

MINUTES OF THE MEETING
OF THE
MICHIGAN STATE UNIVERSITY
BOARD OF TRUSTEES

October 21, 2011

President Simon called the meeting of the Board of Trustees to order at 9:30 a.m. in the Board Room.

Trustees present: Brian Breslin, Dianne Byrum (via phone), Joel Ferguson, Melanie Foster, Mitch Lyons, Faylene Owen, and George Perles.

Trustees absent: Diann Woodard

University officers present: President Simon, Provost Wilcox, Vice President Poston, Secretary Beekman, Vice President and General Counsel Noto, Vice Presidents Burnham, Gray, and Groves, Interim Vice Presidents Maybank and Swain, and Senior Advisor and Director Granberry Russell. Faculty liaisons present: William Anderson, John Foss, Laura McCabe, Mary Noel, and John Powell. Student liaisons present: Stefan Fletcher, Steven Marino, Brieanne Mirjah and Sarah Pomeroy.

All actions taken were by unanimous vote of the Trustees present, unless otherwise noted.

1. On a motion by Trustee Foster, supported by Trustee Breslin, the **BOARD VOTED to approve** the agenda.
2. On a motion by Trustee Owen, supported by Trustee Breslin, the **BOARD VOTED to approve** the minutes of the Board meeting of September 9, 2011.
3. President's Report

President Simon provided the following report to the Board.

A. Economic Development Administration Awards

MSU is among 21 universities to receive grant funding from the U.S. Economic Development Administration. MSU received the third highest award. The amount awarded, \$915,000, will go towards establishing regional economic development tools for practitioners that expand opportunity and create jobs throughout the next five years.

B. Police Grants

The MSU Police Department recently received several grants to improve its services. A Focus Grant of \$650,000 was awarded by the Department of Justice in recognition of the Department's partnership with the community. The money will support the continuation of those efforts. Department of Homeland Security grants totaling \$75,000 will allow the Department to purchase a mobile command post to assist with Emergency Management in disaster situations. The Department of Homeland Security also awarded a \$250,000 grant to purchase an Accountability System. The new technology allows the police to locate officers and volunteers during major special events or in a disaster situation. Finally, a \$55,000 grant was awarded for a specialized vehicle for the Emergency Management Division. Collectively, recent grants to the Police Department amount to approximately \$1,230,000.

C. Obama Honors Researchers

Elena Litchman, Associate Professor of Ecology, and Tonghun Lee, Associate Professor of Mechanical Engineering, were among 94 researchers honored by President Barak Obama as recipients of the Presidential Early Career Award for Scientists and Engineers. The five year research grants are the highest honor bestowed by the United States government on science and engineering professionals in the early stages of their independent research careers and are awarded based on individuals' pursuit of innovative research and their commitment to community service.

D. Rhodes, Marshall, and Mitchell Awards

Based on academic accomplishment and excellence in research, community engagement and other leadership activities, seven students have been nominated by MSU to compete for Rhodes, Marshall, and Mitchell Scholarships. Rebecca Farnum and Marissa Perry are competing for the Rhodes Scholarship; Kathryn Bonnen, Kevin Dean, Rebecca Farnum, Chris Heffner, Alex Henderson, and Evan Stewart are competing for the Marshall Scholarship; and Rebecca Farnum is competing for the Mitchell Scholarship. The President wished these students good luck.

E. Career Gallery

On October 5 and 6, 2011, the MSU Career Services Network hosted a record-setting Career Gallery. With the largest university career fair in the State of Michigan, MSU is proud to report

participation by students and alumni (5845; 15 percent increase over 2010) interacting with over 300 employers (11 percent increase over 2010). While most universities are experiencing a decline in the number of companies and corporations actively recruiting on campus, MSU remains among the top 10 campuses for many corporations and continues to see an increase in those adding MSU to their lists for active recruiting.

F. Kremlin Fellows Delegate

Christopher Schotten, former student liaison to the Board, was selected as a delegate for the November 2011 delegation of Kremlin Fellows. Schotten was selected from an elite pool of applicants by the Russian Federal Agency on Youth Affairs to be among 14 other student leaders from institutions across the country to meet with Russian political and business leaders.

G. MSU Debate Team Rankings

The MSU Debate Team stands at #3 in the country in the College Policy Debate Rankings after the team's first ever undefeated finish at the Kentucky Round Robin tournament and its strong finish at the Georgia State Tournament. The President offered congratulations to the Debate Team students.

H. German Academic Exchange Service (DAAD) Awards

MSU History and Economics junior Kaitlyn McDonald was one of 39 students named a 2011-12 Young Ambassador by the German Academic Exchange Service (DAAD). The organization supports students who have studied or traveled in Germany and hope to inspire their peers to do the same.

I. Dave Brower Retirement

Trustee Breslin presented a Board of Trustees resolution to Assistant Vice President Dave Brower honoring him for his service to MSU. (Appendix A)

J. Sustainability Commitments and Progress

President Simon stated that MSU announced its sustainability plan in 2006. The plan, as it relates to greenhouse gas emissions and energy, is currently being reviewed by a committee of faculty and students. The committee's recommendations will be presented to the Board in early 2012.

K. Racial Incidents

President Simon stated that in each of the past two weeks, she has sent a letter to MSU students and others within the MSU Community, but that she would like to make it clear that racial intimidation in any form has no place at MSU. MSU can succeed as a community of learners only if an environment of respect for all is maintained.

President Simon further stated that inclusion is one of the three guideposts at MSU, along with quality and connectivity. MSU is an exceptional university, but it is only exceptional to the degree that all associated members of the community, as stewards of the institution, live those values. This includes students, faculty, staff, and administrators, as well as alumni and retirees.

President Simon applauded the efforts of student leaders and Interim Vice President Maybank and Senior Advisor and Director Granberry Russell. The meeting between the President and student leaders regarding the racial incidents on campus is being rescheduled to better accommodate full participation by the students. President Simon indicated that she remained committed to the dialogue and was looking forward to working with the students. She stated that, by working together, positive, constructive improvements to the shared learning community could be created.

4. There was no public participation on issues germane to the agenda.

5. Personnel Actions

President Simon presented the following personnel actions:

Izzo, Thomas, AN—Head Coach—Basketball, Intercollegiate Athletics, Subject to Contract, effective July 1, 2017 to June 30, 2018.

Rakan, Susan M., (Suzy Merchant), AN—Head Coach—Women's Basketball, Intercollegiate Athletics, Subject to Contract, effective July 1, 2015 to June 30, 2016.

Trustee Owen **moved to approve** the recommendations, with support from Trustee Ferguson.

THE BOARD VOTED to approve the recommendations.

6. Gifts, Grants, and Contracts

Vice President Gray introduced Dr. Shannon Manning, Professor in the Department of Microbiology and Molecular Genetics. Dr. Manning made a presentation to the Board on the evolution, epidemiology, and ecology of Shiga toxin-producing E. coli. (Appendix B)

7. Finance Committee

Trustee Breslin presented the Trustee Finance Committee Report and recommendations.

A. Adoption of the 2012-13 Appropriation Request Parameters and Capital Outlay

It was recommended that the Board of Trustees adopt the Appropriation Request, including needs for the University General Fund, AgBioResearch and Michigan State University Extension.

Trustee Breslin **moved to approve** the recommendation, with support from Trustee Owen.

THE BOARD VOTED to approve the recommendation.

B. Revised Investment Policy

It was recommended that the Board of Trustees amend its Investment Policy, including the Statement of Investment Objectives for Michigan State University's Common Investment Fund and Investment Guidelines. (Appendix C)

Trustee Breslin **moved to approve** the recommendation, with support from Trustee Ferguson.

THE BOARD VOTED to approve the recommendation.

C. New Investment Managers

It was recommended that the Board of Trustees select ProQuest Investments, Standard Pacific Capital, LLC, Indus Capital Partners, LLC, and Denham Capital Management as investment managers.

Trustee Breslin **moved to approve** the recommendation, with support from Trustee Owen.

President Simon stated that the investment managers were reviewed by the Investment Advisory Subcommittee of the Finance Committee prior to this recommendation.

THE BOARD VOTED to approve the recommendation.

- D. Project Approval—Authorization to Proceed—Steam and Road Reconstruction—Chestnut Road and New Steam Tunnel to IM West Building

It was recommended that the Board of Trustees authorize the Administration to proceed with the project entitled Steam and Road Reconstruction—Chestnut Road and Steam Tunnel to IM West Building, and to approve a budget of \$4,600,000.

Trustee Breslin **moved to approve** the recommendation, with support from Trustee Owen.

THE BOARD VOTED to approve the recommendation.

- E. Project Approval—Authorization to Proceed—Armstrong and Bryan Halls—Renovation

It was recommended that the Board of Trustees authorize the Administration to proceed with the project entitled Armstrong and Bryan Halls—Renovation, and to approve a budget of \$32,000,000.

Trustee Breslin **moved to approve** the recommendation, with support from Trustee Foster.

THE BOARD VOTED to approve the recommendation.

- F. Project Approval—Authorization to Proceed—Shaw Hall—New Dining Hall and Food Emporium

It was recommended that the Board of Trustees authorize the Administration to proceed with the project entitled Shaw Hall—New Dining Hall and Food Emporium, and to approve a budget of \$13,950,000.

Trustee Breslin **moved to approve** the recommendation, with support from Trustee Owen.

THE BOARD VOTED to approve the recommendation.

- G. Project Approval—Authorization to Proceed—Akers Hall—Elevator Replacement

It was recommended that the Board of Trustees authorize the Administration to proceed with the project entitled Akers Hall—Elevator Replacement, and to approve a budget of \$1,500,000.

Trustee Breslin **moved to approve** the recommendation, with support from Trustee Foster.

THE BOARD VOTED to approve the recommendation.

- H. Project Approval—Authorization to Proceed—Brody Complex—Utility Improvements—Phase IV

It was recommended that the Board of Trustees authorize the Administration to proceed with the project entitled Brody Complex—Utility Improvements—Phase IV, and to approve a budget of \$1,850,000.

Trustee Breslin **moved to approve** the recommendation, with support from Trustee Owen.

THE BOARD VOTED to approve the recommendation.

8. Policy Committee

Trustee Lyons presented the Trustee Policy Committee Report and recommendations.

- A. Law College Board Appointments

It was recommended that the Board of Trustees approve the appointments of the following to the Michigan State University College of Law Board of Trustees:

Mr. David Porteous for a term of three years, commencing January 1, 2012, and ending December 31, 2014.

Mr. Charles Janssen for a term of three years, commencing January 1, 2012, and ending December 31, 2014.

Trustee Lyons **moved to approve** the recommendations, with support from Trustee Breslin.

THE BOARD VOTED to approve the recommendations.

B. Investment Advisory Subcommittee Membership

It was recommended that the Board of Trustees amend the Stipulations for the Selection and Participation of Outside Members of the Investment Advisory Subcommittee. (Appendix D)

Trustee Lyons **moved to approve** the recommendation, with support from Trustee Owen.

THE BOARD VOTED to approve the recommendation.

C. New Departments within the College of Human Medicine

It was recommended that the Board of Trustees establish three new departments within the College of Human Medicine: The Department of Anesthesia, the Department of Emergency Medicine, and the Department of Translation Science and Molecular Medicine, effective January 1, 2012. The effective date for the program/curriculum, Fall, 2012.

Trustee Lyons **moved to approve** the recommendation, with support from Trustee Breslin.

THE BOARD VOTED to approve the recommendation.

D. Revision to Bylaws for Academic Governance for Review by the MSU Board of Trustees

It was recommended that the Board of Trustees approve the recommended revised Bylaws for Academic Governance, as approved by University Council on September 20, 2011, with the changes to be effective Spring Semester, 2012. (Appendix E)

Trustee Lyons **moved to approve** the recommendation, with support from Trustee Ferguson.

THE BOARD VOTED to approve the recommendation.

E. Approval of Contract Terms

It was recommended that the Board of Trustees approve the execution of a research contract with *Technova Corporation*, consistent with earlier public notice given at a Board meeting and

with the "Research Contract Term Sheet" presented to the Board. (Appendix F)

It was recommended that the Board of Trustees approve the execution of a contract with BoroPharm, Inc., consistent with earlier public notice given at a Board meeting and with the "Contract Term Sheet" presented to the Board. (Appendix G)

Trustee Lyons **moved to approve** the recommendation, with support from Trustee Breslin.

THE BOARD VOTED to approve the recommendation.

F. Notice of Intent to Negotiate a Contract with *OPTI O2, LLC*

Pursuant to State law, the Acting Chair of the Policy Committee gave public notice to the full Board of the University's intent to negotiate a contract with *OPTI O2, LLC*, a Michigan limited liability company based in Pinckney, Michigan. Dr. Ruby Ghosh, a Research Associate Professor in the Department of Physics & Astronomy, and his family own or have options to buy an ownership interest of more than 1 percent of the company. Dr. Ghosh is also an officer of *OPTI O2, LLC*.

9. Audit Committee

Trustee Perles presented the Trustee Audit Committee Report and recommendations.

A. Acceptance of the Audited Financial Statements for the Year Ended June 30, 2011

It was recommended that the Board of Trustees accept the audited financial statements for the year ended June 30, 2011.

Trustee Perles **moved to approve** the recommendation, with support from Trustee Breslin.

Trustee Perles recognized and thanked Dave Brower for his leadership in the preparation of the University's financial statements over the years. His dedication and involvement will be missed. Trustee Perles welcomed Kim Bontrager to Team MSU as the new Controller.

Trustee Perles said that the Audit Committee met and reviewed with MSU staff and the Board's external auditors, Plante & Moran,

the 2010-11 audited financial statements. The University received an unqualified opinion from the auditors, which indicates that MSU followed all accounting rules appropriately and that the financial reports are an accurate representation of MSU's financial condition as of June 30, 2011. No significant changes were made to Plante & Moran's audit plan, which was reviewed by the Audit Committee prior to commencement of the audit. No significant adjustments were proposed during the audit, and no material weaknesses in accounting policies or procedures were noted.

In addition, the Audit Committee received a review of the University's approach to human subjects research compliance, including rules, compliance protocols, and other protections. The committee also reviewed the annual conflict of interest report.

THE BOARD VOTED to approve the recommendation.

10. Trustees Comments

Trustee Ferguson said that things were moving smoothly and he thanked President Simon for her leadership.

Trustee Owen said that she had a good meeting with the faculty liaison group prior to the Board meeting and that she would have a report at the next meeting.

Trustee Foster noted that it was Homecoming week and said that she had attended the MSU Alumni Association Grand Awards Ceremony on October 20. She stated that honorees ranged in scope from the President of the Discovery Channel to a 2009 graduate who relocated to Thailand and is assisting village women in bringing their goods to market.

Trustee Foster said that The School of Hospitality Business opened the Willard and Alice Marriott Culinary Business Lab in the Kellogg Center. It is a remarkable teaching facility.

11. Public Participation on Other Issues

A. Energy Transition Steering Committee

Mr. Adam Liter, MSU Greenpeace member, said that the group is demanding that MSU transition from coal use to 100 percent clean energy. Mr. Liter stated that the University cannot afford to wait on an energy committee report before acting. Mr. Liter stated that the process is flawed. He expects only goals, rather than solutions, to

be presented in the report. Mr. Liter asked that the Board work with students to realize a clean energy future for MSU.

B. Proposals for Addressing Current Cultural Climate of Campus

Mr. Mario Lemons, President of the Black Student Alliance, said that racism exists on the campus of MSU. Mr. Lemons suggested that MSU needs to do more to combat racial incidents. Mr. Lemons asked for a multi-cultural center for students on campus. He stated that MSU does not do enough to engage students or provide an area where they can meet and discuss issues on campus.

Ms. Shaina Simpson, MSU student, said that racial slurs were written on her dorm room door after she became involved with the Black Student Alliance. Ms. Simpson said that this was not the first time she has encountered racism on the MSU campus. She noted the importance of intercultural aides in the residence halls when these incidents occur. Ms. Simpson said there is a unjustifiable disparity in the number of resident mentors versus that of intercultural aides. She asked the Board not to deny students the support they need from intercultural aides.

Ms. Silver Moore, Vice President of the Black Student Alliance, said that the fact that students still endure racism on the campus of MSU is unacceptable. Ms. Moore said that ten racial incidents have been reported thus far. She asserted that measures must be taken to work against racism in any form. Ms. Moore stated that cultural sensitivity training should be provided to all students at academic orientation.

Ms. Jasmine Fountain, executive board member of the Black Student Alliance, said that she has been the victim of a verbal racially motivated attack when leaving her dorm during the past weekend. She said that it is unacceptable that racial slurs can be used on campus and viewed as free speech. Ms. Fountain said that there is a difference between freedom of speech and hate speech, especially when intimidation is involved.

12. Request to Adjourn

On a motion by Trustee Owen, supported by Trustee Ferguson, **THE BOARD VOTED to adjourn** at 10:45 a.m.

Respectfully submitted,

A handwritten signature in green ink, appearing to read "W Beekman", with a stylized, cursive script.

William R. Beekman
Secretary of the Board of Trustees

RESOLUTION
HONORING DAVID B. BROWER
Michigan State University Board of Trustees
October 21, 2011

The Board of Trustees of Michigan State University today extends to David Brower its deep gratitude and appreciation for service to the university. Mr. Brower began his MSU career over 32 years ago as assistant controller in 1979 before being promoted to controller in 1995 and to Assistant Vice President and Chief Financial Officer in 2001.

Mr. Brower has worked to ensure that MSU operates with the highest degree of financial integrity, that issues affecting the financial health of the university are identified and strategies are formulated to deal with those issues, that timely and appropriate financial decisions are made, that University assets are safeguarded, that state and federal financial regulations are followed and that accounting and financial policies and procedures are developed and in place.

Under Mr. Brower's joint leadership MSU implemented the Enterprise Business Systems in 2011 including the Quali Finance System and the SAP HR/Payroll System. Mr. Brower committed several years to assist in concept development of "open source" software with the Quali Foundation. Mr. Brower's vision for the development of the Quali Financial System was instrumental to its success. He was a key leader in the formation of the Quali Foundation.

Mr. Brower is widely respected by the campus community as an open and inclusive leader. He is a strong advocate for transparency and has made himself available at all levels to discuss best practices and to find solutions to problems that are, as closely as possible, a win-win for all parties involved. In 2009 he was one of the recipients of the Outstanding Supervisor of the Year award.

As part of his University outreach activities Mr. Brower has represented MSU in numerous areas. He has served for over 30 years in various officer roles and as a board member for the University Club of MSU. He was one of the founding members and is current president of the Mid-Michigan Business Travel Coalition.

Mr. Brower supports MSU on many levels. In addition to his professional commitment to MSU, he is a major financial donor with multiple areas of interest, including the Broad College of Business, Wharton Center for Performing Arts, and MSU Athletics. He was also an early supporter of the MSU Leadership Spartan Scholarship Challenge Fund. Mr. Brower is also a long time season ticket holder of 30 years or more in football, basketball, and hockey.

Mr. Brower has been recognized on numerous occasions for his long time dedication to area community service organizations including the YMCA of Metropolitan Lansing and Capital Area United Way.

Mr. Brower has been a lifetime resident of the Lansing area, born and raised here. He completed a B.S. in Accounting and an M.B.A. in Finance both from MSU before earning his CPA certificate while working in a local office of one of the original "Big Eight" accounting firms.

Mr. Brower's integrity is impeccable and his leadership will be sorely missed. It is with much respect, admiration, and gratitude that the MSU Board of Trustees offers David Brower its best wishes for the future.


Joel Ferguson, Chairman

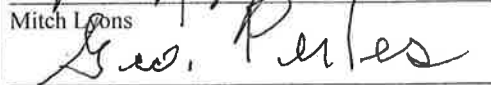

Melanie Foster, Vice Chairperson


Brian Breslin


Dianne Byrum


Mitch Lyons


Faylene Owen


George Perles


Diann Woodard

RESEARCH PRESENTATION

TO THE MSU BOARD OF TRUSTEES

OCTOBER 21, 2011

SHANNON MANNING

**DEPARTMENT OF MICROBIOLOGY &
MOLECULAR GENETICS**

Facilitated by the Office of the Vice President for
Research and Graduate Studies

Evolution, Epidemiology and Ecology of Shiga toxin-producing *E. coli*

Shannon Manning,
Assistant Professor,
Microbiology and Molecular
Genetics



Shiga toxin-producing *E. coli*

- Produce a potent **toxin**
- >120 types (e.g., O157)
- Clinical illness:
 - Diarrhea, bloody diarrhea, hemolytic uremic syndrome (HUS)
- 63,000 cases per year
- 2,100 hospitalizations
- 20 deaths per year
- > \$405.2 million in 2005
- Cattle serve as the reservoir
 - Most human infections occur by consuming food or water contaminated with manure



¹Scallan et al. Emerg Infect Dis 2011; 17

²Frenzen and Drake 2005, J Food Prot 68 2622-30

E. coli outbreaks

- Food → 52% of all infections
- 350 (outbreaks between 1982 and 2002)
 - Beef (41% of outbreaks), Produce 21% of outbreaks)
 - Novel new sources → Cookie dough, Hazelnuts

Number of outbreaks

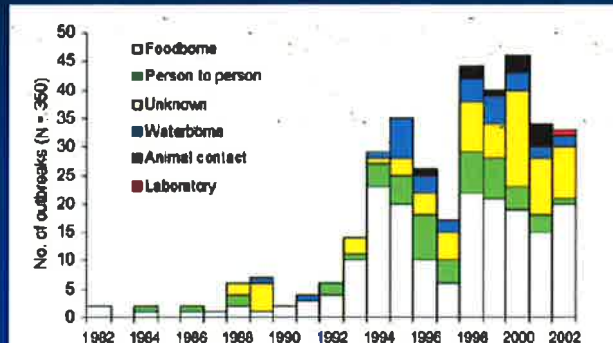


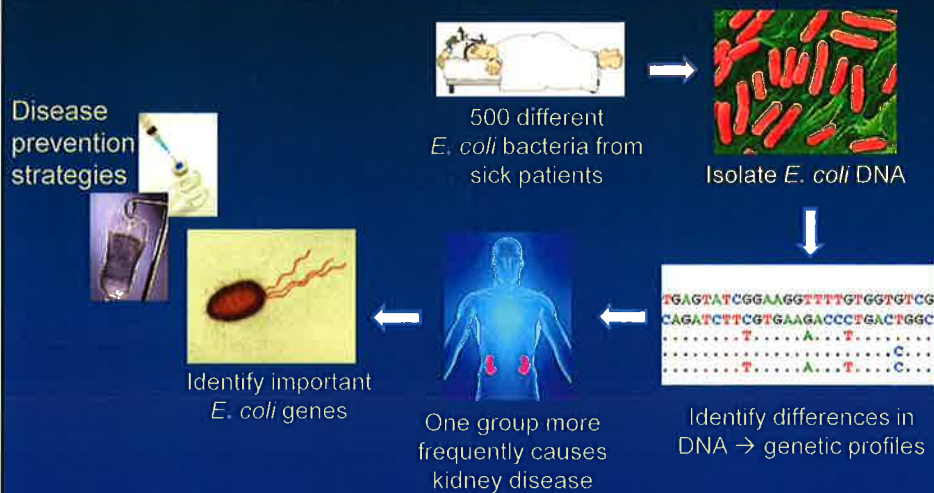
Figure 3. Transmission routes of *Escherichia coli* O157 outbreaks by year.

Rangel et al. Emerg Infect Dis 2005;11:603

Studies at MSU

E. coli bacteria vary in ability to cause severe disease

- Wide range of symptoms – mild to very severe



Manning et al. Proc Natl Acad Sci USA 2008; 105:4868

Enterics Research Cooperative Network (ERIN) (a NIH funded Center Grant)

Does the type and abundance of microbes impact disease?

- Some people resist infection or are asymptomatic

Collect stool from sick patients and family members



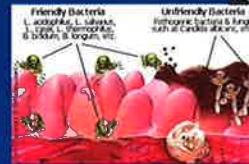
Isolate DNA from microbes in stool



Disease prevention strategies



Identify which microbes are present based on DNA sequence



Compare microbes and by-products in sick and healthy people

Ecological study

How can we decrease the likelihood of *E. coli* contamination of food?

- Cattle are asymptomatic but shed bacteria at high levels



Collect samples



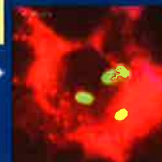
Find important genes



Frequency that cattle bacteria cause human disease?



Identify which microbes support or prevent *E. coli* colonization



What is the role of the immune system?



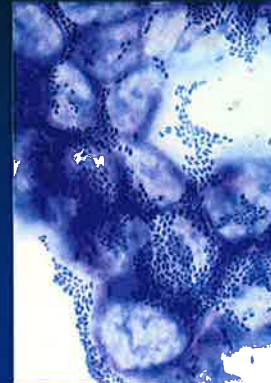
Disease prevention strategies in cattle



Future work

E. coli evolution and virulence

- 2011 German O104:H4 outbreak
 - 4,398 cases, 901 cases of HUS, and 51 deaths¹
 - Transmitted via contaminated bean sprouts
 - An old strain of *E. coli* has acquired unique factors that impact disease
 - Attaches better to human cells and also produces the toxin¹
 - The bacterium arrived at MSU in June!



¹Bielaszewska et al. Lancet. 2011

Acknowledgements

MSU

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Manning Lab

Rim Al Safadi
Scott Henderson
Kathy Jernigan
Akanksha Khare
Cassie Martin
Rebekah Mosci
Lindsey Ouellette
Pallavi Singh
Cody Springman
Cristina Venegas
Sam Wengert
Beth Whittam
Angie Zell



Jim Collins
Frances Pouch Downs
Jim Rudrik
Sandip Shah

INVESTMENT POLICY

Policy Number: 01-07-01

Updated⁽¹⁾: (1/26/79; 4/15/83; 6/8/84; 2/6/87; 10/14/88; 12/6/91; 9/22/00; 6/5/03; 5/7/04; 11/12/04, 5/15/07, 12/5/08, 4/24/09, 4/16/10, 9/17/10, 12/10/10)

I. General Statement

As stated in the Constitution of the State of Michigan and in the Bylaws of the Board of Trustees of Michigan State University (Board), the Board is responsible for the “control and direction of all expenditures from the institution’s funds.” In carrying out this responsibility with respect to the University’s investments, the Board has established a framework for active, professional investment management. This policy states the responsibilities of the parties involved in carrying out the investment program.

The Board will establish an investment program for the investment of University funds for maximum return with an acceptable degree of risk. Within the context of its fiduciary responsibilities, the Board will exhibit social conscience in the administration of the University’s investment portfolio.

All institutional funds available for long-term investment (generally at least five years), with the exception of funds restricted by law or by special donor limitations, will be consolidated into the Board’s Common Investment Fund (CIF). (See Exhibit A for the CIF Statement of Investment Objectives.) All institutional cash, with the exception of cash restricted by external agreements or by special donor limitations, will be consolidated into the Board’s Pooled Cash Fund for investment purposes. The Pooled Cash Fund shall consist of i) the Liquidity Pool (short and intermediate-term commercially available funds) and ii) the Liquidity Reserve Pool. (See Exhibit B for the Pooled Cash Fund Statement of Investment Objectives.)

II. Nature of Assets

Three distinct types of assets are covered by this policy:

1. Institutional Funds - Assets owned and held for long-term investment by the University, such as employee retirement funds and endowment funds, which include endowment trusts and funds functioning as endowments.
2. Annuity and Life Income Funds - Assets held for permanent investment by the University as trustee for the benefit of named beneficiaries, to revert to the University upon the demise of the last beneficiary or after a specified period of time, which should be invested to produce annual returns at least equal to contractually required payments to beneficiaries.
3. Institutional Cash – Cash being pooled and invested pending its intended use.

⁽¹⁾Revision dates for exhibits are shown on the exhibits.

III. Role of Board of Trustees

The Board:

1. Shall exercise its investment responsibilities through its Finance Committee;
2. Shall, upon the recommendation of the Finance Committee, establish investment policies relating to the administration of its investment portfolio;
3. Shall, upon the recommendation of the Finance Committee, establish investment objectives;
4. Shall, upon the recommendation of the Finance Committee, appoint an investment consultant, investment managers and investment custodians for the Institutional Funds; and
5. Shall receive periodic reports on investment results through the Finance Committee.

IV. Role of Finance Committee

The Finance Committee:

1. Shall, in consultation with the Investment Advisory Subcommittee, make recommendations about policies relating to the administration of the University's investment portfolio to the Board;
2. Shall, in consultation with the Investment Advisory Subcommittee, recommend to the Board an investment consultant, investment managers and investment custodians for the Institutional Funds;
3. Shall receive periodic reports on the investment status of the portfolios and shall transmit relevant information from such reports to the Board; and
4. Shall consider other investment-related matters.

V. Role of the Chairperson of the Finance Committee

The Chairperson of the Finance Committee is authorized to appoint certain investment managers when recommended by the Vice President for Finance and Operations and Treasurer (VPFO), in consultation with the investment consultant, when Board action on such new manager appointments at a regularly scheduled Board meeting is not feasible due to the timing of the investment opportunity; ***provided that*** (1) the VPFO shall notify the Board and members of the Investment Advisory Subcommittee of each proposed new manager appointment by fax or email at least one week prior to action on the proposed appointment by the Chairperson of the Finance Committee; (2) the Chairperson of the Finance Committee shall not act on the proposed new manager appointment if within forty-eight hours of the notification, at least three Trustees request a special Board meeting on the proposed appointment; (3) the Chairperson of the Finance Committee

shall consult with available members of the Investment Advisory Subcommittee prior to making any new manager appointment pursuant to this Section V; (4) amounts committed in connection with new manager appointments by the Chairperson of the Finance Committee (a) shall be within the targeted asset allocation range specified in the CIF Statement of Investment Objectives, and (b) shall not exceed (i) \$15 million per new investment manager and (ii) a total of \$75 million per calendar year; and (5) the VPFO shall document compliance with each of the conditions of this Section V before implementing the appointment. Any new investment manager appointments by the Chairperson of the Finance Committee pursuant to this Section V shall be reported to the Board and members of the Investment Advisory Subcommittee.

VI. Role of the Investment Advisory Subcommittee

The Investment Advisory Subcommittee:

1. Shall advise the Finance Committee in the review and evaluation of investment opportunities and strategies;
2. Shall provide knowledgeable, objective and independent advice to the members of the Finance Committee and University administration on strategic investment planning and policy, investment opportunities, and such other matters as shall be determined by the Board;
3. Shall review policies relating to the administration of the University's investment portfolio and, when appropriate, shall advise the Finance Committee about such policies;
4. Shall, in consultation with the investment consultant, the investment managers and the University administration, annually review the performance and investment objectives of the portfolio of Institutional Funds investments;
5. Shall, in consultation with the University administration, semiannually review the performance and investment objectives of the Pooled Cash Fund;
6. Shall, in consultation with the University administration, advise the Finance Committee concerning the investment consultant, investment managers and investment custodians for the Institutional Funds; and
7. Shall usually meet with the investment consultant quarterly, but in no case less frequently than three times a year, and shall periodically evaluate the performance of the investment managers, in consultation with the University administration and the investment consultant.

VII. Role of the Investment Consultant

The investment consultant:

1. Shall annually develop and communicate to the Finance Committee, through its meetings with the Investment Advisory Subcommittee, an appropriate strategy to meet the Board's long-term investment objectives for the Institutional Funds;
2. Shall usually meet with the Investment Advisory Subcommittee quarterly, but in no case less frequently than three times a year, and with the Finance Committee as needed;
3. Shall advise the Finance Committee, through its meetings with the Investment Advisory Subcommittee, regarding searches for investment managers and investment custodians;
4. Shall provide a monitoring and measurement program that will permit evaluation of the performance of the CIF portfolio, asset classes within the portfolio and investment managers in comparison with applicable investment market benchmarks and with other managers;
5. Shall provide a monitoring and measurement program that will permit evaluation of the performance of the Liquidity Reserve Pool and investment managers in comparison with applicable investment market benchmarks and with other managers;
6. Shall provide a monitoring and measurement program that will permit evaluation of the performance of the Liquidity Pool and investment managers in comparison with applicable investment market benchmarks and with other managers; and
- 4.7. Shall provide such other information pertaining to the Board's investment program as may reasonably be required and shall report immediately to the Board any major change in its confidence regarding the securities markets.

VIII. Role of the Investment Managers

Each investment manager:

1. Shall report at least quarterly to the University administration on performance and other appropriate matters;
2. Is authorized to execute investment transactions within its established guidelines, subject to any restrictions established by the Board;
3. Shall provide other necessary information for the development of interim reports and shall meet, as necessary, with the Finance Committee, the Investment Advisory Subcommittee and the VPFO; and
4. Shall vote all proxies in a manner most likely to preserve or enhance the value of the underlying investments and normally to support management on routine matters.

IX. Role of the Investment Custodians

Each investment custodian:

1. Shall hold all securities in an agreed-upon nominee name and form;
2. Shall execute all transactions as directed by the relevant investment manager;
3. Shall collect all income pertaining to the securities held, and shall temporarily invest such income in cash equivalents;
4. Shall periodically remit accumulated income to the University, for credit to the appropriate funds or trusts, pursuant to instructions received from the University administration;
5. Shall provide the University with a full monthly accounting of all transactions, together with a listing of all holdings at cost and market; and
6. Shall provide such other information as may reasonably be required.

X. Role of the University Administration

The University administration through the VPFO:

1. Shall continuously monitor and review the investment consultant's reports, the actions of the investment managers, and the status of the University's investment portfolios;
2. Shall serve as a liaison for ~~interim~~ communication among the Board, the Finance Committee, the Investment Advisory Subcommittee, the investment consultant, and the investment managers;
3. Shall maintain communications, as appropriate, among the Board, the Finance Committee, the Investment Advisory Subcommittee, the investment consultant, and the investment managers;
4. Shall make recommendations to the Finance Committee, in consultation with the Investment Advisory Subcommittee, concerning investment policies, structure, objectives and selection of investment managers;
5. Shall rebalance the portfolio, generally on a quarterly basis, in order to stay within the asset allocation parameters established by the Board and to maintain proper diversification among individual investment managers, (a) by reallocating funds among accounts or investment vehicles managed by investment managers already approved by the Board or by the Chairperson of the Finance Committee pursuant to Section V of this policy, or (b) by managing net cash flows into and out of the CIF by adding to underweight positions or withdrawing from overweight positions;
6. Shall report all rebalancing transactions and all new financial commitments to ~~non-marketable alternative asset investment managers~~ private investments

completed during the quarter to the Finance Committee and Investment Advisory Subcommittee, and shall provide quarterly reports to the Finance Committee and Investment Advisory Subcommittee showing potential rebalancing transactions that are likely to occur over the ensuing quarter;

7. Shall report monthly to the Board and the Investment Advisory Subcommittee any market value decline in excess of both 10 percent and \$500,000 in the value of the CIF, of the Liquidity Reserve Pool, of the Liquidity Pool or of Institutional Funds that are separately invested due to donor limitations;
8. Shall report quarterly to the Board and the Investment Advisory Subcommittee any market value decline in excess of both 10 percent and \$500,000 in the value of the University's investment with an investment manager; and [‡]
9. Shall have the authority to appoint, or may act in the role of, the investment managers and investment custodians for the Pooled Cash Fund and shall report any such appointments to the Finance Committee, the Investment Advisory Subcommittee and the Board.

XI. Endowment Spending

1. In fulfillment of its fiduciary duties as trustee of the University's endowment and other Institutional Funds, the Board causes those Funds to be invested to generate amounts that may be expended for the purposes for which those Funds were established ("programmatic spending") and amounts that may be accumulated for reinvestment to preserve the value of those Funds, and their purchasing power, against inflation.[‡] These are the priorities for the use of the University's endowment and other Institutional Funds. The Board may also permit reasonable and appropriate costs to be charged to the endowment and other Institutional Funds. These charges may include reasonable and appropriate costs of administering and managing the ~~University's~~ Institutional Funds, such as reasonable and appropriate internal and external investment costs and, for certain Institutional Funds, fund-raising costs. Additional returns, if any, generated by the investment of the Institutional Funds may be used to add real principal growth to such Funds, to better preserve their long-term value, to improve and further diversify the investment options for such Funds, and, thus, to enhance opportunities to stabilize and increase annual expenditure rates for such Funds.
2. In accordance with these precepts:
 - (a)(i) The University will make available for programmatic spending 5.0% ~~percent~~ of the average market value of the CIF as calculated for the 20 quarters of the five calendar years prior to the beginning of the fiscal year in which the spending is expected to occur, expressed as a dollar per unit annual distribution amount based on the number of units in the CIF at the time of the calculation.

[‡]~~The CIF Statement of Investment Objectives, Exhibit A, states that "the investment objectives of the CIF are . . . to achieve a total rate of return sufficient to generate the amount annually made available for spending by the University's programs supported by endowment funds and still provide a modest increase in the inflation-adjusted unit value"~~

Programmatic spending distributions will be made to CIF unit holders on a periodic basis during the fiscal year based on the number of units in the CIF held when each periodic programmatic spending distribution is made.² The VPFO will determine when the periodic programmatic spending distributions will occur.

(ii) This programmatic spending rate shall be reviewed annually by the Finance Committee, ~~after review by~~ in consultation with the Investment Advisory Subcommittee. In connection with each of these reviews, the University's investment staff shall present ~~analyses~~ an analysis of the projected impact of inflation on the University's endowment and other Institutional Funds, including how inflation is expected to affect their purchasing power (i.e., the expenditures of amounts for the purposes for which those funds were established).

b. Reasonable and appropriate internal and external investment costs for the CIF, including the costs of the investment consultant, the investment managers, and the investment custodians and the University's own investment management costs (staff and support), shall be deducted in determining the average market value of the CIF available for programmatic spending pursuant to ~~paragraph~~ Section XI (2)(a)(i) of this policy above.

c. The President and the VPFO are authorized to make annual assessments for endowment stewardship, including fund raising, against those of the University's endowment and other Institutional Funds established entirely or primarily with private donations. The amount of the assessments must be reasonable and appropriate, particularly when considered in the context of the University's priorities for the use of its endowment and other Institutional Funds. In any event, the amount assessed may not, without further Board action, exceed 1 percent of the average market value of the CIF units held by such Funds. The calculation of the amount assessed and its allocation to the Funds subject to assessment shall be conceptually consistent with the methodology by which programmatic spending distributions are calculated and allocated under Section XI paragraph (2)(a)(i) of this policy above. Assessments will be made periodically during the fiscal year, as determined by the VPFO. Not less than 30 days prior to the annual review of the programmatic spending rate pursuant to Section paragraph (2)(a)(ii) of this policy above, the President and the VPFO shall provide a written report to the Finance Committee and other members of the Board stating the amount, if any, of the assessment for the following fiscal year and how it was determined.

3. If the University has accepted a gift to an endowment fund documented by a gift instrument in which the donor gives legally binding instructions for the investment of, or expenditures from, that fund which are inconsistent with the foregoing, the University will comply with those special instructions. The VPFO shall calculate the annual programmatic spending distribution and assessment for each endowment fund which is not invested in the CIF in accordance with

² The per unit annual distribution amount will be allocated evenly over the periodic programmatic spending distributions during the fiscal year. The amount of the periodic programmatic spending distributions will not be reduced if the number of units in the CIF increases between when the per unit annual distribution amount is calculated and when the periodic programmatic spending distributions occur.

applicable law and report the programmatic spending rate and assessment amount for each such fund to the Finance Committee. Insofar as possible, given each such fund's investments and the instructions of its donor, the priorities for the use of such funds should be the same as those for endowment funds invested in the CIF.

Statement of Investment Objectives

Michigan State University's Common Investment Fund

Updated: 10/14/88, 6/8/90, 12/6/91, 12/11/92, 3/31/94, 7/14/95, 11/8/96, 9/22/00, 6/5/03, 11/14/03, 11/12/04, 6/17/05, 2/10/06, 5/15/07, 12/5/08, 6/19/09, 9/17/10

INTRODUCTION

This statement defines the investment objectives of Michigan State University's Common Investment Fund ("CIF"), which is composed primarily of the University's endowment funds. While other Institutional Funds (e.g., the Retirement Fund) may use the CIF as an investment vehicle, the separate statements of investment objectives for these funds shall govern their investment if their investment objectives are materially different from those of the endowment funds.

INVESTMENT OBJECTIVES

The investment objectives of the CIF are:

- 1) to achieve a total rate of return sufficient to generate the amount annually made available for spending ⁽¹⁾ by the University's programs supported by endowment funds and still provide a modest increase in the inflation-adjusted unit value, and
- 2) to achieve the desired return while assuming only moderate risk.

The University will seek to achieve these investment objectives by diversifying across major asset classes (e.g., marketable equities, ~~non-marketable private~~ investments, ~~absolute return~~ marketable alternatives, fixed income) as well as within each asset class (e.g., by investment style, capitalization, industry).

SHORT-TERM PERFORMANCE GOALS

Short-term performance goals for the CIF and for individual managers will be to outperform appropriate market and peer benchmarks over rolling three and five-year periods. Furthermore, adherence to the investment style for which individual managers were selected will be monitored. ~~Non-marketable Private~~ investments will be expected to outperform their respective median vintage year benchmarks.

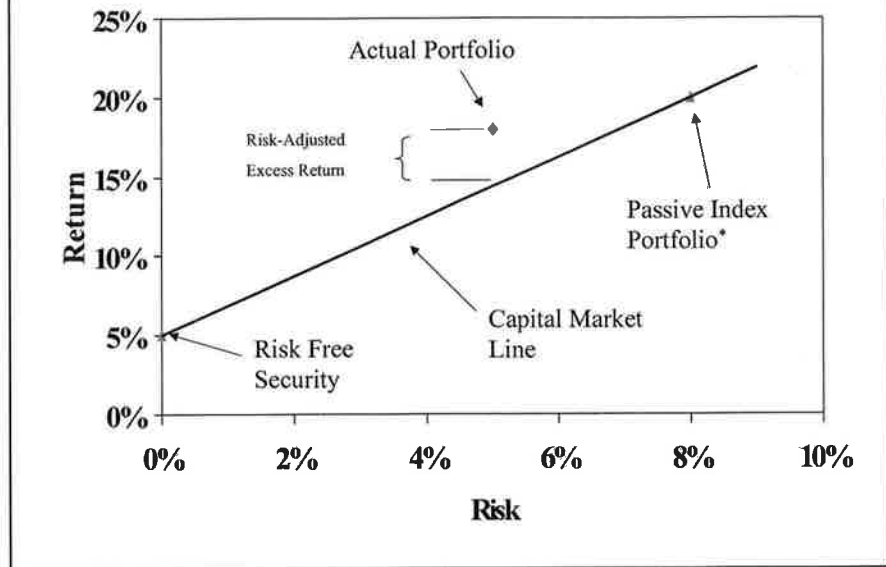
LONG-TERM PERFORMANCE GOALS

The following long-term performance goals of the CIF are expected to be achieved over a ~~five to ten-year period, measured on a~~ five and ten-year periods ~~rolling basis~~:

- 1) A total annual return greater than the rate of inflation plus 6.0%, after fees and expenses.
- 2) To the extent an actively managed strategy is used, a risk-adjusted, excess annual return greater than 1.0%, after fees and expenses. Risk-adjusted, excess return is defined as a portfolio's actual return over and above that of the benchmark portfolio as predicted by the Capital Asset Pricing Model. (See Figure No. 1.) The Jensen measure is used to calculate the risk-adjusted return.

⁽¹⁾ The current endowment spending policy authorizes the University to make available 5.75% of the average market value of the endowment as calculated for the twenty quarters of the five calendar years prior to the beginning of the fiscal year in which the spending is expected to occur.

Figure No. 1
Illustrative Example



*The passive index portfolio will be composed of benchmark indices, for which passive index funds exist, and weighted to reflect the CIF's asset allocation. It should be noted, however, for certain asset classes like non-marketable private and absolute return investments for which passive index funds do not exist, well-established indices corresponding to marketable securities will be used.

Table No. 1 lists the benchmark indices and long-term performance goals for each major asset class. The long-term performance goal for each individual manager will be based on the asset class and investment style for which the manager was selected.

Table No. 1 Benchmarks & Long-Term Performance Goals		
Major Asset Class	Benchmark	Long-Term Performance Goals
U.S. Equity	Russell 3000	If passive, benchmark. If active, risk-adjusted excess return of 1.0% after fees
Developed Global ex U.S. Equity (includes emerging markets)	MSCI All-Country World ex-US Free MSCI EAFE	If passive, benchmark. If active, risk-adjusted excess return of 1.0% after fees
Emerging Markets Equity	MSCI Emerging Markets	If passive, benchmark. If active, risk-adjusted excess return of 1.0% after fees
Inflation Hedge- Marketable: Real Estate Natural Resources Diversified	NAREIT Wilshire 5000 Energy Index Relevant diversified benchmark Inflation Hedge Blended Benchmark (50% MSCI U.S. Natural Resources / 25% FTSE NAREIT Equity Index / 25% S&P GSCI)	If passive, benchmark. If active, risk-adjusted excess return of 1.0% after fees
Inflation Hedge- Non-marketable Private Investments (real estate & natural resources)	Vintage year median IRR for asset class	Meet or exceed benchmark
Non-Marketable Private Investments (includes distressed, private equity and venture capital)	Vintage year median IRR for asset class	Meet or exceed benchmark
Absolute Return-Marketable Alternatives	90-day T-Bill + 6% HRFI Fund of Funds Diversified Index	Meet or exceed benchmark
Fixed Income	Barclays Aggregate	If passive, benchmark. If active, risk-adjusted excess return of 0.50% after fees

ASSET ALLOCATION

Table No. 2 sets forth the policy targets and ranges for each major asset class:

Table No. 2 Asset Allocation			
Major Asset Class*	Target	Range	Rationale*
U.S. Equity	17.0%	12.0% - 23.0%	Maximize real returns
Developed Global ex U.S. Equity (includes emerging markets)	18.0 10.0%	12.0% - 23.0% 8.0% -	Maximize real returns & diversification

		14.0%	
<u>Emerging Markets Equity</u>	8.0%	4.0% - 12.0%	<u>Maximize real returns & diversification</u>
<u>Inflation Hedge (real estate & natural resources)</u>	10.0%	7.5% - 12.5%	Inflation hedge & diversification
<u>Non-Marketable Private Investments (includes distressed, private equity and venture capital)</u>	15.0%	7.0% - 20.0%	Higher returns than equities & diversification
<u>Absolute Return-Marketable Alternatives</u>	25.0%	20.0% - 30.0%	Low volatility & moderate correlation with equities
Fixed Income	15.0%	10.0% - 25.0%	Deflation hedge & diversification

* See detailed descriptions of each asset class listed below.

U.S. Equity. This asset class consists of marketable equity securities of primarily U.S.-based companies. Managers may hold equity securities of non-U.S.-based companies which are traded as American depository receipts (“ADR’s”) on U.S. stock exchanges. It is intended to be a long-term hedge against inflation and provide a real return of about 7%. Several sub-categories of this asset class include: large capitalization companies, small capitalization companies, value-style investing and growth-style investing. While the benchmark for this entire class is the Russell 3000 Index, individual managers may have specific benchmarks corresponding to their investment style and capitalization category.

Developed Global ex U.S. Equity. This asset class consists of marketable equity securities in developed countries outside the U.S. It is intended to provide long-term performance similar to U.S. equities, but will provide some diversification due to imperfect correlation. This class will be diversified geographically and will include emerging markets.

Emerging Markets Equity. This asset class consists of marketable equity securities in emerging markets. It is intended to provide long-term performance similar to U.S. equities, but will provide some diversification due to imperfect correlation. This class will be diversified geographically.

Inflation Hedge. The University will seek to reduce the volatility of the CIF and provide a hedge against sudden, unanticipated inflation by investing a portion of its available funds in real estate and natural resource investments, such as oil, gas, timber and minerals oriented investments. Risks related to the real estate investments will be minimized by diversifying through use of real estate investment pools or partnerships that are varied as to property type, location, investment life cycle and investment manager. This core real estate portfolio may be supplemented with less diversified specialty funds or direct investments. Risks related to natural resource investments will be controlled by diversifying among operators and acquisition prospects and by geography.

Non-Marketable Private Investments. The University will seek to enhance the total return of the CIF by investing a portion of its funds in non-marketable private investments, which include distressed, private equity and venture capital investments. These investments are illiquid and higher risk/return assets than marketable securities. Risk will be controlled by diversifying across a number of fund managers and by geographic focus, industry emphasis, financing stage and vintage year. This core non-marketable private investments portfolio may be supplemented with less diversified specialty funds or direct investments.

Absolute Return-Funds Marketable Alternatives. The University will seek equity-like returns while reducing the volatility of the CIF by investing a portion of its funds in absolute return strategies designed to achieve positive absolute returns with less correlation to broad market trends while employing risk management techniques intended to reduce downside potential, thereby creating a more defensive posture to the portfolio. Absolute return funds have been designed to seek an “absolute” return which is positive regardless of the overall direction of the markets. Managers employing “long/short” strategies invest primarily in equities and mitigate market risk by purchasing equity shares that are expected to appreciate in

~~value and selling short equity shares that are expected to decline in value taking both long and short positions in selected stocks or indexes.~~ Managers employing event-driven and arbitrage strategies seek to maximize returns by investing in publicly announced corporate transactions, such as mergers, tender offers, liquidations, bankruptcies and reorganizations or in arbitraging temporary discrepancies in securities pricing in the equity and fixed income markets. ~~Additional return is also sought through investment in distressed securities~~ Distressed security managers invest primarily in bonds and bank loans trading at a significant discount to par value as a result of the debtor's troubled financial condition.

Fixed Income. This asset class is intended to reduce the portfolio's exposure to market risk and provide a hedge against sudden, unanticipated deflation. Foreign currency bonds may be held to enhance total return and provide diversification.

INVESTMENT GUIDELINES

- 1) Investment guidelines are provided in Exhibit C.
- 2) Additional guidelines may be adopted by separate Board action. They will be communicated to the affected investment managers.

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Statement of Investment Objectives

Michigan State University's Pooled Cash Fund

Updated: (6/24/83, 2/3/89, 2/7/92, 6/10/94, 10/24/97, 12/8/00, 11/12/04, 12/5/08, 4/16/10)

INTRODUCTION

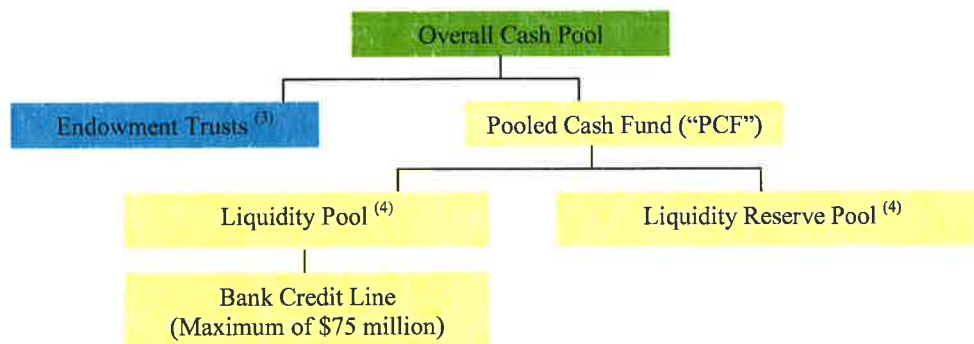
This statement sets forth the investment objectives of Michigan State University's Pooled Cash Fund ("PCF"), which is a subset of the University's overall cash pool. (See Figure No. 1.)

PCF ASSETS

The PCF has two components -- the Liquidity Pool and the Liquidity Reserve Pool. The Liquidity Pool shall be composed of short-term (less than one-year maturity) and intermediate-term (between one and three-year maturity, on average) commercially available funds and up to a \$75 million bank line of credit or its equivalent. (See Figure No. 1.) These funds shall be available on a daily basis. The target amount for the Liquidity Pool shall be 30 days of operating cash ⁽¹⁾ (based on a 12-month average).

The target amount for the Liquidity Reserve Pool shall be 45 days of operating cash ⁽¹⁾ (based on a 12-month average). ⁽²⁾ The minimum amount of the combined Liquidity Pool and Liquidity Reserve Pool shall be the sum of (1) two times the Liquidity Pool's maximum historical net daily cash outflow, (2) three months of State appropriations, calculated using the sum of the University General Fund, Michigan Agricultural Experiment Station and MSU Extension appropriations from the State included in the University's Board-approved budget guidelines for that fiscal year, and (3) one-half of the total amount of tuition and fees collected for the most recently completed fall semester.

Figure No. 1
Structure of MSU's Overall Cash Pool



-
- (1) Operating cash equals operating expenses less depreciation as reported in MSU's Audited Financial Statements.
 (2) See also footnote 1 to Table No. 1 in the event the University employs a bank line of credit in the Liquidity Pool.
 (3) Overall cash pool amounts in excess of the PCF targeted amount. Invested on a long-term basis with other Institutional Funds in the University's Common Investment Fund (CIF).
 (4) The minimum amount of the combined Liquidity Pool and Liquidity Reserve Pool shall be the sum of (1) two times the Liquidity Pool's maximum historical net daily cash outflow, (2) three months of State appropriations, calculated using the sum of the University General Fund, Michigan Agricultural Experiment Station and MSU Extension appropriations from the State included in the University's Board-approved budget guidelines for that fiscal year, and (3) one-half of the total amount of tuition and fees collected for the most recently completed fall semester.

Table No. 1 summarizes the target allocations for each component of the PCF.

Table No. 1 PCF Composition		
	Target Allocation	
	Minimum Amount	Target Amount
Liquidity Pool	The sum of (1) two times the Liquidity Pool's maximum historical net daily cash outflow, (2) three months of State appropriations, calculated using the sum of the University General Fund, Michigan Agricultural Experiment Station and MSU Extension appropriations from the State included in the University's Board-approved budget guidelines for that fiscal year, and (3) one-half of the total amount of tuition and fees collected for the most recently completed fall semester.	30 days of operating cash ⁽¹⁾
Liquidity Reserve Pool		45 days of operating cash

1. Up to \$75 million of this amount may be represented by a bank line of credit or its equivalent. Any Liquidity Pool target amount for which the bank line of credit would substitute would be retained in the PCF, thus increasing the Liquidity Reserve Pool target amount by the amount of the bank line of credit.

INVESTMENT OBJECTIVES

The investment objectives for each component of the PCF are:

Liquidity Pool. The primary objective is to provide a liquid source of funds to meet the University's daily cash requirements. A secondary objective is to yield a competitive investment return while bearing minimal principal risk.

Liquidity Reserve Pool. The primary objective is to provide a source of funds in the event the Liquidity Pool is insufficient to meet the University's cash needs. A secondary objective is to earn a higher investment return than the Liquidity Pool. Because of the very low likelihood that these funds would be needed to meet cash flow requirements, a greater degree of principal risk is acceptable in order to obtain a higher return.

SHORT-TERM PERFORMANCE GOALS

Short-term performance goals for each component of the PCF, and for individual managers, will be to outperform (if actively managed) net of fees appropriate market and peer benchmarks over rolling one, three and five-year periods. Furthermore, adherence to the investment style for which individual managers were selected will also be monitored.

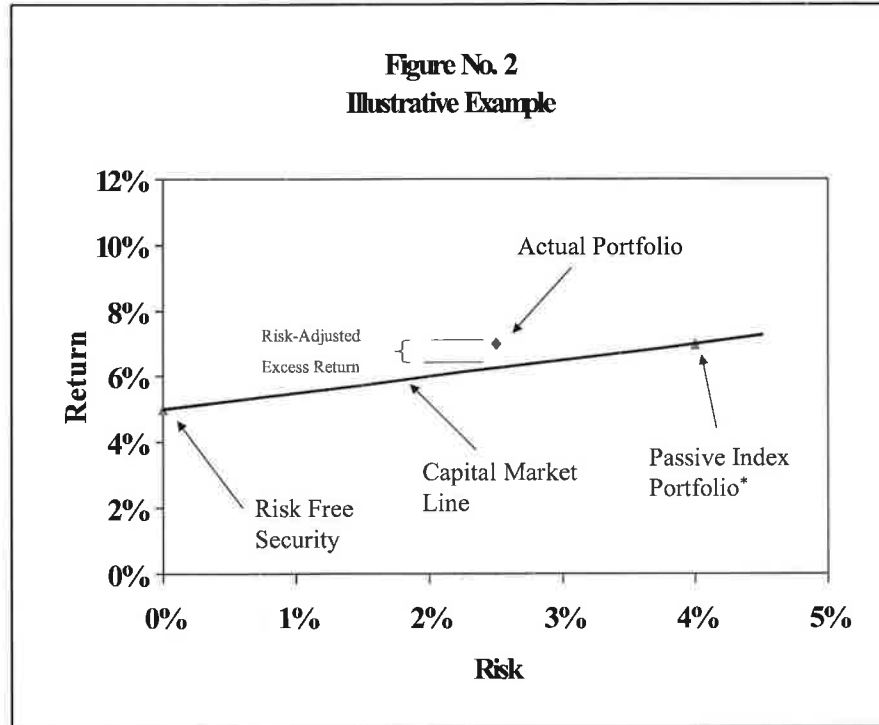
LONG-TERM PERFORMANCE GOALS

The following long-term performance goals of the PCF are expected to be achieved over a five-year period, measured on a five-year rolling basis.

- 1) A total annual return net of fees greater than the rate of inflation
 - a. plus 1.5% for the Liquidity Pool, and
 - b. plus 3.0% for the Liquidity Reserve Pool.

- 2) To the extent an actively managed strategy is used, a risk-adjusted, excess annual return net of fees greater than
- 0.25% for the Liquidity Pool, and
 - 0.50% for the Liquidity Reserve Pool.

Risk-adjusted, excess return is defined as a portfolio's actual return less the capital market line return corresponding to the same risk level. (See Figure No. 2.)



*The passive index portfolio would be the appropriate fixed income benchmark index.

Table No. 2 lists the benchmark indices and long-term performance goals for each PCF component. Similarly, the long-term performance goal for each individual manager will be for it to contribute a risk-adjusted return corresponding to its respective component of the PCF.

Table No. 2 Benchmarks & Long-Term Performance Goals		
PCF Component	Benchmark	Long-Term Performance Goals
Liquidity Pool	Merrill Lynch 1-3 year Treasury Index	If passive, benchmark. If active, risk-adjusted excess return of 0.25% after fees
Liquidity Reserve Pool	Barclays Aggregate	If passive, benchmark. If active, risk-adjusted excess return of 0.50% after fees

INVESTMENT GUIDELINES

- 1) Liquidity Pool - Investment guidelines are provided in Exhibit C.
- 2) Liquidity Reserve Pool -- Investment guidelines are provided in Exhibit C.
- 3) Additional guidelines may be adopted by separate Board action. They will be communicated to the affected investment managers.

Investment Guidelines

Exhibit C

<u>Liquidity Pool</u>		<u>Liquidity Reserve Pool</u>		<u>Common Investment Fund</u>	
Separately Managed Funds					
Permitted Securities					
Marketable fixed income securities such as: U.S. government and agency issues; corporate debt; certificates of deposit; time deposits; repurchase and reverse repurchase agreements; mortgage-backed; asset-backed; securities issued under Rule 144A; dollar denominated U.S. and foreign issuers; derivatives for hedging purposes and creating portfolio risk profiles that could otherwise have been achieved using fixed income instruments authorized in these guidelines; commingled and global funds that invest in securities authorized in these guidelines.		Marketable fixed income securities such as: U.S. government and agency issues; U.S and non-U.S. corporate debt; certificates of deposit; time deposits; repurchase and reverse repurchase agreements; inflation indexed bonds; mortgage-backed; asset-backed; securities issued under Rule 144A; obligations of state and local governments and non-U.S. government and agency issues; derivatives for hedging purposes and creating risk portfolio profiles that could otherwise have been achieved using fixed income instruments authorized in these guidelines.		Marketable securities. Non-marketable securities may be held in the Inflation Hedge, Non-Marketable Investments and Absolute Return asset classes.	
Diversification:					
No more than 15% of the portfolio's market value may be invested in dollar denominated foreign securities of developed countries. No more than 10% of the portfolio's market value will be invested in (1) Rule 144A securities and or not more than 10% will be invested in (2) securities of any single issuer, except those which are obligations of, or fully guaranteed as to both principal and interest by, the U.S. government or its agencies.		No more than 10% of the portfolio's market value may be invested in securities below BBB. No more than 30% of the portfolio's market value may be invested in securities denominated in foreign currencies. No more than 10% of the portfolio's market value will be invested in securities of any single issuer, except those which are obligations of, or fully guaranteed as to both principal and interest by, the U.S. government or its agencies.		In accordance with asset allocation guidelines. Individual investment managers' guidelines at time of manager appointment or as later amended by agreement of both parties.	
Fixed Income:					
Minimum Quality:					
Portfolio:					
AA		AA		AA	
Security (at purchase):					
Short-term		Long-term		Short-term	
A1/P1		BBB		A2/P2	
				BB	
Maturity/Duration:					
10 year maximum maturity of any security.		No maximum maturity of any security.		No maximum maturity of any security.	
3 year maximum average duration of the portfolio.		6 year maximum average duration of the portfolio.		6 year maximum average duration of the portfolio.	
Commingled Funds: Funds' investment guidelines at time of manager appointment <u>or as later amended</u> prevail.					

Attachment A

STIPULATIONS FOR THE SELECTION AND PARTICIPATION OF OUTSIDE MEMBERS OF THE INVESTMENT ADVISORY SUBCOMMITTEE

The Investment Advisory Subcommittee is a subcommittee of the Finance Committee. Its role is to aid the Finance Committee in the review and evaluation of investment opportunities and strategies.

The Investment Advisory Subcommittee includes select individuals who are not members of the Board of Trustees. The following stipulations apply to the participation of those outside members.

1. The Investment Advisory Subcommittee will have three outside members.
2. ~~Each time the Investment Advisory Subcommittee has a vacancy for an outside member, t~~The MSU Foundation ~~Board~~ will nominate ~~at least two~~ individuals to fill ~~that vacancy~~ies for outside members of the Investment Advisory Subcommittee. The Board of Trustees, in consultation with the President and the Vice President for Finance and Operations, will select the new outside members from those nominees.
3. Outside members will serve staggered three-year terms and may be re-appointed once.
4. Key qualifications for outside members include high ethical standards, wide-ranging institutional investment experience, ability to constructively debate issues, skill at asking pertinent questions to independently challenge investment opportunities, and established and beneficial affiliation with MSU.
5. Outside members will be required to comply with Board-approved conflict of interest standards for external members.
6. Outside members are expected to regularly attend Investment Advisory Subcommittee meetings in person or, when necessary, electronically.

Proposed Changes in Bylaws for Academic Governance

Current Language with Proposed Amendments

Delete the words “on a regular basis” in 1.1.2.1 and 1.1.2.2 and to read as follows:

1.1.2.1. The voting faculty in the election of University-level councils and committees shall be all regular faculty, health professions faculty, and NSCL faculty. Voting faculty also includes full-time fixed-term faculty who have served at least three consecutive years and who are engaged in the academic activities of the University. ~~on a regular basis.~~

1.1.2.2. The voting faculty in the election of department, school, or college councils and committees and in elections pertaining to department, school, or college policies and decisions shall include all regular faculty engaged in the academic activities of that unit ~~on a regular basis~~ and may, if so provided by unit bylaws, also include health professions faculty, NSCL faculty, fixed-term faculty, honorary faculty, specialists, lecturers, research associates, assistant instructors, and/or adjunct faculty.

Proposed Language

1.1.2.1. The voting faculty in the election of University-level councils and committees shall be all regular faculty, health professions faculty, and NSCL faculty. Voting faculty also includes full-time fixed-term faculty who have served at least three consecutive years and who are engaged in the academic activities of the University.

1.1.2.2. The voting faculty in the election of department, school, or college councils and committees and in elections pertaining to department, school, or college policies and decisions shall include all regular faculty engaged in the academic activities of that unit and may, if so provided by unit bylaws, also include health professions faculty, NSCL faculty, fixed-term faculty, honorary faculty, specialists, lecturers, research associates, assistant instructors, and/or adjunct faculty.

RESEARCH CONTRACT TERM SHEET

Party: Technova Corporation

Contracts: Sponsored research agreement
“Development of an Inexpensive, Rapid and Highly Sensitive Perchlorate Nanobiosensor”

Term: From the effective date of the agreement to April 15, 2015

Payment Terms: \$100,000

Services Provided: By MSU to Technova: Research and development of an inexpensive, rapid and highly sensitive perchlorate nanobiosensor

By Technova to MSU: none

Use of University Facilities/Personnel:
Use of MSU facilities/personnel by Technova provided at prevailing rates for industrial research

Organization Type: Incorporated Michigan-based small business

Personnel Interest: Dr. Parviz Soroushian, a Professor in the Department of Civil and Environmental Engineering, and his family own or have options to buy an ownership interest of more than 1% of the company. Dr. Soroushian is also the president of Technova Corporation.

CONTRACT TERM SHEET

Party: BoroPharm, Inc.

Project Description: Use of pilot plant infrastructure plus operational and analytical staff at the MSU facility in Holland, MI for production of chemicals.

Term: Two years, unless terminated at an earlier date at the discretion of either party.

Contractual Terms: BoroPharm, Inc., will be charged by project for mutually agreed supplies, personnel services, and equipment use as specified on the attached standard rate sheet, with total expenses under the contract not to exceed \$200,000 during the Term. BoroPharm, Inc. is responsible for arranging and paying for all raw materials, for the shipping of all products, and for disposal of all wastes generated. The company is responsible for complying with all applicable laws and regulations, as well as all MSU policies, and for cooperating fully with the MSU Office of Radiation, Chemical, and Biological Safety. The company assumes all risks of failed production runs not resulting from demonstrable MSU error or negligence. No intellectual property rights of either party are modified under this agreement.

Services Provided: By MSU, to BoroPharm, Inc.:
Pilot plant scale-up of chemical syntheses, with associated analytical services, as ordered.
By BoroPharm, Inc., to MSU:
None under contemplated agreement.

Use of University Facilities/Personnel:
MSU personnel will execute the pilot plant synthesis runs in the MSU facility in Holland, MI, and provide any agreed supplemental analytical services.

Organization Type: BoroPharm, Inc., is a Delaware corporation with offices in Novi, MI.

Personnel Interest: Dr. Robert Maleczka, Professor and Chairperson in the Department of Chemistry, and Dr. Milton Smith, Associate Professor in the Department of Chemistry, and their immediate families, each own or have an option to buy an ownership

interest of more than 1% of the company. Drs. Maleczka and Smith are also officers of BoroPharm, Inc.