

MINUTES OF THE MEETING
of the
MICHIGAN STATE UNIVERSITY
BOARD OF TRUSTEES
September 22-23, 1977

President Wharton called the meeting to order in the Lincoln Room, Kellogg Center, at 3:00 p.m., September 22.

Present: Trustees Carrigan, Bruff, Martin, Stack, and Stevens. Trustee Smydra arrived at 3:05 p.m., Trustee Radcliffe at 3:30 p.m., and Trustee Krolkowski at 4:10 p.m. President Wharton, Provost Winder, Executive Vice President Breslin; Vice Presidents Cantlon, Carr, Nonnamaker, Perrin, Scott, and Wilkinson; Secretary Ballard; Faculty Liaison Group; Student Liaison Group.

Absent: No one.

1. Motion was made by Trustee Carrigan, seconded by Trustee Stevens, to approve the proposed agenda amended to add an item, "Institutional Neutrality in Collective Bargaining." Approved by a vote of 5 to 0.

2. Motion was made by Trustee Carrigan, seconded by Trustee Stevens, to approve the July 21 minutes. Unanimously carried.

3. Auditor's Report for Fiscal Year 1976-77

Vice President Wilkinson introduced Philip C. Berry, Herbert McLachlan, and William Carlson of Ernst & Ernst, the University's external auditor. A copy of the complete audit report is filed in the Secretary's Office.

Mr. Berry explained the meaning of the auditor's letter of certification and contrasted his firm's function as external auditor with the functions of the other audit agencies. As external auditor they are interested primarily in the overall accuracy and completeness of the University's financial records, not in each individual transaction generating those records. Other agencies have different areas of emphasis; for example, the State Auditor General's primary concern is with the University's General Fund over an extended period rather than a single fiscal year. Mr. Berry described the Auditor General's audit as primarily a negative approach generating exceptions to University practices with a strong orientation toward legislative intent or what the audit staff assumes legislative intent to be. Federal contract auditors are concerned with a very detailed review of charges against specific accounts funded with federal funds. The University's Internal Auditor is concerned primarily with adherence to internal University policies and procedures.

Mr. Berry reviewed the fund accounting concept followed by Michigan's public colleges and universities and reviewed the highlights of 1976-77 activities within the General Fund, Designated Fund, Expendable Restricted Fund, and Auxiliary Activities Fund.

Next, he reviewed the format of the University's financial statements, explaining the listing of assets, liabilities, and fund balances within each fund grouping. Finally, Mr. Berry called the Board's attention to the footnotes appended to the audit and explained their significance.

In response to questions from the Trustees, Mr. Berry indicated that he thought it would be inappropriate for Michigan State University to change to an October 1 - September 30 fiscal year unless such a change was uniformly adopted by other public colleges and universities within the state. Such a change, unless clearly understood by all interested parties, might make the University appear to be more solvent than it actually is on September 30 because of the imbalance between revenues and expenditures during the summer term. In addition, a September 30 closing would require substantial additional staffing because it would add the task of closing the books for the fiscal year to the fall peak work load in other areas of the business office.

Trustees Stack and Bruff, on behalf of the Audit Committee, indicated that the committee had excused staff from the committee meeting at which the audit report was discussed in order to afford the auditors an opportunity to comment freely on any area of University operations in which they detected problems and the cooperation received from central administration. They were pleased by the auditors' very favorable report of the business office staff in terms of competence, objectivity, and cooperation. They identified no specific areas of the University operations which presently require an operational audit by external auditors.

At 4:15 p.m. the meeting recessed for Investment and Health Programs committee meetings.

The meeting reconvened at 7:30 p.m. in the Lincoln Room, Kellogg Center.

Present: Trustees Carrigan, Bruff, Krolkowski, Martin, Radcliffe, Smydra, Stack, and Stevens; all University officers, Faculty Liaison Group, Student Liaison Group.

4. Public Comments

No members of the public appeared to testify to the Board.

Audit Report
for Fiscal Year
1976-77 pre-
sented by
Ernst & Ernst

Report on
Intercollegiate
Athletics5. Report on Intercollegiate Athletics

Dr. Joseph Kearney, Athletic Director, outlined to the Board his impressions of the current status of the University's intercollegiate athletic programs and expressed optimism for the programs' growth and development. He outlined steps he has taken to avoid future violations of NCAA and Big Ten regulations, noting that it is impossible to set up any system which will absolutely assure that problems will not arise in the future. He noted, however, that the NCAA recently appeared to be more cognizant of due process than it was at the time of the University's former problems.

Dr. Kearney gave an optimistic outlook for Spartan intercollegiate athletics in the future but cautioned against assuming that our teams would achieve national prominence overnight. He predicted rapid strides for women's athletics as future budgets are increased to more closely parallel budgets for men's non-revenue sports.

Dr. Kearney also commented on needs which he perceives in the area of facilities. Among these are new seats for the stadium and renovation of the stadium pressbox, both of which, hopefully will be accomplished before the 1978 football season. Longer range needs include an addition to the north end of the stadium to provide better facilities for the football program. This would also free up substantial space in Jenison to accommodate the growing needs of women's athletic programs. Finally, Dr. Kearney noted that a new all-events building is needed to accommodate basketball and other indoor events. This facility also would boost our potential for hosting regional and national indoor competition. Dr. Wharton pointed out that this facility was already on the Board's priority list and would be considered in the near future.

Dr. Kearney concluded by noting that the University is exploring the pros and cons of holding big-draw basketball games and possibly the season-ending football game in off-campus facilities in the future.

6. Report from Ad Hoc Committee on Chicanos and Migrants

Dean Keith Goldhammer, Chairperson of the Ad Hoc Committee; Dr. Joseph Spielberg, Chairperson of the Study Committee; and Dr. Gumecindo Salas, Executive Secretary of the Ad Hoc Committee and the Study Committee, presented a progress report. A summary of their report is filed in the Secretary's Office.

Recessed at 10:00 p.m.

The Audit Committee and the Affirmative Action Committee met Friday morning prior to the session in the Board Room in the Administration Building.

The Board reconvened in the Board Room in the Administration Building at 10:22 a.m. September 23.

Present: Trustees Bruff, Carrigan, Krolikowski, Martin, Radcliffe, Smydra, Stack, and Stevens; all University officers, Faculty Liaison Group, Student Liaison Group.

Absent: No one.

President Wharton announced that two items were being deleted from the agenda: a proposal to jointly administer the Institute for Water Research under the Office of the Vice President for Research and Graduate Studies and the College of Agriculture and Natural Resources, and a grant of \$65,125 to the Dean of Osteopathic Medicine from the American Cancer Society, Inc.

A. PERSONNEL CHANGESResignations

1. Harriet A. Hamberg, Extension Home Economist, Monroe, Lenawee and Washtenaw Counties, effective August 17, 1977, to seek other employment.
2. Rickey D. Meyers, Extension 4-H Youth Agent, Bay, Midland, and Saginaw Counties, effective September 19, 1977, to accept employment as a salesman for a food distributor.
3. Richard G. Murphy, County Extension 4-H Youth Agent, Kent County, effective August 31, 1977, to seek other employment.
4. Albert H. Nickels, County Extension Director, Alpena County, effective August 31, 1977, for federal retirement.
5. Jean M. Ward, Extension Home Economist, Genesee and Lapeer Counties, effective August 15, 1977, to accept a position as Consumer Education Specialist, J.C. Penney, New York, N. Y.
6. N. Jean Yoder, Extension Home Economist, Eaton, Ingham, and Livingston Counties, effective September 7, 1977, because she is moving to another area.
7. Cancellation of appointment of Paul M. Schierholz as Associate Professor, Food Science and Human Nutrition and Agricultural Engineering, and Associate Adjunct Professor, Chemical Engineering, effective July 1, 1977.
8. Richard Ernest Walker, Assistant Professor, German and Russian, effective August 31, 1977, to accept a position at the University of Florida, Gainesville.

Report by Ad
Hoc Committee
on Chicanos
and Migrants

Resignations

A. PERSONNEL CHANGES, cont.

September 22-23, 1977

Resignations, cont.

Resignations

9. Ronald A. Copes, Assistant Professor, Music, effective August 31, 1977, to accept another position.
10. Dale V. Alam, Associate Professor, Secondary Education and Curriculum, effective August 31, 1977, to accept another position.
11. Roger K. Ferguson, Associate Professor, Medicine and Pharmacology, effective July 31, 1977, to accept a position at the Jefferson Medical College, Thomas Jefferson University, Philadelphia, Pa.
12. Jerry A. Holmberg, Instructor, Pathology, effective September 30, 1977, to accept a position with Bowling Green State University.
13. Abigail B. Sher, Associate Professor, Office of Medical Education Research and Development, effective June 30, 1977.
14. June Mack, Specialist, Entomology, effective October 15, 1977.
15. Robert S. Carmichael, Assistant Professor, Geology, effective August 31, 1977, to accept a position at another university.
16. Lenore Anderson, Assistant Professor, School of Nursing, effective August 31, 1977, because she is leaving the area.
17. Dorothea Milbrandt, Associate Professor, School of Nursing, effective August 31, 1977, to accept full-time responsibilities as Vice President for Nursing at Ingham Medical Center.
18. Dorothy E. Tennant, Assistant Professor, Family Medicine, effective July 29, 1977, to accept a practice and teaching position at Wayne State University.
19. George E. Turke, Associate Professor, Osteopathic Medicine, effective June 30, 1977, to return to private practice.
20. William H. Baugh, Assistant Professor, Political Science, effective August 31, 1978, because his appointment is not being renewed.
21. Larry T. Hoover, Assistant Professor, Criminal Justice, effective August 31, 1977, to accept a position at Sam Houston State University.
22. Sydell Spinner, Instructor, Criminal Justice, effective August 31, 1977, to move to another area.
23. Michael E. Borus, Professor, Labor and Industrial Relations, effective August 31, 1977, to accept a position at Ohio State University.
24. Cancellation of appointment of Norris B. Johnson, Assistant Professor, Social Science, effective September 1, 1977.
25. John C. Thrush, Instructor, Social Science, effective August 31, 1978, because his appointment is not being renewed.
26. Clara Horne, Specialist, University College Student Affairs, effective August 31, 1977 to accept full-time employment by the College of Social Science.
27. Harry Pachon, Assistant Professor, Urban and Metropolitan Studies, effective August 31, 1977, to accept other employment.
28. Patrick K. Cusick, Assistant Professor, Pathology and Animal Health Diagnostic Laboratory, effective September 1, 1977, to accept a position with G. D. Searle & Co. Chicago, Illinois.
29. Albert W. Dade, Associate Professor, Pathology and Animal Health Diagnostic Laboratory, effective October 31, 1977, to accept a position at Tuskegee Institute.
30. Pamela N. Engelbrecht, Librarian, Libraries, effective September 30, 1977, to accept a position as Director of Montgomery-Floyd (Va.) Regional Library System.
31. Diane E. Murray, Librarian, Libraries, effective October 10, 1977, to accept a position as Technical Services Librarian, Hope College.
32. Irmgard E. Ritters, Librarian, Libraries, effective September 30, 1977.

Leaves--SabbaticalSabbatical
Leaves

1. John A. Boezi, Professor, Biochemistry, with half pay, effective September 1, 1977 through August 31, 1978, to study in the laboratory of Dr. I. R. Lehman, Department of Biochemistry, Stanford University School of Medicine.
2. John L. Gill, Professor, Dairy Science, with full pay, effective March 20, 1978 through September 20, 1978, to study at the University of Reading, England, and the University of Zurich, Switzerland.

A. PERSONNEL CHANGES, cont.

September 22-23, 1977

Leaves--Sabbatical, cont.

3. Melvin G. Leiserowitz, Associate Professor, Art, with full pay, from January 1, 1978 through March 31, 1978, to study and travel in Mexico.
4. Charles K. Atkin, Associate Professor, Communication, with half pay, from September 1, 1977 through February 28, 1978, to study at Stanford University.
5. T. Clinton Cobb, Professor, Administration and Higher Education, and Assistant Dean, College of Education, with full pay, from October 3, 1977 through December 2, 1977, to study and travel in England, Europe and the United States.
6. R. L. Featherstone, Professor, Administration and Higher Education, and Elementary and Special Education, from March 15, 1978 through September 14, 1978, to study in Asia and the United States; with full pay.
7. James H. Nelson, Professor, Administration and Higher Education, with full pay, from September 1, 1978 through February 28, 1979, to study in Canada and the United States.
8. Shirley A. Brehm, Professor, Elementary and Special Education, with full pay, from September 15, 1977 through December 14, 1977, to study in East Lansing, Appalachia, and the Ozark area.
9. Calhoun Collier, Professor, Elementary and Special Education, with full pay, from January 1, 1978 through June 30, 1978, to study in Michigan and other states which have early childhood education programs.
10. Sumer Verma, Associate Professor, Psychiatry and Medicine, with full pay, from January 1, 1978 through June 30, 1978, to study at the Institute of Post Graduate Medical Education and Research, Chandigarh, India.
11. John H. Hart, Professor, Botany and Plant Pathology, Forestry, and the Institute of Agricultural Technology, with half pay, from September 1, 1977 through August 31, 1978, to study at the Pacific Forest Research Centre, Victoria, British Columbia.
12. Patrick H. Doyle, Professor, Mathematics, with half pay, from September 1, 1978 through August 31, 1979, to study in London, England.
13. Peter A. Lappan, Professor, Mathematics, with half pay, from September 1, 1978 through August 31, 1979, to study at the Imperial College of Science and Technology, University of London, London, England.
14. Mary J. Winter, Associate Professor, Mathematics, with half pay, from September 1, 1978 through August 31, 1979, to study in London, England.
15. Pui Kei Wong, Professor, Mathematics, with half pay, from September 1, 1977 through February 28, 1978, to study in East Lansing and Washington, D.C.
16. K. Wendell Chen, Professor, Physics, with half pay, from September 1, 1977 through August 31, 1978, to study in Batavia, Illinois.
17. Horace Z. Ma, Associate Professor, Physics, with full pay, from September 1, 1977 through December 31, 1977, to study at Stanford University.
18. Surinder K. Aggarwal, Professor, Zoology, with half pay, from September 1, 1977 through August 31, 1978, to study in Japan, Australia, and Switzerland.
19. Donald E. Waite, Professor, Family Medicine, with half pay, from September 1, 1978 through August 31, 1979, to study at the University of California, Berkeley.
20. Thomas J. Stachnik, Associate Professor, Psychiatry, with half pay, from January 1, 1978 through December 31, 1978, to study in the United States and other countries.
21. John S. Duley, Assistant Professor, Learning and Evaluation Service, with full pay, from September 1, 1977 through December 31, 1977, to be a Visiting Fellow in the Institute for Research and Development in Post-compulsory Education, the University of Lancaster, England.

Medical Leaves

Leaves--Medical

1. Sharon L. Fortino, Extension Home Economist, Gratiot, Clinton, and Shiawassee Counties, with full pay, from June 20, 1977 through September 6, 1977.
2. Joan V. Smith, Associate Professor, Art, with full pay, from April 1, 1977 through June 30, 1977.
3. Marianne E. Miller, Instructor, Family Practice and Nursing, with full pay, from August 29, 1977 through November 6, 1977.
4. Edward D. Coppola, Professor, Surgery, with full pay, from July 1, 1977 through September 30, 1977.

A. PERSONNEL CHANGES, cont.

September 22-23, 1977

Leaves--Medical, cont.

Medical Leaves

5. Celia B. Guro, Associate Professor, Community Medicine, and Assistant to the Dean, College of Osteopathic Medicine, with full pay, from August 15, 1977 through September 23, 1977.
6. Patricia O'Handley, Assistant Professor, Small Animal Surgery and Medicine, with full pay, from August 1, 1977 through September 30, 1977.
7. Joanne M. Weil, Librarian, Libraries, with full pay, from July 1, 1977 through September 30, 1977.
8. Robert M. Williams, Librarian, Libraries, with full pay, from July 18, 1977 through September 17, 1977.

Leaves--Military

Military Leaves

1. Aaron E. Reynolds, Jr., Associate Professor, Food Science and Human Nutrition, with full pay, from July 13, 1977 through July 27, 1977.
2. Eldon E. Fredericks, Specialist, Agriculture and Natural Resources Education Institute and Information Services, with full pay, from July 24, 1977 through August 6, 1977.

Leaves--Other

Other Leaves

1. Lynn R. Harvey, District Extension Agent, Public Policy, Cooperative Extension Service, with full pay, from September 15, 1977 through March 15, 1978, to complete a Master's Degree program.
2. Richard W. Hill, Extension 4-H Youth Agent, Eaton and Barry Counties, with full pay, from September 29, 1977 through December 15, 1977, and from March 29, 1978 through June 8, 1978, to work on doctoral study at Michigan State University.
3. LaVerne A. Norman, Extension Agricultural and Resource Development Agent, Benzie County, with full pay, from September 22, 1977 through December 16, 1977, to pursue graduate study at Michigan State University.
4. Kelly M. Harrison, Associate Professor, Agricultural Economics, without pay, from July 15, 1977 through September 15, 1977, to assist the Department of Agriculture in the development of revised programs for agricultural exports and food aid.
5. J. James Victoria, Professor, Art, without pay, from September 1, 1977 through August 31, 1978, to serve as professor and consultant at Concordia University, Montreal, Quebec.
6. Diane Wakoski, Professor, English, without pay, from May 1, 1978 through August 31, 1978, to serve as a visiting creative writing professor.
7. Daniel B. Suits, Professor, Economics, without pay, from January 1, 1978 through April 30, 1978, to work at the East-West Population Institute in Honolulu, Hawaii.
8. John D. Abel, Associate Professor, Telecommunication, without pay, from August 1, 1977 through July 31, 1978.
9. Jennifer A. Parks, Assistant Professor, Health, Physical Education and Recreation, and Intercollegiate Athletics, without pay, from September 1, 1977 through August 31, 1978, to study at the University of Michigan.
10. Linda J. Nelson, Associate Professor and Chairman, Family Ecology, without pay, from October 9, 1977 through October 30, 1977, for consultation with the Spanish Extension Service, Spain.
11. Marianne E. Miller, Instructor, Family Practice, without pay, from November 7, 1977 through December 19, 1977, for child care.
12. Mary M. Noel, Specialist, Family Practice, Family Medicine, and Food Science and Human Nutrition, without pay, from November 1, 1977 through April 30, 1978, for maternity leave.
13. Horacio Fabrega, Jr., Professor, Psychiatry, without pay, from September 15, 1977 through September 14, 1978, to study at the University of Pittsburgh.
14. Harry Perlstadt, Assistant Professor, Sociology and Community Medicine, without pay, from January 1, 1978 through June 30, 1978, to study at the University of Michigan.
15. Steven M. Director, Assistant Professor, Labor and Industrial Relations, without pay, from September 1, 1977 through August 31, 1978, to study at The Brookings Institution, Washington, D.C.
16. Larry Carey, Instructor, American Thought and Language, without pay, from January 1, 1978 through August 31, 1978, for completion of doctorate.

A. PERSONNEL CHANGES, cont.

September 22-23, 1977

Other Leaves

Leaves--Other, cont.

17. Benjamin B. Hickok, Professor, American Thought and Language, without pay, from January 1, 1978 through April 30, 1978.

Transfers and Changes in Assignment

Transfers and Changes in Assignment

Dempsey B. Allen

1. Transfer Dempsey B. Allen, Extension 4-H Youth Agent, from Wayne and Oakland Counties to Saginaw County, effective September 1, 1977.

G. Eldon Bowers

2. Change G. Eldon Bowers from Extension Agricultural Agent, Barry County, to County Extension Director, Luce County, with an increase in salary to \$16,200 per year on a 12-month basis, effective August 15, 1977.

Jerry A. Halm

3. Change Jerry A. Halm from Program Coordinator, Expanded Nutrition Program (Family Living Education) to Regional Extension Supervisor, with an increase in salary to \$22,000 per year on a 12-month basis, effective August 1, 1977.

Virginia K. Ortiz

4. Transfer Virginia K. Ortiz, Extension Home Economist, from Lapeer and Genesee Counties to Monroe, Lenawee, and Washtenaw Counties, with an increase in salary to \$18,600 per year on a 12-month basis, effective September 1, 1977.

Geraldine G. Peeples

5. Change Geraldine G. Peeples from County Extension Home Economist, Genesee County, to Extension Home Economist, Saginaw County, with an increase in salary to \$15,800 per year on a 12-month basis, effective September 1, 1977.

Mary E. Pierce

6. Change Mary E. Pierce from Extension Home Economist, Marquette and Alger Counties, to County Extension Director, Marquette County, with an increase in salary to \$16,100 per year on a 12-month basis, effective October 1, 1977.

Harold D. Rouget

7. Change Harold D. Rouget from Extension Agricultural Agent, Bay County, to Regional Extension Field Crops Agent, East Central, with an increase in salary to \$18,900 per year on a 12-month basis, effective September 1, 1977.

Joseph R. Shaltry

8. Change Joseph R. Shaltry from Extension Agricultural Agent, Sanilac County, to Regional Extension Dairy Agent, East Central, with an increase in salary to \$19,500 per year on a 12-month basis, effective September 1, 1977.

Zane R. Helsel

9. Change effective date of appointment of Zane R. Helsel as Assistant Professor, Crop and Soil Sciences from July 1, 1977 to September 1, 1977.

Stanley J. Zarnoch

10. Change effective date of appointment of Stanley J. Zarnoch as Assistant Professor, Fisheries and Wildlife, from July 1, 1977 to August 15, 1977.

Eugene F. Dice

11. Additional assignment as Program Leader for Advisory Service, Michigan Sea Grant Program, for Eugene F. Dice, Professor, Park and Recreation Resources and Resource Development, effective October 1, 1977.

Linda C. Wagner

12. Additional assignment as Associate Chairman, Department of English and change from a 10-month basis at a salary of \$26,490 per year to a 12-month basis at a salary of \$33,113 per year for Linda C. Wagner, Professor, effective September 1, 1977.

Stanley J. Chojnacki

13. Additional assignment as Assistant Chairman, Department of History, and change from a 10-month basis at a salary of \$17,760 per year to a 12-month basis at a salary of \$22,200 per year, for Stanley J. Chojnacki, Associate Professor, effective September 1, 1977.

Renee Firestone

14. Change Renee Firestone, Specialist, Dean's Office, College of Business, from a 10-month basis at a salary of \$8,300 per year to a 12-month basis at a salary of \$10,375 per year, effective September 1, 1977 through August 31, 1979.

Byron W. Brown

15. Additional assignment as Chairman, Department of Economics, and change from a 10-month basis at a salary of \$20,500 per year to a 12-month basis at a salary of \$26,825 per year, for Byron W. Brown, Associate Professor, effective September 1, 1977.

Edward A. Carlin

16. Change Edward A. Carlin from Professor, Department of Social Science, and Dean, University College, at a salary of \$40,800 per year on a 12-month basis, to Professor, Economics, at a salary of \$35,500 per year on a 10-month basis, effective September 1, 1977.

Victor E. Smith

17. Change Victor E. Smith from Professor and Chairman, Department of Economics, to Professor, Department of Economics, with a change from a 12-month basis at a salary of \$37,300 per year to a 10-month basis at a salary of \$28,880 per year, effective September 1, 1977.

Jack L. Hillwig

18. Transfer Jack L. Hillwig, Instructor, from the Dean's Office, College of Communication Arts and Sciences, to the School of Journalism, effective October 1, 1977.

George B. Sherman

19. Change George B. Sherman, Assistant Professor, Elementary and Special Education, from a 12-month basis at a salary of \$22,800 per year to a 10-month basis at a salary of \$18,240 per year effective September 1, 1977.

A. PERSONNEL CHANGES, cont.

September 22-23, 1977

Transfers and Changes in Assignment, cont.

Transfers and Changes in Assignment

- 20. Change of assignment for William C. Bradley, Professor, from Civil and Sanitary Engineering and Metallurgy, Mechanics and Materials Science, to Civil and Sanitary Engineering only, effective September 1, 1978. William C. Bradley
- 21. Change of assignment for James L. Lubkin, Professor, from Civil and Sanitary Engineering and Metallurgy, Mechanics and Materials Science, to Civil and Sanitary Engineering only, effective September 1, 1977 James L. Lubkin
- 22. Change of assignment for Maurice R. Bennink, Assistant Professor, from Food Science and Human Nutrition and School of Nursing, to Food Science and Human Nutrition only, effective July 1, 1977. Maurice R. Bennink
- 23. Additional assignment for Thomas A. Helmrath, Associate Professor, Human Development, as Associate Dean for Clinical Services, Dean's Office, College of Human Medicine, with an increase in salary to \$38,750 per year on a 12-month basis, effective August 1, 1977. Thomas A. Helmrath
- 24. Additional assignment for Geraldine M. Purcell, Associate Professor, Physiology, as Acting Assistant Dean, Flint Campus, College of Human Medicine, with an increase in salary to \$28,730 per year on a 12-month basis, effective August 1, 1977. Geraldine M. Purcell
- 25. Additional assignment for Albert B. Robillard, Assistant Professor, Human Development, as Director of Primary Care Program, with an increase in salary to \$24,000 per year on a 12-month basis, effective July 1, 1977. Albert B. Robillard
- 26. Change sabbatical leave dates for Teresa Bernardez-Bonesatti, Associate Professor, Psychiatry, from August 1, 1977 through July 31, 1978, to September 1, 1977 through August 31, 1978. Teresa Bernardez-Bonesatti
- 27. Promotion of Dan C. English from Associate Professor to Professor, and designation as Chairman, Department of Surgery, with an increase in salary to \$52,000 per year on a 12-month basis, effective July 1, 1977. Dan C. English
- 28. Change Ralph E. Taggart, Associate Professor, Biological Science Program, and Associate Professor and Assistant Chairman, Botany and Plant Pathology, from a 10-month basis at a salary of \$17,320 per year to a 12-month basis at a salary of \$21,650 per year, effective September 1, 1977. Ralph E. Taggart
- 29. Change effective date of appointment of Stuart H. Gage as Assistant Professor and Extension Specialist, Entomology, from July 1, 1977 to October 10, 1977. Stuart H. Gage
- 30. Change effective date of appointment of James Miller as Assistant Professor, Entomology, from July 1, 1977 to August 1, 1977. James Miller
- 31. Change Gerald D. Ludden, Professor, Mathematics, from a 12-month basis at a salary of \$25,530 per year to a 10-month basis at a salary of \$20,424 per year effective September 1, 1977. Gerald D. Ludden
- 32. Change William T. Sledd, Professor, Mathematics, from a 10-month basis at a salary of \$25,330 per year to a 12-month basis at a salary of \$31,662 per year effective September 1, 1977. William T. Sledd
- 33. Change Sam M. Austin from Professor, Physics, and Associate Director, Cyclotron Laboratory, to Professor, Physics, and Associate Director, MSU/NSF Heavy Ion Laboratory, with an increase in salary to \$38,000 per year on a 12-month basis, effective October 1, 1977. Sam M. Austin
- 34. Change Henry G. Blosser from Professor, Physics and Director, Cyclotron Laboratory, to Professor, Physics, and Director, MSU/NSF Heavy Ion Laboratory, with an increase in salary to \$55,000 per year on a 12-month basis, effective October 1, 1977. Henry G. Blosser
- 35. Change sabbatical leave dates for Hugh McManus, Professor, Physics, from September 1, 1978 through December 31, 1978, to September 1, 1977 through December 31, 1977. Hugh McManus
- 36. Change Willard G. Warrington from Professor, University College Student Affairs, and Associate Dean and Director, Office of Instructional Services, University College, to Professor, University College Student Affairs, and Acting Dean, University College, with an increase in salary to \$40,800 per year on a 12-month basis, effective September 1, 1977. Willard G. Warrington
- 37. Change ending date of leave for Alwynelle S. Ahl, Associate Professor, Natural Science, from December 31, 1977 to August 31, 1977. Alwynelle S. Ahl
- 38. Additional assignment for Matthew A. Epstein, Professor, Department of Social Science, as Director, University College Student Affairs and Residence Hall Instruction, East Complex, and a change from a 10-month basis at a salary of \$24,270 per year to a 12-month basis at a salary of \$30,338 per year effective September 1, 1977. Matthew A. Epstein

A. PERSONNEL CHANGES, cont.

September 22-23, 1977

Transfers and
Changes in
AssignmentTransfers and Changes in Assignment, cont.

Jack M. Bain

39. Change sabbatical leave dates for Jack M. Bain, Professor and Chairman, Racial and Ethnic Studies, and Professor, Communication, from June 16, 1977 through September 15, 1977 to June 20, 1977 through September 19, 1977.

George W. Logan

40. Change terms of leave for George W. Logan, Assistant Professor, Urban and Metropolitan Studies, from no pay, effective September 1, 1977 through August 31, 1978, to sabbatical leave, full pay, effective September 1, 1977 through February 28, 1978.

Jeffrey F.
Williams

41. Additional assignment for Jeffrey F. Williams, Professor, Microbiology and Public Health, as Assistant Dean for Graduate Study and Research, Dean's Office, College of Veterinary Medicine, with an increase in salary to \$32,985 per year on a 12-month basis, effective October 1, 1977 through December 31, 1981.

Peter T.
McGovern

42. Additional assignment for Peter T. McGovern, Associate Professor, Anatomy and Large Animal Surgery and Medicine, as Acting Chairman, Anatomy, with an increase in salary to \$25,900 per year on a 12-month basis, effective July 1, 1977.

Andrew D. Hunt

43. Change of assignment for Andrew D. Hunt from Professor, Human Development, and Acting Director, Office of Health Services Programs, to Professor, Human Development; Consultant, Office of the Provost; and Coordinator, Medical Humanities Program, effective October 1, 1977 through June 30, 1978.

Kent W.
Cresswell

44. Change Kent W. Cresswell from Assistant Professor, Telecommunication, and Assistant Professor and Associate Director, Instructional Television Service, to Assistant Professor, Telecommunication, and Assistant Professor and Associate Director, Instructional and Public Television, effective March 1, 1977.

Donald A. Pash

45. Change Donald A. Pash, Professor, from Instructional Television Service to Instructional and Public Television, effective March 1, 1977.

Clarence W.
Minkel

46. Change Clarence W. Minkel from Professor, Geography, and Acting Dean, Graduate School, to Professor, Geography, and Associate Dean, International Studies and Programs, with a change in salary to \$38,400 per year on a 12-month basis, effective September 1, 1977.

Ellsworth A.
Netherton

47. Assignment of Ellsworth A. Netherton, Extension Field Crops Agent, Cooperative Extension Service, to Overseas-MSU/PIATA Uruguay Project, at an overseas salary of \$25,600 per year on a 12-month basis, effective July 1, 1977 through June 30, 1979.

Robert D. Page

48. Change Robert D. Page, Director, Instructional and Public Television, from AP-16 to AP-17 with an increase in salary to \$28,300 per year on a 12-month basis, effective July 1, 1977.

Promotion

Promotion

1. Change John T. Hinnant from Instructor to Assistant Professor, Anthropology and African Studies Center, with an increase in salary to \$15,450 per year on a 10-month basis, effective September 1, 1977.

Salary Changes

Salary Changes

1. Increase in salary for Lawrence N. Redd, Assistant Professor, Telecommunication, to \$17,000 per year on a 12-month basis, effective October 1, 1977.
2. Increase in salary for Sharon S. Emmert, Assistant Professor, Nursing, to \$16,050 per year on a 10-month basis, effective October 1, 1977.
3. Increase in salary for Margaret Gamble, Assistant Professor, Nursing, to \$16,050 per year on a 10-month basis, effective October 1, 1977.
4. Increase in salary for John K. Hudzik, Assistant Professor, Criminal Justice, to \$18,000 per year on a 10-month basis, effective October 1, 1977.
5. Increase in salary for Steven M. Director, Assistant Professor, Labor and Industrial Relations, to \$17,100 per year on a 10-month basis, effective October 1, 1977.
6. Increase in salary for Jack N. E. Pitts, Instructor, Urban and Metropolitan Studies and Racial and Ethnic Studies, and Director of Student Affairs, Dean's Office, College of Urban Development, to \$21,800 per year on a 12-month basis, effective October 1, 1977.
7. Increase in salary for Carol A. Coffman, Specialist, Foreign Student Advisor Office, International Studies and Programs, to \$13,900 per year on a 12-month basis, effective October 1, 1977.

Appointments

Appointments

1. Carolyn C. Bay, Regional Extension Livestock Agent, East Central, Cooperative Extension Service, at a salary of \$21,500 per year on a 12-month basis, effective September 12, 1977.

A. PERSONNEL CHANGES, cont.

September 22-23, 1977

Appointments, cont.

Appointments

2. Adger B. Carroll, Assistant Director of Extension for Natural Resources and Public Policy Programs, Cooperative Extension Service, at a salary of \$33,000 per year on a 12-month basis, effective September 15, 1977.
3. Ronald Lee Dingerson, Extension Agricultural Agent, Barry County, at a salary of \$13,950 per year on a 12-month basis, effective September 1, 1977.
4. Philip L. Greenburg, Regional Extension Farm Management Agent, Upper Peninsula, at a salary of \$13,950 per year on a 12-month basis, effective September 1, 1977.
5. Melvin R. Matchett, County Extension Director, Alpena County, at a salary of \$19,600 per year on a 12-month basis, effective September 1, 1977.
6. Stephen Raymond Stewart, District Extension Marine Agent, Southeast, at a salary of \$13,100 per year on a 12-month basis, effective October 1, 1977.
7. Sally Ann Wheeler, Extension Home Economist, Livingston County, at a salary of \$11,550 per year on a 12-month basis, effective August 1, 1977.
8. Emmett Allen Shields, Specialist, Agricultural Engineering and Institute of Agricultural Technology, at a salary of \$12,000 per year on a 12-month basis, with job security, effective July 1, 1977 through June 30, 1979.
9. Vernon W. Meints, Assistant Professor, Crop and Soil Sciences, in the tenure system, at a salary of \$19,000 per year on a 12-month basis, effective July 11, 1977.
10. Benjamin B. Bartlett, Specialist, Dairy Science and Animal Husbandry, in the job security system, at a salary of \$16,000 per year on a 12-month basis, effective August 15, 1977.
11. Ralph Leroy Fogwell, Assistant Professor, Dairy Science, in the tenure system, at a salary of \$19,000 per year on a 12-month basis, effective September 1, 1977.
12. Ronald E. Allen, Assistant Professor, Food Science and Human Nutrition and Animal Husbandry, in the tenure system, at a salary of \$19,000 per year on a 12-month basis, effective September 15, 1977.
13. James B. Hart, Assistant Professor, Forestry, in the tenure system, at a salary of \$23,000 per year on a 12-month basis, effective September 1, 1977.
14. Lowell Carrell Ewart, Associate Professor, Horticulture and Institute of Agricultural Technology, in the tenure system, at a salary of \$23,000 per year on a 12-month basis, effective September 1, 1977.
15. Jon Frederick Fobes, Assistant Professor, Horticulture, in the tenure system, at a salary of \$18,300 per year on a 12-month basis, effective September 24, 1977.
16. Eugene E. Trotter, Assistant Professor, Institute of Agricultural Technology, in the tenure system, at a salary of \$20,500 per year on a 12-month basis, effective September 1, 1977.
17. Mary Lee Hu, Assistant Professor, Art, in the tenure system, at a salary of \$15,000 per year on a 10-month basis, effective September 1, 1977.
18. Patrick M. McConeghy, Assistant Professor, German and Russian, in the tenure system, at a salary of \$13,500 per year on a 10-month basis, effective September 1, 1977.
19. Dale Bonge, Assistant Professor, Music, in the tenure system, at a salary of \$13,000 per year on a 10-month basis, effective September 1, 1977.
20. Roger Smeltekop, Instructor, Music, in the tenure system, at a salary of \$13,500 per year on a 10-month basis, effective September 1, 1977.
21. John Cooper Birchfield, Associate Professor, Hotel, Restaurant, and Institutional Management, in the tenure system, at a salary of \$21,500 per year on a 10-month basis, effective September 1, 1977.
22. Leonard Reid, Assistant Professor, Advertising, in the tenure system, at a salary of \$16,500 per year on a 10-month basis, effective September 1, 1977.
23. Jacqueline A. Graham, Specialist, Audiology and Speech Sciences, in the job security system, at a salary of \$13,375 per year on a 12-month basis, effective September 1, 1977.
24. William M. Johnson, Specialist, Audiology and Speech Sciences, in the job security system, at a salary of \$13,250 per year on a 12-month basis, effective September 1, 1977.
25. Lawrence Newton Redd, Assistant Professor, Telecommunication, in the tenure system, at a salary of \$14,825 per year on a 12-month basis, effective September 1, 1977.

Appointments

Appointments, cont.

26. Charles A. Petty, Assistant Professor, Chemical Engineering, in the tenure system, at a salary of \$20,000 per year on a 10-month basis, effective September 1, 1977.
27. John A. Brighton, Professor and Chairman, Mechanical Engineering, with tenure, at a salary of \$40,000 per year on a 12-month basis, effective October 15, 1977.
28. John F. Martin, Assistant Professor, Metallurgy, Mechanics, and Materials Science, in the tenure system, at a salary of \$17,000 per year on a 10-month basis, effective September 1, 1977.
29. William R. Schonbein, Specialist, Radiology, and Assistant Dean for Management, College of Human Medicine, in the job security system, at a salary of \$31,800 per year on a 12-month basis, effective July 1, 1977.
30. Jack Gilbert Hills, Associate Professor, Astronomy and Astrophysics, at a salary of \$19,000 per year on a 10-month basis, effective September 1, 1977 through August 31, 1979.
31. Robert James Tanis, Specialist, Biochemistry, in the job security system, at a salary of \$19,500 per year on a 12-month basis, effective July 12, 1977.
32. Rudolph Goetz, Specialist-Organic Undergraduate Laboratory Coordinator, Chemistry, in the job security system, at a salary of \$17,000 per year on a 12-month basis, effective September 1, 1977.
33. Frank B. Dazzo, Assistant Professor, Microbiology and Public Health, in the tenure system, at a salary of \$20,000 per year on a 12-month basis, effective January 1, 1978.
34. Claus-Konrad Gelbke, Associate Professor, Physics, in the tenure system, at a salary of \$22,000 per year on a 12-month basis, effective August 15, 1977.
35. Peter S. Miller, Specialist, MSU/NSF Heavy Ion Laboratory, with job security, at a salary of \$23,500 per year on a 12-month basis, effective January 1, 1978.
36. Thomas Baer Friedman, Associate Professor, Zoology, in the tenure system, at a salary of \$16,000 per year on a 10-month basis, effective January 1, 1978.
37. Judith E. Brown, Assistant Professor, Nursing, in the tenure system, at a salary of \$16,000 per year on a 10-month basis, effective September 1, 1977.
38. Sharon Sue Emmert, Assistant Professor, Nursing, in the tenure system, at a salary of \$15,000 per year on a 10-month basis, effective September 1, 1977.
39. Carolyn Fox, Assistant Professor, Nursing, in the tenure system, at a salary of \$16,000 per year on a 10-month basis, effective September 1, 1977.
40. Margaret E. Gamble, Assistant Professor, Nursing, in the tenure system, at a salary of \$15,000 per year on a 10-month basis, effective September 1, 1977.
41. Margaret Kingry, Assistant Professor, Nursing, in the tenure system, at a salary of \$15,500 per year on a 10-month basis, effective September 1, 1977.
42. Robert P. Hubbard, Assistant Professor, Biomechanics, and Metallurgy, Mechanics and Materials Science, in the tenure system, at a salary of \$22,750 per year on a 10-month basis, effective September 1, 1977.
43. Herbert M. Reynolds, Assistant Professor, Biomechanics, in the tenure system, at a salary of \$26,500 per year on a 12-month basis, effective September 1, 1977.
44. Lynn F. Brumm, Professor and Chairman, Family Medicine, with tenure, at a salary of \$56,000 per year on a 12-month basis, effective August 1, 1977.
45. Anthony G. Chila, Associate Professor, Family Medicine, in the tenure system, at a salary of \$40,000 per year on a 12-month basis, effective September 1, 1977.
46. Kenneth J. Mahoney, Associate Professor, Osteopathic Medicine, in the tenure system, at a salary of \$40,000 per year on a 12-month basis, effective July 15, 1977.
47. Thomas F. Santucci, Jr., Professor, Osteopathic Medicine, with tenure, at a salary of \$40,000 per year on a 12-month basis, effective July 1, 1977.
48. Gregory D. Fink, Assistant Professor, Pharmacology, in the tenure system, at a salary of \$22,000 per year on a 12-month basis, effective July 1, 1977.
49. John E. Thornburg, Assistant Professor, Pharmacology and Family Medicine, in the tenure system, at a salary of \$32,000 per year on a 12-month basis, effective September 1, 1977.
50. Richard E. Groop, Assistant Professor, Geography, in the tenure system, at a salary of \$14,000 per year on a 10-month basis, effective September 1, 1977.
51. Bruce W. Pigozzi, Assistant Professor, Geography, in the tenure system, at a salary of \$14,000 per year on a 10-month basis, effective September 1, 1977.

A. PERSONNEL CHANGES, cont.

September 22-23, 1977

Appointments, cont.

Appointments

52. Craig Ketterer Harris, Assistant Professor, Sociology, in the tenure system, at a salary of \$16,500 per year on a 12-month basis, effective September 1, 1977.
53. Nan E. Johnson, Assistant Professor, Sociology, in the tenure system, at a salary of \$16,500 per year on a 12-month basis, effective September 1, 1977.
54. Timothy S. Bynum, Assistant Professor, Criminal Justice, in the tenure system, at a salary of \$16,000 per year on a 10-month basis, effective September 1, 1977.
55. John K. Hudzik, Assistant Professor, Criminal Justice, in the tenure system, at a salary of \$17,000 per year on a 10-month basis, effective September 1, 1977.
56. Steven M. Director, Assistant Professor, Labor and Industrial Relations, in the tenure system, at a salary of \$16,500 per year on a 10-month basis, effective September 1, 1977.
57. Mark Paul Frederickson, Assistant Professor, Urban Planning and Landscape Architecture, in the tenure system, at a salary of \$14,500 per year on a 10-month basis, effective September 1, 1977.
58. Hans Dodds Kellner, Assistant Professor, Humanities, in the tenure system, at a salary of \$14,000 per year on a 10-month basis, effective September 1, 1977.
59. Edith Allen Schult, Instructor, Social Science, in the tenure system, at a salary of \$13,000 per year on a 10-month basis, effective September 1, 1977.
60. Jack N. E. Pitts, Instructor, Urban and Metropolitan Studies and Racial and Ethnic Studies, and Director of Student Affairs, Dean's Office, College of Urban Development, at a salary of \$20,200 per year on a 12-month basis, effective September 1, 1977.
61. Terrance David Braden, Assistant Professor, Small Animal Surgery and Medicine, in the tenure system, at a salary of \$26,500 per year on a 12-month basis, effective September 1, 1977.
62. Jerome F. E. Halverson, Assistant Professor and Regional Director, West Michigan Region, University Extension, in the tenure system, at a salary of \$18,000 per year on a 12-month basis, effective October 1, 1977.
63. Thomas E. DeWitt, Specialist, Communication Resource Development, Highway Traffic Safety Center, in the job security system, at a salary of \$17,500 per year on a 12-month basis, effective October 1, 1977.
64. Carol Ann Coffman, Specialist-Foreign Student Counselor, International Studies and Programs, in the job security system, at a salary of \$12,900 per year on a 12-month basis, effective September 1, 1977.
65. William J. Klein, Professor and Director, Health Services Programs, Office of Health Services, and Professor, Health Services Education and Research and Community Medicine, with tenure, at a salary of \$55,000 per year on a 12-month basis, effective October 1, 1977.
66. Yu Shiang Yeh, Librarian, Libraries, at a salary of \$15,000 per year on a 12-month basis, effective September 15, 1977.
67. Marsha MacDowell, Specialist, Museum, in the job security system, at a salary of \$12,000 per year on a 12-month basis, effective July 1, 1977.
68. Andrew Hugine, Jr., Assistant Professor, Institutional Research, in the tenure system, at a salary of \$16,500 per year on a 12-month basis, effective September 1, 1977.
69. James J. Lennon, Director, AP-18, Data Processing, at a salary of \$32,600 per year on a 12-month basis, effective September 1, 1977.
70. Gerald B. Thomas, Staff Physician, AP-60, MSU Health Center, at a salary of \$20,000 per year on a 12-month basis, effective August 8, 1977.

On motion by Trustee Carrigan, seconded by Trustee Radcliffe, it was unanimously voted to approve the Resignations, Leaves, Transfers and Changes in Assignment, Promotion, Salary Changes, and Appointments.

Personnel RecommendationsPersonnel
Recommendations

It is recommended that the following positions be established:

1. Audiovisual technician C-T 10 for the Dean's Office, College of Human Medicine.
2. Office Assistant II C-T 8 for the Dean's Office, Lyman Briggs College
3. Coordinator/General Chemistry Self-Instructional Program A-P 11 for the Department of Chemistry
4. Research Assistant Natural/Health Science A-P 7 for the Department of Biochemistry, College of Osteopathic Medicine.

A. PERSONNEL CHANGES, cont.

September 22-23, 1977

Personnel
Recommendations,
cont.Personnel Recommendations, cont.

5. Office Supervisor III APS-8 for the Department of Osteopathic Medicine.
6. Systems Analyst AP-11 for the Computer Institute for Social Science Research.
7. Secretary II CT-7 for the Dean's Office, College of Veterinary Medicine.
8. Anatomical Preparation Technician CT-8 for the Animal Health Diagnostic Laboratory.
9. For the Veterinary Clinical Center:
 - a. Senior Administrative Assistant AP-12
 - b. 3 Medical Technologist AP-7
 - c. Animal Technician II CT-9
 - d. Radiologic Technologist I CT-8
 - e. 9 Animal Technician I CT-7
 - f. Secretary I CT-5
 - g. Operating Room Technician CT-4
10. Secretary III CT-9 for the Director's Office, MSU Health Center
11. Manager Accounting AP-13 for the Controller, Bookkeeping Section
12. Laboratory Research Technician I CT-7 for the Institute of Water Research

On motion by Trustee Martin, seconded by Trustee Bruff, it was unanimously voted to approve the Personnel Recommendations.

Gifts and
GrantsB. GIFTS AND GRANTS

1. Gift of a hand operated laboratory bench size homogenizer and an electric powered homogenizer with a total value of \$500 from Florence Diamond, Dearborn, to be used under the direction of R. Chandan in the Department of Food Science and Human Nutrition for experimental work to achieve emulsification of fats and oils in various kinds of food products.
2. Gift of an untitled ink drawing by Walter Houmère, given in memory of Jesse J. Garrison, valued at \$300 from Anne Garrison, East Lansing, for the Kresge Art Gallery.
3. Gift of 922 upholstery and drapery fabric samples valued at \$9,200 from Mary L. Shipley, Tallahassee, Florida, to be used in interior design classes in the Department of Human Environment and Design.
4. Gift of a window style air conditioner valued at \$100 from Jim R. Faraone, Lansing, to be used for climate control of audio control room at WKAR-TV, Instructional and Public Television.
5. Grants to be used for scholarship purposes as follows:
 - a. \$2,598,020 from the Department of Health, Education and Welfare, for the National Direct Student Loan account
 - b. \$1,000 from Robert J. Alpers, Findlay Ohio, for the Department of Agricultural Engineering
 - c. \$225 from the New York Florists' Club, New York, N.Y. for students in the Department of Horticulture
 - d. \$650 from the Ralston Purina Co., St. Louis, Missouri, for the Ralston Purina Scholarship Award for the 1977-78 school year
 - e. \$1,000 from the Duncan Hines Foundation, Ithaca, N.Y., to continue the Duncan Hines Scholarship; recipients to be selected by the School of Hotel, Restaurant and Institutional Management
 - f. \$1,000 from the Marriott Corporation, Washington, D.C. for a student or students in Hotel, Restaurant and Institutional Management
 - g. \$900 from the Stouffer Foods Corporation Fund, Cleveland Ohio, to be given on the basis of good, average scholarship ability and financial need
 - h. \$11,939.40 from the Estate of Jennie Elizabeth Eason, Kalamazoo, as the initial distribution of the Estate to be used for scholarships for students training in special education.
 - i. \$1,200 from the Boeing Company, Seattle, Washington, to aid students in the College of Engineering
 - j. \$638.75 from the General Motors Corp., Detroit, to assist students in the College of Engineering
 - k. \$500 from the Nissan Motor Corp. in U.S.A., Gardena, California, to be used for scholarships for students in the College of Engineering
 - l. \$300 from the Stouffer Foods Corp. Fund for a student enrolled in the College of Human Ecology
 - m. \$1,187 from the Michigan Foundation for Medical and Health Education for long-term loans to students enrolled in the College of Human Medicine
 - n. \$1,000 from the Michigan State Bar Foundation, Lansing, for a student of James Madison College who will be serving at the State Bar Grievance Board
 - o. \$200 from the Women's Auxiliary to the Michigan Veterinary Medicine Association for the Veterinary Student Loan Fund
 - p. For the MSU Grant Fund:
 - \$75 from the Miss Muskegon County Scholarship Pageant
 - \$700 from the Walker Manufacturing Co., Racine, Wisconsin
 - q. \$2,500 from the Pick Benevolent Association, Chicago, Ill., to assist one or more students who have indicated need of financial assistance to pursue their college or postgraduate education.
6. Grants as follows to the MSU Development Fund:
 - a. \$5,000 from the Moorman Manufacturing Co., Quincy, Ill., for research in the Department of Animal Husbandry

B. GIFTS AND GRANTS, cont.

September 22-23, 1977

Gifts and
Grants

6. Grants to the MSU Development Fund, cont.
 - b. For the Hotel, Restaurant and Institutional Management Associates Endowment Fund:
 - \$812 from Angelos J. Vlahakis, East Lansing
 - \$2,970 from various donors
 - c. \$100 from Richard Bosworth, Dimondale, for research in the Department of Computer Science
 - d. \$25 from R. F. Langham for the Runnells Pathology Prize, College of Veterinary Medicine
 - e. \$2,000 from Ada Stevens, Laguna Hills, Calif., for the Terrill D. Stevens Memorial Scholarship
 - f. \$85,047.67 from various donors for various projects as listed in the Development Fund Office.
7. Grant of \$120,304 from ACTION/Peace Corps, Washington, D.C., to be used under the direction of J. James Kielbaso in the College of Agriculture and Natural Resources to prepare BA/BS generalists for agricultural positions with Peace Corps in Africa and the Philippines; also to allow MSU Peace Corps Intern Program Director to visit MSU graduates serving as Peace Corps volunteers in the Philippines, Thailand, Nepal, and Malaysia.
8. Grant of \$500 from Gerber Products Co., Fremont, to be used under the direction of G. T. Stachwick in the Cooperative Extension Service to conduct research to the demonstration of terramycin usage for control of bacterial spot on peaches.
9. Grant of \$750,000 from the Michigan Department of Social Services, Lansing, to be used under the direction of N. A. Brown in the Cooperative Extension Service for the expansion of MSU's 4-H Youth programs in urban areas.
10. Grant of \$12,500 from the Office of Services to the Aging, Lansing, to be used under the direction of Gordon Guyer in the Cooperative Extension Service for food and nutrition education for Title VII participants and staff.
11. Grant of \$520 from the Michigan Association Future Farmers of America, Lansing, to be used under the direction of N. A. Brown in Extension 4-H Youth for sponsorship of the Work Adventure program.
12. Grant of \$180 from the National 4-H Council, Chicago, Ill., to be used under the direction of N. A. Brown in Extension 4-H Youth as a scholarship grant for 1977 Eastern 4-H Tractor and Small Engines Automotive Events.
13. Grant of \$400 from the National 4-H Council, Chicago, Ill., to be used under the direction of N. A. Brown in Extension 4-H Youth for five scholarship grants for National 4-H Wildlife Conservation Workshop, Washington, D.C., August 7-13, 1977.
14. Grant of \$9,600 from the Ford Foundation, New York, N.Y., to be used under the direction of Carl K. Eicher in Agricultural Economics to support the activities of Dr. Assefa Mehretu as visiting associate professor in the Department of Agricultural Economics.
15. Grant of \$2,500 from the Michigan Fruit Cannery, Benton Harbor, to be used under the direction of D. Ricks in the Department of Agricultural Economics to support unrestricted research in the area of marketing.
16. Grant of \$4,193 from the U.S. Department of Agriculture, Washington, D.C., to be used under the direction of Kelly Harrison in the Department of Agricultural Economics for work with the Office of Rural Development of AID in the preparation of a new rural market system project.
17. Grant of \$10,049 from the U.S. Department of Agriculture, Washington, D.C., to be used under the direction of H. M. Riley in the Department of Agricultural Economics to prepare a plan for longer term study of small scale rural industries in Bangladesh.
18. Grant of \$91,610 from the U.S. Department of Agriculture, Economic Research Service, Washington, D.C., to be used under the direction of H. M. Riley in the Department of Agricultural Economics to provide a data management system and an analytical framework to selected developing country governments for assembling resources information and assessing potential of resources for agriculture.
19. Grants totaling \$10,000 from Cannery Machinery Limited, Ontario, Canada, to be used under the direction of C. M. Hansen in Agricultural Engineering, to improve mechanical strawberry harvester/capper.
20. Grant of \$4,000 from the National Pork Producers Council, Des Moines, Iowa, to be used under the direction of J. B. Gerrish in the Department of Agricultural Engineering for research in the utilization of solar energy for odor control of anaerobic swine waste lagoons.
21. Grant of \$5,000 from the New Idea Farm Equipment Co., Coldwater, to be used under the direction of Robert H. Wilkinson in Agricultural Engineering to conduct studies on the effect of various preservatives on high-moisture, rolled hay wafers.
22. Grant of \$300 from Pickle Packers International, Inc., St. Charles, Ill., to be used under the direction of L. J. Segerlind in Agricultural Engineering for a CO₂ probe evaluation study.

23. Grant of \$1,000 from Pioneer Hi-Bred International, Inc., Des Moines, Iowa, to be used under the direction of T. L. Loudon in Agricultural Engineering to support meetings with farmers on water management.
24. Grant of \$43,425 from the U.S. Department of Agriculture, Washington, D.C., to be used under the direction of M. L. Esmay in Agricultural Engineering for research in solar energy utilization for supplemental heating of laying houses in the northern states and excreta drying.
25. Grant of \$2,000 from the American Association Laboratory Animal Science Foundation, Joliet, Ill., to be used under the direction of W. R. Dukelow and S. Arigan in Animal Husbandry to study seasonal variations in response to spontaneous and induced ovulation in two species of small nonhuman primates.
26. Grant of \$750 from Purdue University International Programs in Agriculture (EMBRAPA contract), West Lafayette, Indiana, to be used under the direction of W. R. Dukelow in Animal Husbandry for the studies of Wanderlei Ferreira de Sa, a graduate student. The research support is part of Ferreira de Sa's fellowship to study placental function and embryonic mortality in swine.
27. Grant of \$13,000 from the U.S. Department of Agriculture, Agriculture Research Service, Beltsville, Maryland, to be used under the direction of R. A. Merkel in Animal Husbandry to determine the causative factor in cold induced shortening and concomitant toughness in muscle.
28. Grant of \$302 from the National Institutes of Health to be used under the direction of Robert Barker in Biochemistry for research in membrane oligosaccharides.
29. Grant of \$46,077 from the National Institutes of Health to be used under the direction of L. L. Bieber in Biochemistry for research in the biochemistry of polyene antibiotics.
30. Grant of \$83,700 from the National Science Foundation to be used under the direction of N. E. Tolbert in Biochemistry for research in leaf peroxisomes.
31. Grant of \$70,000 from the National Science Foundation to be used under the direction of W. A. Wood in Biochemistry for experimental validation of an oligomerization model of allosteric control.
32. Grant of \$450 from the Chevron Chemical Co., Ocoee, Florida, to be used under the direction of H. S. Potter in Botany and Plant Pathology for efficacy studies with difolatan applied through irrigation systems for control of disease on tomato and potato.
33. Grant of \$500 from the W. A. Cleary Chemical Corp., Somerset, N.J., to be used under the direction of J. M. Vargas in Botany and Plant Pathology to evaluate donor's experimental turf grass.
34. Grant of \$600 from the Conklin Co., Inc., Minneapolis, Mn., to be used under the direction of J. M. Vargas, Jr. in Botany and Plant Pathology to help support expenses incurred in the ongoing turfgrass pathology research program.
35. Grant of \$600 from the Diamond Shamrock Co., Cleveland, Ohio, to be used under the direction of J. M. Vargas, Jr., in Bot. & Pl. Path., to help defray expenses incurred in the ongoing turfgrass disease research program.
36. Grant of \$500 from the Dow Chemical Co., Midland, to be used under the direction of E. J. Klos in Botany and Plant Pathology to determine the effect of soil fumigants on predisposition of cherries to bacterial canker.
37. Grant of \$600 from E.I. duPont de Nemours & Co., Wilmington, Delaware, to be used under the direction of J. M. Vargas, Botany and Plant Pathology, to evaluate duPont experimental fungicides for turf grass control.
38. Grant of \$500 from EM Laboratories, Inc., Darmstadt, Germany, to be used under the direction of D. C. Ramsdell in Botany and Plant Pathology to help defray expenses incurred in the testing of fungicides on blueberries.
39. Grant of \$750 from the FMC Corporation, Middleport, N.Y., to be used under the direction of A. L. Jones in Botany and Plant Pathology to evaluate the effectiveness of Polyram fungicide in combination with benomyl for the control of benomyl-resistant strain of apple scab.
40. Grant of \$7,500 from the International Potato Center, Lima, Peru, to be used under the direction of W. J. Hooker in Botany and Plant Pathology to prepare a Spanish translation of the Compendium of Potato Pathology of which the English manuscript is now in preparation.
41. Grant of \$500 from Merck & Co., Inc., Rahway, N.J., to be used under the direction of M. L. Lacy in Botany and Plant Pathology as partial support of the work being done on disease control in onions.
42. Grant of \$1,000 from Merck & Co., Inc., Rahway, N.J., to be used under the direction of H. S. Potter in Botany and Plant Pathology to evaluate the effectiveness of systemic fungicide formulation for control of Fusarium dry rot of potato and Botrytis of onion.

B. GIFTS AND GRANTS, cont.

September 22-23, 1977

Gifts and Grants

- 43. Grant of \$1,000 from Merck & Co., Rahway, N.J., to be used under the direction of M. V. Wiese in Botany and Plant Pathology to test experimental chemicals for the control of wheat disease.
- 44. Grants totaling \$1,127.63 from the Mineral Research and Development Corp., Charlotte, North Carolina, to be used under the direction of H. S. Potter in Botany and Plant Pathology to evaluate the use of ammoniated copper for control of downy mildew on cole crops.
- 45. Grant of \$3,000 from the Mint Industry Research Council, Corvallis, Oregon, to be used under the direction of M. L. Lacy in Botany and Plant Pathology for research on disease control and variety development in mint crops.
- 46. Grant of \$400 from the Olin Chemicals Group, Stamford, Conn., to be used under the direction of M. V. Wiese in Botany and Plant Pathology to test PCNB/Vitavax combination for control of seed-borne diseases of wheat.
- 47. Grant of \$600 from Pickle Packers International, Inc., St. Charles, Il., to be used under the direction of M. L. Lacy in Botany and Plant Pathology to screen cucumber lines for disease resistance, and to improve screening methods.
- 48. Grant of \$2,500 from the Stauffer Chemical Corp., Mountain View, CA, to be used under the direction of A. L. Jones in Botany and Plant Pathology to evaluate the effectiveness of captan fungicide in combination with benomyl for the control of benomyl-resistant apple scab, brown rot and leaf spot.
- 49. Grant of \$500 from the Stauffer Chemical Co., Mountain View, CA, to be used under the direction of D. C. Ramsdell in Botany and Plant Pathology to help defray expenses incurred in field testing of captan and other chemicals.
- 50. Grant of \$500 from the Union Carbide Corp., New York, N.Y., to be used under the direction of H. S. Potter in Botany and Plant Pathology to study the interactions of ingested insecticides and fungicides on cucurbits crops.
- 51. Grant of \$1,000 from Uniroyal, Inc., Naugatuck, Conn., to be used under the direction of H. S. Potter in Botany and Plant Pathology for research in chemical post-harvest treatment for control of storage rots in potatoes.
- 52. Grant of \$156.83 from The University of Nebraska, Lincoln, NB, to be used under the direction of M. V. Wiese in Botany and Plant Pathology to help defray expenses incurred in the preparation of the Wheat Disease Compendium.
- 53. Grant of \$1,500 from the Amway Corp., Ada, to be used under the direction of P. E. Rieke in Crop and Soil Sciences for research on the use of Amway Spray Adjuvant on turf.
- 54. Grant of \$500 from the Amway Corp., Ada, to be used under the direction of P. E. Rieke in Crop and Soil Sciences for continuing research.
- 55. Grant of \$500 from the Borden Foundation, Inc., Columbus, Ohio, to be used under the direction of M. Vitosh in Crop and Soil Sciences for continuing soil fertility research.
- 56. Grant of \$100 from Chemagro, Kansas City, MO., to be used under the direction of D. Chase in Crop and Soil Sciences for testing of Mesuraol in the no-till research.
- 57. Grant of \$77,768 from the Energy Research and Development Administration, Washington, D.C., to be used under the direction of P. Carlson in Crop and Soil Sciences for research in cellular approaches to agricultural genetics.
- 58. Grant of \$250 from Kalo Laboratories, Inc., Kansas City, MO, to be used under the direction of M. Vitosh in Crop and Soil Sciences for continuing research.
- 59. Grant of \$500 from the Lansing Grain Co., Lansing, to be used under the direction of E. H. Everson in Crop and Soil Sciences for the continuation of existing wheat research programs.
- 60. Grants totaling \$15,500 from the Michigan Bean Commission, Lansing, to be used under the direction of A. J. Smucker, A. E. Erickson, and G. W. Bird in Crop and Soil Sciences for continuing support of bean research.
- 61. Grant of \$124,820 from the Michigan Department of State Highways and Transportation to be used under the direction of A. E. Erickson in Crop and Soil Sciences for sewage treatment systems at freeway rest areas.
- 62. Grant of \$6,550 from the Michigan Sugar Co., Caro, to be used under the direction of G. Hogaboam in Crop and Soil Sciences for research in seed improvement in sugarbeets.
- 63. Grant of \$3,000 from the Michigan Sugar Co., Caro, to be used under the direction of G. Hogaboam in Crop and Soil Sciences for work in genetic control of disease resistance in sugarbeets.

64. Grant of \$4,950 from the Michigan Sugar Co., Caro, to be used under the direction of G. Hogaboam in Crop and Soil Sciences for sugarbeet storage research.
65. Grant of \$7,000 from the Michigan Sugar Co., Caro, to be used under the direction of W. F. Meggitt in Crop and Soil Sciences for weed control research in sugarbeets.
66. Grants totaling \$8,500 from the Monitor Sugar Co., Bay City, to be used under the direction of D. R. Christenson in Crop and Soil Sciences for continuing sugarbeet research.
67. Grant of \$1,500 from Northrup, King & Co., Stanton, MN, to be used under the direction of D. Penner in Crop and Soil Sciences for analyzing corn samples for various content with Neotec Grain Quality Analyzer.
68. Grant of \$750 from Olin Chemical, Little Rock, Ark., to be used under the direction of D. Warncke in Crop and Soil Sciences for ongoing research of Terrazole as a nitrification inhibitor on vegetables.
69. Grant of \$1,000 from the Rockefeller Foundation, New York, N.Y., to be used under the direction of Peter Carlson in Crop and Soil Sciences for equipment.
70. Grant of \$4,500 from the Tennessee Valley Authority to be used under the direction of D. Christenson in Crop and Soil Sciences for research in fertilizer needs under conditions of high P & K accumulation in soils.
71. Grant of \$133,050 from the U.S. Environmental Protection Agency, Washington, D.C., to be used under the direction of E. Erickson in Crop and Soil Sciences for soil and crop management system for treatment, utilization and disposal of municipal wastewater and sludges.
72. Grant of \$5,000 from the U.S. Environmental Protection Agency, Washington, D.C., to be used under the direction of D. D. Harpstead in Crop and Soil Sciences for non-personal services in connection with wastewater management office.
73. Grant of \$500 from the United States Gypsum Co., Chicago, Ill., to be used under the direction of P. E. Rieke in Crop and Soil Sciences for the continuation of research.
74. Grant of \$5,500 from the Velsicol Chemical Corp., Chicago, Ill., to be used under the direction of D. Penner in Crop and Soil Sciences for continuing pesticide research.
75. Grants totaling \$4,700 from various donors to be used under the direction of E. H. Everson in Crop and Soil Sciences for the continuation of existing research on wheat.
76. Grants totaling \$5,000 from various donors to be used under the direction of T. J. Johnston in Crop and Soil Sciences for continuing soybean research.
77. Grants totaling \$6,500 from various donors to be used under the direction of W. F. Meggitt in Crop and Soil Sciences for continuing weed control research.
78. Grant of \$1,000 from Wickes Agriculture, Saginaw, to be used under the direction of E. H. Everson in Crop and Soil Sciences for the continuation of existing wheat research programs.
79. Grant of \$3,353.50 from the Michigan Dairy Herd Improvement Association, Inc., Lansing, to be used under the direction of H. D. Hafs in Dairy Science to support a dairy fieldman position.
80. Grant of \$87,575 from the National Institutes of Health to be used under the direction of J. W. Thomas in Dairy Science to provide funds to train predoctoral students in a broad, multi-species aspect of nutrition at MSU and increase productivity of individual staff and departments in training graduate students in nutrition.
81. Grants totaling \$45 from various donors to be used under the direction of H. D. Hafs in Dairy Science to support scholarship funding for students in Dairy Science through the Michigan Dairy Memorial Scholarship.
82. Grant of \$25,500 from the U.S. Department of Agriculture to be used under the direction of R. Carde in Entomology for use of Pheromone traps to model distribution and movement of male gypsy moths.
83. Grant of \$13,200 from the U.S. Department of Agriculture to be used under the direction of G. Simmons in Entomology for the cultural control of pine root collar weevil by early basal pruning and litter removal.
84. Grant of \$10,000 from the U.S. Department of Agriculture to be used under the direction of G. Simmons in Entomology for Jack Pine budworm hazard reduction by residual over-story removal.
85. Grants totaling \$73,674 from the University of California to be used under the direction of B. A. Croft in Entomology for integrated control system for apple pests in Michigan.
86. Grants totaling \$1,500 from various donors to be used under the direction of George W. Bird in Entomology for nematode population management in Michigan crop production.

B. GIFTS AND GRANTS, cont.

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87. Grants totaling \$16,000 from various donors to be used under the direction of A. J. Howitt in Entomology for fruit tree pests research.
88. Grants totaling \$4,600 from various donors to be used under the direction of R. F. Ruppel in Entomology for field and forage crop insect pest research.
89. Grant of \$2,978 from the Huron Mountain Wildlife Foundation, Grosse Pointe Farms, to be used under the direction of R. J. White in Fisheries and Wildlife for the continuation of troupe population and habitat studies in Salmon Trout River, Marquette County and preliminary measurements of limnologic characteristics and zooplankton in nearby Howe Lake.
90. Grant of \$3,000 from the Michigan Department of Natural Resources to be used under the direction of R. A. Cole in Fisheries and Wildlife for a continuation of assistantship for J. Schaeffer to allow him to complete analysis of data collected in 1976 field season on Lake Erie Larval Fish Study.
91. Grant of \$351.78 from the Michigan Department of Natural Resources to be used under the direction of H. H. Prince in Fisheries and Wildlife for a woodcock study, Houghton Lake.
92. Grant of \$5,000 from the Charles Lukens Huston Fellowship Foundation, Coatesville, Pa., to be used under the direction of J. R. Brunner in Food Science and Human Nutrition to provide fellowship support for David Tobelmann as well as supplies and services for his research.
93. Grant of \$15,855 from Dairy Research, Inc., Rosemont, IL., to be used under the direction of C. M. Stine in Food Science and Human Nutrition on heat induced interactions between milk proteins and soy protein isolates.
94. Grant of \$200 from the Diamond Shamrock Corp., Cleveland, Ohio, to be used under the direction of J. N. Cash in Food Science and Human Nutrition for research on the effect of spray materials on flavor of fresh and processed cherries and peaches.
95. Grant of \$100 from Heinz U.S.A., Holland, to be used under the direction of J. R. Brunner in Food Science and Human Nutrition for analytical services performed and to be used for supplies, etc.
96. Grant of \$300 from the Stouffer Foods Corporation Fund, Cleveland, Ohio, to be used under the direction of L. G. Harmon in Food Science and Human Nutrition to provide scholarships for students in the Department of Food Science and Human Nutrition.
97. Grant of \$520.82 from the Michigan Dairy Foods Association, Lansing, to be used under the direction of A. L. Rippen in Food Science and Human Nutrition to provide supplies and international and domestic travel for departmental judging teams.
98. Grant of \$500 from the Milnot Company, Litchfield, IL., to be used under the direction of C. M. Stine in Food Science and Human Nutrition to study interactions of vegetable and animal proteins in sterilized food systems.
99. Grant of \$1,000 from Pickle Packers International, Inc., St. Charles, IL., to be used under the direction of R. F. McFeeters in Food Science and Human Nutrition for the evaluation of cucumber brinestock quality.
100. Grant of \$4,500 from the U.S. Forest Service, North Central Forest Experiment Station, St. Paul, MN, to be used under the direction of V. J. Rudolph in Forestry to determine the relevance of the national ecological reserve data bank to USDA missions and activities.
101. Grant of \$6,000 from the U.S. Forest Service, Northeastern Area, State and Private Forestry, Upper Darby, PA, to be used under the direction of H. A. Huber in Forestry to (1) reduce wood waste in furniture-type roughmill operations; (2) increase use of lower grades of lumber; (3) reduce lumber and processing costs to the manufacturer and ultimately to consumer.
102. Grant of \$15,000 from the American Cyanamid Co., Princeton, N.J., to be used under the direction of S. K. Ries in Horticulture to support research on triacontanol.
103. Grant of \$5,000 from the Crookham Co., Caldwell, Idaho, to be used under the direction of L. R. Baker in Horticulture to support on-going carrot breeding program.
104. Grant of \$500 from E.I. duPont de Nemours & Co., Wilmington, Del., to be used under the direction of A. R. Putnam in Horticulture to support ongoing research programs relating to the study of herbicides on fruit and vegetable crops.
105. Grant of \$2,500 from Gerber, Fremont, to be used under the direction of R. F. Carlson in Horticulture to support ongoing research on tree fruit rootstock.
106. Grant of \$5,000 from the Fred C. Gloeckner Foundation, Inc., New York, N.Y., to be used under the direction of K. Sink in Horticulture to support research programs relating to the genetics of flowers, primarily the induction of Pistillate flowers in double petunias.

B. GIFTS AND GRANTS, cont.

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107. Grant of \$2,668 from the Kenneth Post Foundation, Etna, N.Y., to be used under the direction of K. Sink in Horticulture to support the tissue culture mutation induction research on Kalanchoe.
108. Grant of \$13,000 from the Netherlands Flower Bulb Institute, Inc., New York, N.Y. to be used under the direction of A. deHertogh in Horticulture to support ongoing programs of applied and fundamental research relating to flower bulb forcing and postharvest physiology.
109. Grant of \$1,500 from the New York Florist Club, New York, N.Y., to be used under the direction of H. P. Rasmussen in Horticulture to support investigations of cytohistological changes occurring in rose stress during the cut flower life.
110. Grant of \$3,000 from the Pickle Packers International, Inc., St. Charles, Ill., to be used under the direction of L. R. Baker in Horticulture to support ongoing research on cucumber breeding.
111. Grant of \$1,000 from Pickle Packers International, Inc., St. Charles, Ill., to be used under the direction of R. Herner in Horticulture for cucumber respiration research.
112. Grant of \$500 from Vlastic Foods, Inc., Bloomfield, to be used under the direction of S. Honma in Horticulture to develop improved pepper varieties for Michigan.
113. Grant of \$500 from various donors to be used under the direction of D. H. Dewey in Horticulture to support program in progress to improve internal quality of apples for fresh market and processing.
114. Grant of \$1,000 from Century Rain Aid, Southfield, to be used under the direction of C. J. Mackson in Packaging as a contribution toward the European Commission for Mechanization of Agriculture study tour to be held in the United States during September 1977.
115. Grant of \$5,000 from Deere & Co., Moline, Ill., to be used under the direction of C. J. Mackson in Packaging as the remainder of a pledge of \$10,000 for support of the ECE program study tour to be held in the United States during September 1977.
116. \$2,000 from the International Harvester Co., Chicago, Ill., to be used under the direction of C. J. Mackson in Packaging as the remainder of a pledge for support of the ECE program study tour to be held in the United States during September 1977.
117. \$300 from Lowe's Inc., Cassopolis, to be used under the direction of C. J. Mackson in Packaging as support of the FAO/ECE program study tour to be held in the United States during September 1977.
118. Grant of \$2,000 from Sperry-New Holland Division of Sperry Rand Corp., New Holland, Pa., to be used under the direction of C. J. Mackson in Packaging as the remainder of a pledge for support of the ECE program study tour to be held in the United States during September 1977.
119. Grant of \$4,000 from the Johnson's Wax Fund, Inc., Racine, Wis., to be used under the direction of C. J. Mackson in Packaging as a renewal of a graduate fellowship.
120. Grant of \$200 from the General Electric Co., Schenectady, N.Y., for unrestricted use under the direction of C. J. Mackson in Packaging.
121. Grant of \$500 from The Great Lakes Packaging Association, Detroit, for unrestricted use under the direction of C. J. Mackson in Packaging.
122. Grants totaling \$1,107 from various donors for unrestricted use under the direction of C. J. Mackson in Packaging.
123. Grant of \$9,865.48 from the Waterways Division, Michigan Department of Natural Resources to be used under the direction of D. F. Holecek in Park and Recreation Resources to develop guidelines for improving the Waterways Division's managerial cost accounting system.
124. Grant of \$11,061.89 from the Waterways Division, Michigan Department of Natural Resources, to be used under the direction of D. F. Holecek in Park and Recreation Resources, to identify and quantify major costs of operating inland lake public access sites for use in deriving individual access site cost effectiveness ratios.
125. Grant of \$110,000 from the National Aeronautics and Space Administration, Washington, D.C. to be used under the direction of R. D. Vlasin in Resource Development to develop and demonstrate for Michigan situations, the operational uses of remote sensing in land and water planning and policy formulation.
126. Grant of \$2,850 from the Tri-County Regional Planning Commission, Lansing, to be used under the direction of W. R. Enslin in Resource Development for the preparation of a grid geocoded natural resource information file for Bath, Delhi, DeWitt and Watertown townships.
127. Grant of \$100 from Commonwealth Associates, Inc., Jackson, as an unrestricted gift to be used under the direction of C. H. Wamhoff in the Agriculture and Natural Resources Education Institute.

B. GIFTS AND GRANTS, cont.

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128. Grant of \$5,000 from the Michigan Department of Education, Lansing, to be used under the direction of C. H. Wamhoff in the Agriculture and Natural Resources Education Institute for a competency-based education workshop.
129. Grant of \$11,700 from the Michigan Department of Education, Lansing, to be used under the direction of C. H. Wamhoff in the Agriculture and Natural Resources Education Institute for a special project in vocational education, FFA projects in agriculture.
130. Grant of \$11,295 from the Michigan Department of Education, Lansing, to be used under the direction of C. H. Wamhoff in the Agriculture and Natural Resources Education Institute to carry out various programs and activities with respect to the FHA-Hero organization throughout the state of Michigan.
131. Grant of \$480 from the Michigan Council for the Arts, Detroit, to be used under the direction of R. Mosher in Art to put on a public lecture and photographic exhibition of Harold Jones' work.
132. Grant of \$3,800 from the Michigan Department of State, Lansing, to be used under the direction of S. Omoto in Art for an inventory of sites of historic and architectural significance in a five-county area in southwest Michigan in cooperation with the Michigan History Division, Department of State.
133. Grant of \$2,337 from the U.S. Department of the Interior, Washington, D.C., to be used under the direction of S. Omoto in Art to inventory the historic sites on South Manitou Island, Sleeping Bear Dunes National Lakeshore.
134. Grant of \$15 from Elliot B. or Thea G. Glicksman, Lansing, as an unrestricted grant to be used under the direction of D. Burk in Music.
135. Grant of \$500 from the MSU Foundation to be used under the direction of J. Niblock in Music to support the visit of Professor T. C. David, Head of the Composition Department of the Academy of Music in Vienna, Austria, to MSU.
136. Grant of \$1,450 from the Japan Institute for International Study, Osaka, Japan, to be used under the direction of P. Munsell in the English Language Center to cover costs incurred in developing the program.
137. Grant of \$4,000 from the International Business Machines Corp., Armonk, N.Y., to be used under the direction of G. St. Amand in the Dean's Office, College of Business, to support the Eighth Conference on Computers in Undergraduate Curricula.
138. Grant of \$100 from Rudolph F. Ranke, Birmingham, as an unrestricted grant to be used under the direction of Dean R. J. Lewis in the College of Business.
139. Grant of \$1,530 from the Price Waterhouse Foundation, New York, N.Y., to be used under the direction of H. Sollenberger in Accounting and Financial Administration for faculty development.
140. Grant of \$9,718.62 from the ATA Foundation, Inc., Washington, D.C., to be used under the direction of K. D. Boyer in Economics to measure the boundaries of inter-modal competition.
141. Grant of \$8,500 from the Ford Foundation, New York, N.Y., to be used under the direction of H. Kisch in Economics to finance an international conference on Proto-industrialization in Europe at the Eleutherian Mills in Greenville-Wilmington, Del.
142. Grant of \$35 from Ford Tractor Operations, Troy, to be used under the direction of D. A. Taylor in Marketing and Transportation Administration to support the development of the marketing program and faculty at MSU.
143. Grant of \$1,375 from the General Foods Corp., White Plains, N.Y., to be used under the direction of D. A. Taylor in Marketing and Transportation Administration to support a graduate assistant during the summer of 1977 to work on development of a Department of Transportation proposal in connection with the Integral Container Train concept.
144. Grant of \$3,000 from the General Motors Corp., Detroit, to be used under the direction of D. A. Taylor in Marketing and Transportation Administration to support the development of the marketing program and faculty at MSU.
145. Grant of \$2,000 from the Gerber Baby Foods Fund, Fremont, to be used under the direction of J. W. Allen in Marketing and Transportation Administration to provide scholarships for students.
146. Grant of \$1,000 from Alan L. Gornick, Bloomfield Hills, to be used under the direction of R. L. Blomstrom in the School of Hotel, Restaurant and Institutional Administration as a contribution to the Associates Endowment Fund of the School.
147. Grant of \$22,275.25 from the U.S. Air Force to be used under the direction of R. L. Blomstrom in Hotel, Restaurant and Institutional Management for an open mess management seminar.

B. GIFTS AND GRANTS, CONT.

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148. Grant of \$750 from Allied Telephone Co., Little Rock, Ark., to be used under the direction of H. M. Trebing in the Institute of Public Utilities to support the activities of the Institute.
149. Grant of \$3,500 from the Baltimore Gas and Electric Co., Baltimore, Md., to be used under the direction of H. M. Trebing in the Institute of Public Utilities to support the activities of the Institute.
150. Grant of \$2,500 from the Central Illinois Light Co., Peoria, Ill., to be used under the direction of H. M. Trebing in the Institute of Public Utilities to support the activities of the Institute.
151. Grant of \$2,500 from the Cleveland Electric Illuminating Co., Cleveland, Ohio, to be used under the direction of H. M. Trebing in the Institute of Public Utilities to support the activities of the Institute.
152. Grant of \$3,500 from the Columbia Gas System Service Corp., Wilmington, Del., to be used under the direction of H. M. Trebing in the Institute of Public Utilities to support the activities of the Institute.
153. Grant of \$3,500 from the Consolidated Natural Gas Service Co., Pittsburgh, Pa., to be used under the direction of H. M. Trebing in the Institute of Public Utilities to support the activities of the Institute.
154. Grant of \$3,500 from the Pacific Gas and Electric Co., San Francisco, CA., to be used under the direction of H. M. Trebing in the Institute of Public Utilities to support the activities of the Institute.
155. Grant of \$3,500 from the Panhandle Eastern Pipe Line Co., Houston, Texas, to be used under the direction of H. M. Trebing in the Institute of Public Utilities to support the activities of the Institute.
156. Grant of \$3,500 from the United Telecommunications, Inc., Kansas City, Mo., to be used under the direction of H. M. Trebing in the Institute of Public Utilities to support the activities of the Institute.
157. Grant of \$1,000 from the East Lansing State Bank to be used under the direction of D. Furse in Advertising to support student development presentation of advertising campaign strategy as part of ADV 486 course requirements.
158. Grant of \$30,000 from the U.S. Office of Education, Washington, D.C., to be used under the direction of L. V. Deal in Audiology and Speech Sciences for graduate students: Preparation of Personnel for Education of the Handicapped - Speech and Hearing.
159. Grant of \$100,000 from the Department of Health, Education and Welfare, Washington, D.C., to be used under the direction of C. K. Atkin and B. S. Greenberg in Communication to determine what effects television exposure to specific social roles and behaviors have on the developing child in relation to family and life-cycle roles, occupational roles, intersecting roles for blacks and females, pro-social behavior and anti-social behavior.
160. Grant of \$65.58 from the National Association of Manufacturers, Washington, D.C., to be used under the direction of G. A. Hough 3rd in Journalism for the enrichment of the Journalism program.
161. Grant of \$200 from the University of Tennessee, Knoxville, to be used under the direction of G. A. Hough 3rd in Journalism to take care of initial expenses of storage and transportation of printing collection given to the School of Journalism.
162. Grant of \$406.85 from the Lansing School District to be used under the direction of T. C. Cobb in Dean's Office, College of Education, to cover costs of supplies and services.
163. Grant of \$35,000 from the U.S. Office of Education, Washington, D.C., to be used under the direction of K. Goldhammer in the Dean's Office, College of Education for pre-service preparation of teachers to provide educational services for the handicapped.
164. Grant of \$100 from Data Analyzation (House of Representatives), Lansing, to be used under the direction of V. Johnson in Administration and Higher Education to analyze data collected for the purpose of a study of ad valorem property taxation.
165. Grant of \$250 from the School District of the City of Holland to be used under the direction of P. Cusick in Administration and Higher Education to develop materials to be mimeographed.
166. Grant of \$250 from the School District of the City of Holland to be used under the direction of L. Romano in Administration and Higher Education to develop materials to be mimeographed for the middle school principals and teachers.
167. Grant totaling \$2,200 from the Michigan Association of Middle School Educators, Plymouth, to be used under the direction of L. G. Romano in Administration and Higher Education to develop materials to be mimeographed for the middle school principals and teachers.

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168. Grants totaling \$95.91 from various donors to be used under the direction of L. G. Romano in Administration and Higher Education to develop materials to be mimeographed for the middle school principals and teachers.
169. Grant of \$200 from the Niles Community Schools to be used under the direction of S. Hecker and F. Ignatovich in Administration and Higher Education to produce enrollment projections for specified school districts.
170. Grants totaling \$1,000 from various donors to be used under the direction of S. Hecker and F. Ignatovich in Administration and Higher Education to produce enrollment projections for specified school districts.
171. Grant of \$3,700 from the American Educational Research Association, Washington, D.C., to be used under the direction of M. McSweeney in Counseling, Personnel Services and Educational Psychology to provide support for editing the American Educational Research Journal.
172. Grant of \$1,500 from the American Education Research Association, Washington, D.C., to be used under the direction of L. S. Shulman in Counseling Personnel Services and Educational Psychology for expenses which will be incurred in editing the Review of Research in Education, including salary to be paid to an assistant and a secretary.
173. Grant of \$8,000 from the National Academy of Education, Stanford, CA., to be used under the direction of C. M. Clark in Counseling, Personnel Services and Educational Psychology for a Spencer fellowship to support research on topics related to education.
174. Grant of \$92,181 from the Rehabilitation Services Administration, Washington, D.C., to be used under the direction of J. R. Engelkes and M. B. Pringle in Counseling, Personnel Services and Educational Psychology to train a placement specialist in the field of rehabilitation.
175. Grant of \$450,000 from the Rehabilitation Services Administration, Washington, D.C., to be used under the direction of J. Jordan in Counseling, Personnel Services and Educational Psychology to gather information and conduct research and training in rehabilitation and special education.
176. Grant of \$3,412.50 from the Michigan Personnel and Guidance Association, Okemos, to be used under the direction of J. W. Costar in Counseling, Personnel Services and Educational Psychology to provide consultant and coordinator services to the Executive Board and the president of the Michigan Personnel and Guidance Association.
177. Grant of \$65,766 from Region V - Office of Rehabilitation Services, Chicago, Ill., to be used under the direction of J. Engelkes in Counseling, Personnel Services and Educational Psychology to train master's level people in rehabilitation counseling.
178. Grant of \$16,000 from the University of Wisconsin - Stout, Menominee, Wis., to be used under the direction of J. R. Engelkes in Counseling, Personnel Services and Educational Psychology to provide two doctoral level students to conduct research in Michigan on behalf of the UW-Stout R & T Center; these individuals will work the equivalent of full-time on the research projects and other supervisory and research related responsibilities assigned by the R & T Center under the general supervision of MSU.
179. Grant of \$400 from The National Council for the Social Studies, Washington, D.C., to be used under the direction of W. W. Joyce in Elementary and Special Education to prepare a manuscript for an anthology of articles published in the field of elementary social studies.
180. Grant of \$170,000 from the U.S. Office of Education - Bureau of Education for the Handicapped, Washington, D.C., to be used under the direction of C. Mange in Elementary and Special Education for the training of teachers and administrators in the education of the handicapped.
181. Grant of \$12,000 from the Michigan Department of Education to be used under the direction of C. Heilman in Secondary Education and Curriculum for a Career Education Coordinator Workshop.
182. Grant of \$150 from the National Council for the Social Studies, Arlington, Va., to be used under the direction of S. Wronski in Secondary Education and Curriculum for social studies activities.
183. Grant of \$63,350 from the U.S. Office of Education, Washington, D.C., to be used under the direction of P. G. Haines and R. E. Ray in Secondary Education and Curriculum to provide graduate level professional preparation in vocational and technical education and supporting disciplines.
184. Grant of \$250 from the United Nations Scientific and Cultural Organization, Paris, France, to be used under the direction of K. L. Neff in the Institute for International Studies in Education to support S. Sudarmadi's research project with computer services.

185. Grant of \$500 from Amsted Industries, Inc., Chicago, Ill., to be used under the direction of L. W. Von Tersch in the College of Engineering in the development of cast metals activities and for the reestablishment of a metallurgical degree granting program.
186. Grant of \$4,000 from the Exxon USA Foundation, Houston, Texas, to be used under the direction of W. J. Gamble, Jr. in the Dean's Office, College of Engineering to aid in the financial support of the Engineering Equal Opportunity Program.
187. Grant of \$33,000 from the University of Michigan, Ann Arbor, to be used under the direction of W. J. Gamble, Jr. in the College of Engineering to combat the low rate at which minority students enter careers in professional or technical areas.
188. Grant of \$11,200 from the Jackson County Intermediate School District to be used under the direction of J. B. Eulenberg in the Division of Engineering Research to conduct a communication enhancement program for the handicapped.
189. Grant of \$23,250 from the National Aeronautics and Space Administration, Hampton, Va., to be used under the direction of John F. Foss in the Division of Engineering Research to provide vorticity measurements in support of an investigation of jet impingement noise production mechanisms.
190. Grant of \$55,000 from the National Science Foundation to be used under the direction of H. G. Hedges in the Division of Engineering Research to support equipment purchases to be used for research in the methodology of pattern recognition in the Department of Computer Science.
191. Grant of \$13,700 from the Office of Highway Safety Planning, Department of State Police, Lansing, to be used under the direction of J. D. Brogan in the Division of Engineering Research to develop and implement a series of traffic engineering short courses.
192. Grant of \$40,000 from the Office of Naval Research, Arlington, Va., to be used under the direction of R. E. Falco in the Division of Engineering Research to develop a semi-automated method of conditionally sampling coherent turbulent motions found in turbulent boundary layers.
193. Grant of \$6,000 from the Amoco Foundation, Inc., Chicago, Ill., to be used under the direction of D. K. Anderson in Chemical Engineering for graduate student support.
194. Grant of \$80 from the Wayne County Intermediate School District to be used under the direction of J. B. Eulenberg in Computer Science to construct four transistor radios with adaptation to emit sound by human touch.
195. Grant of \$31,696 from the National Institutes of Health to be used under the direction of D. R. Romsos in Food Science and Human Nutrition to continue research studying the metabolic effects of diet and meal pattern.
196. Grant of \$250 from Hygrade Food Products Corp., Detroit, to be used under the direction of L. G. Harmon in Food Science and Human Nutrition to defray costs of the American Dairy Science - American Association of Animal Science meeting to be held at MSU, Summer 1978.
197. Grant of \$105,000 from the Department of Health, Education and Welfare, Office of Education, to be used under the direction of N. A. Carlson in the Institute for Family and Child Study to continue the PATHWAYS demonstration project, providing comprehensive support to "mainstreamed" handicapped children and their families, staff and MSU faculty and students in both on-campus and community nursery schools and day care centers.
198. Grant of \$300 from Eli Lilly and Co., Indianapolis, Ind., to be used under the direction of G. H. Mayor in the College of Human Medicine for nephrology program development.
199. Grant of \$76,768 from the National Cancer Institute to be used under the direction of A. D. Hunt in the College of Human Medicine for exploratory studies in cancer research.
200. Grant of \$200 from The Upjohn Co., Kalamazoo, to be used under the direction of V. V. Gossain in the College of Human Medicine for medical education.
201. Grant of \$3,500 from the National Science Foundation to be used under the direction of W. W. Wells in Biochemistry for a conference on cyclitols and phosphoinositides.
202. Grant of \$5,000 from the Gerber Products Co., Fremont, to be used under the direction of W. B. Weil, Jr. to continue the Gerber Scholar for Human Development Award.
203. Grant of \$25.65 from R. E. Honicky, Lansing, to be used under the direction of W. B. Weil, Jr. in Human Development for unrestricted research.
204. Grant of \$61,960 from the National Institutes of Health to be used under the direction of T. A. Helmrath in Human Development to delineate the control mechanisms of gluconeogenesis in the neonatal pig liver under a variety of substrate and hormonal influences.

B. GIFTS AND GRANTS, cont.

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205. Grant of \$81,146 from the National Institutes of Health to be used under the direction of D. J. Kallen in Human Development for research on factors influencing contraceptive use.
206. Grant of \$500 from the American College of Emergency Physicians to be used under the direction of J. G. Wiegenstein in Medicine for data processing on PEER.
207. Grant of \$18,115 from the Children's Leukemia Foundation of Michigan, Detroit, to be used under the direction of L. Aronson in Medicine for research on the effects of proteases and human protease inhibitor on lymphocyte blastogenesis.
208. Grant of \$17,052 from the Children's Leukemia Foundation, Detroit, to be used under the direction of G. H. Tishkoff in Medicine for the regional leukaphoresis program.
209. Grant of \$2,000 from the Michigan Department of Public Health to be used under the direction of G. H. Mayor in Medicine for research to determine if hepatitis in patients with end-state renal disease and their contacts can be detected or prevented.
210. Grant of \$200 from T. V. Sanchez, Lansing, to be used under the direction of G. H. Mayor in Medicine for Nephrology program development.
211. Grant of \$1,500 from the Michigan State Medical Society, Lansing, to be used under the direction of C. H. Sander in Pathology to support the Placental Tissue Registry for the state of Michigan in cooperation with the Michigan State Medical Society.
212. Grant of \$394.64 from the CIBA-GEIGY Corp., Summit, N.J., to be used under the direction of K. Moore in Pharmacology for unrestricted use.
213. Grant of \$25,257 from the National Institute on Drug Abuse to be used under the direction of R. H. Rech in Pharmacology for research on interactions with stimulants and depressants.
214. Grant of \$71,986 from the National Institutes of Health to be used under the direction of A. M. Michelakis in Pharmacology for research in new vasoactive factors and their role in hypertension.
215. Grant of \$57,739 from the National Institute of Neurological and Communicative Disorder and Stroke to be used under the direction of K. E. Moore in Pharmacology for research on the role of catecholamines in drug toxicity.
216. Grant of \$17,549 from the County of Ingham to be used under the direction of N. B. Enzer in Psychiatry for the Psychiatric residency training program.
217. Grant of \$70,237 from the National Heart, Lung and Blood Institute to be used under the direction of L. Van Egeren in Psychiatry for research in interpersonal stress and coronary-prone behavior.
218. Grant of \$3,802 from the Pine Rest Christian Hospital Association, Grand Rapids, to be used under the direction of N. B. Enzer in Psychiatry for the Psychiatry residency training program.
219. Grant of \$69,431 from the National Institute of Mental Health to be used under the direction of L. Rosen in Psychiatry for the psychiatric residency training program.
220. Grant of \$9,500 from the Michigan Heart Association, Southfield, to be used under the direction of W. J. Esselman in Surgery for research in immunosuppression in experimental transplantation.
221. Grant of \$11,936 from the Michigan Heart Association, Southfield, to be used under the direction of L. Gonzalez-Lavin in Surgery for research in cardiovascular surgery.
222. Grant of \$15,088 from the Genesee County Health Department, Flint, to be used under the direction of R. J. Sprafka in the Office of Health Services Education and Research to collaborate in the development of applied methods for interpretation and presentation of health survey results for health planning purposes as these relate to the special requirements in Flint and Genesee County.
223. Grant of \$9,746 from the Michigan Department of Public Health to be used under the direction of C. W. Given in Health Services Education and Research to maintain an ambulatory care data system for purposes of statistical analysis of family practice residency training programs.
224. Grant of \$2,400 from the Council on Resident Education in Obstetrics and Gynecology, Chapel Hill, N.C., to be used under the direction of G. B. Holzman in Medical Education Research and Development to collect and analyze data related to reactions to residency evaluation programs.
225. Grant of \$169,117 from the Health Resources Administration, Department of Health, Education and Welfare, to be used under the direction of J. L. Maatsch in Medical Education Research and Development to conduct research on the applicability of criterion-referenced testing in medical specialty certification decision-making.

226. Grant of \$5,000 from the National Science Foundation to be used under the direction of J. R. Brandou in the Dean's Office, College of Natural Science to support the workshop, "Capture, Conversion and Conservation of Energy in Plants" to be held September 19-21 at MSU.
227. Grant of \$24,000 from the National Science Foundation to be used under the direction of R. F. Stein in Astronomy and Astrophysics to develop techniques for solving coupled radiative transfer-nonlinear fluid flow problems in one dimension and non-linear fluid flow problems in two- and three-dimensions; study the effects of waves in the solar atmosphere, the formation of stars, and the evolution of a turbulent universe.
228. Grant of \$67,157 from the National Institutes of Health to be used under the direction of J. E. Wilson in Biochemistry for research on mitochondrial hexokinase and brain metabolism.
229. Grant of \$12,500 from the International Nickel Co., New York, N.Y., to be used under the direction of B. Rosenberg in Biophysics for research on the anti-cancer activities of the platinum metal group complexes. Unrestricted funds.
230. Grant of \$25,783 from the National Institutes of Health to be used under the direction of K. Nadler in Botany and Plant Pathology for studies of heme and hemoglobin synthesis in soybean root nodules.
231. Grant of \$4,700 from the American Chemical Society, Washinton, D.C., to be used under the direction of C. G. Enke in Chemistry for fellowship support for R. A. Yost.
232. Grant of \$44,379 from the National Institutes of Health to be used under the direction of A. Tulinsky for X-ray crystallographic studies of cc-Chymotrypsin, in Chemistry.
233. Grant of \$49,300 from the National Science Foundation to be used under the direction of N. R. Armstrong in Chemistry for photoelectrochemical and surface compositional studies of metal oxide and chemically modified metal oxide electrodes.
234. Grant of \$25,400 from the National Science Foundation to be used under the direction of R. I. Cukier in Chemistry for study of the theory of the sensitivity of rate equations to uncertainties in rate coefficients.
235. Grant of \$38,000 from the National Science Foundation to be used under the direction of G. E. Leroi in Chemistry for spectroscopic studies of molecular energetics and dynamics.
236. Grant of \$70,000 from the National Science Foundation to be used under the direction of W. C. McHarris in Chemistry for a general nuclear chemistry research program combining conventional nuclear spectroscopic techniques with on-line spectroscopy and nuclear reactions.
237. Grant of \$35,000 from the National Science Foundation to be used under the direction of A. I. Popov in Chemistry for research on solvation and complexation reactions in solutions.
238. Grant of \$31,600 from the National Science Foundation to be used under the direction of M. Rathke in Chemistry for research on the chemistry of ester enolates.
239. Grant of \$3,000 from the MSU Foundation to be used under the direction of F. W. Cambray in Geology representing the transfer of a gift from Cities Service Foundation of Tulsa, Okla., designated specifically to the areas of geology and geophysics.
240. Grant of \$100 from the MSU Foundation to be used under the direction of F. W. Cambray in Geology representing the transfer of a gift from W. T. Stelzer designated specifically to the Department of Geology.
241. Grant of \$3,700 from the National Science Foundation to be used under the direction of R. S. Harmon in Geology for isotopic paleoclimate investigations of cave deposits.
242. Grant of \$28,400 from the National Science Foundation to be used under the direction of K. W. Kwun in Mathematics for research on finite group actions on manifolds.
243. Grant of \$7,300 from the National Science Foundation to be used under the direction of W. Ow in Mathematics for research on harmonic approximation on closed sets in R^n .
244. Grant of \$15,194 from the National Science Foundation to be used under the direction of M. J. Winter and G. L. Lappan in Mathematics for numerical mathematics for elementary school teachers.
245. Grant of \$66,500 from the National Science Foundation to be used under the direction of R. L. Uffen in Microbiology and Public Health for the study of diversity among aquatic microorganisms in anaerobic environments.
246. Grant of \$1,000 from Central Michigan University to be used under the direction of J. Cleveland and P. Schroeder as a blanket order to cover purchases of liquid helium and supplies for research in the Department of Physics.

B. GIFTS AND GRANTS, cont.

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247. Grant of \$3,600 from the National Science Foundation to be used under the direction of W. M. Hartmann in Physics for study of the temporal effects in human pitch perception.
248. Grant of \$22,000 from the National Science Foundation to be used under the direction of P. Signell in Physics for the study of nucleon-nucleon interaction.
249. Grant of \$53,200 from the National Science Foundation to be used under the direction of M. J. Thorpe in physics for study of the theory of some disordered systems.
250. Grants totaling \$1,282 from various donors to be used under the direction of P. Signell in Physics for the development of instructional modules.
251. Grant of \$140,400 from the National Science Foundation to be used under the direction of H. G. Blosser and S. M. Austin in the Cyclotron to intensify work on the superconducting cyclotron design project.
252. Grant of \$400,000 from the National Science Foundation to be used under the direction of H. G. Blosser in the Cyclotron as the first increment of a \$1,291,000 program to make existing superconducting magnet into operating 500 MeV cyclotron including radiation shielding and inter-connections to existing experimental equipment.
253. Grant of \$52,000 from the National Science Foundation to be used under the direction of D. Gilliland and J. Hannan in Statistics and Probability for study of approximation to Bayes Risk in sequences and sets of decision problems.
254. Grant of \$10,500 from the National Science Foundation to be used under the direction of H. Salehi in Statistics and Probability to study the multivariate prediction theory, essentially on the prediction theory of stationery stochastic processes.
255. Grant of \$23,200 from the National Science Foundation to be used under the direction of E. Seiden in Statistics and Probability for study of problems in mathematical theory of design of experiments and their applications.
256. Grant of \$15,900 from the National Science Foundation to be used under the direction of J. Zinn in Statistics and Probability for the study of limit theorems for Banach space-valued and real-valued random variables.
257. Grant of \$60,800 from the National Science Foundation to be used under the direction of W. E. Cooper in Zoology to study predator-prey interactions.
258. Grant of \$9,572 from the Department of Health, Education and Welfare to be used under the direction of I. K. Payne in Nursing for the professional nurse traineeship program.
259. Grant of \$15,934 from the Michigan Nurses Association, East Lansing, to be used under the direction of I. K. Payne in Nursing to develop the conduct and utilization of clinical nursing research in the state of Michigan.
260. Grant of \$2,405.76 from the Kendall/Hunt Publishing Co., East Lansing, to be used under the direction of J. H. Fitch and S. C. Bromley in the Biological Science Program for equipment, services, supplies and travel expenditures.
261. Grant of \$51,606 from the Academy of Natural Science, Philadelphia, Pa., to be used under the direction of K. W. Cummins in the Kellogg Biological Station for the river continuum: strategies of biological systems for maintaining a quasi-equilibrium of energy flow.
262. Grant of \$200 from Robert E. and Barbara A. Otis, Ripon, Wis., to be used under the direction of R. D. Van Deusen in the Kellogg Biological Station to help complete fencing of experimental pens for residential goose flock.
263. Grant of \$9,989 from the U.S. Army Corps of Engineers, Baltimore, Md., to be used under the direction of G. H. Lauff in the Kellogg Biological Station for a training course in wetlands science and technology.
264. Grant of \$1,356,000 from the Energy Research and Development Administration to be used under the direction of Anton Lang in the MSU/ERDA Plant Research Laboratory for research and training at graduate and postdoctoral levels in experimental plant biology.
265. Grant of \$20,500 from the National Science Foundation to be used under the direction of H. Kende in the MSU/ERDA Plant Research Laboratory for studies on the role of ethylene in plant aging.
266. Grant of \$50,706 from the National Science Foundation to be used under the direction of C. P. Wolk in the MSU/ERDA Plant Research Laboratory for biochemical analysis of developmental mutants in, and genetic transformation of, pattern-forming cyanobacteria.

267. Grant of \$31,797 from the Department of Health, Education and Welfare to be used under the direction of M. Hetherington in the Science and Mathematics Teaching Center to help secondary school science and social studies teachers develop an understanding of the need and procedures for regional environmental planning and assist them in incorporating these ideas in their local school curricula. To do this, a series of inservice workshops are proposed that will involve selected teams of science and social studies teachers from each of the secondary school districts in the tri-county region which constitutes the greater Lansing area in south central Michigan.
268. Grant of \$13,500 from the Muscular Dystrophy Association, Inc., New York, N.Y. to be used under the direction of C. H. Suelter in Biochemistry for a study of comparative enzymology of normal and dystrophic tissue.
269. Grant of \$65,493 from the National Institutes of Health to be used under the direction of H. C. Miller in Microbiology and Public Health for the development of immunogenesis from bone-marrow cells.
270. Grant of \$35,800 from the National Science Foundation to be used under the direction of J. A. Breznak in Microbiology and Public Health for a study of the biochemical relationships between symbiotic micro-organisms and their hosts.
271. Grant of \$13,000 from Hoffman-La Roche, Inc., to be used under the direction of J. L. Bennett in Pharmacology for a study of the effects of benzodiazepines on the schistosome.
272. Grant of \$1,500 from Merck & Co., Inc., Rahway, N.J., to be used under the direction of J. L. Bennett in Pharmacology for the evaluation of antiparasitic compounds.
273. Grant of \$2,585 from the National Institutes of Health to be used under the direction of J. Stickney in Pharmacology to study digitalis: mechanisms of cardiac sympathetic effects.
274. Grant of \$39,942 from the National Heart, Lung and Blood Institute to be used under the direction of L. C. Weaver in Physiology to study the autonomic control of renal function.
275. Grant of \$64,232 from the National Institute of Mental Health to be used under the direction of A. Werner in Psychiatry for medical student psychiatry education.
276. Grant of \$55,021 from the National Institutes of Health to be used under the direction of A. J. Rubel in Anthropology to provide training in medical anthropology to pre-doctoral and post-doctoral students.
277. Grant of \$65,794 from the National Institute of Mental Health to be used under the direction of G. W. Fairweather in Psychology for Ph.D training in ecological psychology.
278. Grant of \$53,997 from the National Institutes of Mental Health to be used under the direction of L. J. Harris in Psychology for Ph.D training in experimental-general psychology.
279. Grant of \$25,184 from the National Institute of Mental Health to be used under the direction of E. H. Jacobson in Psychology for social psychology training.
280. Grant of \$2,000 from the Calhoun County Probate Court, Marshall, to be used under the direction of T. Dungworth in the School of Criminal Justice for an analysis of the 1976 case load, Calhoun County Juvenile Court.
281. Grant of \$1,500 from the Department of State Police to be used under the direction of J. McNamara in the School of Criminal Justice to conduct preliminary evaluation of performance of female troopers in the State Police Department.
282. Grant of \$4,800 from the LEAA Office of Criminal Justice, U.S. Department of Criminal Justice, to be used under the direction of J. K. Hudzik in the School of Criminal Justice for a conference on criminal justice human resource needs and the collegiate educational response.
283. Grant of \$131,571 from the National Institute of Corrections to be used under the direction of R. C. Trojanowicz in the School of Criminal Justice for executive seminars for managers of medium and large local corrections facilities.
284. Grant of \$50 from the Michigan Statewide Health Manpower Survey, East Lansing, to be used under the direction of D. H. Kruger in Labor and Industrial Relations to process and analyze research data from the Michigan Statewide Health Manpower Survey.
285. Grant of \$47,194 from the National Institute of Mental Health to be used under the direction of J. P. Miller, Jr. in Social Work for graduate training in community mental health.
286. Grant of \$56,663 from the Public Services Administration, Department of Health, Education and Welfare, to be used under the direction of J. P. Miller, Jr. in Social Work for graduate training in social work preventive intervention.
287. Grant of \$500 from the MSU Foundation to be used under the direction of C. Goldschmidt in Urban Planning and Landscape Architecture to study the system by which the city of Hamburg, Germany controls its physical development.

B. GIFTS AND GRANTS, cont.

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288. Grant of \$264,200 from the National Institute of Mental Health to be used under the direction of T. S. Gunnings in Urban and Metropolitan Studies for fellowships for students from minority groups for the purpose of training them as urban counselors.
289. Grant of \$1,000 from New Detroit, Inc. to be used under the direction of T. Tenbrunsel in Urban and Metropolitan Studies to analyze doctor mobility in the Detroit metropolitan area.
290. Grant of \$500 from the Mid-Michigan Cat Fanciers, Lansing, to be used under the direction of W. F. Keller in the College of Veterinary Medicine for feline research.
291. Grant of \$25 from the Sportsmen's Dog Training Club of Detroit, Inc., to be used under the direction of W. F. Keller in the College of Veterinary Medicine in the field of ophthalmology.
292. Grant of \$200 from the Women's Auxiliary to the Michigan Veterinary Medical Association to be used under the direction of J. R. Welser in the College of Veterinary Medicine for the Veterinary Clinic Library.
293. Grants totaling \$535 from various donors to be used under the direction of J. R. Welser in the College of Veterinary Medicine for the Canine Health Advisory Research Fund and the College of Veterinary Medicine Learning Resources Library Fund.
294. Grant of \$49,009 from the American Cancer Society, Inc., New York, N.Y., to be used under the direction of C. W. Welsch in Anatomy for the study of the hormonal control of human breast cancerigenesis.
295. Grant of \$24,024 from the National Institutes of Health to be used under the direction of T. R. Corner in Microbiology and Public Health for intergovernmental personnel transfer.
296. Grant of \$93,550 from the National Institutes of Health to be used under the direction of J. F. Williams in Microbiology and Public Health for the study of immunology of larval tapeworm infection.
297. Grant of \$2,450 from the National Pork Producers Council, Des Moines, Iowa, to be used under the direction of G. L. Waxler in Pathology for the study of the effects of an attenuated transmissible gastroenteritis virus on intestinal epithelium of gnotobiotic pigs.
298. Grant of \$2,500 from the McNeil Laboratories, Fort Washington, Pa., to be used under the direction of J. B. Hook in Pharmacology as an unrestricted grant.
299. Grant of \$61,710 from the National Institute of Environmental Health Sciences to be used under the direction of J. B. Hook in Pharmacology for the study of perinatal pesticide toxicity.
300. Grant of \$10,000 from the Upjohn Co., Kalamazoo, for unrestricted use under the direction of T. Brody in Pharmacology.
301. Grant of \$27,600 from the National Science Foundation to be used under the direction of P. O. Fromm in Physiology for a study of the effects of pollutants on gills of fresh water fishes.
302. Grant of \$500 from the Michigan Veterinary Medical Association, Holland, to be used under the direction of D. DeYoung in Small Animal Surgery and Medicine for canine research in anesthesia.
303. Grant of \$10 from Maria Della Corte, East Lansing, for unrestricted use under the direction of J. R. Welser in the Veterinary Clinical Center.
304. Grant of \$8,000 from the Alvin M. Bentley Foundation, Owosso, to be used under the direction of H. J. Oyer in The Graduate School for two scholarships for graduate students in 1977-78.
305. Grant of \$80,425 from the U.S. Office of Education to be used under the direction of H. J. Oyer in The Graduate School for foreign language and area studies fellowships.
306. Grant of \$970 from the U.S. Army PACAF Procurement Center, Yokohama, Japan, to be used under the direction of S. Cherney in International Extension for tuition assistance for military attending the Graduate Education Overseas program in Zama, Japan.
307. Grant of \$45,500 from the Michigan Office of Highway Safety Planning, Lansing, to be used under the direction of A. H. Koert in the Highway Traffic Safety Center to raise the level of expertise of paraprofessionals in the traffic engineering field through the conduct of basic courses and an advanced course in four locations in Michigan.
308. Grant of \$6,675.75 from the Council on International Educational Exchange, New York, N.Y., to be used under the direction of A. G. Benson in International Studies and Programs to provide a twenty-five day orientation program involving an overview of American teaching methods and programs and an introduction to the American culture for eleven Japanese professors.

309. Grants totaling \$180 from various donors to be used under the direction of William T. Ross in the Asian Studies Center to aid in the expenses necessary to publish the proceedings of the 13th Annual Bengal Conference held in Chicago May 6-8, 1977.
310. Grant of \$190,833 from the Bureau of Health Manpower, Hyattsville, Md., to be used under the direction of R. Gerard and R. Harvey in the Office of Health Services for training in the interdisciplinary team approach to the delivery of health care services.
311. Grant of \$175,248 from the National Iranian Radio and Television, Tehran, Iran, to be used under the direction of M. A. Issari in the Instructional Media Center to complete the Ancient Iran Film Series -- editing, sound recording, graphics, art work, animation and related post production activities.
312. Grant of \$600 from The Interpublic Group of Companies, Inc., New York, N.Y., to be used under the direction of R. D. Page in Instructional and Public Television to underwrite the state high school basketball championships.
313. Grant of \$20,480 from the Michigan Council for the Humanities, East Lansing, to be used under the direction of K. Ingram in Instructional and Public Television to produce an hour film documentary exploring the play element in contemporary civilization.
314. Grant of \$300 from the 3M Company, Saint Paul, Minn., to be used under the direction of R. D. Page in Instructional and Public Television to support programming activities at WKAR-TV.
315. Grants totaling \$747 from various donors to be used under the direction of Robert D. Page in Instructional and Public Television for the Michigan high school basketball championships and to sponsor a MSU hockey game.
316. Grants totaling \$298 from various donors to be used under the direction of Robert D. Page in Instructional and Public Television to support program activities of WKAR-TV and sponsor a MSU hockey game.
317. Grant of \$1,400 from the Lansing Community College to be used under the direction of J. P. Fry in Learning and Evaluation Service to improve faculty performance in the design and conduct of lectures, classroom discussion and course evaluation.
318. Grants totaling \$2,045 from various donors to be used under the direction of R. Estell in Radio Broadcasting to support the program activities of WKAR Radio.
319. Grant of \$677.74 from Capitol Consultants, Inc. to be used under the direction of W. Lovis in the Museum for an archaeological survey of the Charlotte wastewater treatment facility.
320. Grant of \$668.68 from Gove Associates, Inc. to be used under the direction of W. Lovis in the Museum for an archaeological survey of the village of Homer.
321. Grant of \$7,146 from the Michigan Department of State to be used under the direction of W. Lovis in the Museum for an archaeological survey of the Ionia State Recreation Area.
322. Grant of \$22,345.50 from the U.S. Forest Service to be used under the direction of W. Lovis in the Museum for an archaeological survey and study refinement of Hiawatha National Forest.
323. Grant of \$915 from the U.S. Forest Service to be used under the direction of W. Lovis in the Museum for an archaeological survey of Camp 7 Lake Campgrounds.
324. Grant of \$3,090.14 from the U.S. Forest Service to be used under the direction of W. Lovis in the Museum for an archaeological inventory of the Finn Hollow Charcoal Kilns.
325. Grant of \$3,608.94 from the U.S. Forest Service to be used under the direction of W. Lovis in the Museum for an evaluation of the Finn Hollow Charcoal Kilns.
326. Grant of \$962.16 from the U.S. Forest Service to be used under the direction of W. Lovis in the Museum for an archaeological inventory of a reported mill site.
327. Grant of \$1,154.16 from the U.S. Forest Service to be used under the direction of W. Lovis in the Museum for an archaeological inventory of a historic cabin site.
328. Grant of \$2,866.94 from the U.S. Forest Service to be used under the direction of W. Lovis in the Museum for an evaluation of a historic homestead.
329. Grant of \$1,538.16 from the U.S. Forest Service to be used under the direction of W. Lovis in the Museum for an archaeological inventory of a reported log camp and mill site.
330. Grant of \$107,263 from the Department of Health, Education and Welfare, Office of Education, to be used under the direction of J. B. Hamilton in the Office of Special Programs to provide opportunities to disadvantaged high school youth for educational development and enrichment prior to enrollment in a postsecondary educational institution.

B. GIFTS AND GRANTS, cont.

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331. Grant of \$170,000 from the Department of Health, Education and Welfare, Office of Education to be used under the direction of J. B. Hamilton in the Office of Special Programs to provide supportive services for the educationally disadvantaged and handicapped students enrolled at MSU.
332. Grant of \$2,600 from the Frank and Mollie VanDervoort Memorial Foundation, Lansing, to be used under the direction of J. B. Hamilton in the Office of Special Programs for the expansion of the reading room for the blind and for the purchase of an electrostatic copier.
333. Grant of \$50 from the Class of 83, Renton Junior High School, to be used under the direction of F. W. Freeman in Campus Park and Planning to purchase library books for the Gardens Center Building at Hidden Lake Gardens.
334. Grant of \$100 from the Garden Club of Michigan, Grosse Pointe, Mich., to be used under the direction of F. W. Freeman and M. Baron in Campus Park and Planning toward construction of the plaque at the arboretum overlook.
335. Grant of \$1,394.40 from J. Frank Schmidt & Son Co., Boring, Oregon, to be used under the direction of M. Baron in Campus Park and Planning for experimentation, selection and dissemination of superior horticultural plants at Hidden Lake Gardens.
336. Grant of \$6,845.40 from the Markham Research Institute, Chicago, Ill., to be used under the direction of N. Elliott in the office of the Vice President for Business and Finance for an academic chair in Chemistry or Pharmacology under the MSU Enrichment Program.
337. Grant of \$35,000 from the Trustees of Forest H. Akers to be used under the direction of R. E. Wilkinson, Vice President for Business and Finance, towards completion of the remaining 9 holes of the Forest Akers Golf Course.
338. Grant of \$6,500 from the National Endowment for the Arts to be used under the direction of Colleen Hennessy in Housing and Food Services to educate and expand the awareness of one of USA's only original art forms -- jazz, within MSU and surrounding communities.
339. Grant of \$30 from Mrs. Joena Foote, Holt, Mich., to be used under the direction of G. Williams in the Counseling Center to maintain current research programs in Operant and Social Learning Theory and to facilitate the development of new programs.
340. Grant of \$250,000 from the Herrick Foundation, Detroit to be used under the direction of L. Scott, Vice President for Development, in the capital enrichment program.

Motion was made by Trustee Carrigan, seconded by Trustee Bruff, to accept the gifts and grants. Approved by a vote of 6 to 0. Trustee Radcliffe was out of the room at the time the vote was recorded, and Trustee Smydra abstained.

C. BIDS AND CONTRACT AWARDSBids and
Contract Awards1. Farm Lane Bridge

At the July 22, 1977 meeting of the Board of Trustees, approval was granted to the administration to proceed with the award of contracts for bids received for reconstruction of the north span of the Farm Lane bridge. The following bids were received on August 10, 1977 and work has commenced. This action is to report the administrative approval of these contracts.

Farm Lane
Bridge
Reconstruction

<u>Contractor</u>	<u>Base Bid</u>
C. A. Hull Co., Inc.	\$ 99,600
Walter Toebe Construction Co.	110,915
Brown Brothers, Inc.	121,800

A contract was awarded to the low bidder, C. A. Hull Co., Inc., in the amount of \$99,600 and the following project budget was established:

Contract Work-C. A. Hull Co., Inc.	\$ 99,600
Purchase of bridge railing from Michigan Highway Department	675
Grounds Department	1,000
Consulting Engineering Fee	12,000
Contingency	6,725
	<u>\$120,000</u>

RESOLVED that the above report be accepted.

Approved by a vote of 7 to 0 on motion by Trustee Bruff, seconded by Trustee Stevens. Trustee Radcliffe was not in the room at the time the vote was taken.

Bids and
Contract
Awards

C. BIDS AND CONTRACT AWARDS, cont.

September 22-23, 1977

Brody Complex -
Replace Outside
Entrance Doors2. Brody Complex - Replace Outside Entrance Doors

The following bids were received on August 23, 1977 for Brody Complex - Replace Outside Entrance Doors. The base bid involves replacement of all existing exterior doors, frames, and glazing with heavy duty wide stile aluminum doors, insulated tempered safety glass, and insulated panels in new aluminum frames at Armstrong, Bailey, Bryan, and Emmons Halls. The new entrances are much more energy efficient and designed for heavy duty use. Alternate No. 1 provides for installation of balanced doors at each opening.

<u>Contractor</u>	<u>Base Bid</u>	<u>Alternate No. 1 (Add)</u>
Haussman Construction Co., Inc.	\$45,293	\$55,272
McNeilly Construction, Inc.	45,870	32,000
Hanel-Vance Construction Co.	45,900	52,900
Charles Featherly Construction Co.	46,675	57,876
Nielsen Construction Co.	47,400	55,000

It is recommended that a contract be awarded to the Haussman Construction Co., Inc. of Lansing, Michigan in the amount of the base bid of \$45,293, and that the following project budget be established:

Haussman Construction Co., Inc.	\$45,293
Contingencies	10,207
Engineering, Supervision and Expediting	<u>4,500</u>
Total Expected Expenditures	\$60,000

Funds are available for this project in Account 21-3184, Brody Group Special Projects and Account 41-4292, Brody Complex Special Maintenance.

RESOLVED that the above contract be awarded and project budget be established as recommended.

Approved by a vote of 6 to 0 on motion by Trustee Bruff, seconded by Trustee Carrigan. Trustees Radcliffe and Smydra were out of the room when the vote was taken.

Forest Akers
Golf Course -
Golf Cart
Storage Bldg.3. Forest Akers Golf Course - Golf Cart Storage Building

The following bids were received on August 23, 1977 for Forest Akers Golf Course - Golf Cart Storage Building. This project involves the construction of a new golf cart storage building at the Forest Akers West Golf Course to provide year-round storage area for 40 golf carts. The work includes water and electrical service, lighting, drainage system, asphalt paving, and site restoration.

<u>Contractor</u>	<u>Base Bid</u>
Hanel-Vance Construction Co.	\$34,150
Haussman Construction Co., Inc.	35,840
McNeilly Construction, Inc.	35,917
Charles Featherly Construction Co.	36,695
Nielsen Construction Co.	38,700

It is recommended that a contract be awarded to the low bidder, Hanel-Vance Construction Co. of Okemos, Michigan in the amount of \$34,150, and that the following project budget be established:

Hanel-Vance Construction Co.	\$34,150
Landscaping - Campus Park and Planning	2,200
Contingencies	3,650
Engineering, Supervision and Expediting	<u>3,500</u>
Total Expected Expenditures	\$43,500

Funds for this project are available in Account 41-4499, Golf Cart Storage Building.

RESOLVED that a contract be awarded and project budget be established as recommended.

Approved unanimously on motion by Trustee Stevens, seconded by Trustee Carrigan.

Slate and
Gutter Repairs
for Several
Dormitories4. Landon, Yakeley, Gilchrist, Mary Mayo and Campbell Halls - Slate and Gutter Repairs

Bids were received on September 7, 1977 for Landon, Yakeley, Gilchrist, Mary Mayo and Campbell Halls - Slate and Gutter Repairs. One bid was received from the Steyer Roofing Co., which proposed a fixed fee of \$9,000 to perform an estimated \$80,000 worth of work. This project involves inspection of all slate fields and replacing all broken and missing slate and repair of copper gutters and downspouts, as required. Also included is the replacement of missing copper elbows, connectors, and other items required to complete roof restoration on these five units.

Since the fixed fee is less than anticipated and the Steyer Roofing Co. has been performing this type of work on the campus over the past fifteen years, it is recommended that a contract be awarded to the Steyer Roofing Co. of Warren, Michigan for a fixed fee of \$9,000 to perform an estimated \$80,000 worth of work, and that the following project budget be established:

continued - - -

C. BIDS AND CONTRACT AWARDS, cont.

September 22-23, 1977

Bids and Contract Awards

4. Landon, Yakeley, Gilchrist, Mary Mayo and Campbell Halls - Slate and Gutter Repairs, cont.

Slate and Gutter Repairs for Several Dormitories, cont.

Slate and Gutter Repair Work	\$80,000
Steyer Roofing Co.	9,000
Contingencies	13,000
Engineering, Supervision and Expediting	<u>8,000</u>
Total Expected Expenditures	\$110,000

Funding is available for this project in Account 21-3175, Landon-Special Project; Account 21-3176, Campbell-Special Project; Account 21-3177, Mayo-Special Project; and Account 21-3187, Yakeley-Gilchrist-Special Project.

RESOLVED that the above contract be awarded and project budget be established as recommended.

Approved unanimously on motion by Trustee Smydra, seconded by Trustee Carrigan.

5. Management Education Center, Troy - Automatic Sprinkler Irrigation System

Management Education Center - Automatic Sprinkler Irrigation System

The following bids were received on September 8, 1977 for the installation of an automatic sprinkler irrigation system for the Management Education Center, Troy:

<u>Contractor</u>	<u>Base Bid</u>
Omega Lawn Sprinkling Co.	\$32,000
Wolverine Trenching Service	33,800
Uni-Spray Lawn Sprinkler Co.	35,212

It is recommended that a contract be awarded to the Omega Lawn Sprinkling Co. of Southfield, Michigan in the amount of \$32,000 and that a project budget be established as follows:

Contract Work	\$32,000
Grounds Department	3,000
Contingency	4,000
Engineering Services	<u>1,000</u>
Total Expected Expenditures	\$40,000

Funds are available for this project in Account 41-2227, Troy Management Education Center-Landscaping.

RESOLVED that the above contract be awarded and project budget be established as recommended.

Approved unanimously on motion by Trustee Radcliffe, seconded by Trustee Bruff.

Note: Items 4 through 11, OTHER ITEMS FOR ACTION, were discussed immediately following the above actions; items 1 through 3 were considered following an executive session and the luncheon recess.

D. OTHER ITEMS FOR ACTION

Other Items for Action

1. 1977-78 Budgets

1977-78 Budgets approved

In accordance with the guidelines adopted at the June 24 and July 6, 1977 Board meetings, the following 1977-78 budgets are recommended for approval.

A. UNIVERSITY GENERAL

<u>Estimated Revenues</u>		<u>Estimated Expenditures</u>	
State Appropriation	\$ 99,382,900	Salaries	\$112,498,650
Federal Funds:		Labor	11,200,646
Morrill-Nelson	350,000	Supplies & Services	32,758,625
University Funds:		Equipment	2,993,079
Student Fees	\$48,038,100		
Application Fees	480,000		
Departmental Receipts	1,700,000		
Interest Income	1,200,000		
Recovery on Research Contracts	6,350,000		
Equity	1,950,000		
	<u>59,718,100</u>		
	<u>\$159,451,000</u>		<u>\$159,451,000</u>

Other Items
for Action

1977-78
Budgets, cont.

D. OTHER ITEMS FOR ACTION, cont.

September 22-23, 1977

1. 1977-78 Budgets, cont.

B. COOPERATIVE EXTENSION SERVICE

<u>Estimated Revenues</u>	<u>Estimated Expenditures</u>
Federal:	Salaries \$10,302,271
Smith-Lever	
(requires matching) \$ 3,942,412	Fringe Benefits <u>2,280,000</u> \$ 12,582,271
Federal Retirement 488,540	
4-H Urban 158,700	Travel &
4-H Rural 69,350	Maintenance 2,124,703
Part-time Farming 32,171	
Expanded Nutrition 1,468,890	
Rural Development 31,869	
Rural Development	
Title V 64,091	
Farm Safety 5,000	
Field & Vegetable Crops 28,377	
Apple Pest Management 12,500	
Test Home Economics	
Programs 10,000	
Urban Garden Program <u>37,500</u> \$6,349,400	
State 7,983,900	
County <u>373,674</u>	
<u>\$14,706,974</u>	<u>\$ 14,706,974</u>

C. AGRICULTURAL EXPERIMENT STATION

<u>Estimated Revenues</u>	<u>Estimated Expenditures</u>
Federal Grants:	Salaries \$ 7,110,825
Hatch	Fringe Benefits <u>1,140,000</u> \$ 8,250,825
(Requires Matching) \$ 2,254,966	Project Expenses 3,654,624
Hatch R.R.F.	
(Requires Matching) 523,573	
McIntire-Stennis	
(Requires Matching) 127,533	
Rural Development Title V <u>42,727</u> \$ 2,948,799	
State Appropriations:	
Regular State \$ 7,141,850	
Field Crop Research:	
Bean & Beet Plant 74,800	
Soft White Winter Wheat 70,100	
Sod Research 32,700	
Horticulture Crop Research:	
Vegetable & Fruit 112,100	
Extending Peach	
Tree Life 22,500	
Weather Adaptability 33,600	
Livestock Research:	
Livestock Production 46,800	
Beef Cattle Forage 70,200	
Cattle & Swine	
Infertility 70,200	
Calf Mortality 46,800	
Large Animal Research	
Center 187,500	
Pest Control:	
Pesticide Research 467,500	
Control of Fruit Pests 56,100	
Accelerated Tree	
Growth & Nursery Stock 70,100	
Rural & Community	
Development 35,500	
Municipal & Agricultural	
Waste 130,800	
Highway Tree Project 10,000	
Viticulture Research 37,500	
Clarksville Experiment	
Station 112,500	
Food Contamination	
Research <u>127,500</u> 8,956,650	
<u>\$11,905,449</u>	<u>\$11,905,449</u>

D. OTHER ITEMS FOR ACTION, cont.

September 22-23, 1977

Other Items for
Action1. 1977-78 Budgets, cont.1977-78 Budgets,
cont.D. INTERCOLLEGIATE ATHLETICS

Authorized Expenditures

\$3,707,791

RESOLVED that the 1977-78 General Fund, Cooperative Extension Service, Agricultural Experiment Station, and Intercollegiate Athletics budgets be approved as submitted.

Approved by a vote of 6 to 0 on motion by Trustee Smydra, seconded by Trustee Bruff. Trustees Martin and Radcliffe were not present for the vote.

2. Faculty SalariesFaculty Salaries
eff. Oct. 1,
1977 approved

Faculty salaries were developed following the budget guidelines incorporating provisions that utilize special salary augmentation funds included in the appropriations for the Agricultural Experiment Station and the Cooperative Extension Service. Provost Winder recommends that the faculty salaries as shown on the lists submitted to the Trustees (copy on file in the Secretary's Office) be approved effective October 1, 1977.

RESOLVED that the faculty salaries effective October 1, 1977 unless otherwise noted be approved as recommended.

Approved by a vote of 6 to 0 on motion by Trustee Carrigan, seconded by Trustee Bruff. This action includes the recommendations for officers' salaries as listed in President Wharton's September 19 memorandum to the Trustees as amended by the Trustees. Trustees Martin and Radcliffe were not present.

3. Administrative-Professional SalariesAdmin-Prof.
Salaries eff.
Oct. 1, 1977
approved

Administrative-Professional salaries were developed following the budget guidelines. Executive Vice President Breslin recommends that the Administrative-Professional salaries as shown on the lists submitted to the Trustees (copy on file in the Secretary's Office) be approved effective October 1, 1977.

RESOLVED that the Administrative-Professional salaries effective October 1, 1977 be approved as recommended.

Approved by a vote of 6 to 0 on motion by Trustee Carrigan, seconded by Trustee Stevens. Trustees Martin and Radcliffe were not present.

4. Veterinary Clinical CenterEstablishment
of Veterinary
Clinical Ctr.
approved

The proposed Veterinary Clinical Center is the result of the need to augment the teaching, research and service programs of the College of Veterinary Medicine. Learning to diagnose, treat and control spontaneous occurring animal diseases is an essential part of veterinary medical education.

Previously the clinical service program housed within the Veterinary Clinic was conducted under the direction of the Departments of Large Animal Surgery and Medicine, Small Animal Surgery and Medicine, and Pathology. The identification and separation of the service arms of these departments provide the opportunity for better integration and management of the service program. The appointment of a hospital administrator allows the departments to devote more time to their teaching and research programs. In addition it makes the diagnosis and treatment of spontaneous occurring disease and the teaching of students in that setting a college-wide responsibility permitting other basic science units the opportunity to interact at an applied level and deliver service.

The Veterinary Clinical Center will:

1. Provide clinical material for the educational programs of the College of Veterinary Medicine where students will have contact with spontaneous occurring diseases and exposure to management practices and procedures.
2. Serve as a referral clinic for practicing veterinarians and a hospital for live-stock and companion animals of the citizens of the state of Michigan/
3. Provide records, materials and facilities for applied and basic research on animal diseases.
4. Separate and document the cost of teaching in relationships to service.

A Hospital Board has been appointed and initial policies and procedures have been established. A personnel manager has been appointed for the Veterinary Clinical Center. Full funding in the future will result in a comprehensive quality center for diagnosis, treatment and research on animal diseases.

RESOLVED that the Veterinary Clinical Center be established effective October 1, 1977.

Unanimously approved. Motion by Trustee Carrigan, seconded by Trustee Bruff.

Other Items
for Action

D. OTHER ITEMS FOR ACTION, cont.

September 22-23, 1977

Animal Health
Diagnostic
Laboratory
established

5. Animal Health Diagnostic Laboratory

The Animal Health Diagnostic Laboratory received initial funding from the legislature in fiscal 1976-77. It provided mission designation to the College of Veterinary Medicine to develop a diagnostic and field problem solving service for non-regulatory infectious disease and toxic substance contamination. The purpose of the Laboratory is to provide rapid, accurate diagnosis of animal disease or toxic conditions so that treatment, control, prevention and/or public health protective measures can be properly implemented. The mission is:

1. To provide animal disease diagnostic service and animal-problem solving capability for the Michigan livestock industry, animal owners and veterinarians.
2. To work in cooperation with the Michigan Department of Agriculture and Michigan Department of Health in differentiating between regulatory and non-regulatory conditions so that public health protective measures and/or control programs can be instituted.
3. To train veterinary students, technicians and specialists in veterinary diagnostic methods.
4. To define animal problems for research.

Initial funding last year permitted the appointment of a director and the beginning implementation of the concept. Full funding in the future will result in a full-service laboratory. A full-service laboratory receives and examines tissues, blood, urine, and related materials recovered from sick, dead or drugged animals in an attempt to solve disease, toxic or drugging problems. The Laboratory is staffed by veterinary medical specialists who have advanced training and experience in pathology, microbiology, toxicology, parasitology, management and nutrition. These specialists are supported by technical personnel and the use of precision methods and equipment along with clinical observation and herd histories to determine a diagnosis. These services are available to any of the citizens of the state of Michigan in conjunction with their local veterinarian.

RESOLVED that:

- (1) The Animal Health Diagnostic Laboratory be established to develop a diagnostic and field problem solving service for non-regulatory infectious disease and toxic substance contamination.
- (2) The administrator of the Center shall have the title of Director.
- (3) The Laboratory shall be administered by the College of Veterinary Medicine.

Unanimously approved. Motion by Trustee Carrigan, seconded by Trustee Bruff.

Cyclotron Lab.
renamed
MSU/NSF Heavy
Ion Lab

6. MSU/NSF Heavy Ion Laboratory

Michigan State University has been awarded a grant by the National Science Foundation to implement the first phase of a program of heavy ion research. This distinctive new program should be identified as accurately as possible to facilitate communication with national and international scientific communities. The proposal is to change the name of the administrative unit previously known as the Cyclotron Laboratory to identify the focus of the new program. The building housing the program will continue to be called the Cyclotron Laboratory.

RESOLVED that the administrative unit previously known as the Cyclotron Laboratory be renamed the MSU/NSF Heavy Ion Laboratory.

Approved by a vote of 7 to 0 on motion by Trustee Martin, seconded by Trustee Bruff. Trustee Carrigan was not in the room at the time the vote was taken.

Investment
Items

7. Investment Items

a. W. Cameron Meyers Scholarship Fund

The W. Cameron Meyers Scholarship Fund was established by gifts accepted by the Board of Trustees which were given through the MSU Development Fund. The fund will be invested in the Pooled Income Fund to provide scholarships for students in journalism.

It is recommended that this fund be classified as a fund functioning as an endowment for the purpose indicated above.

RESOLVED that the above recommendation be approved.

Approved by a vote of 7 to 0 on motion by Trustee Bruff, seconded by Trustee Krolikowski. Trustee Carrigan was out of the room at the time the vote was taken.

b. Additions to the Buy List

At its July 21, 1977 meeting, the Trustee Investment Committee approved the placement of the following firms on the buy list of the University:

Alexander & Alexander Services, Inc.
Franklin Life Insurance Co.
Liberty National Life Insurance Co.
Southwestern Life Corporation

It is recommended by the Committee that these firms be approved for placement on the University stock investment list.

RESOLVED that the above recommendation be approved.

Unanimously approved. Motion by Trustee Carrigan, seconded by Trustee Krolikowski.

Additions to
Investment Buy
List

D. OTHER ITEMS FOR ACTION, cont.

September 22-23, 1977

Other Items for Action

7. Investment Items, cont.

Investment Items
Changes in Fixed Security Portfolio

c. Changes in Fixed Security Portfolio

Following procedures established by the Board of Trustees, Scudder, Stevens & Clark have completed changes in the University's fixed security portfolio as shown in their letter dated July 29, 1977 (copy on file in the Secretary's Office).

RESOLVED that the above investment report be accepted.

Unanimously approved. Motion by Trustee Bruff, seconded by Trustee Carrigan.

d. Investment Report

Scudder, Stevens & Clark Investment Report

The Trustee Investment Committee at its July 21 meeting reviewed the investment letter of July 15 from Scudder, Stevens & Clark (copy on file in the Secretary's Office) and approved the sale of the holdings of Beech Aircraft and the investment in U.S. Treasury Notes due 5-15-86.

RESOLVED that the above investment report be accepted.

Unanimously approved. Motion by Trustee Carrigan, seconded by Trustee Krolikowski.

8. Easement to City of East Lansing

Easement granted to City of East Lansing for holding system for storage and storm water

Several proposals for an easement to the City of East Lansing for the construction of a holding system for storage and storm water have been discussed over the past three years. The current proposal, which is described in a September 12, 1977 memorandum to President Wharton from Executive Vice President Breslin (copy on file in the Secretary's Office) is acceptable to the University and its approval is recommended.

RESOLVED that an easement to the City of East Lansing for the construction of a holding system for storage and storm water be granted as recommended.

Unanimously approved. Motion by Trustee Bruff, seconded by Trustee Carrigan.

9. Sale of Properties

Recommended Sale of Stoney Creek properties approved

The Land and Physical Facilities Committee of the Board of Trustees met August 30 in North Foundation Hall, Oakland University. The Committee, after discussion, approved the following recommendations:

a. Sale of Eight Stoney Creek Village Houses

The addresses of these houses are:

- 1. 999 East Tienken
- 2. 1046 East Tienken
- 3. 992 East Tienken
- 4. 972-978 East Tienken
- 5. 960 East Tienken
- 6. 1081 East Tienken
- 7. 991 Washington
- 8. 1025 Washington

The above houses do not include the main farmhouse at 1005 Van Hoosen or the house at 1009 Van Hoosen which Miss Serrell had assigned to her under the terms of Miss Jones' will. The Committee is currently exploring the possibility of granting the main farmhouse to Avon Township as a historical site.

RESOLVED that the eight houses listed above be sold immediately.

Motion was made by Trustee Stevens, seconded by Trustee Bruff, to approve the above resolution. After discussion, the resolution was amended to include a provision that the houses be sold under a procedure approved by the Land and Physical Facilities Committee.

Unanimously approved.

b. Disposal of James Price Forest

Recommended Disposal of James Price Forest approved

It is recommended that the University dispose of the James Price Forest (136 acres) near Saginaw as soon as possible, either by sale or gift to Saginaw County, Bridgeport Township, or other appropriate local organizations. This property has been a continuing problem for the University and the Department of Forestry has recommended disposing of it since 1958.

RESOLVED that the disposal of the James Price Forest is authorized.

Unanimously approved. Motion by Trustee Stevens, supported by Trustee Bruff.

10. AFSCME Local 1585 Contract

AFSCME Local 1585 Contract approved

A contract agreement has been reached between the University and MSU/AFSCME Local 1585. The highlights of the new agreement are as follows:

- 1. Duration of Contract - 22 months (October 1, 1977 through July 31, 1979).
- 2. Wages - Within wage guidelines established by the Board. This includes wage increases and COLA (cost of living adjustments).
- 3. Hospitalization - Blue Cross-Blue Shield. University pays 90%; employee pays 10%.
- 4. Longevity - Increase base to \$8,500 (from \$7,500).

Other Items
for Action

D. OTHER ITEMS FOR ACTION, cont.

September 22-23, 1977

AFSCME Local
1585 Contract,
cont.

10. AFSCME Local 1585 Contract, cont.

5. Vacation - Increase 1 day for 5 to 10 years; increase ½ day for 10 years or more.
6. Shift differential - 2nd shift \$.15 (up \$.05); 3rd shift \$.25 (up \$.05).
7. Grievance Procedure - Deletion of Appeal Board. Shortened time limits for appeals to arbitration.

RESOLVED that the Board of Trustees approves the new contract between the University and MSU/AFSCME Local 1585.

Unanimously approved. Motion by Trustee Martin, seconded by Trustee Radcliffe.

Affiliation
Agreement be-
tween Col. of
Human Ecology
and Edw. W.
Sparrow Hospital
approved

11. Affiliation Agreement with Edward W. Sparrow Hospital

In keeping with previously established policies and procedures, the College of Human Ecology (Department of Food Science and Human Nutrition) has requested approval of an affiliation agreement between the University and E. W. Sparrow Hospital for the development of teaching programs in health care.

The agreement is essentially the same as prior agreements with other hospitals. It has been submitted with the approval of the Dean, College of Human Ecology, and has been reviewed by the Office of the Provost and the University Attorney and found to be in order.

RESOLVED that the affiliation agreement between Michigan State University, College of Human Ecology, and E. W. Sparrow Hospital be approved.

Unanimously approved. Motion by Trustee Stevens, seconded by Trustee Carrigan. A copy of the agreement is filed in the Secretary's Office.

Institutional
Neutrality in
Collective
Bargaining
Affirmed

12. Institutional Neutrality in Collective Bargaining

The Board affirms the basic right of all University employees, including faculty members, to make their own decisions regarding the merits of collective bargaining.

The Board encourages each employee to become as knowledgeable as possible regarding collective bargaining so that each person can come to an informed decision.

The Board affirms a policy of institutional neutrality regarding collective bargaining efforts.

RESOLVED that the above policy be approved.

Unanimously approved. Motion by Trustee Martin, seconded by Trustee Stevens.

Vote to Move to
Executive
Session

13. Executive Session

Motion was made by Trustee Stevens, seconded by Trustee Martin, to move to an Executive Session to discuss a land purchase. The roll call vote on the motion was as follows:
Aye: Trustees Bruff, Carrigan, Krolikowski, Martin, Radcliffe, Smydra, Stack, and Stevens.
Nay: No one. Unanimously approved. The Executive Session convened at 11:55 a.m.

The regular meeting reconvened at 2:25 p.m. in the Board Room in the Administration Building to act on items 1, 2 and 3 OTHER ITEMS FOR ACTION. The President's Report, Board Committee Reports, and a progress report by Provost Winder on behalf of the Long-range Planning Council were also given at this session.

Trustees Martin and Radcliffe were absent when the meeting reconvened but entered while the President's and Committee Reports were being given.

Information
Items and
Reports

E. INFORMATION ITEMS AND REPORTS

1. President's Report

a. Enrollment

The President reported it is anticipated that fall term enrollment will be somewhat higher than predicted. This is due in a large part to the inability to predict the number of returning students. A significant downward trend in enrollments appears possible beginning in 1979-80, if MSU reflects state and national trends.

b. Budget

President Wharton commented that despite this year's improved budget picture, a serious fiscal problem still confronts MSU as well as other Michigan universities. It is hoped that the product of the Long-range Planning Council's work will offer solutions.

c. Personnel

Recent appointments of a new Provost and several new deans provide strong leadership which will continue MSU's forward thrust.

d. Capital Enrichment Program

After a remarkable response by the University family to the Pathfinder drive, the capital campaign has moved into its second phase, a concentration on mid-Michigan donors. To date, large gifts have been received from the Herrick and Wolfram Foundations.

Enrollment

Budget

Personnel

Capital Enrich-
ment Program

E. INFORMATION ITEMS AND REPORTS, cont.

September 22-23, 1977

Information Items and Reports

2. Board Committee Reports

Board Committee Reports

a. Affirmative Action Committee

Trustee Martin outlined the reports given to the committee by Vice President Perrin and Assistant Vice President Bonner regarding the 1976-77 Affirmative Action report to HEW, the employment of women and minorities, and the University's efforts to attain compliance with the Federal Rehabilitation Act which prohibits discrimination against individuals with handicaps.

b. Investment Committee

Trustee Krolikowski reported that the Investment Committee plans to ask Scudder, Stevens & Clark to give their annual presentation to the October Board meeting. It was agreed that the full presentation would be given to the committee on Thursday afternoon, October 27, with other Board members attending the meeting at their discretion.

Investment Committee authorized to retain investment consultant

Trustee Krolikowski also reported that the Investment Committee would like authorization to retain an independent investment consultant to evaluate the University's investment performance and procedures over the past few years.

Motion was made by Trustee Smydra, seconded by Trustee Carrigan, to approve this authorization. Carried by a vote of 8 to 0.

c. Health Programs Committee

Trustee Stack reported that the committee had received a recommendation from the Provost on the merger of two administrative units, one in the College of Human Medicine and one in the College of Osteopathic Medicine. This proposal will be on the October Board agenda.

d. Audit Committee

Trustee Stack reported that the Audit Committee had met several times to hear the Ernst & Ernst 1976-77 audit report which was presented to the full Board September 22. Ernst & Ernst also gave a report on related party transactions and a legal opinion on that subject is forthcoming from Attorney Carr.

Trustee expense guidelines have also been discussed, will be considered again on Thursday afternoon, October 7, and will be included in the October agenda.

3. Trustees' Expenses

Trustees' expenses for June and July 1977

a. Trustees' expenses paid in June 1977 totaled \$1,991.60 distributed as follows:

	<u>Bruff</u>	<u>Carrigan</u>	<u>Krolikowski</u>	<u>Martin</u>	<u>Radcliffe</u>	<u>Smydra</u>	<u>Stack</u>	<u>Stevens</u>
Long-distance Telephone Charges	\$ 51.01	\$ 23.18	\$ 5.03	--	\$ 26.35	\$ 36.75	\$ 18.16	\$ 1.39
Travel	--	67.45	--	--	105.95	585.06	--	372.00
Lodging and Subsistence	62.30	40.00	30.43	--	--	--	149.79	44.23
University Entertainment	--	16.25	--	--	59.12	39.76	46.95	--
Postage	1.92	3.12	--	--	--	1.91	--	1.54
Other	81.50	--	--	--	20.00	100.45	--	--
Total	<u>\$196.73</u>	<u>\$150.00</u>	<u>\$35.46</u>	<u>--</u>	<u>\$211.42</u>	<u>\$763.93</u>	<u>\$214.90</u>	<u>\$419.16</u>

b. Trustees' expenses paid in July 1977 totaled \$663.28 distributed as follows:

Travel	--	--	--	--	\$164.95	\$ 90.00	--	\$188.80
Lodging and Subsistence	--	--	--	--	--	--	\$20.90	2.80
University Entertainment	--	--	--	--	--	15.53	--	--
Postage	--	\$.91	--	--	--	--	--	14.59
Subscription	\$20.60	20.60	\$20.60	\$20.60	20.60	20.60	20.60	20.60
Total	<u>\$20.60</u>	<u>\$21.51</u>	<u>\$20.60</u>	<u>\$20.60</u>	<u>\$185.55</u>	<u>\$126.13</u>	<u>\$41.50</u>	<u>\$226.79</u>

4. Long-range Planning Council

Provost Winder presented a progress report on the activities of the Long-range Planning Council. A copy of the material he distributed is filed in the Secretary's Office.

Progress report on Long-range Planning Council

Adjourned.

[Signature]

President

[Signature]

Secretary