-doc' or equipment has to go," Mathews said. "Sometimes the entire project has to be shelved or inefficiently stretched out."

One observer has said that nationally there is occurring a mindless dismantling of the scientific enterprise.

And an MSU scientist has described the cuts on biomedical research as "criminal." * * *

ANOTHER MSU researcher, Physiology Chairman Francis Haddy, "We said: have promising breakthroughs ahead in research on heart disease and cancer. If this progress is retarded these breakthroughs will be correspondingly delayed."

Department of Human Development. "So we preferentially get hurt more than other medical school departments. Almost all of the medical departments are hurting. Research-training project funds are withering away."

"Clearly, the direction of support is changing," Weil said. "In the past, basic research was the backbone of a medical school. Here, teaching and service is the backbone of our medical school."

"During the funding transition, individualized teaching programs will not be adversely affected," he said. "Meanwhile, the mechanism of government support for medicine will be swinging to educational support. At the moment, however, we have received talk about such a mechanism, but no dollars.

"I see it is a shift in emphasis rather than a halting of basic research," said Galonsky. "It may take a few years for many of us to adjust. This adjustment period may be hard on our next graduates. In university circles pure research has been looked up to and students have tended to want to do some kind of pure research."

"Attitudes change," Galonsky said. "For example, if there is a lot of prestige with solving environmental problems, then the physics students will want to swing over like others are swinging over to environmental research.

MICROBIOLOGY and public health has had good support for its younger researchers.

"Some of us have been caught short," said Philipp Gerhardt, chairman of

"Our research," said Jacob A. Hoefer, associate director of the station, "stands about the same as last year. As far as NIH and NSF funds are concerned, we fare about the same as similarly supported projects about the campus."

Some projects on the campus have survived the grant crunch, but have been cut by as much as 25 percent.

"The problem is compounded," A.L. Mathews, administrative assistant in biochemistry said, "because salaries for some continuing projects were projected seven to eight years in advance. Inflation has erroded costs so that in three years a \$20,000-per-year grant that would support a project is, in effect, about \$4,000 short due to inflation. Typically, such a grant may have been cut to \$16,000, or so, to give an effective \$8,000 slice from the project."

"The threat is critical," he added. "I recently sat in on a section reviewing some grant applications. They were from well-established scientists. About 5 per cent of the investigations will come to a halt if these and related applications are not approved by this coming July 1.

"These people are working on areas that will lead to an improvement in the understanding and the therapy of heart disease. This is what finishes off many of us. It's a terrible thing. Research cutbacks will erode both physiology and medical education. Many medical schools pay their faculty in part from grant funds. This cut back will erode entire faculties."

The MSU medical school is feeling the financial pressure too.

"New departments are hurting in the positions for young faculty," said William B: Weikl, chairman of the * * *

A RECENT editorial in Science magazine said:

"In exploiting scientific discoveries, humanity will squander resources and conduct profoundly unwittingly important experiments of itself and on the environment. Who will evaluate such experiments and be alert to emerging problems? The man in the street can scarcely fill such a role. Government might, but its leadership is in the hands of politicians who rarely act until an issue is crystallized by others. Scientists or engineers in government service might act as watchdogs, but in general, politicians prefer that the bureaucrats speak only when spoken to. Employes of industry are in much the same circumstance. Thus academic scientists and the scientific societies have responsibilities that they cannot escape."