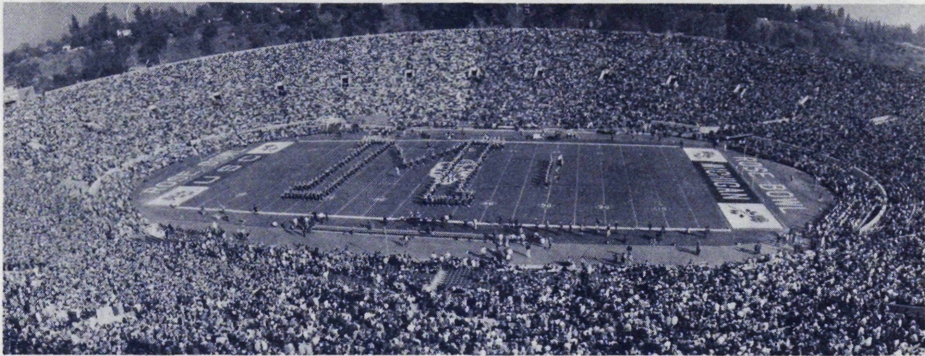


W Henry Johnston files

# the university of michigan Today

Vol. 4, No. 1, Winter 1972

U-M TODAY is the only Michigan publication received regularly by 160,000 alumni, friends and faculty of The University



California Here We Come—Again

## Undefeated Michigan Team Meets Stanford in Rose Bowl

Hardly a man alive saw it. Michigan 49; Leland Stanford Jr. 0. That was the first Rose Bowl game. This week on the 70th anniversary of "The" Bowl 100,000 plus persons will be on the scene and millions of others will watch it live as Big Ten champion Michigan again faces Stanford, title holders of the Pacific Eight Conference.

Back in 1901, his first year as the Wolverine coach, Fielding H. Yost directed Michigan through 11 games undefeated, untied, and unscored upon while running up 550 points, including the Rose Bowl Premiere on January 1, 1902.

Now, again undefeated and untied through 11 games, the Wolverines coached by Bo Schembechler left the snows of Ann Arbor to make their fifth appearance in Pasadena with plans to atone for their defeat of two years ago, the U-M's only loss in four Rose Bowl contests.

Michigan this season moved through their first nine games untested but against Purdue and then Ohio State they proved their championship capabilities by winning in the final minutes when their unblemished record appeared gone in both games.

No one can convince the Wolverines that they are not as good as or better than any team in the nation as the polls foolishly attempt to rank unmatched teams. Likewise, it is impossible to prove that this is or is not the finest team in Michigan's 92 years of football history.

Unrefuted, however, are records achieved this season including the 409 points scored, the most since the turn of the century, while allowing only 70. Primarily a rushing

team, Michigan averaged 341 yards per game, a Big Ten Record. But it was the defense that received unlimited praise from the coaches and fans as it repeatedly took the ball away from opponents and handed it to the offense. (Ohio State was held to 78 yards rushing and 60 by air.) Countless other records were set by the squad and by individuals.

Billy Taylor (No. 42) has a career rushing record of 2,990 yards, surpassing the old mark of 2,440 set by Ron Johnson. Dana Coin (No. 36) has kicked 54 points after touch-

### Quite a Season

Michigan scored 409 points to their opponents 70 . . . Only Michigan State (13) and Purdue (17) scored more than 7 points on the Wolverines, while three teams were shut-out . . . Michigan rushed for 3,714 yards to their opponents 696 . . . The defense forced 80 punts as Michigan kicked 53 times, with sophomore Barry Dotzauer (No. 25) averaging 40.5 yards . . . They also intercepted 15 passes to their opponents six, and they gained strength during each game as they allowed only three teams to score on them in the fourth quarter, none over six points.

downs in 54 attempts this season. His 12 field goals, seven this year including the winning margin in both the Purdue and Ohio State games, ties the existing career record. These seniors are but two stars who shone during the Wolverine's 660 minutes of 1971 football. Only 60 minutes remain in which to make this the winningest football squad in Michigan history.

## Michigan History Collection Aided

Individuals, institutions, and corporate groups interested in the preservation and dissemination of the history of Michigan have organized as the Friends of the Michigan Historical Collections of The University of Michigan. Qualification for membership includes contribution to Michigan Historical Collections under three categories annual (\$25), sustaining (\$100) and life (\$1,000). Members, who receive an annual report, invitations to special programs, and publications of the Collections, promote the interests of the Collections.

## Museum Program Receives Grant From Endowment

The National Endowment for the Arts has made a \$60,000 grant to the U-M in support of a program for museum training and internships for moderate-size art museums and centers.

Recognizing a neglect of such training of personnel for small museums, the program is intended as a pilot venture with the hope that similar programs in other sections of the country can be developed to bring a broader distribution of trained museum personnel.

## President Fleming Asks For Program Evaluation and Change

President R. W. Fleming in his fourth annual State of The University Address emphasized that the current crisis is not student turbulence, but financial adversity. He called for studied evaluation of present programs and confidence in facing inevitable changes. The following are excerpts from the President's address.

The long-run financial problem . . . has at least two aspects. One is the stark fact that in this University and all others, our costs are annually out-running our income. The other is that the great public support which higher education has been given is facing fiercely competing demands for dollars at the very time when public confidence in higher education is uncertain . . .

Inflation is our worst enemy. It has steadily eroded our base . . . Our records show that basic cost items, such as library books and laboratory equipment, have far exceeded the national average with respect to rising costs . . . Security costs have increased astronomically in recent years. This has contributed to a public disenchantment with higher education, particularly insofar as the public associates such costs with conduct of which they disapprove.

### Aid to Disadvantaged

In our effort to make available a University of Michigan education to the culturally and financially disadvantaged, we have undertaken one of the country's major student financial aid efforts. This is now costing us well over a million dollars in new money each year at least through 1973-74. Next year a total increase of \$2.5 million is needed. We have not received as much support from either the state or federal governments as we had hoped for this highly meritorious program.

Faced with inadequate state appropriations, we have had to sharply increase tuition. We are now near the saturation point on that front. Attendance by out-of-state students is clearly being affected, and this both reduces our status as a national university and diminishes our income because of the substantial disparity between the

tuition for in and out-state students. . . .

The unhappy fact is that we are going to have to rely almost entirely on self-generated internal funds for program improvement. . . . We are going to have to direct more concern at studied evaluation of programs with a view to weeding out those which are deemed less essential than others to the mission of the University. . . . If we could find a way to even out the flow of students over our present academic calendar we could achieve cost savings. There is, for instance, a considerable drop in the number of students who are here during the winter term as compared with the fall term. The result is reduced fee income without any significant change in personnel commitments.

During the past 25 years there has been an enormous proliferation of courses. They add to the luster of this University—and they increase our costs. It is time to see to what extent we can reduce our course offerings without eroding quality. . . .

### Research and Teaching

A change in time allocation between research and teaching would have an enormous impact upon our funding pattern. State appropriations are geared to a student-staff ratio, which is, for all practical purposes, a measure of the amount of teaching that is done. However important we may think research time is, and most of us think it is very important, the incontrovertible fact is that state funding, which is the principal source (about 60 per cent) of our ongoing operational budget, does not give it the credit which is given for teaching. . . .

We must learn to make better use

(continued on page 4)



## Diagonalis et Circumferentia

□ The three U-M alumni who were the Apollo 15 crew returned to Ann Arbor December 19 to receive honorary Doctor of Astronautical Science degrees during the fall commencement ceremonies. Col. David R. Scott, Maj. Alfred M. Worden and Lt. Col. James B. Irwin spent two days on the campus in October during which they lectured, made technical presentations, and attended the Michigan-Navy football game.

□ A total of 268,961 degrees have been awarded by The University of

Michigan since 1845. Between July 1970 and June 1971 the degrees granted numbered 9,968, up 622 from the previous year. This represented 122 different degrees in 224 fields of specialization.

□ The Walgreen Laboratory in the College of Pharmacy was recently dedicated. The new facility was a gift of alumnus Charles R. Walgreen, Jr., former board chairman of the Walgreen Drug Company and a former chairman of the University's Presidents Club.

□ A record total of \$278,505 was contributed by the University community to the 1971 United Fund it was reported by this year's U-M chairman, Vice-President Michael Radock.

□ A new cooperative property insurance plan for universities emerged from a conference of the University Insurance Managers Association held at the U-M. Called the University Property Pool, the plan is designed to alleviate the unstable insurance situation facing many major universities and result in more economical property insurance costs as well as new risk management services. The pool's funds will be managed by a commercial insurance group in conjunction with a Board of Managers elected by the participating universities.

□ Historians of the American Revolution will have available four or five volumes containing the correspondence of Gen. Nathanael Greene. These will be jointly published by the U-M's Clements Library and the Rhode Island Historical Society, with a grant from the National Historical Publications Commission, an arm of the National Archives.

□ Michigan alumni in Alaska listened to the Ohio State game over the Midnight Sun Network at 9:30 a.m. in Fairbanks, and 10:30 a.m. in Anchorage and Juneau. The game was fed by the U-M's station WUOM for what the network manager called a "beer and ham special."

□ Albert Stanley, the University of Michigan's first teacher of organ, while heading the Music Department from 1888 to 1922, used a small pipe organ in old University Hall. Today the noted Professor Marilyn Mason, Chairman of the Organ Department of the School of Music, directs the teaching of 70 majors and 25 students who are studying the organ as a secondary instrument. Practice facilities include 11 practice rooms at the School of Music, all equipped with pipe organs, in addition to three teaching studios in Hill Auditorium. These instruments are tuned and regulated by the department's full-time organ builder.

## Service Aids Students With Career Plans

A new direction and emphasis has been undertaken by the Placement Services Office, which has changed its name to Career Planning and Placement.

The emphasis is on career planning with the start being made at the freshman level. The office has begun reaching out to freshmen and sophomores, together with their counselors, to plan academic careers that will lead to professional capability. Seminars on career planning are being instituted with representatives from business firms assisting. Director E. W. Ardis emphasizes "We want to help the student look at career advancement—not just a first job."

For seniors and graduates the office has augmented its placement services by joining a computerized operation. Special forms focus on job interest, degree level, major field, job function, type of employer, and geographical preference. These are matched by computer with employers who have jobs available.

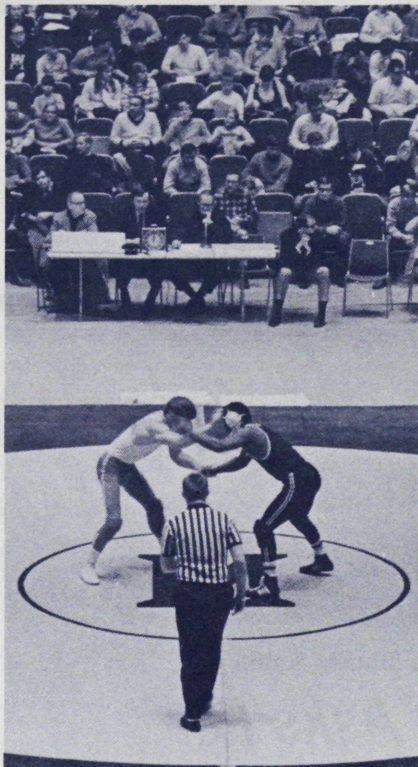
## Team Studies Solar Energy

A University of Michigan team of scientists with backgrounds in botany, electrical engineering, and chemistry is attempting to find a means of utilizing solar energy to meet the rapidly increasing demand for electrical power. Their approach is through the study of green plants, which so successfully convert light energy into chemical energy.

Apart from conversion devices used as energy sources for satellites, there has been limited success in attempting to harness the vast power of the sun, according to Project Director Richard A. Cellarius, assistant professor of botany. If a way can be found to emulate the way plants convert light to chemical energy the team believes a new approach can be made to building a similar system to obtain electrical energy that would be practical, smokeless, non-radioactive, and self-contained.

## Where the Action is . . .

While the attention of Wolverine sports fans has been focused on football, six winter sports squads are off to promising seasons. They have already engaged in 36 games and meets.

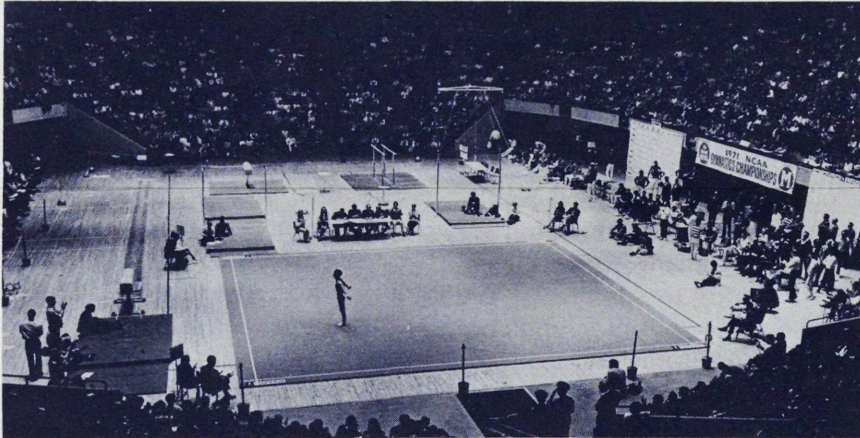


**WRESTLING.** An avid following is watching Coach Rick Bay's young squad through a 13-meet, three tournament schedule.

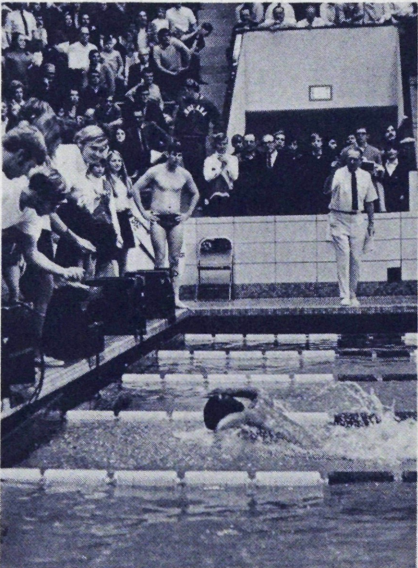


**BASKETBALL.** It is no secret, Michigan is more than aiming for the Big Ten championship.

**GYMNASTICS.** The Big Ten titlists, while hosting the national championships last March, drew the largest crowd in NCAA history.

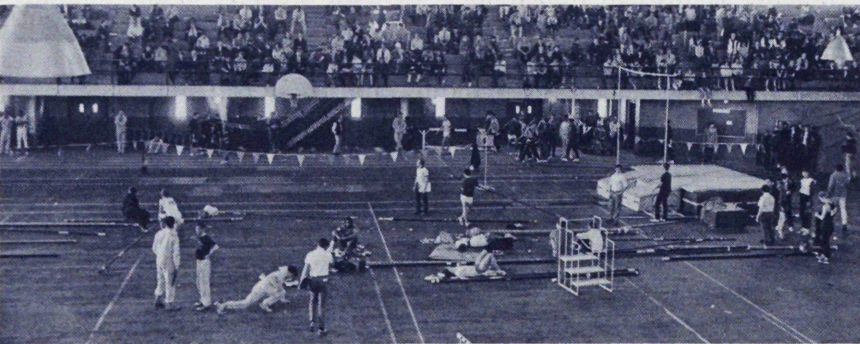


**SWIMMING.** The improved Wolverines were second to powerful Indiana last year. Dallas alumni can see Michigan vs. SMU on February 25.



**HOCKEY.** A young squad is striving to return Michigan to national prominence against increasingly rugged competition.

**TRACK.** New Coach Dixon Farmer has only the Michigan Relays January 29 in Yost Fieldhouse. The following meets are on the road.





# ISR: Twenty-Five Years of Social Research

The world is in turmoil. What are we doing about it?

A better understanding of the sources of many of society's ills has long been the quest of the University's Institute for Social Research, now celebrating its 25th year.

As is often true of many educational and service organizations at the U-M, relatively few persons fully realize the magnitude and importance of the ISR. Yet the findings of this unique organization are being used world-wide by organizations seeking to ease the social frustrations afflicting man.



Angus Campbell

Director Angus Campbell—one of the small group that founded the Institute—in reporting on its first 25 years observed:

We are completing our first quarter-century at the Institute for Social Research at a time when the nation is experiencing a growing sense of urgency regarding its social problems. Strains which have been latent in American society for many years have come to the surface and the mounting turmoil has given rise to an insistent and almost desperate demand for answers to the dilemmas in which the nation finds itself. It is not surprising that social scientists are now being asked to demonstrate that they have something unique to contribute to the solution of these problems.

We feel we have a responsibility to respond to this challenge. Although the Institute has never regarded itself as primarily devoted to applied research, we have had from the beginning a strong problem-orientation. We have on occasion been concerned with research which had immediate and specific application but more commonly our interest has been in research which has broader and more basic value. In all cases, however, we restrict our agenda to activities which promise in the longer or shorter term to have general social worth.

We have learned over the years that there are great difficulties involved in finding research answers to action questions. The crises which American society is now experiencing are far too complex to be solved by simple answers and it is most unlikely that any single research project will provide the key to their solution. Social scientists will contribute to decisions regarding these problems in three ways—by strengthening the basic understanding among decision-

makers of the society they are attempting to serve, by providing relevant information which will improve the quality of specific decisions, and by assessing the consequences of these decisions so that the nation may learn from the action it takes.

We could not have predicted in 1946 that the Institute would grow as it has and we cannot be certain how it may change in the future. However, if we were to risk a look into the next quarter-century we would foresee the following probable developments:

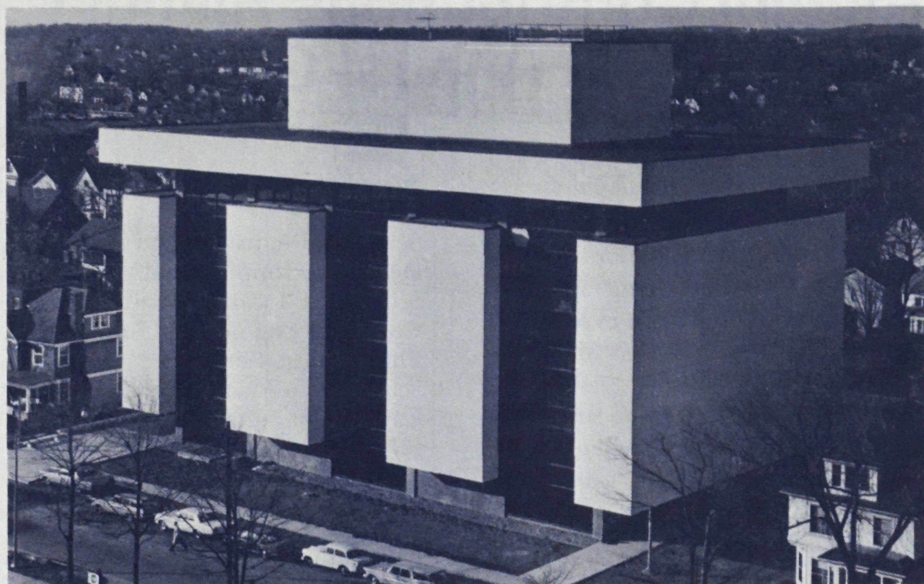
1. The nation's need for both basic and specific information regarding social change will continue as will the demand for social reforms. Social science will be under increasing pressure not only to document the major trends in social change but to provide an understanding of the forces which shape them.

2. Financial support of the research necessary to provide this understanding will continue to run considerably short of what is needed but as it becomes increasingly apparent that the nation's basic problems are social and psychological, as well as medical, ecological, and economic, more adequate support will develop from both private and public sources.

3. The Institute for Social Research will become increasingly valuable as a national research resource. Its devotion to the achievement of a basic understanding of society, its capacities as a social observatory and its commitment to the translation of its research findings into socially useful information will give it a prominent role in the nation's total program of social science research.

While the Institute has changed greatly since 1946, its commitment has remained constant: to embark on those research ventures that offer the greatest hope for scientific and social rewards.

One of its major concerns is with



the community that people live in, their neighborhood, their city, the nation at large. What impact do these communities have on the quality of life, in what ways do they enhance or detract from it. "We no longer believe that national well-being can be adequately measured by the gross national product," Campbell points out. "We need to know a great deal more than we know now about the social changes that are going on in this country and the impact these changes are having on the lives of our citizens."

Over 100 programs are in progress at any one time at ISR, conducted by an Ann Arbor-based staff of about five hundred. The research staff works with four constituent units:

#### Survey Research Center

The oldest and largest unit, well known among academic institutions for the depth and breadth of its research on national social problems and its pioneering and refinement of survey research methodology.

#### Research Center for Group Dynamics

The Center is concerned with the development of basic science of behavior in groups, seeking to explain the nature of social forces which cause group behavior, the relations among members and the activities of the group as a whole.

#### Center for Research on Utilization of Scientific Knowledge

This unit was established to investigate:

—processes of scientific knowledge utilization.

—the spread of new knowledge.

—ways of training practitioners to apply research findings in different fields.

—the value, ethical, and political issues in the use of scientific knowledge.

#### Center for Political Studies

Although this group was not established until 1970, its study of electoral politics goes back to 1948 following President Truman's last-minute surge against Gov. Thomas E. Dewey.

The Institute is considered by many to be the prototype of the national social observatory. A distinguishing feature of the Institute's interdisciplinary approach is that many of its undertakings complement each other. Researchers have a commonality of interest and continually draw upon each other's work. Many ventures thus become possible that are far beyond the reach of the individual researcher or lone scholar.

In addition to serving the immediate purposes for which they were collected, the resulting data have become an archive for the thousands of social scientists who participate in such cooperative enterprises as the Inter-University Consortium for Political Research, a partnership between the Institute and 145 other institutions throughout the world.

Although it is an integral part of the U-M, the Institute is independent of the University's schools and departments. While it cooperates with these units in teaching, the Institute's basic objective is original and intensive research on problems of man and his society.

The Institute's financial support comes from several sources. The Federal Government provides a little over half, foundations and industry account for about 40 per cent, and the University provides less than 10 per cent. In one of the largest commitments of this kind ever, the National Science Foundation recently made a grant of \$3.1 million to strengthen the ISR as a national center for social science research.

## Milestones in ISR History

- With the active support and interest of The University of Michigan a small cadre of the Division of Program Surveys (an agency of the Bureau of Agricultural Economics) headed by Rensis Likert, came into being at U-M in 1946 as the Survey Research Center (SRC).
- Kurt Lewin, pioneer in the experimental study of group processes, established a Research Center for Group Dynamics (RCGD) in 1945 at the Massachusetts Institute of Technology.
- In 1947, the senior staff of RCGD (then at M.I.T.) decided to move to another university having a strong social science orientation; they joined in 1948 with SRC to form the Institute for Social Research at U-M.
- In 1962 the political behavior program of SRC inaugurated the Inter-University Consortium for Political Research, a partnership between the Institute and some 145 other universities.
- To develop procedures for the interpretation and application of research findings, a third center was created in 1964: the Center for Research on Utilization of Scientific Knowledge. (CRUSK).
- The development of the political studies program and its Consortium made desirable the establishment in 1970, of the Institute's fourth center—the Center for Political Studies.
- A long-time goal of the Institute was attained in 1971, with a grant from the National Science Foundation to support on a sustaining basis certain activities of the Institute, making this organization even more a national resource for social science research.



## the Vital Margin

# Alumni Contributions Highest In History of Annual-Giving

by Michael Radock  
Vice-President for University  
Relations and Development

Through the third quarter of 1971 alumni contributions to the Michigan Annual-Giving Program were at the highest rate ever in the 18-year history of the Michigan Annual-Giving Fund.

For the first nine months the \$2,339,664 received represents a 107 per cent increase over the same period of the previous year. The 19,976 donors reflect a rise of 15 per cent.

Two dominant factors usually influence alumni giving. They are the economic outlook and the personal attitude toward a particular institution as well as to higher education in general. For this reason we can be exceptionally proud of the faith and confidence Michigan alumni have placed in their University by substantially increased gift support. This, fortunately, has come in a period when economic uneasiness and declining public confidence have unfavorably affected so many universities in the nation.

Alumni giving also has shown a significant increase in the U-M professional schools, especially in the College of Engineering, Law School, Medical School, and the School of Business Administration.

Michigan Public Act 315 encourages private support of the state system of higher education by providing a direct tax credit for unrestricted gifts.

The increase in the state income tax rate makes it even more advantageous for Michigan residents to make unrestricted gifts to the University.

A gift to any one of 23 approved funds at The University of Michigan will qualify as a credit to the donor's Michigan Income Tax. A full 50 per cent of the gift can be used to reduce the tax-due amount. However, the credit is limited to a \$100 maximum or 20 per cent of the original tax liability.

Federal Income Tax deductibility remains, providing additional savings roughly equivalent to the percentage given for the donor's tax bracket.

The State Tax Credit plus the Federal Tax deduction can provide a significant reduction in the actual "cost" (or money spent) in a gift to the University.

To get direct credit on your Michigan Income Tax, your gift may be marked "Where Needed Most" or designated to one of the following U-M funds:

- Michigan Annual-Giving Fund-Undesignated
- Michigan Annual-Giving Fund-President's Fund

- College of Architecture and Design Fund
- School of Business Administration Fund
- School of Dentistry Fund
- Dearborn Campus Fund
- School of Education Fund
- College of Engineering Fund
- Flint College Fund
- School of Graduate Studies Fund
- Law School Fund
- School of Library Science Fund
- Medical School Fund
- College of Literature, Science, and the Arts Fund
- School of Music Fund
- School of Natural Resources Fund
- School of Nursing Fund
- College of Pharmacy Fund
- School of Public Health Fund
- Residential College Fund
- School of Social Work Fund
- General Fund-Undesignated
- \$55 Million Program-Undesignated (pledge payments)

## Twelve Faculty Honored For Service to U-M

Twelve University faculty members received a total of \$10,500 in awards for distinguished scholarship, teaching, and service during the past year. The five senior faculty members awarded \$1,000 each for outstanding teaching and research were Marvin Felheim, English; Frank R. Kennedy, law; C. Theodore Larson, architecture; James V. Neel, human genetics; and W. Allen Spivey, statistics. These awards were provided by the Michigan Annual-Giving Fund. The U-M Club of Chicago underwrote \$750 grants to David L. Chambers, law; H. Scott Folger, chemical engineering; Richard I. Ford, anthropology; Lewis J. Keinsmith, zoology; Thomas A. Preston, internal medicine; and J. B. Ritchie, industrial relations, for excellence in teaching and University community service. The U-M Press Book Award went to Sidney Fine, history, for his book "Sit Down: The General Motors Strike of 1936-37."

## U-M Band Alumni Plan Revelli Hall

Michigan bands, which have few challengers, will have their own hall if plans for the much-needed building materialize.

Architect sketches are ready and one donor has contributed \$100,000 toward the project which has been undertaken by Michigan Band alumni as a tribute to retired Dr. William D. Revelli. Limited rehearsal facilities at the School of Music have forced the bands to use inadequate Harris Hall, the lease on which will be terminating.

## Program Planning Emphasized In President's Annual Address

(continued from page 1)

of the technology which now exists to reduce the routine load on teaching personnel. Much of the experimentation so far suggests that technology may improve the quality, but not unit costs. . . .

### Restoring Confidence

The generation of new dollars within the present system is only part of our problem. The other part is to restore confidence in higher education among its critics. That criticism tends to center around two contentions. One is that we are unreceptive to change in old ways of doing things, and the other is that we have oversold the benefits of higher education. . . .

There have, in fact, been very significant changes. . . . The most severe critics of the *status quo* are almost invariably those who have espoused a particular idea which has not been adopted. They tend also to exaggerate the degree of dissatisfaction which presently exists with the existing system. The most recent comprehensive survey of student and faculty attitudes is the one done for the Carnegie Commission on Higher Education in 1969 and reported in 1970. . . . Only 13 per cent of the undergraduates and six per cent of the graduates reported that they were dissatisfied. . . . If The University of Michigan is to be the leader which it says it is, we ought to be sufficiently con-

## With the Professors . . .

Lawrence W. Jones of the physics department maintains liquid hydrogen, whose only combustion product is water vapor, must be seriously considered as the ultimate replacement for oil and other fossil fuels in vehicular and aircraft transport. . . . The new dean of the Rackham School of Graduate Studies is Professor Donald E. Stokes, chairman of the political science department. . . . The new president of the American Public Health Association is Myron E. Wegman, dean of the School of Public Health. . . . Holography, lensless three-dimensional photography, for which Dr. Dennis Gabor received the Nobel Prize in physics, was first made into a practical tool

## University Club Opens in Union

The main dining room of the Michigan Union was opened this month as the University Club, available to faculty, staff, alumni, students, and members of their immediate families on a membership basis.

The club, the culmination of a year in planning, replaces the old Faculty Club. Under the direction of a former manager of two prominent Detroit restaurants, it is designed to be a convenient place to meet colleagues, to get acquainted, to entertain friends, and to bring families.

fidant to experiment with new programs which will permit those students who are dissatisfied to pursue different avenues. . . . Given the high cost of higher education and the numbers to be accommodated, I see nothing sacred about the four-year formula for attaining the undergraduate degree. . . . If a student is good enough on arrival to opt out of a year's work which a fellow first-year student is taking for credit, why not give him credit and let him shorten his total university program? . . .

Suppose we experimented with a reasonable number of students who did not aspire to a degree on our terms, but who wanted to be in residence, to take a full load of courses of their own choosing, to remain on campus for a fixed period, and to simply be certified in terms of the work they had done. . . .

### Expand Opportunities

If those of us who are engaged in the business of higher education want to serve the people and maintain their support we must be prepared to help meet their needs. . . . By working with our neighbor institutions I believe a package program could be put together which would greatly expand the opportunity for citizens of the state who cannot now attend campus instruction to advance their own education. . . .

by U-M Professor Emmett N. Leith and research engineer Juris Upatnieks. . . . Roger Jacobi, professor of music, has taken over as president of the Interlochen Center for the Arts, with Assistant Professor Paul Boylan succeeding him as director of the U-M division of the National Music Camp. . . . The Adult Education Association of the U.S.A. has as its new president Alfred W. Storey, director of the U-M Extension Service. . . . The U-M Commission on Women is headed by Virginia Davis Nordin, instructor in law. . . . Giles G. Bole, Jr., M.D., has been named physician-in-charge of the Rackham Arthritis Research Unit.

## Research Funds Reflect Support

Research expenditures of the University during the past year totalled \$61.2 million, only \$1.2 million less than during the previous 12 months. "This," according to Vice-President for Research A. G. Norman, "is a reflection of program strength and diversity of University of Michigan research. Despite the change in public and political attitudes about research and development, and the faltering in appropriations for research, the faculty and staff of the University have continued to find support for their work at a level only about two per cent less in the aggregate than in the preceding three years."