

Inside . . .

...New state boundaries, page 2
 ...Educator Johnson, page 2
 ...Toward better lab tests, page 4
 ..."Centennial Review," page 5
 ...The Arts, page 6

MSU News-Bulletin

Vol. 4, No. 25

Michigan State University

April 19, 1973

ROTC units prepare for peacetime roles

Remember Brasso? The metal polish in the little striped can that used to sit next to the 19 cent ballpoints by the cash register in the bookstore? As recently as 11 years ago, when every able bodied male freshman and sophomore was required to belong either to ROTC or the band, and there were a lot of buttons and buckles to shine, it was a hot item.



BY
 MIKE
 MORRISON

The bookstore doesn't stock it anymore. The Army and Air Force ROTC united on campus this spring have a combined enrollment of 218 cadets. The band is almost that big.

But raw numbers and Brasso sales are misleading if they are used to gauge the health of ROTC at MSU.

The leaner cadet corps is the result of the abolition of mandatory military training at the University a decade ago and, more recently, the end of the draft and general drawdown of military forces since the disengagement of the United States from the Vietnam War.

Spokesmen for both the Air Force and Army units are encouraged by the fact that the programs are composed of young men and women with the "right" motivations — a desire for service to the country, professional advancement, and a steady and well paying job upon graduation, among others.

There is little chance of ROTC at MSU going belly-up because of lack of interest, they say. The Army unit is still the largest among the 11 units in the state and was one of 20 out of the 102 units under 5th Army that showed an increase in enrollment last fall. The Air Force program is also larger than the other three in Michigan.

Faculty and staff members who have been active in ROTC affairs in instructional or advisory capacities say the relationship between the military and the University embodied in ROTC is moving away from what was considered by some a parasitic arrangement and approaching a more beneficial state of symbiosis.

They say it is critically important that MSU and other universities continue to influence the military establishment through the ROTC students who graduate into the officer corps, particularly in view of the volunteer Army concept and its implications for possibly creating a dangerous gulf between a suspicious citizenry and a cloistered military.

Input needed

Col. Jean Burner directs the Army program on campus. He's a West Point graduate who doesn't believe in "Knocking his ring" (a bit of military esoterica referring to the tendency of some service academy graduates to remind other officers of their prestigious beginnings by rapping their class rings on desks, bars, etc.).

Burner believes the military needs

the input from ROTC to complement that from the service academies and other sources and "to permeate the officer corps with a broader point of view."

"Duty, Honor, Country," the motto of the Long Grey Line, is just as applicable to his students, he says, though few of his graduates are motivated toward military careers.

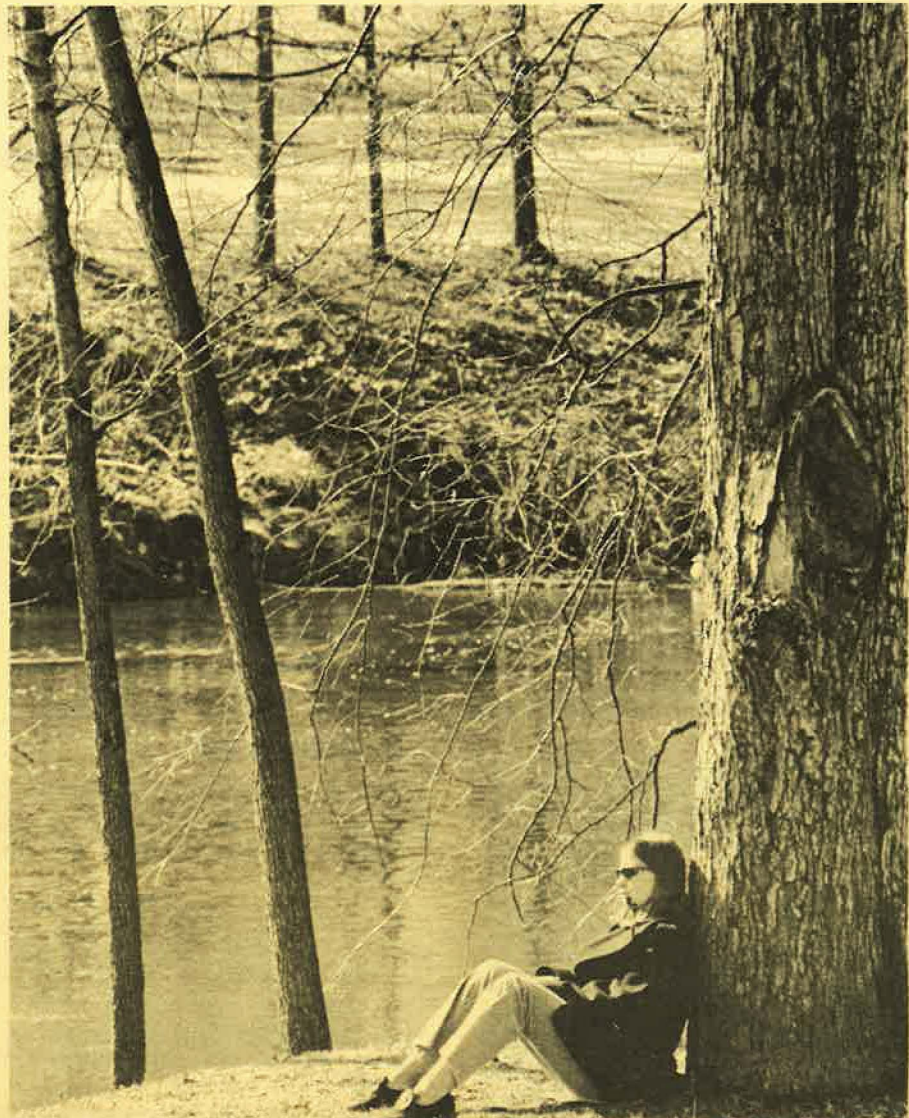
"The product we aim to turn out is the citizen-soldier," he says. "Most of our people are not military career oriented and it is not our goal to make them so."

In 1969, the last year ROTC was mandatory, the Army program enrolled more than 3,000 students. This spring the enrollment is 106. In spite of a slight increase in enrollment last fall, two very different factors have occurred since that have affected retention.

The first was the announcement in January that no more men would be drafted. Twenty-four cadets left the program shortly thereafter.

"These were mostly first and second year students, many of whom were draft motivated," Burner said. He said that draft avoidance has frequently been a motivation for ROTC membership, adding "and this has provided us with some very good products."

(Continued on page 4)



— Photo by Dick Wesley

Survey raps pass-fail grades

An informal survey of member institutions by the Committee on Institutional Cooperation (CIC) has shown that nontraditional grading can work to a student's disadvantage when he or she applies for admission to graduate or professional schools.

The Committee on Institutional Cooperation is composed of the Big Ten Universities and the University of Chicago.

Admissions officers at CIC medical schools say that pass-fail grading forces an over-reliance on the Medical College Admissions Test, which by itself is an uncertain measure of the applicant's ability.

They say that a few pass-fail courses, particularly in non-required subjects, do little harm, but large numbers of such courses in prerequisite areas can produce a "distinct disadvantage" for the applicant. Several respondents said such grading was "grossly unfair" to good students.

Business and law school admissions officers see fewer problems with nontraditional grading so long as those courses comprise a minimum of the student's transcript, although they agree with law school officers that it forces too much reliance on standard admissions tests.

Several CIC Business schools expressed concern over the growth of nontraditional grading, and one admissions officer said that any grading pattern that could not be adjusted to the 4.0 scale would eliminate the applicant from admission.

Admission to CIC law schools is apparently not hampered if

nontraditional grading accounts for less than 25 per cent of the student's undergraduate grades, but can be a detriment if the proportion is higher.

Several law deans, however, expressed strong disapproval of the pass-fail grading, one terming it "unfair to the good student," and another calling it a "euphemistic absurdity."

Graduate school deans also said a few pass-fail courses might not be an impediment, but that in general nontraditional grading has a "negative influence" on admissions. One dean said pass-fail grading "unquestionably does harm," and another said a complete transcript of such courses would eliminate the candidate from consideration, and another described it as "bordering on the fraudulent."

Financial aid in CIC law, medicine and business schools is based on need exclusively, so the undergraduate transcript is not a factor once the admissions hurdle is passed. Member graduate schools, however, weigh the student's academic record in determining eligibility for aid, and a transcript heavy with pass-fail courses can penalize the student financially.

Faculty members at Justin Morrill College, who are currently evaluating the pass-no grade (PN) system instituted for JMC students in 1970, expressed concern over the CIC survey.

Dean Gordon Rohman said he was discouraged by the report, but added, "this is part of the information we need to complete our evaluation."

Neil Cullen, JMC instructor who is conducting the evaluation said he was "definitely concerned," and added that

it was unfortunate if JMC's PN system was lumped into all other pass-fail courses by graduate and professional schools.

He explained that the PN system used by JMC provides written evaluations of the students, not just a pass or fail notation. At the end of a student's undergraduate career he can ask for a profile encompassing all his written evaluations.

"We provide more evaluation of the student through our system," he said, "not less."

The CIC survey indicated that 25 per cent of a student's transcript composed of pass-fail evaluations was about the maximum acceptable without hurting the student's chances for admission to graduate or professional school. JMC students graduating this year and next will have about 50 per cent of their undergraduate work in PN courses. All of the work in their majors, however, will be graded traditionally because it is taken outside the college.

Cullen said the experiences of this graduating class and the next one will be closely watched to see if the PN grading is detrimental.

"If we find that graduate and professional schools react negatively to our system, then we won't keep it and jeopardize our students," Cullen said.

Both Rohman and Cullen expressed disappointment that admissions officers seem reluctant to take the time and go to the expense to give nontraditional grading a chance.

"Some of them just don't know how to cope without the convenience of numbers," Rohman said.

Geographer redraws United States map

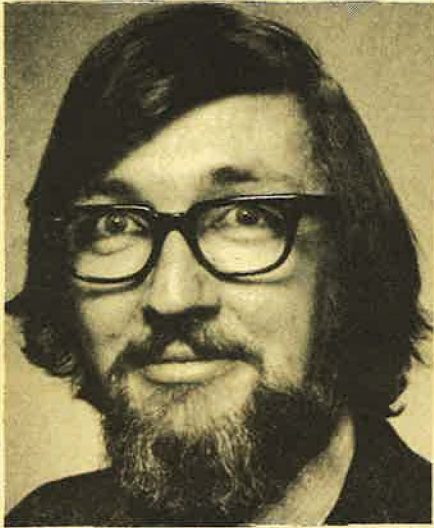
Stanley D. Brunn, associate professor of geography, has devised a new map of the nation's states, reducing them in number from 50 to 16 on the basis of similar economic orientations, social and cultural heritage, and political ideology.

Brunn, who is acting director of the MSU Computer Institute for Social Science Research, said his new map is an attempt to identify a reasonable number of states or city states that could justifiably handle existing and eventual societal problems.

Brunn has done extensive research in political geography, social geography and urban geography, using the computer and various quantitative methods. He feels that the 50 - state political divisions of today, devised in the colonial and agrarian regimes of the 18th and 19th centuries, are invalid.

On the other hand, he doubts that his new map of 16 states will receive instant acceptance as Americans are accustomed to the boundaries and names of existing political units.

The average American, Brunn said, often knows his police, property, and school district boundaries and may fight to retain each of them, if asked to shift loyalties, even though there may be considerable personal and societal gain in such an enterprise.



STANLEY BRUNN

Brunn would revise the present structure of electing national, state and local officials. He would redraw legislative areas at local and national levels. He would acknowledge shifts in political parties and cultures. He would give recognition to American migration, mobility, urbanization, concern for the environment, and the newer needs in governmental decision - making.

16 New States

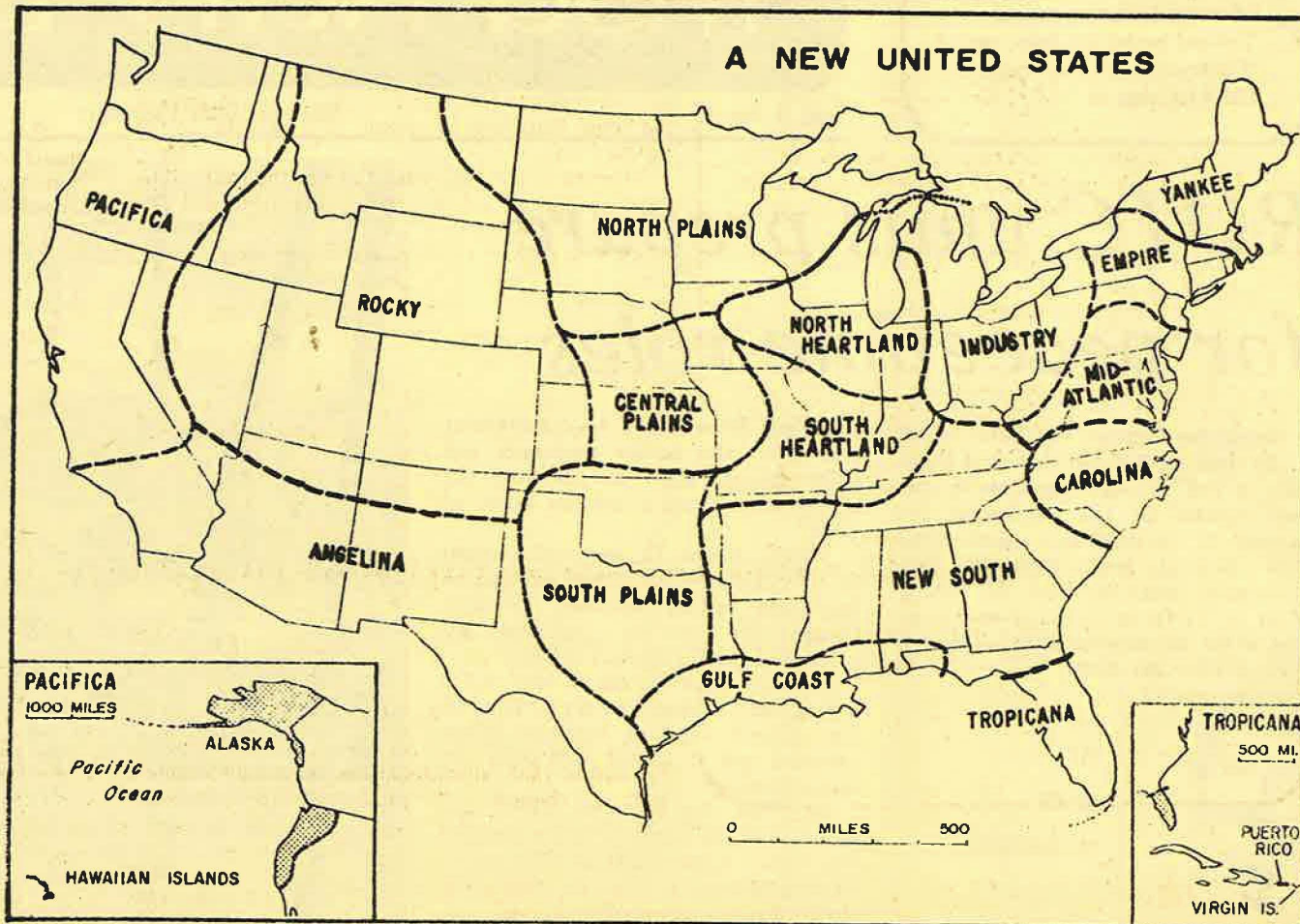
In the west, Brunn's new states would be "Pacifica," running from the Canadian border to midway between San Francisco and Los Angeles, and including Hawaii and Alaska; "Angelina," which would run east from the Southern end of "Pacifica" to include the western third of Texas; and "Rocky," which would include all or part of eight western states starting in the north with Montana. San Francisco would be the capital of "Pacifica," Los Angeles the capital of Angelina, and Denver the Capital of "Rocky."

In the center of the nation, the new states would be "North Plains," "Central Plains," "South Plains," "North Heartland," and "South Heartland."

In the south, a major new state would be "New South," including parts of nine existing states, with Atlanta the capital. Other southern states would be "Gulf Coast," with Houston the capital; "Tropicana," including most of Florida and Puerto Rico and the Virgin Islands, with the capital in Miami; and "Carolina," spanning all or part of three existing states, with Norfolk as the capital.

Michigan

In the central northeast, the new state of "Industry," would comprise most of Michigan's lower peninsula (the Upper Peninsula goes to the "North Plains"), all of Ohio, and portions of



Indiana, Kentucky, West Virginia and Pennsylvania, with Detroit as the capital.

New states in the northeast would be "Yankee," including all of Maine and parts of four other states, with Boston as capital; "Empire," dominated by New York as capital; and "Mid - Atlantic," comprising all or part of four existing states and the District of Columbia, with Baltimore as the capital.

In each instance, Brunn justifies his remapping on the bases of political, economic and social shifts which already have occurred in American living.

His "Angelina," is dominated by the Spanish - American influence, the influx of old and young migrants, and the spread of defense and space industries. Los Angeles is selected as capital because it is the dominant city in the southwest.

Brunn's "Industry," would include the heart of the industrial nation.

His three plains states would represent regions of progressive, moderate and conservative political philosophies.

"To many Americans," Brunn said, "politics has become identified with national goals like housing, health and education. However, to a sizable segment of other Americans, politics is still tied to big city bosses, rural county seats, and specific regional issues."

"Ineffective and outdated as such political organizational structures may be, they still represent a problem involved in the construction of a new map of the United States, and especially at the specific point where the individual lives his life."

"It is well that feelings of political identity and allegiance not be lost entirely in restructuring political space, even though some reorientation of an individual's or a group's behavioral space will accompany long - awaited political reforms."

Year 2000

Looking to the political evolution which he expects by the year 2000, regardless of whether there is an actual remapping of the states, Brunn foresees six major political characteristics of the nation by the turn of the century.

*Erosion of political geographical boundaries, which will be gradually and primarily functional in nature, nurturing further administrative problems in states, metropolises and municipalities, and inviting computer - based reapportionment. Brunn looks to metropolitan complexes such as from Chicago to Pittsburgh, sometimes

referred to as Chipitts, Boston to Washington (Bowash), San Francisco to San Diego (SanSan), along the Gulf Coast, and along the east coast of Florida.

*New political cultures will arise, mainly in cities, to challenge the traditional two - party system, with need for standardized and national welfare goals for everybody.

*A reorientation of voting patterns may mean the breakdown of traditional party loyalties, and produce new loyalties based on age, income, race, if not on regional philosophies, occupation, and educational attainment. Cities will become increasingly competitive in their demands.

*Centralized government planning

will increase, with the federal government regarded as the chief regulator and server.

*Politicalization of the environment will entail increasing attention to charges of misuse of the environment in agriculture, mining, industry and even recreation. An international controversy can be expected over regulation and manipulation of weather. (The Alaska Pipeline dispute is a current example of political - ecological conflict.)

*Reorganization of the current political structure will occur with input from social and behavioral scientists, lawyers, urban planners, politicians and administrators, all envisioning new forms of political representation and processes.

-FRAN MURRAY

Johnson honored as outstanding educator



WALTER JOHNSON

Walter F. Johnson, professor of education, has been named the "Outstanding Contributor to the Field of Higher Education for 1973" by the National Association of Student Personnel Administrators.

Johnson was chosen for the honor by the 3,600 - member national organization representing the leading student personnel administrators from more than 930 colleges and universities. He received the award at the association's 55th annual meeting in Philadelphia last week.

Johnson, active in the development of guidance and personnel work, has been on the faculty of the College of

Education since 1948. He has served as director of graduate student affairs in the College of Education in 1964 - 65, chairman of the Guidance and Personnel Services Curriculum Group, 1958 - 60, and director of faculty development, 1960 - 63.

During his career he has received many honors, including a Distinguished Faculty Award in 1964. He has also received the University of Minnesota's Outstanding Achievement Award in 1967. Johnson earned his bachelor's, master's and doctorate degrees from that university.

Johnson also has been active in many professional organizations and was president of the American Personnel and Guidance Association from 1958 - 59, and executive secretary of the Michigan Counselor's Association for five years.

MSU News - Bulletin

Editor: Mike Morrison

Associate editor: Sandra Dalka

Calendar editor: Patricia Grauer

Editorial assistant: Janice Hayes

Editorial offices: Rooms 314 and 315, Linton Hall, Michigan State University, East Lansing 48823. Phone: 355-2285.

Published weekly during the academic year by the Department of Information Services. Second-class postage paid at East Lansing, Mich. 48823.

Around the campus: A summary

Board agenda set

The monthly meeting of the Board of Trustees will be held at 10 a.m. Friday, April 20, in the Board Room of the Administration Building.

The tentative agenda for the meeting includes the following:

1. Personnel changes, including faculty promotions.
2. Gifts and grants.
3. Bids and contract awards — improvements to Agriculture Hall, Erickson Hall and Spartan Stadium.
4. Revision of University Copyright Policy.
5. Miscellaneous amendments to University ordinances.
6. Changes in Academic Governance Bylaws.
7. College of Osteopathic Medicine affiliation agreement.

The Board will meet in executive session Thursday evening to receive a report from Robert H. Hayes & Associates, Inc., on the Administrative - Professional classification study. The closed meeting will be for information purposes and no action will be taken.

Soph receives honor

Charles E. Meeker, an MSU sophomore from Portland, Ore. has received an honorable mention ranking in the 33rd annual national William Lowell Putnam Mathematical Competition.

Meeker placed in the top five per cent in the competition, which consisted of a six - hour examination given in December. Nearly 1,700 students from 322 colleges and universities in the United States and Canada participated.

MSU teams have placed first in the nation in 1961, 1963, and 1967.

Other MSU students who were recognized for their participation were John F. Reiser of LaGrange Park, Ill.; David M. Bowen of Harbor Beach; David A. Filpus of Alpena; Jesse O. Hobbs of Kent, Ohio; Keven J. Karplus of Hinsdale, Ill.; Thomas Kuczek of East Lansing; and Teresa L. Roberts of Lima, Ohio.

Energy policy urged

A coherent national energy policy — one which will enable the nation and its energy suppliers to work toward common goals — is long overdue, a vice president of Consumers Power Co. charged on campus last week.

Decisions of many federal departments and agencies which rule on energy matters have been "piecemeal and inconsistent, based on narrow and short - run interpretations of conditions affecting particular fuels, at a particular time," said Romney Wheeler.

Wheeler emphasized that Michigan, which has changed from an agricultural state to a great industrial complex, depends on energy, as he addressed Michigan District 636 Rotarians meeting in Kellogg Center.

He said it is "alarming" that most Americans do not yet realize there is a problem and that even some of those who are aware of the problem are unaware of the impact of inadequate energy supplies on their own day - by - day activities and life styles.

"Organized labor, for example," he said, "has not concerned itself, at all, with the energy problem."

Wheeler said the U.S. Department of Interior estimates the national demand for energy — industrial, commercial, governmental and private residential — will triple by the year 2,000. He said Michigan's demand may increase by even more than the national average.

To restrict the growth rate of energy use is not practical, he told the Rotarians. "We would fail to achieve our most pressing national goals, including full employment, alleviation of poverty, and protection of our national security. We also would have to curtail our efforts to clean up the environment..."

Wheeler pointed out that while it is highly

desirably to use available energy more efficiently, this alone will not solve the problem.

Neither will imports, he underscored. He cited lack of ocean terminals, shortage of refineries and the "cold hard facts of balance of payments" to the Middle East.

"Energy is going to cost more in the future," he asserted. But he added that higher rates will not solve the problem.

Wheeler emphasized that the United States, itself, "has sufficient resources to meet its foreseeable needs" in the energy field.

"The various elements of energy industries must be allowed to get on with the job of providing increased supplies," he declared. "This means allowing wells to be drilled, pipelines to be built, transmission lines to be extended, nuclear plants to be constructed and brought into service."

'Stay off bandwagon'

America's educational leaders should not "jump on the bandwagon" of fads for changing education, according to one of this country's leading educators.

Ralph W. Tyler told the faculty of the College of Education that educational leaders should examine both the changes in the whole society and pressures for change from within the discipline, and then make creative, constructive responses.

Tyler, a spry 71 - year - old who began teaching 51 years ago, was the guest speaker at a President's Luncheon last week honoring four MSU education faculty members who are presidents of professional organizations.

He is the founding director and director emeritus of the Center for Advanced Study in the Behavioral Sciences at Palo Alto, Calif., and was formerly dean of the School of Education at the University of Chicago. Tyler has been responsible for many developments in curriculum, evaluation and testing.

The educator said he sees two separate kinds of changes in education — those which are a response to changes in society and those which originate with educators from their changing concepts of what education is.

Schools in the United States are more responsive to changes in society than are the schools of most other nations, he said. He reviewed several influences from outside education which have molded it in recent history:

*The shift in the labor force away from agricultural to industrial and service occupations has increased the number of children who stay in school longer.

*The rise in international tensions during World War II and the cold war has put increasing attention on science and mathematics.

*The increasing ease with which people can advance their social class as America becomes more of an open society has increased the need for education.

*Efforts connected with the civil rights movement to increase opportunities for minorities.

*The smaller role the family plays in its children's education.

*Pressure from the public for the government to provide more services, and in turn, the pressure from the government to justify how schools spend their money.

On the other hand, there have been changes in education that have come from within, Tyler said.

"We don't realize how humane the treatment of children is and how recent a change that is," he said, relating the experiences of his grandfather who as a teacher had to prove to the older boys that he was stronger than they.

He also cited the tailoring of instruction to each child, the involvement of children in the planning and evaluating of activities, and the increasing clarity of objectives and relevance of what is taught.

The MSU luncheon at which he spoke honored Cole S. Brembeck, president of the Comparative and International Education Society; William K. Durr, president of the International Reading Association; Robert L. Ebel, president of the American Education Research Association; and Floyd G. Parker, president of the Council of Education Facility Planners, International. They were praised for the significant contributions they have made to their professions and to MSU.

Abernathy here

The Rev. Ralph Abernathy, president of the Southern Christian Leadership Conference, will address a Michigan Convocation for Racial Justice Tuesday (April 24) at Kellogg Center.

The convocation is sponsored by a coalition of 30 organizations representing business, industry, labor, civic groups, religious educational, governmental and voluntary organizations.

Ten panels will examine matters including the role of the mass media, cultural preservation versus assimilation, social forces, institutional racism, political empowerment, economic empowerment, health, housing, quality education and equal justice under law.

Stated purpose of the convocation (Advance fee, \$8.25, including luncheon) is "To promote greater understanding and cooperation, to effect sustained action, to eliminate racism in community and state life, to provide a rallying point for everyone to participate in the statewide effort, and to build coalitions for education and action designed to bring racial justice for all."

Enrollments soaring

Human ecology enrollment is increasing more than ten times as fast as overall enrollment at MSU, the new dean of the College of Human Ecology told alumni, meeting Saturday (April 14).

"Very rapid growth has occurred in the past two years," said Lois A. Lund. "Enrollment in the College of Human Ecology has increased by more than 29 per cent while overall University enrollment has increased by only a little over 2 per cent."

Dean Lund said undergraduate enrollment in human ecology has increased from 1,350 majors to more than 1,750 majors in just three years. She said most of this has been at the junior - senior level, as well. She added that graduate enrollment in human ecology fields has tripled within the decade.

Dean Lund indicated that burgeoning enrollment, especially in the graduate field, manifests increased interest in professional studies related to families and family problems.

But she pointed out that pride in increased interest and enrollment in home and family studies is "mixed with frustrations."

She said, "Our ever modest support budgets have neither in the past, nor do they now meet our needs... We are quickly growing short of all that we need to maintain quality — faculty, time, space, equipment supplies..."

Dedicated service

A certificate of appreciation for 43 years of "dedicated service to home economics and human ecology" was presented to Rosalind A. Mentzer, professor and assistant dean of the College of Human Ecology Saturday (April 14).

The "surprise" citation was a feature of the 24th reunion of alumni of the College of Human Ecology in Kellogg Center.

Digressions

THREE YEARS AGO

The McKee Report (of the New Committee on Student Participation in Academic Governance) is adopted. The recommendations must now be written into the faculty bylaws and submitted to the Council's May meeting. If passed, elected faculty would be in the voting minority by 70 - 56.

TWO YEARS AGO

MSU graduate students who find themselves in a financial strain may now seek assistance from a newly established fund implemented by the COGS which allocates 30 per cent of each term's revenue for short - term loans to be administered through the Financial Aids Office.

ONE YEAR AGO

MSU will offer a wider range of living options next fall, including a substantial increase in the limited visitation option.

Science notes



BY PHILLIP MILLER

Focus of med tech workshop is dependable laboratory tests

Physicians increasingly look to laboratory tests for information about their patients. But can such tests be made more dependable and efficient?

The technologist is the first "early warning system" to catch deviations in instruments used to test human samples, such as blood, MSU biochemist John F. Holland said last month before a workshop at MSU for medical technologists who run such tests.

"A critical eye will catch instrument malfunctions," said Holland. "Sometimes the malfunction is immediate. A fuse may blow. But such malfunctions usually don't result in incorrect analytical results.

"Where the danger comes is when the instrument slowly starts to malfunction over a period of time. It may yield totally meaningless results and yet the medical technologist, or a doctor who ordered the test, may not realize it.

"Yet, there are good analytical practices to avoid this."

Medical technologists should be able to correct simple malfunctions and conduct preventive maintenance, said Holland. Often basic knowledge of the instruments will avoid costly and prolonged "down time."

"One time I had to fly approximately 1,800 miles to a hospital in the western part of the country that was down for four weeks with an instrument system," said Holland.

When he got there he found the trouble: a connector cable was unplugged.

"The cleaning women, or somebody, accidentally pulled the cable too hard and it came disconnected, and that's all it was."

At the other extreme there is the med-tech who becomes a nut on gadgetry and instrumentation:

"This person spends excessive amounts of time getting involved in servicing and maintenance techniques with instrument systems," said Holland.

"The really valuable technologist is going to operate somewhere in between these extremes."

Reliability, calibration and control of the instruments used by medical technologists throughout the nation have improved over the past several years, in part because of encouragement from the federal government, groups in the health professions and others concerned about the accuracy of clinical tests for people.

"There should be more interaction between professional laboratory medicine personnel and members of other medical and paramedical groups," according to an Iowa study reported in the Journal of the American Medical Association on guidelines for medical technology in the physician's office. "Presentations, workshops, and seminars should be presented at annual meetings of medical and nursing societies."

Apparent from the related emphasis of the MSU workshop was that hospitals, and other testing centers as well, are becoming increasingly dependent on sophisticated electronic equipment for their accurate clinical analytical information.

But even with advanced equipment there must be the skilled medical technologist to catch possible errors.

How can errors of analyses be prevented?

In almost every case where laboratory errors have occurred some person has not looked at some operation procedure or result with a "critical eye," Holland told some sixty med-techs from Michigan, Indiana, Ohio and Kentucky.

He remembered one instance of a test used by the Army to screen for a venereal disease:

"To illustrate the system," said Holland, "we used a positive antigen and created negative and positive tests. One of the technologists viewed the addition of the positive antigen as part of the method."

Later the Army complained that the VD rates were going up.

"Upon investigation it was found that this laboratory was pointing the finger at too many of the boys and the boys

were all protesting," said Holland.

"This was a total lack of a critical eye. Here was a case where a person was continually reading positives and never questioned it!

"The operator with the critical eye will avoid such catastrophic errors," said Holland.

Another MSU speaker, biochemistry chairman Willis A. Wood, stressed the importance of repeatedly measuring rates of reaction when testing blood for enzymes.

He made the analogy of a policeman estimating the speed of an automobile by one quick check, as opposed to several checks while following the automobile's speed closely for some time. A one sample reading of an enzyme isn't enough, he said.

The luncheon speaker besides Holland and Wood was MSU faculty physician Anthony J. Bowdler who spoke on pitfalls in particle counting.

Several MSU scientists participated in the workshop.

... ROTC: 'The presence of the Uni

(Concluded from page 1)

Secondly, the post-Vietnam drawdown has resulted in lower manpower requirements in the regular Army and a greater emphasis on reserve and National Guard forces. A large number of graduates are highly interested in doing an active duty tour, but slots are not available and many will do only six months on active duty for training and return to serve the remainder of their obligations as part-time officers.

"Only about half of the graduates this year who want to do two or four years on active duty are being selected," Burner said. "This is an important incentive for many, and this aspect of the drawdown is a source of disenchantment."

The Air Force unit did not experience a wholesale enrollment drop when the draft ended, and can still guarantee its graduates an active duty tour, according to its executive officer, Maj. Douglas Aho, but graduates who wish to enter a reserve unit instead have that option. He said the effect of the draft stoppage could not be evaluated until next fall.

Like the Army cadets, few Air Force students anticipate a military career. Aho estimates only about 10 - 15 per cent plan on a career in uniform.

Both officers say the atmosphere on campus for ROTC has shifted back to normalcy after the demonstrations directed toward it two and three years ago. The Army unit was the target for

most of those demonstrations but the Air Force did not escape the repercussions.

Both units have been commissioning about 35 officers a year. Next year the Air Force will commission only 19, and Aho feels this is a result of the peer pressure on freshmen in 1970 that made many of them reluctant to wear the uniform.

Reassessment

One result of the Vietnam War, and the anti-military reactions it spawned on this and other campuses, has been a reassessment of the place of ROTC in the University. Out of this reassessment has come curricular changes that, in the opinion of military and civilian faculty members, have created a stronger relationship.

In 1960 the Merston National Security Program sponsored a two-day program at Ohio State University to assess the role of ROTC programs in light of the "current uneasiness" being expressed regarding the relationship of officer education to college curricula. William Combs, dean emeritus of the University Services and presently director of MSU's Archives and Historical Collections, was one of the five men who planned that conference.

Among the recommendations stemming from that conference were: regular academic courses should be substituted for some military courses; faculty committees with policy responsibilities should be appointed; military programs should become more

flexible to reflect the varied academic character of the institution; universities should be reimbursed by the military for the use of their facilities; and better communication should be established between the armed services and the academic institutions.

Very little came of those recommendations. Sufficient pressure for implementation did not appear. But by the end of the decade, with the country involved in perhaps its most controversial war, the pressure was there.

In 1969, the Department of Defense released the report of its Special Committee on ROTC, a group composed of nine high ranking university and military officials.

Twenty-one recommendations were included in that report - called the Benson Report after committee chairman George C.S. Benson - which were largely a reiteration of those suggested at the Merston Conference.

The Benson Report did, however, go further in recommending an integration of ROTC into regular academic offerings of the host institutions and in giving institutions greater input and control over courses required of ROTC students.

Two years later, in 1971, six major education associations, including the American Council on Education and the National Association of State Universities and Land Grant Colleges, issued a joint statement with a series of proposals again designed to establish a clearly mutual responsibility of the participating academic institutions and the military in the operation of ROTC programs.

Implementation

Most of the major recommendations of the Merston Conference, the Benson Report and the joint statement by the education associations have been implemented at MSU.

Since 1969, curriculum revisions have been underway that now require all ROTC students to take a series of political science, management, and other courses for military and aerospace science credit. Military history has long been required. One course being developed for aerospace students is "The Military in American Society," which will explore the role of the military officer in a democratic society and the political, economic and social constraints upon the military.

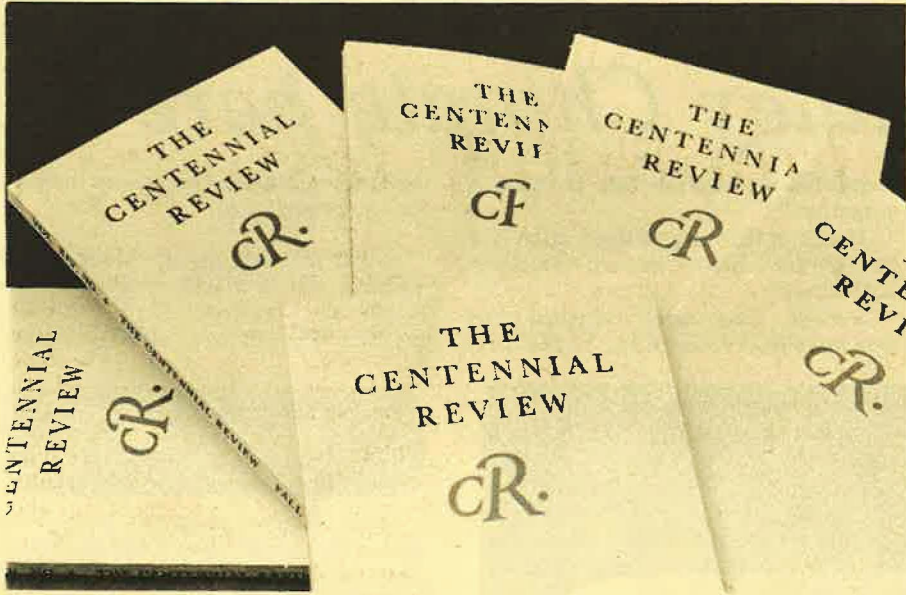
Faculty and University input into ROTC programs is channeled through the 15-member Military Education Advisory Committee created in 1967, and which is now chaired by Richard Coelho, assistant dean of University College.

Col. Burner believes the curricular revisions in the Army program here make it unique among all other Army ROTC programs, particularly in the



Major Roland E. Roupe explains Air Force opportunities to Barbara Riley. Mrs. Riley will be the first woman commissioned through Air Force ROTC at MSU when she graduates in June. Six other women are currently enrolled in Aerospace Studies.

CR puts knowledge in stream of culture



University in the military

greater use made of various types of expertise on campus. As a result, he said, MSU graduates are "standing head and shoulders above other ROTC graduates" in the six-month branch schools they attend upon being commissioned.

Future

What about the future?

"There have always been many young men and women interested in military service and I think this interest will continue," says Frederick Williams, professor of history and a member of the national Army Advisory Panel on ROTC Affairs.



COL. JEAN BURNER

He points out that interest on the part of academic institutions remains high, with more than 40 schools now on a waiting list to be granted Army ROTC units.

One of the recommendations of both the Mershon Conference and the Benson Report was that the military reimburse the universities for institutional expenses in supporting ROTC units. Williams says this is nearing fruition, although a final formula has not yet been worked out.

The institutional contribution is more than financial, he adds, because the graduates fed into the military are influential in the officer corps, and this civilian influence in a democratic society is essential.

Bert Shaber, associate director of admissions and scholarships, who served as chairman of Aerospace Studies before retiring from the Air Force, believes interest in ROTC bottomed out about a year ago and will soon begin a resurgence. On visits to high schools, he finds that interest is already increasing, and "a surprising number of the national merit finalists who came to campus contending for the Alumni Distinguished Scholarships expressed an interest in ROTC."

Richard Coelho says one of the biggest incentives for ROTC membership will be money.

"One big attraction will be ROTC

scholarships," he says. "They are practically the only federal source of scholarship funds these days."

More than 6,500 scholarships covering tuition, books and fees are in effect by both the Army and Air Force each year. For next fall, more than 30,000 high school seniors are competing for the Air Force scholarships alone.

In addition, ROTC students during their last two years draw \$100 a month, tax free.

Herman King, assistant provost and the man to whom the two ROTC units report, agrees with Williams on the importance of civilian input into the officer corps, and prefers to refer to ROTC as "the presence of the University in the military, rather than vice versa."

With a peacetime atmosphere pervading, King says there may be a tendency to let ROTC matters slide and that this should be guarded against. It was this kind of atmosphere and ambivalence that saw the recommendations of the Mershon Conference rest on dead center until the Vietnam War brought new pressures on ROTC, he said.

"We ought to behave toward ROTC as though the pressure was still on," he says. "If people had taken the Mershon Conference more seriously, we wouldn't have had the problems we did later on."

King has a number of specific ideas on how ROTC could become an even more integral and productive part of the academic institution.

"Local ROTC units should act as a prime channel of communication between the University and the Department of Defense much like the Cooperative Extension Service does to the Department of Agriculture," he says.

King strongly recommends that ROTC adopt a research function to complement its teaching responsibilities, giving officers an opportunity to use University resources for "peace research."

"We ought to be doing peace research on every campus," he says. "We sometimes think of peace as only a vacuum between wars. We ought to encourage a more positive approach and ask 'what causes peace,' and 'how do we accomplish peace?'"

Finally, he wants to see even more cooperation between military and civilian faculty through team teaching and team research efforts.

With the changes that have been made in the last several years, he is satisfied. But he looks forward to more.

"The relationship between the academic community and ROTC has been in need of modernization," he says. "We are doing a good job in bringing it about."

The Centennial Review, MSU's major intellectual journal, is a labor of love and somewhat of an alter ego for its editor, David Mead.

Mead is the third editor of the journal since its founding as part of the University's centennial celebration in 1955. Unlike his predecessors, he serves without pay or released time from his first duties as professor of English. He does it because he likes it; more specifically because the journal incorporates his own Protean interests.

"The Centennial Review is intended to be an intellectual journal representing the whole gamut of the arts and sciences, written by specialists to be read by non-specialists and persons of entirely different disciplines," Mead says in describing the operating philosophy of the quarterly publication.

Larger than that, however, is the rationale that Mead applies for the existence of The Centennial Review:

"A great deal of knowledge is merely traded back and forth between specialists and never becomes part of the culture. Scholars, it seems to me, have a responsibility to see that knowledge is assimilated into society." The centennial Review, he says, is one way knowledge can be placed in the stream of culture.

It is a prejudice of Mead's that "by the time a person completes graduate school he loses the ability to write for anyone but people like himself, those who can understand the jargon of his discipline."

About 90 per cent of the articles submitted for publication in The Centennial Review are rejected, most of them because they are too specialized for a broad audience.

Manuscripts come from all over the world, principally from scholars but also from professional people. Authors have included social scientist Talcott Parsons and philosopher Erwin Panofsky, as well as Adlai Stevenson and Lyndon Johnson.

All of the material is original. As an indication of the journal's reputation, more than 60 per cent of the material is reprinted in anthologies or other works.

Mead welcomes articles from people branching out from their specific fields of interest. In the current spring number, there is an article on the fiction of F. Scott Fitzgerald co-authored by a UCLA law professor and the director of legal psychiatry at UCLA, and another on the political theories of novelist Ken Kesey written by a University of Texas political scientist.

"If the journal seems weighted toward literature," Mead says, it is only because of the number of manuscripts from that field that we receive, not because it is designed that way."

The Centennial Review operates within a "small but adequate budget."

At a time when many intellectual journals are in financial trouble, it is healthy if not affluent. Circulation varies between 1,500 and 2,000, not enough to eliminate the need for subsidization through the College of Arts and Letters.

The private subscription list is small, Mead theorizes, because the publication covers so many fields. Rates are \$3 per year or \$5 for two years.

Mead works gratis. Managing Margaret Blackman works half-time and is the only paid staff member. Honorariums of \$50 used to be paid to authors, then it was \$25, now nothing. The only advertising is in the New York Review of Books. Reprints are no longer provided to authors. Long distance phone calls are made only in emergencies.

But no compromise has been made effecting the quality of the publication. Printing is done by the William Byrd Press in Virginia. There are cheaper alternatives, Mead says, but the product would show it.

The Centennial Review was designed by Charles C. Pollock, now retired from the Art Department. Its size, slightly smaller than similar publications, is comfortable.

Its typographical personality is one of no-nonsense efficiency without affected starchiness.

In addition to Mrs. Blackman, Mead is assisted by poetry editor Linda Wagner and a 15-member editorial board composed of faculty members from 14 different disciplines.

Mead has been editor for six years. He was preceded by Herbert Weisinger, now dean of graduate studies at the State University of New York at Stony Brook, and Branford Millar, who left MSU in 1959 to assume the presidency of Portland State College in Oregon.

Mead's editing experience goes back to the Depression when he worked for the Federal Writers Project in Ohio editing state and regional guides. In the intervening years, he augmented his undergraduate degree from Washington and Jefferson College with a B. A. and M. A. from Ohio State University, and taught at Ohio Wesleyan, Denison and Ohio State before coming to MSU in 1948. He currently serves as an advisory editor to Dodd, Mead (no relation), Inc. on literary manuscripts.

He was chairman of the English Department from 1959-66, served as chief of MSU's Okinawa Project between 1955 and 1957, and in 1964 was a Fulbright Scholar at the University of the Philippines.

He says he doesn't believe in remaining in one professional position forever, but that he'll continue editing The Centennial Review "as long as it's exciting."

— MIKE MORRISON



Editor David Mead and managing editor Margaret Blackman scan a manuscript being considered for publication in The Centennial Review.

The arts



BY FRED BRUFLODT

PAC to perform "A Funny Thing" next week; Bradley Chorale here

The Broadway musical comedy hit, "A Funny Thing Happened on the Way to the Forum" will be presented by the Performing Arts Company for a five-day run beginning Tuesday evening in Fairchild Theatre.

Written by Burn Shevelove and Larry Gelbart, "A Funny Thing" is based on hilarious situations derived from seven different farces of Plautus, the Roman playwright who convulses audiences in the Colosseum around 200 B.C.

The play ran for 28 months on Broadway and was also made into a film.

Featured in the MSU performance will be John Grassilli as Pseudolus, the slave who schemes to gain his freedom and the most desirable piece of merchandise — Philia (Kathy Sheffer) — belonging to a local girl — trader. Frank Krenz will play his fellow slave and schemer, Hysterium.

Other PAC members in the cast include Jim Pentecost, Susan Dickey, Bruce Snyder and Bill Sapp.

The musical is being staged by Robert Klassen; Maggie Moar is staging the dances. Musical director for the songs by Stephen Sondheim, is Michael Griffith.

Bradley chorale

In exchange for a recent performance at Bradley University by MSU's State Singers, the Bradley University Chorale will present a free concert in the Music Auditorium Wednesday evening, April 25.

The 50 - voice mixed ensemble, directed by John Davis, has made several concert tours of Europe, sung on radio and TV, and performed at New York's Town Hall and the National Cathedral and National Gallery of Art in Washington, D. C.

MSU's State Singers performed at Bradley last month while on a concert tour of Michigan, Indiana and Illinois.

Rare sculpture

A stone base with carvings of animals and birds recently acquired by MSU's Permanent Art Collection may actually be older and more valuable than had originally been thought.

At first considered to be from the Romanesque period, Robert Rough, association professor of art history and a specialist in the medieval period, says

that the base is from the Visigothic period (7th to 9th century A.D.) and thus about 500 years older.

While research on the stone base will continue, Rough says that his own research and that of a graduate student

"confirms my opinion that the base is visigothic."

If this is true, says Rough, then it is "a unique piece in an American collection."

Rough has also studied the iconography, or carvings, of the base

and has concluded that it was the base for a baptismal font.

A gift of the Ransom Fidelity Co. of Lansing, the base was accepted by the Board of Trustees at its January meeting. The gift was valued at \$1,000.



Romanesque or Visigothic?

Achievements

Four faculty members have been chosen from more than 2,400 applicants from the United States and Canada to receive the coveted Guggenheim Fellowship Awards.

HENRY G. BLOSSER, professor of physics, ELLEN MICKIEWICZ, associate professor of political science, JAN A.D. ZEEVAART, professor at the AEC Plant Research Laboratory, were among 399 scholars, scientists, and artists selected on the basis of "demonstrated accomplishment in the past and strong promise for the future."

The Foundation's awards in the 49th annual competition totaled more than \$3.8 million.

Blosser will perform studies in nuclear physics instrumentation, Mickiewicz the political and social development in the U.S.S.R., Scholberg satire in 16th century Spanish literature, and Zeevaart the physiology and biochemistry of flowering.

ALVIN RIPPEN extension specialist in dairy manufacturing, was presented the "Distinguished Alumni Award" recently by Ohio State University's Department of Food Sciences and Nutrition. Rippen was named Outstanding Extension Specialist for Michigan's Cooperative Extension Service in 1968.

PETER McKINNON, associate professor of humanities, has received a grant made available to the University from the Ford Foundation. The grant is for travel funds which will allow McKinnon to investigate orientation programs in the "red brick" colleges in Great Britain and to conduct research in newspaper archives in Scotland.

Three associate professors of humanities recently delivered papers at meetings. ROY T. MATTHEWS and EDWARD D. GRAHAM delivered papers at the Michigan Academy of Science, Arts, and Letters meeting in Ann Arbor on April 6. Matthews' paper was on "Spy: Sir Leslie Ward. The Image of the Victorian - Edwardian Eras in Caricature." Graham's paper was entitled "Special Interests and the Early China Trade." SURJIT DULAI presented a paper "The Feminine Sensibility in Punjabi Literature" at the Association for Asia Studies at the University of Chicago.

ROWLAND R. PIERSON, director of the Counseling Center, has been elected to the Board of Directors of the International Association of Counseling Services, a new association of counseling agencies affiliated with the American Personnel and Guidance Association.

University vehicles to be auctioned

The MSU Motor Pool will be disposing of several University vehicles in the April 28 State auction.

The auction will be held at the Department of State Auction Center off Saginaw Highway near 196. Vehicles are available for inspection at the center from 8 a.m. to 3 p.m., April 27, and beginning at 8 a.m. on April 28.

Further information may be obtained by calling 373-6559 or 373-0303.

MSU Positions Available

IMPORTANT: Administrative - Professional and Clerical - Technical applicants should contact the Employment Office at 353 - 4334 by April 24, 1973 and refer to the vacancy by the position number. Fuller descriptions of positions are available in departmental postings. Instructional staff applicants should contact departments noted.

FACULTY

Asst. Prof. in Communication (Ph. D. completed by Sept. 1973) Language behavior; non - verbal communication; organizational communication; urban communication. Emphasis is on behavior research/teaching.

Contact: Erwin P. Bettinghaus
Chmn., Dept. of Communications

Asst. Dean for Student Affairs (M.D. clinician) Responsible for community based students in the College of Human Med. during the clinical phase of their educational program.

Contact: James Conklin
Admission & Student Affairs
College of Human Medicine

Director of Admissions in Human Medicine (M.D. or Ph.D.) Implement procedure for the processing of medical school applications; recruit desirable applicants; develop program for the identification & selection of applicants; experience in office management, supervision, admissions & techniques of

application processing. Not less than 1/2 time appointment.

Contact: James L. Conklin,
Admission & Student Affairs
College of Human Medicine

ADMINISTRATIVE - PROFESSIONAL

345. Management Analyst A - P V - Ability to prepare statistical summaries. Supervise all non - academic personnel management at COM. Ability to analyze the plans, operations, and financial needs of a group of complex academic & clinical units. Ability to participate in planning and implementing organizational policies and procedural changes. \$12 - 15,550

CLERICAL - TECHNICAL

325. Health Physics Technician VIII - College training in basic sciences. Collects, transports, & stores radioactive waste from campus labs. Prepare waste for disposal & maintains proper records. Aid survey in radiation safety program. \$7,473 - 9,576

326. Ex. Secretary VIII - Secretary to Dean; fast, accurate typist; shorthand desirable. Knowledge of Univ. procedures; ability to handle confidential material. \$7,473 - 9,576

327 - 330. Sr. Dept. Secretary VII (4 positions) Typing, some require shorthand, knowledge of Univ. procedures, relate well with people both in person & by telephone. \$6,660 - 8,272

331. Graphic Artist V - Skill in copying

and composing charts and graphs, simple illustrations and paste - ups. Speed and neatness essential. Familiar with simple graphics production equipment. \$3.01 - 3.55/hour

332. Lab. Research Aide V - To service food preparation laboratories with food supplies. Clean & service lab work units. Temporary - Spring term only. Should also be available for fall term 1973. \$3.01 - 3.55/hour

333 - 336. Sr. Clerk Stenographer V - Typing, some require shorthand. (4 positions - 2 hourly at \$3.01 - 3.55/hour and 2 salary at \$6,267 - 7,389/year)

337. Sr. Clerk Typist V - General office work. Good typing. \$3.01 - 3.55/hour.

338 & 339. Dept. Secretary V - (2 positions) Typing, One with bookkeeping and is part - time until June then full - time. Other requires shorthand and works for three professors. \$6,267 - 7,389 or hourly at \$3.01 - 3.55

340. Sr. Clerk IV - Knowledge of Univ. business procedures. \$5,735 - 6,926

341 & 342. Clerk - Stenographer III (2 positions) Typing, general office work. \$5,511 - 6,562

343. Clerk - Typist II (Part - time) Typing, filing & general office work 4 days a week. \$2.62 - 3.09/hour

344. Clerk I - Typing ability and work with small children. \$2.55 - 2.95/hour

MICHIGAN STATE UNIVERSITY IS AN
EQUAL OPPORTUNITY EMPLOYER.

EXHIBITIONS

Kresge Art Gallery

Entrance gallery: "Ralf Henricksen Retrospective" includes works done over a period of 43 years. Henricksen, a member of the art faculty, will retire in June.

North gallery: "Earl Kerkam: Drawings and Paintings" includes a group of works by this artist on loan from 35 collections. Gallery hours are 9 a.m. to 5 p.m. weekdays, 7 to 9 p.m. Tuesdays, and 1 to 4 p.m. Sundays.

Library

"Trollope" includes a comprehensive display of this author's works.

Museum

A sparkling display of more than 50 glass pitchers is featured from the collection of the late Gladys Ferden of Chesaning. The exhibit includes excellent examples of glassware designs popular in the 1880s.

CONFERENCES

April 19 Clinical Demonstrations and New Techniques in Equine Clinic

April 23-27 Police Alcohol Training

April 23-27 Basic Life and Health Insurance Institute, Lincoln Park

April 23-27 Managing Today's Law Enforcement Agencies III

April 24 Coalition for Racial Justice

April 24-26 University Photographers Assn. of America

All conferences will be held in Kellogg Center unless otherwise noted.

Students and faculty members are welcome to attend these continuing education programs. Those who are interested should make arrangements in advance with the Office of University Conferences, 5-4590.

SEMINARS

THURSDAY, APRIL 19, 1973

Program evaluation methods: an application to rural manpower programs. James H. Booth, 3 p.m., 312 Agriculture. **Agricultural Economics.**

Problems in dwarf wheat development. N.C. Stoskopf, U. of Guelph, Canada, 4 p.m., 301 Agriculture. **Crop and Soil Sciences.**

To be announced. G. Bennett, U. of Indiana, 4:10 p.m., 304A Wells. **Mathematics.**

An opponent—process theory of motivation. Richard L. Solomon, 4:15 p.m., 111 Olds. **Psychology.**

How I use mastery learning. Henry D. Foth, 12:10 p.m., 149 Veterinary Clinic. **Veterinary Medicine.**

FRIDAY, APRIL 20, 1973

Cocoa market stabilization with stochastic control. David Kendrick, The U. of Texas at Austin, 3 p.m., 108 Berkey. **Economic Development and Dept. of Economics.**

Toward sexual anarchism. Alision Jaggar, U. of Cincinnati, 8 p.m., 104B Wells. **Philosophy.**

Mammals of the Pro-Namib Desert, South West Africa. Rollin Baker, 3 p.m., 140 Natural Science. **Zoology.**

MONDAY, APRIL 23, 1973

Milk marketing procedures. C.A. Lassiter, 12:30 p.m., 126 Anthony. **Dairy Science.**

Progress report on the Muskegon Municipal Wastewater Renovation Project. William J. Bauer, president, Bauer Engineering, Chicago, 3 p.m., 223 Natural Resources. **Institute of Water Research.**

The relationship of structure of bacterial lipopolysaccharide to its function as a lymphocyte mitogen, an adjuvant and as an immunogen. J.M. Chiller, Scripps Clinic and Research Foundation, LaJolla, Calif. 3 p.m., 146 Giltner. **Microbiology and Public Health.**

The mechanism(s) of cell cooperation in the immune response. E. Golub, Dept. of Biological Science, Purdue U., 4:10 p.m., 146 Giltner. **Microbiology and Public Health.**

High temperature thermodynamics of the Hubbard model. Pieter B. Visscher, 4 p.m., 223 Physics-Astronomy. **Physics.**

Interaction of oxygen and pH on the local regulation of skeletal muscle blood flow during exercise. David F. Stowe, 4 p.m., 216 Giltner. **Physiology.**

The effects of the emigration from Yugoslavia and the problems of the returning emigre workers. Dr. Crkvencic, visiting professor, Kent State U., 4 p.m., German and Russian Dept. Library Seminar Room, 7th floor Wells. **Russian and East European Studies Program.**

TUESDAY, APRIL 24, 1973

The stability of channel flow. Merle Potter, 4 p.m. 284 Engineering. **Chemical Engineering and Mechanical Engineering.**

Selected topics in analytical chemistry. H.A. Laitinen, U. of Illinois, 4 p.m., 136 Chemistry. **Chemistry.**

Environmental consideration for power plant siting. John Calvert, manager, Environmental Systems Division, Commonwealth Associates, Inc., Jackson, 4:10 p.m., 146 Engineering. **Civil and Sanitary Engineering, Electrical Engineering and Systems Science, and Metallurgy, Mechanics and Materials Science.**

Computer architecture for the '70s and '80s. Neil Lincoln, ACM national lecturer, 7:30 p.m., 402 Computer Center. **Computer Science.**

Plasma levels of digoxin. John G. Wagner, professor of pharmacy, U. of Michigan, 4 p.m., 449B Life Sciences. **Pharmacology.**

WEDNESDAY, APRIL 25, 1973

Selected topics on statistical mechanics. K. Shuler, U. of California, 4 p.m., 136 Chemistry. **Chemistry.**

Multipolar cell division and the evolution of chromosomal number in angiosperms. William Tai, 4 p.m., 103 Anthony. **Genetics Seminar Committee.**

Food production in Peoples Republic of China. A. Eckstein, Dept. of Economics, U. of Michigan, 4 p.m., 131 Anthony. **Institute of Nutrition.**

Through a microscope darkly: a look at plant disease-causing organisms with the electron microscope. Gary Hooper, 4 p.m., Pesticide Research Conference Room. **Pesticide Research Center.**

Interactions of atrazine with soil microorganisms: population shifts and accumulation. Jim Percich, 4:10 p.m., 168 Plant Biology Lab. **Plant Pathology.**

Particle-bound phytochrome from maize and pumpkin. Peter Quail, Biologisches Institut, W. Germany, 4:10 p.m., 101 Biochemistry. **Plant Research Laboratory.**

A data-analytical look at Goldbach counts. Frederick Mosteller, Dept. of Statistics, Harvard U., 4:10 p.m., 405A Wells. **Statistics and Probability.**

THURSDAY, APRIL 26, 1973

Computer assisted instruction in the classroom. Don Ricks and John Ferris, 3:30 p.m., 312 Agriculture. **Agricultural Economics.**

Hormonal interaction on the adenylyl cyclase system in the uterus. R.C. Bhalla, Depts. of Medicine and Biochemistry, U. of Iowa, 8:30 a.m., 101 Giltner. **Anatomy.**

Variability in the tertiary structure of alpha-chymotrypsin at 2.8 angstrom resolution. Alexander Tulinsky, 4:10 p.m., 101 Biochemistry. **Biochemistry.**

Herbicide research. D. Penner, 4 p.m., 301 Agriculture. **Crop and Soil Sciences.**

United Nations Technical Assistance: approaches and problems in the 1970s. Myer Cohen, United Nations, 3:30 p.m., 107 Berkey. **Economic Development.**

The TIE workshop on tropical ecology in primary productivity in the terrestrial tropics. Peter G. Murphy, 1:30 p.m., 223 Natural Resources. **Fisheries and Wildlife.**

Field experimental studies of Soviet and American personality. Timothy Brock, professor of psychology, Ohio State U. 4 p.m., 304 Olds. **Psychology.**

The problem-oriented medical record in veterinary teaching. Robert Schirmer, 12:10 p.m., 149 Veterinary Clinic. **Veterinary Medicine.**

FRIDAY, APRIL 27, 1973

Selected topics in quantum mechanics. Oktay Sinanoglu, Yale U., 4 p.m., 136 Chemistry. **Chemistry.**

The energetics of lust and lethargy in reptiles. William R. Dawson, Dept. of Zoology, U. of Michigan, 3 p.m., 140 Natural Science. **Zoology.**

MICHIGAN STATE UNIVERSITY

Calendar of Events

FRIDAY, APRIL 20, 1973

- 12 p.m. Society for International Development luncheon. Marcus Franda, American Universities Field Staff, will discuss "Bangladesh in World Affairs." Room C, Crossroads Cafeteria.
- 2 p.m. Baseball—MSU vs. Iowa. John Kobs Field.
- 3 p.m. Tennis—MSU vs. Indiana Varsity courts.
- 8 p.m. "The New World" is an original science fiction program with an underlying ecological theme. Skywatching sessions follow the 8 p.m. performances. Tickets are sold at the door, Abrams Planetarium.
- 10 p.m. "The New World" (see above). Abrams Planetarium.

SATURDAY, APRIL 21, 1973

- 1 p.m. Baseball—MSU vs. Minnesota. John Kobs field.
- 1 p.m. Tennis—MSU vs. Ohio State. Varsity courts.
- 2:30 p.m. "The New World" (see April 20). Abrams Planetarium.
- 8 p.m. "The New World" (see April 20). Abrams Planetarium.
- 10 p.m. "The New World" (see April 20). Abrams Planetarium.

SUNDAY, APRIL 22, 1973

- 4 p.m. "The New World" (see April 20). Abrams Planetarium.

TUESDAY, APRIL 24, 1973

- 12 p.m. University Club luncheon—Stephen Naert, East Lansing chief of police, will discuss "Police Work in a University Town."
- 1 p.m. Baseball—MSU vs. Wayne State U. John Kobs Field.

- 8:15 p.m. Performing Arts Company presents "A Funny Thing Happened on the Way to the Forum." Fairchild Theatre.

WEDNESDAY, APRIL 25, 1973

- 8:15 p.m. Performing Arts Company (see April 24). Fairchild Theatre.

THURSDAY, APRIL 26, 1973

- 8:15 p.m. Performing Arts Company (see April 24). Fairchild Theatre.

FRIDAY, APRIL 27, 1973

- 7:30 p.m. Eisenstein Film Festival—Under the sponsorship of the Russian and East European Studies Program, "Potemkin," a 1925 silent film, will be presented without charge. 102B Wells.
- 8 p.m. "The New World" (see April 20). Abrams Planetarium.
- 8:15 p.m. Performing Arts Company (see April 24). Fairchild Theatre.
- 10 p.m. "The New World" (see April 20). Abrams Planetarium.

SATURDAY, APRIL 28, 1973

- 2 p.m. Eisenstein Film Festival (see April 27). 102B Wells.
- 2 p.m. Lacrosse—MSU vs. Ohio State. Practice field south of stadium.
- 2:30 p.m. "The New World" (see April 20). Abrams Planetarium.
- 8 p.m. "The New World" (see April 20). Abrams Planetarium.
- 8:15 p.m. Performing Arts Company (see April 24). Fairchild Theatre.
- 10 p.m. "The New World" (see April 20). Abrams Planetarium.

BULLETINS

PHI BETA KAPPA

The spring term meeting of the Epsilon chapter of Phi Beta Kappa will be held in the Union Green Room at 8 p.m. Wednesday, April 25.

BOARD MATERIAL

Material for consideration at the May meeting of the Board of Trustees is due in the office of the executive vice president or the provost by Thursday, April 26.

EASTER FLOWERS

The MSU Horticulture Club is selling potted blooming hyacinths, daffodils, tulips, and other spring bulbs at \$2 per pot from 10 a.m. to 2 p.m. April 19 and 20 in the Horticulture Bldg. lobby.

ICE CREAM SALE

Deluxe chocolate ice cream will be sold by the Food Science Club at \$1.10 a half gallon from noon to 5 p.m. Friday, April 27 in the basement of the Dairy Plant at the weekly cheese sale. Advance orders will be accepted by calling 3-0764 between 8 a.m. and 5 p.m.

EXTENSION WOMEN

The MSU Extension Women's Club will hold its final meeting of the year at a "Spring Stroll Luncheon" at 1 p.m. Thursday, April 26. Lunch will start at the home of Mrs. Lawrence Boger and progress to the home of Mrs. Graydon Blank. Reservations must be made by April 20 with Mrs. Robert Ruppel, 351-0822.

USED OFFICE MACHINES

The University Services Division is purchasing good used office machines and making them available to departments through General Stores. For information regarding availability of machines, including typewriters and dictating equipment, contact Ray Cox, General Stores, 5-1700. Machines can be seen and tested at the Stores Bldg.

GENERAL STORES

General Stores Dept. will be closed April 23-27 for taking of annual stock inventory. Requests for supplies received after April 18 will be held for processing until the week of April 30. Receiving, redelivery, open order, and shipping functions located in the General Stores Building will remain open. This closing will allow Stores to better serve at fiscal year end by remaining open during all of June.

MOSTELLER SERIES

Frederick Mosteller, Dept. of Statistics, Harvard University, will speak on the implications of social experimentation at 10 a.m., Wednesday, April 25, in the International Center Con Con Room. An informal discussion of the lecture will be held at 1:30 p.m. Wednesday in 507 Erickson. On Thursday, April 26, Mosteller will discuss "Equality and Educational Opportunity" at 9:30 a.m. and "Inference and Disputed Authorship" at 1:30 p.m. in 106 International Center. Those wishing to attend the Thursday sessions should register with Shirley Wagner, 5-0579. Mosteller is sponsored by the Dept. of Counseling, Personnel Services, and Educational Psychology.

STEERING COMMITTEE

The Steering Committee of the Faculty will meet at 3 p.m. Monday, April 23 in 443A Administration Bldg. to set the agenda for the May 1 Academic Council meeting.

DUPLICATE BRIDGE

Duplicate bridge meets each Wednesday at 7:15 p.m. on the second floor of the Union. All faculty and staff are welcome, and may come as individuals or couples. For information, contact Raymond F. Johnston, 5-6483.

LECTURE

Joseph Heard of Miami, Florida, will speak on "What is Really Me" at 3 p.m. Wednesday, April 25, in 104B Wells. The talk is sponsored by the MSU Christian Science Organization.

INTEREST GROUP

The Faculty Folk International Interest Group will meet at the home of Mrs. Christopher Sower, 4330 Hulett Rd., Okemos, at 1 p.m., Monday, April 23. Ronald Simons will speak on Hindu healing festivals. For information, call Mrs. Ralph Smuckler, 337-2320, or Mrs. George Petrides, 655-1022.

OBSERVATORY

The MSU Observatory will be open to the public from 8 to 10 p.m. Saturday, April 21. Weather permitting, the 24-inch reflecting telescope will be used for observing current celestial objects. Children under 13 should be accompanied by at least one adult for each three children.

SPRING BANQUET

The annual spring banquet of the Faculty Women's Association will be held at 6:30 p.m. Thursday, April 26 at the University Club. Jean King, Ann Arbor lawyer, will speak, and scholarship awards to outstanding graduate women will be presented. Reservations are due by Monday, April 23. For information, call Kay White, 5-8330.

AUFS LECTURER

Denny Rusinow, a member of the American Universities Field Staff, will be on campus April 30-May 9 and is available for preliminary scheduling for courses and seminars. He is a Rhodes Scholar who received the Ph.D. from Oxford. His area of interest is central and eastern Europe with particular emphasis on Yugoslavia. He is the author of many works, including *Italy's Austrian Heritage, 1919-1946*. For information, contact Charles Gliozzo, Dept. of Humanities, 3-5242.

SALVAGE EQUIPMENT

Periodically excess equipment purchased by University Services and not sold on campus will be made available to the public through the Salvage Yard under the following policies: 1) Machines are priced on the basis of trade-in value plus markup. 2) All machines are sold "as is, where is, on a first-come, first-served" basis. 3) Machines will not be held and must be paid for and removed at the time of sale. 4) All sales to the public will be made through the Salvage Yard. Equipment declared as salvage will be delivered there on the Friday of each week.

Information on MSU events may be submitted for possible inclusion in the bulletins to Patricia Grauer, Dept. of Information Services, 109 Agriculture Hall. (517) 353-8819. Deadline for submitting information is noon Tuesday preceding the Thursday publication.