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

April 16, 2010

President Simon called the meeting of the Board of Trustees to order at 9:35 a.m. in the Board Room.

Trustees present: Dianne Byrum, Joel Ferguson, Melanie Foster, Colleen McNamara, Donald W. Nugent, Faylene Owen, and Diann Woodard.

Trustee absent: George Perles

University officers present: President Simon, Provost Wilcox, Vice President Poston, Secretary Beekman, Vice President and General Counsel Noto, Vice Presidents Denbow, Gray, Groves, and June, and Senior Advisor and Director Granberry Russell. Faculty liaisons present: William Corser, Harold Hughes, Mark Largent, and Deborah Moriarty. Student liaisons present: Kristy Currier, Kyle Dysarz, Emeka Igwe, and Rachel Naegele.

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

- 1. On a motion by Trustee Nugent, supported by Trustee Byrum, the **BOARD VOTED to approve** the agenda.
- On a motion by Trustee Nugent, supported by Trustee Woodard, the BOARD VOTED to approve the minutes of the Board meeting of February 12, 2010.
- 3. Board of Trustees Award Presentations

Trustees Ferguson and Foster presented the Board of Trustees Award to the following students:

- 1. Shruti Agrawal—Major: Accounting; Member of the Honors College; 4.0 GPA
- Antonia Aladjova—Major: Accounting; Member of the Honors College; 4.0 GPA

- Genevieve Andress—Major: Interdisciplinary Studies in Social Science-Environmental Policy; Member of the Honors College; 4.0 GPA
- 4. Justin Biega—Major: Chemical Engineering; Member of the Honors College; 4.0 GPA
- 5. Laura DeBruin—Major: Animal Science; Member of the Honors College; 4.0 GPA
- 6. Lindsey Diggelmann—Major: Civil Engineering; Member of the Honors College; 4.0 GPA
- 7. Stacie Dodgson—Major: Genomics and Molecular Genetics: Member of the Honors College; 4.0 GPA
- Laura Freitag—Major: Special Education-Learning Disabilities; 4.0 GPA
- 9. Matthew Guibord—Major: Computer Engineering; 4.0 GPA
- 10. Jeffrey Holycross—Major: Finance; Member of the Honors College; 4.0 GPA
- 11. Carrie Kubiak—Major: Nutritional Sciences; Member of the Honors College; 4.0 GPA
- Kirsten Kumpar—Major: French; Member of the Honors College;
 4.0 GPA
- Joseph Orsini—Major: Economics; Member of the Honors College;
 4.0 GPA
- 14. Daniel Panyard-Major: Physiology; Member of the Honors: College; 4.0 GPA
- 15. Kendell Pawelec—Major: Materials Science and Engineering; Member of the Honors College; 4.0 GPA
- 16. Arslan Qaiser-Major: Electrical Engineering; 4.0 GPA
- Mikhail Revyakin—Major: Public Administration and Public Policy;
 4.0 GPA
- 18. Matthew Strand—Major: Psychology; 4.0 GPA

- Gabrielle Tepp—Major: Physics; Member of the Honors College;
 4.0 GPA
- 20. Matthew Weir—Major: Mechanical Engineering; 4.0 GPA
- 21. Hillary Woodworth—Major: Nutritional Sciences; Member of the Honors College; 4.0 GPA
- 22. Haoli Xue---Major: Accounting; Member of the Honors College; 4.0 GPA
- 23. Lauren Zedan—Major: Biological Science; Member of the Honors College; 4.0 GPA
- 4. President's Report

President Simon presented the following report to the Board.

A. Commencement

Joseph P. Kennedy II, former U.S. Congressman and founder of Citizens Energy Corporation, will be presented with an Honorary Degree of Laws degree and be the featured speaker during the spring undergraduate convocation. Congressman Kennedy joins MSU for its first green commencement, highlighting Michigan State's commitment to a sustainable environment. Examples of this focus on sustainability include gowns and diplomas that are made of recycled materials.

Daniel Nocera, the Henry Dryfus Professor of Energy at Massachusetts Institute of Technology, will be presented with an Honorary Doctorate of Science degree and will be the featured speaker at the advanced degree convocation. Emil Boc, Prime Minister of the Government of Romania, will be presented with an Honorary Doctor of Laws degree during the advanced degree ceremony.

B. Goldwater Scholar, Gates-Cambridge Scholar and Debate Team

Cynthia Jackson-Elmoore, Dean of the Honors College, introduced Goldwater Scholar Tasneem Pierce and Gates-Cambridge Scholar Kendell Pawelec. Dean Jackson-Elmoore also introduced 2010 National Champion Debate Team members Eric Lanning and Carly Wunderlich.

C. Undergraduate Research to be on Display at MSU

The annual University Undergraduate Research and Arts Forum will be held April 16 at the MSU Union. Research on topics ranging from tropical diseases to spinal cord injuries to the life of an 18th century violin maker—all done by MSU undergraduate students—will be on display.

D. MSU's College of Osteopathic Medicine Marks New Campus in Macomb County

MSU's College of Osteopathic Medicine celebrated the opening of its new campus at Macomb Community College's University Center on February 22. The opening of a new campus strengthens the University's partnerships in southeast Michigan.

E. Year-Round Harvesting in MSU Hoop House Feeds Hungry Students

Students and others working at MSU's Student Organic Farm are busy harvesting everything from potatoes to kale—much of which will be used to feed hungry students. Over 80 different crops are grown year round in the greenhouses. The hoop houses not only promote sustainability through the use of solar energy, but also by providing organically and locally grown food.

F. Student Liaison Transitions

The close of the academic year marks a time of transition for the student liaisons to the Board of Trustees. On behalf of the MSU community, President Simon thanked Council of Graduate Students (COGS) representative Rachel Naegele for her service as a student liaison and welcomed Stefan Fletcher as the new COGS representative.

G. ASMSU Presentation

Ms. Kristy Currier and Mr. Kyle Dysarz, student liaisons to the Board of Trustees, gave a presentation outlining ASMSU activities for 2009-10. (Appendix A)

H. Stella Cash resolution

Trustee Foster presented a Board of Trustees resolution to Ms. Stella Cash honoring her for her service to MSU. (Appendix B)

- 5. There was no Public Participation on Issues Germane to the Agenda.
- 6. Personnel Actions

Provost Kim Wilcox presented the following personnel actions:

Collier, Kathy S., AN—Professor, College of Human Medicine West Michigan; Department of Medicine, \$175,000, with Tenure, effective July 1, 2010.

Collier, Timothy J., AN—Professor, Edwin A. Brophy Endowed Chair in Central Nervous System Disorders, College of Human Medicine West Medicine; Department of Medicine, \$205,000, with Tenure, effective July 1, 2010.

Trustee Nugent **moved to approve** the recommendations, with support from Trustee Foster.

THE BOARD VOTED to approve the appointments.

7. Gifts, Grants, and Contracts

Vice President Gray presented the Gifts, Grants, and Contracts Report for the period January 30, 2010 through April 2, 2010. The total value for this period is \$136,897,689.

Trustee Nugent moved to approve the report, supported by Trustee Owen.

THE BOARD VOTED to approve the Gifts, Grants, and Contracts Report.

Vice President Gray introduced Dr. William Schmidt, University Distinguished Professor in the College of Education. Dr. Schmidt made a presentation to the Board on his research on mathematics education in secondary schools in the United States. (Appendix C)

8. Finance Committee

Trustee Owen presented the Trustee Finance Committee Report and recommendations.

A. 2010-11 Housing and Dining Rate Recommendations

It was recommended that the Board of Trustees adopt the basic residence hall room and board rate of \$7,770 for freshman, transfer

and returning students who select the silver unlimited meal plan for the 2010-11 academic year.

It was recommended that the Board of Trustees adopt University apartment rates of \$650 per month for a one-bedroom apartment, \$774 per month for a two-bedroom apartment, and the rate of \$683 per month/per bedroom for a four-bedroom apartment in University Village, effective August 1, 2010.

Trustee Owen **moved to approve** the recommended actions, with support from Trustee Byrum.

THE BOARD VOTED to approve the recommended actions.

B. Purchase of the Huber Property in Tuscola County, Michigan for the Saginaw Valley Research and Extension Center and Noel W. Stuckman Gift of Property in Bingham Township, Michigan

It was recommended that the Board of Trustees authorize the Administration to purchase approximately 62 acres, located in Tuscola County, Michigan, from the Huber family, for \$285,000, and upon such other terms and conditions as may be acceptable to the Vice President for Finance and Operations.

It was recommended that the Board of Trustees authorize the Administration to accept a charitable gift of approximately 40 acres of land from the Noel W. Stuckman Trust, through the Michigan State University Foundation.

Trustee Owen **moved to approve** the recommended actions, with support from Trustee Nugent.

THE BOARD VOTED to approve the recommended actions.

C. Annual Endowment Spending Policy Review and the Uniform Prudent Management of Institutional Funds Act (UPMIFA); Revised Investment Policy; Endowment Trusts

It was recommended that the Board of Trustees adopt the resolutions attached. (Appendices D,E,F)

Trustee Owen **moved to approve** the recommended actions, as a group, with support from Trustee Nugent.

THE BOARD VOTED to approve the recommended actions.

D. New Investment Managers—Chilton Investment Company, LLC; J.H. Whitney Capital Partners, LLC; Southern Cross Management

It was recommended that the Board of Trustees authorize the Administration to select Chilton Investment Company, LLC as an investment manager.

It was recommended that the Board of Trustees authorize the Administration to select J.H. Whitney Capital Partners, LLC as an investment manager.

It was recommended that the Board of Trustees authorize the Administration to select Southern Cross Management as an investment manager.

Trustee Owen **moved to approve** the recommended actions, as a group, with support from Trustee Ferguson.

THE BOARD VOTED to approve the recommended actions.

E. Authorization to Plan—Cherry Lane and Faculty Bricks Apartment Demolition

It was recommended that the Board of Trustees authorize the Administration to plan for the project entitled Cherry Lane and Faculty Bricks Apartments Demolition.

Trustee Owen **moved to approve** the recommended actions, with support from Trustee Byrum.

THE BOARD VOTED to approve the recommended actions.

F. Project Approval—Authorization to Proceed—Facility for Rare Isotope Beams—Utility Relocation—Phase I and Bott Building for Nursing Education and Research

It was recommended that the Board of Trustees authorize the Administration to proceed with the project entitled Facility for Rare Isotope Beams—Utility Relocation—Phase I, and to approve a budget of \$6,300,000.

It was recommended that the Board of Trustees authorize the Administration to proceed with the project entitled Bott Building for Nursing Education and Research, and to approve a budget of \$17,670,422. Trustee Owen **moved to approve** the recommended actions, with support from Trustee Nugent.

THE BOARD VOTED to approve the recommended actions.

G. Bid and Contract Award—Administration Building—Ground Floor Asbestos Abatement and Old College Field Renovations—Phase VI Softball Grandstand and Press Box

It was recommended that the Board authorize the Administration to award a contract in the amount of \$193,267 to Certified Abatement Services, Inc., a contract in the amount of \$105,385 to WorkSquared, and a contract in the amount of \$58,400 to William Reichenbach Company, for the project entitled Administration Building—Ground Floor Asbestos Abatement.

It was recommended that the Board of Trustees authorize the Administration to award a contract in the amount of \$1,498,000 to Kincaid Henry Building Group, Inc. and that the budget be increased from \$1,900,000 to \$2,050,000 for the project entitled Old College Field Renovations—Phase VI Softball Grandstand and Press Box.

Trustee Owen **moved to approve** the recommended actions, with support from Trustee Byrum.

THE BOARD VOTED to approve the recommended actions.

9. Policy Committee

Trustee McNamara presented the Trustee Policy Committee Report and recommendations.

A. Trustee Emeritus Policy

It was recommended that the Board of Trustees approve the proposed amendments to Board Policy 01-01-08, pertaining to Trustee Emeriti and the related authorization and directions set forth in the resolution. (Appendix G)

Trustee McNamara **moved to approve** the recommended actions, with support from Trustee Ferguson.

THE BOARD VOTED to approve the recommended actions.

B. Approval of Contract Terms

It was recommended that the Board of Trustees approve the purchase of a power treatment table from *Ludington Urology*, *PLLC*, consistent with the Equipment Purchase Term Sheet presented to the Board. (Appendix H)

It was recommended that the Board of Trustees approve the execution of a professional services contract with *Spectra Data and Research, Inc.*, consistent with earlier public notice given at a Board meeting and with the Professional Services Contract Term Sheet presented to the Board. (Appendix I)

It was recommended that the Board of Trustees approve the execution of an amendment to a license agreement with *GEMA Diagnostics, Inc.*, consistent with earlier public notice given at a Board meeting and with the Amended License Agreement Term Sheet presented to the Board. (Appendix J)

It was recommended that the Board of Trustees approve the execution of a restated and amended license agreement with XG *Sciences, Inc.*, consistent with earlier public notice given at a Board meeting and with the Restated and Amended License Agreement Term Sheet presented to the Board. (Appendix K)

Trustee McNamara **moved to approve** the recommended actions, with support from Trustee Ferguson.

THE BOARD VOTED to approve the recommended actions.

C. Notice of Intent to Negotiate Publishing Contracts

Pursuant to State law, Trustee McNamara gave public of the University's intent to negotiate a contract with Dr. Eric Freedman regarding a publication by the MSU Press. Dr. Freedman is a faculty member in the School of Journalism and an assistant dean in International Studies and Programs.

Pursuant to State law, Trustee McNamara gave public notice of the University's intent to negotiate a contract with Dr. Susan Bandes regarding a publication by the MSU Press. Dr. Bandes is a faculty member in the Department of Art and Art History and the Director of the Kresge Art Museum.

Pursuant to State law, Trustee McNamara gave public notice of the University's intent to negotiate a contract with Dr. April Kingsley

regarding a publication by the MSU Press. Dr. Kingsley is an academic specialist in the Kresge Art Museum.

Pursuant to State law, Trustee McNamara gave public notice of the University's intent to negotiate a contract with Dr. David Wiley and Dr. Robert Glew regarding a publication by the MSU Press. Dr. Wiley is a faculty member in the Department of Sociology. Dr. Glew is a faculty member in the Department of Anthropology and the director of the Center for Advanced Study of International Development.

D. Notice of Intent to Negotiate a Contract with ZuvaChem, Inc.

Pursuant to State law, Trustee McNamara gave public notice of the University's intent to negotiate contracts with *ZuvaChem, Inc.*, a Delaware corporation with its principal place of business in Baltimore, Maryland. Dr. Thomas Sharkey, a Professor in the Department of Biochemistry and Molecular Biology, and his immediate family hold an ownership interest which exceeds one percent of the company.

10. Audit Committee

Trustee Nugent presented the Trustee Audit Committee Report.

Representatives of Plante and Moran reviewed their audit strategy with the Audit Committee for the 2009-10 fiscal year. Discussions included a review of the audit scope, upcoming audit issues, required disclosures, and the audit timeline.

Vice President Ian Gray, Assistant Vice President of Regulatory Affairs JR Haywood and Kevin Eisenbeis, Director of Environmental Health and Safety, presented an environmental health and safety program overview to the Audit Committee.

Mr. Eisenbeis' unit is primarily responsible for the management and oversight of both research-related and operations-related environmental health and safety programs and compliance. This unit is also responsible for the training of over 10,000 employees and students each year. Environmental health and safety includes the following areas of emphasis: radiation safety, chemical hygiene, bio-safety, industrial and occupational safety, and environmental management and compliance.

Environmental Health and Safety uses a proactive, performance-driven culture which exceeds the regulatory minimums. This unit has been successful in managing risk proactively as research grows, facilities are added, and new regulations emerge.

11. Shaping the Future Update

President Simon said that the budget guidelines would be reviewed at the June Board meeting. The State of Michigan has yet to resolve its budget for the 2010-11 fiscal year.

Provost Wilcox acknowledged the Board of Trustees for their wisdom to focus on budget planning guidelines over two years. This longer term planning process has allowed MSU to give careful consideration to adjustments that will need to be made beyond the current fiscal year. Academic units are currently working toward an average six percent reduction in operating budgets.

Provost Wilcox said that a dedicated group of people have been working on the neighborhood concept. This concept will utilize the residence hall system as a platform for student support systems with the objective of better supporting students where they live. A draft plan will be presented to campus in the coming weeks. The concept will be tested as a pilot project in Hubbard Hall during fall semester 2010.

Provost Wilcox stated that 33 degree programs and 13 concentrations, specializations, and minors have been recommended for discontinuance. A moratorium on admissions has been placed on about two-thirds of those. Once a moratorium is in place, a series of discussions take place regarding the appropriateness of discontinuing those programs.

12. Trustee Comments

Trustee Ferguson congratulated the Board of Trustees Award recipients. He thanked Dr. Gray for the outstanding research presentations and indicated that they are a highlight of the Board meetings.

Trustee Nugent noted that the groundbreaking for the Plant Sciences addition would take place at 2 p.m. He stated that he was looking forward to the upcoming commencements.

Trustee Byrum congratulated the Board of Trustees Award recipients and wished them well with their future endeavors. She thanked Mark Largent, faculty liaison to the Board of Trustees, for his service.

Trustee Owen thanked student liaisons Kristy Currier and Kyle Dysarz for the ASMSU presentation.

Trustee Woodard thanked the student liaisons for their service to the Board.

- 13. Public Participation on Other Issues
 - A. Deaf Education/American Sign Language

Ms. Celeste Johnson, community member, said that the closing of the Deaf Education training program was made public in 2009; however, there was no announcement of the closing of the American Sign Language program. Ms. Johnson said that there is great support in the community for the program.

B. Deaf Education/American Sign Language

Ms. Sheryl Emery, community member, said she is a successful deaf woman due to the quality teachers that she had as a child. Ms. Emery stated that she is a mother of three deaf children and that oral programs failed all three of her children. Deaf education, with the choice to communicate in the manner each student prefers, allows students to excel and grow.

C. Shaping the Future

Mr. Dedrick Cotton, Vice President of the student group Successful Black Men, said that the purpose of the group was to promote the graduation of black men and to encourage their success both academically and personally.

D. Shaping the Future

Mr. Paris Wilson, President of the student group Successful Black Men, said that the group strives to become the primary resource for African American men at MSU, supporting their success in college and their future endeavors. Mr. Wilson said the goal of the group is to develop a better mindset among students, to increase the retention rate, and to have a positive impact on the MSU community by creating a culture of goal oriented individuals focused on success. Mr. Wilson said it is important for MSU to provide the best education possible and to remain one of the top public universities.

E. Shaping the Future

Mr. DeTwan Chapman, Successful Black Men member, said that he is concerned about where MSU budget cuts will be made. He said that his involvement with campus organizations such as Black Student Alliance, Black Caucus, and the Office of Cultural and Academic Transitions helped him to develop as a student. Mr. Chapman hopes that programs such as these will not be discontinued due to the difficult economic conditions.

14. Request to Adjourn

On a motion by Trustee Ferguson, supported by Trustee Nugent, THE BOARD VOTED to adjourn at 11:30 a.m.

Respectfully submitted,

Allona

William R. Beekman Secretary of the Board of Trustees













Academic Governance Involvement

- Seats on five of seven Standing Committees
 - UCAG 5 seats of 10 total
 - UCAP 4 seats of 24 total
 - UCC 5 seats of 25 total
 - UCFT 2 seats of 21 total
 - UCSA 2 AA seats, 3 SA seats of 11 total
- ✤ 8 of 85 voting seats on Advisory Committees
- Variety of other Board and Administration Advisory Committees

Funding Board

✤ 2009/2010

- Allocated \$180,487.70 to 55 different Registered Student organizations
- Ex. African Student Union, MSU Crew Club, Underwater Hockey, MSU Solar Car Racing Team, and MSU Breakdance Club
- 2008/2009
 - Allocated \$194,625.40 to 59 RSOs
 - Ex. MSU Forestry Club, MSU Kendo Club, Minorities in Agriculture and Natural Resources Association, Society of Automotive Engineers Formula Racing Team, Multicultural Business Students
- 2007/2008
 - Ailocated \$188,395.39 to 59 RSOs
 - Ex. National Association of Black Engineers, GLBT Safe Schools Group, MSU Gospel Chorale, MSU Mock Trial Association, MSU Krav Maga, Finance Association, Jewish Women's Forum, Spartan Christian Fellowship, Vietnamese Student Association.

Grand Total: \$563,508.49 given to 173 different Registered Student Groups

Programming Board

2009/2010

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- Allocated approximately \$193,400 to 14 separate Activity Departments Student Groups include: ISA, ACS, JSU, POP Entertainment
- Events included "Spartan Leadership", "Arab Awareness Week", " Israel Festival", and multiple small-scale concerts with various local and national artists
- 2008/2009
 - Allocated approximately \$174,226.68 to separate activity departments
 - Student Groups include: CRU, Great Issues, Women's Council, CIC
 - Events included "Latin Explosion", "Lost Films" event, and the "Walker Lecture"

2007/2008

- Allocated \$168,629.35 to separate activity departments
- Student Groups include: BSA, Alliance, NAISO
- Events included "Black Power Rally", "Merging Identities", and (NAISO's) "Powwow of Love"

Grand Total: \$536,256.03 toward diverse student programs



Student Legal Services

- Our staff is comprised of a Student Director, an executive secretary, three full-time attorneys, and 1-2 law clerks.
- Office offers internship opportunities for MSU Law students, and a clerical work study position for one undergraduate student.
- Legal Services assist student with the following issues: Misdemeanor, Landlord-Tenant Issues, Tenant-Tenant Issues, Contracts, Small Claims, and No-Fault cases, and other personal legal counsel.
- Our legal team also does legal education workshops and speaking engagements for student groups and communities (e.g. RSOs, torornies & fraternities, etc).
- Provide legal representation and counsel for both ASMSU AND COGS

\$ 2009/Present \$ 1,673 student visits \$ 2008/2009/ \$ 1,995 students visits \$ 2007/2008 \$ 2,234 student visits Grand Total: 5,922 Students Berastited over the last three years

STUDENT DEFENDER PROGRAM

Assist and advise undergraduate and graduate students involved in intra-university disputes

Assist students in university hearings & administrative meetings

Help prepare students for case

nform students of their rights & responsibilities

Answer questions about the structure and rocedures of the MSU judicial system, and Iniversity rules, regulations, and policies



- Represent our student voices to legislators in Washington D.C., Lansing, and East Lansing
- Have been advocating for:
 - An increase in Federal Pell Grants and other Financial Aid
 - Michigan Medical Amnesty Legislation
 - A stronger Student/University/East Lansing relationship





Scholarships

- Each year ASMSU contributes to the RESPECT scholarship to assist students in financial need stay in school
 - Since 2002 ASMSU has contributed a total of \$200,500 of Scholarships
- This year ASMSU allocated \$66,000 to establish both an endowment and expendable scholarship
 - ASMSU's Scholarship for Student Leaders
 - Seven \$3,000 scholarships awarded next year
 - · Eight \$3,000 scholarships awarded the following year
 - Matching Spartan Challenge Endowment
 - Endowment established at \$30,000

Readership Program

- Dates: April 6, 2009 through May 5, 2009 9 50, 340 newspapers picked up (average of 2, 517/per day)
- 2009-2010 One Year Program September: 30,366 papers October: 46,823 papers Møvember: 34,482 papers December: 20,231 papers Sa suary: 31,362 papers
 - February: 43,328 papers

Grand Total of 206,592 papers (avg. of 34,432 papers/month

- All papers not picked up are NOT charged to students and taken to the MSU Recycling
- ✤ Papers Provided: USA Today, New York Times. Detroit Free Press. and Financial Times



Serving Michigan State Undergraduate Students Since 1965

YOUR VOICE

RESOLUTION HONORING STELLA CASH

Michigan State University Board of Trustees February 12, 2010

The Board of Trustees of Michigan State University today pays special tribute to an exemplary and model Spartan, Stella Cash as she steps down from service as the Interim Executive Director of the MSU Alumni Association

Ms. Cash came to MSU in 1975 and has been involved in a multitude of professional and volunteer activities at the university ever since.

A registered dietitian, Ms. Cash was the director of MSU's internationally recognized Dietetics Program for 25 years. She is now a senior academic specialist emerita in the Department of Food Science and Human Nutrition. Ms. Cash also holds an appointment in the Department of Radiology where she has been a key driver in its advancement into the field of nutrigenomics.

She has been most generous in sharing her expertise. She is a former president of the American Dietetic Association Foundation, has served as a food and nutrition consultant for more than 30 companies, government agencies and commodity groups, and hosted her own local television show, "Home Cooking with Stella Cash."

Most recently, Ms. Cash served MSU as the interim executive director of the MSU Alumni Association, a post she held from January 2008 through December 2009. She infused enthusiasm, pride, and dedication in the university's national and international outreach to its alumni, and was an energetic and visible advocate in Michigan, across the United States and around the world.

Ms. Cash was instrumental in the success of the MSU Capital Campaign, serving as co-chair and as a member of the All –University Campaign cabinet.

Other ways in which Ms. Cash served her university and community include being a member of the MSU Safe Place Committee, president of the MSU Alumni Association National Board, and president of the University Club of MSU.

In 2003, she was honored for her work by receiving the MSU Alumni Association's Distinguished Alumni Award.

It is on behalf of the entire Michigan State University community that the Board of Trustees offers Stella Cash its heart-felt thanks for her devotion to her university and best wishes for the future.

Ice se Perles Dianne Byrum Diann Woodard

MICHIGAN STATE

William H. Schmidt University Distinguished Professor

Breaking the Cycle

rces: Levy and Murnane; Schleicher, 2007



The Economy Has Changed .

. Have Our Schools?

Note: Net graduation rate is calculated by summing the graduation rates by single year of age in 2005. Year of reference 2004.

Source: OECD 2007

Australia	*	
Iceland		
New Zealand		
Finland		
Denmark		
Poland		
Netherlands		
Italy		
Norway		
United Kingdom		
Ireland		
Sweden		
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Hungary		
Japan		
EU19 average	•	
Israel		
United States		
Spain		
Portugal		No. of Concession, Name
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Switzerland		01
Greece		
Czech Republic		
Austria		
Germany	0	N
Slovenia	00	2005
Turkey	0	5



U.S. Teacher Education Study – Mathematics

© 2010 Michigan State University

Sources: PISA 2004, 2007

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What Americans Value

U.S. Teacher Education Study – Mathematics

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Measurement Units			-	-			•	
Common Fractions			*		-	•		
Equations & Formulas	1			•		•		
Data Representation & Analysis			*		•	•		*
2-D Geometry: Basics			4	•				
2-D Geometry: Polygons & Circles				•	•	•		
Measurement: Perimeter, Area & Volume				•	•	•		
Rounding & Significant Figures				•	•			
Estimating Computations				•	•	•		
Whole Numbers: Properties of Operations	3			•	•			
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Decimal Fractions						•		
Relation of Common & Decimal Fractions				•		•		
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2-D Geometry: Coordinate Geometry						•	•	
Geometry: Transformations								
Negative Numbers, Integers, & Their Properties						. +	•	
Number Theory							•	4
Exponents, Roots & Radicals								
Exponents & Orders of Magnitude							+	+
Measurement: Estimation & Errors	-							
Constructions Using Straightedge & Compass								
3-D Geometry							•	-
Geometry: Congruence & Similarity								
Rational Numbers & Their Properties								
Patterns, Relations & Functions	_							
Proportionality: Slope & Trigonometry								

Top Achieving Countries' Mathematics Curriculum

top-achieving countries (5 out of 6).

* Intended by 4 out of the 6

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top-achieving countries Intended by all but *one* of the

Intended by all of the top-achieving countries.

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U.S. Teacher Education Study – Mathematics



21 States' Mathematics Standards

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U.S. Teacher Education Study – Mathematics	U.S.							8	10 Michigan State University
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									Patterns, Relations & Functions
					-	0	0	0	Rational Numbers & Their Properties
h									Geometry: Congruence & Similarity
									3-D Geometry
		1			0	0	0	0	Constructions Using Straightedge & Compass
									Measurement: Estimation & Errors
	1000					-	0	0	Exponents & Orders of Magnitude
							0	0	Exponents, Roots & Radicals
									Number Theory
		1011	1						Negative Numbers, Integers, & Their Properties
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									2-D Geometry: Coordinate Geometry
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Topics for Which All States Intend or Don't Intend Coverage

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TEDS Lower Secondary Mathematics Knowledge and Mathematics Pedagogy Knowledge Scores

MCK	
Country	Mn (se)
Chinese Taipei	667 (3.9)
Russian Federation	594 (12.8)
Singapore	570 (2.8)
Poland	540 (3.1)
Switzerland	531 (3.7)
Germany	519 (3.6)
United States-Private	512 (16.3)
United States-Public	505 (9.7)
Malaysia	493 (2.4)
Thailand	479 (1.6)
Oman	472 (2.4)
Norway	444 (2.3)
Philippines	442 (4.6)
Botswana	441 (5.3)
Georgia	424 (8.9)
Chile	354 (2.5)

PCK		
Country	Mn	(se)
Chinese Taipei	649	(5.2)
Russian Federation	566	(10.1)
Singapore	553	(4.7)
Switzerland	549	(5.9)
Germany	540	(5.1)
Poland	524	(4.2)
United States-Private	505	(13.0)
United States-Public	502	(8.7)
Thailand	476	(2.5)
Oman	474	(3.8)
Malaysia	472	(3.3)
Norway	463	(3.4)
Philippines	450	(4.7)
Georgia	443	(9.6)
Botswana	425	(8.2)
Chile	394	(3.8)

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Significantly above US-Public. Not significantly different from US-Public

Significantly below US-Public



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TIMSS 2003 Mathematics



TEDS Primary MCK Score vs. TIMSS 2003 Grade 8 Math Score

(both adjusted by GDP & Rigor)

U.S. Teacher Education Study – Mathemati

MICHIGAN STATE

April 7, 2010

MEMORANDUM

To: Trustee Finance Committee

From: Fred L. Poston

Subject: Annual Endowment Spending Policy Review and the Uniform Prudent Management of Institutional Funds Act (UPMIFA)

RECOMMENDATION

BE IT RESOLVED that the Trustee Finance Committee recommends to the Board of Trustees that the Board affirm its Investment Policy, as amended this date, and maintain the endowment spending rate included therein at the current level of 5.0% of the average market value of the Common Investment Fund 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; and

BE IT FURTHER RESOLVED that because, under the Uniform Prudent Management of Institutional Funds Act ("UPMIFA"), as recently adopted in Michigan, certain currently unanticipated circumstances may require adjustments (upward or downward) in the established endowment spending rate where such an adjustment is necessary to accomplish the purposes of the University and of a specific fund or group of funds, including, without being limited to, preserving the fund or funds against inflation in perpetuity or for the duration of the fund or funds, the Trustee Finance Committee recommends that the Board of Trustees authorize the President and Vice President for Finance and Operations and Treasurer ("VPFO") to implement, to the extent appropriate and feasible and after thirty days prior written notice to the Board, such adjustments from the endowment spending rate set forth above for specific funds or groups of funds, as, in their judgment, may be necessary to assure compliance with UPMIFA.

BACKGROUND

Under the Investment Policy, institutional funds available for long-term investment, such as employee retirement funds and endowment funds, are consolidated into the Common Investment Fund ("CIF"). The Investment Policy establishes the spending rate for the CIF and requires annual review of that spending rate by the Investment Advisory Subcommittee and the Trustee Finance Committee. This is the first review since UPMIFA became effective in Michigan.



OFFICE OF THE VICE PRESIDENT FOR FINANCE AND OPERATIONS AND TREASURER

> Fred L. Poston Vice President

Michigan State University 412 Administration Building East Lansing, Mi 48824-1046

> 517/355-5014 FAX: 517/353-6772

Endowment Spending Policy and the Uniform Prudent Management of Institutional Funds Act (UPMIFA) April 7, 2010 Page 2

Under Michigan law, the Board acts in a fiduciary capacity as trustee of the endowment funds and other institutional funds of the University. The standards of care required of trustees of endowment and other institutional funds are currently set forth in UPMIFA.

UPMIFA establishes more modern and more specific duties of care for governing boards than did its predecessor legislation in the management and investment of endowments and other institutional funds, and in setting the expenditure levels from endowment funds. Specifically, with respect to the management and investment of endowment and other institutional funds, UPMIFA requires that the Board exercise good faith care that an ordinarily prudent person in a like position would exercise under similar circumstances, and consider both the charitable purposes and needs of the University and the purposes and needs of the specific endowment or other institutional fund regarding current expenditures and preservation of the purchasing power of the fund. The Board is also to consider, among other things, the general economic conditions, the impact of inflation or deflation on the purchasing power of the funds, other resources of the University, expected total returns, and diversification of investments within the University's overall investment portfolio. Management and investment decisions are to be made in the context of the overall portfolio and as part of an overall investment strategy suitable to the University and its endowment and other institutional funds. Finally, the Board may permit only reasonable costs to be charged to the endowment and other institutional funds.

Under the direction of the VPFO, the University's investment staff, in consultation with the University's Investment Consultant, Cambridge Associates, has reviewed the Board's Investment Policy and the costs charged to the endowment and other institutional funds, and has concluded that the Policy and costs are consistent with the requirements of UPMIFA with respect to the management and investment of endowment and other institutional funds of the University.

UPMIFA also establishes more specific standards of care in setting spending levels from endowment funds. These standards require consideration of, among other factors, the duration and preservation of endowment funds, the purposes of both the institution and the endowment fund, general economic conditions, including the impact of the economy on other funding sources for the University, the possible impact of inflation or deflation, the expected total return from income and appreciation of the investments, other resources of the University, and the University's investment policies. Under the direction of the VPFO, the University's investment staff, in consultation with Cambridge Associates, has undertaken analyses with respect to these criteria, including, but not limited to, analysis of expected future total returns on the endowment portfolio, the impact of inflation on the purchasing power of endowment funds, the impact of the economy on the availability of other resources for paying costs of operating the University and achieving the purposes supported by the endowment funds, and analysis of "underwater" endowments (i.e., endowment funds whose current values are lower than the total amounts deposited in those funds by, or at the instruction of, donors

Endowment Spending Policy and the Uniform Prudent Management of Institutional Funds Act (UPMIFA) April 7, 2010 Page 3

to those funds) and the time for the recovery of the values of those funds, taking into account the projected investment returns and expenditure levels and other costs. Such analyses support continuing the endowment spending at the current rate.

UPMIFA places more emphasis than did prior law on the needs and purposes of each specific endowment fund. While, in general, the analyses referred to above support the maintenance of a single spending rate for all endowment funds, in order to be able to react to unforeseen circumstances, it is prudent to authorize the President and VPFO to implement adjustments in the spending rate for a specific fund or groups of funds. The resolution requires that the President and VPFO provide thirty days prior written notice to the Board of any proposed adjustment in order to permit members of the Board to seek further information with respect to the proposed action. Such notice must contain a statement of the rationale for the proposed action. It is currently anticipated that any such adjustments will be very rare, due to budgetary and other operational constraints. It is further anticipated that the administration will engage in discussions with the Board, prior to the next annual review of the endowment spending rate, regarding the establishment of standards for implementation of future adjustments in the established endowment spending rate.

cc: D. Brower, N. Carter, G. Klein, K. Lindahl, R. Noto

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)

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;
- Shall, upon the recommendation of the Finance Committee, establish investment policies relating to the administration of its investment portfolio;
- Shall, upon the recommendation of the Finance Committee, establish investment objectives;
- Shall, upon the recommendation of the Finance Committee, appoint an investment consultant, investment managers and investment custodians for the Institutional Funds; and
- 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;
- 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;
- 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;
- Shall review policies relating to the administration of the University's investment portfolio and, when appropriate, shall advise the Finance Committee about such policies;
- 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;
- 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.

VII. Role of the Investment Consultant

The investment consultant:
- Shall annually develop and communicate to the Finance Committee an appropriate strategy to meet the Board's long-term investment objectives for the Institutional Funds;
- 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;
- Shall advise the Finance Committee regarding searches for investment managers and investment custodians;
- Shall provide a monitoring and measurement program that will permit evaluation of the performance of the investment managers in comparison with the investment markets and with other managers; and
- 5. 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;
- Shall collect all income pertaining to the securities held, and shall temporarily invest such income in cash equivalents;

- 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;
- 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 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. The University will make available for spending 5.0% of the average market value of the CIF 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.
- 2. The University may spend 100% of the income earned by Institutional Funds that are separately invested due to donor limitations.
- 3. This spending policy shall be reviewed annually by the Finance Committee, after review by the Investment Advisory Subcommittee.

Exhibit B

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 a12-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

- (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 Poel'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 Allocat	tion
	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	30 days of operating cash ⁽¹⁾
	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	
Liquidity Reserve Pool	recently completed fall semester.	45 days of operating cash

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.

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

Benc	Table No. 2 hmarks & Long-Term	Performance Goals
PCF Component	Benchmark	Long-Term Performance Goals
Liquidity Pool	Merrilf 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.
- Additional guidelines may be adopted by separate Board action. They will be communicated to the affected investment managers.

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Liquidity Pool		Liquidity	Reserve Pool	Commo	Common Investment Fur	
eparately Managed						
Permitted Securiti	5.6 C					
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:		,		<u> </u>		
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 or (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 a later amended by agreement of both parties.		
Fixed Income:						
Minimum Quality	:					
Portfolio:						
AA		AA		AA		
Security (at pure	chase):	<i>.</i>				
Short-term	Long-term	Short-term	Long-term	Short- term	Long-term	
A1/P1	BBB	A2/P2	В	A2/P2	BB	
Maturity/Duration	:					
10 year maximum maturity of any security.		No maximum maturity of any security.		No maximum maturity of an security.		
3 year maximum average duration of the portfolio.		б year maximum average duration of the portfolio.		6 year maximum average duration of the portfolio.		

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SCHEDULE A

ATTACHMENT 1

MICHIGAN STATE

July 26, 2000

REVISED

MEMORANDUM

To:	Trustee	Finance	Committee
10.	Trustee	rinance	Committee

From: Fred Poston

Subject: Revised Investment Strategy for Operating Cash Pools

RECOMMENDATION:

BE IT RESOLVED that the Trustee Finance Committee recommends to the Board of Trustees that the pooled cash management strategy be revised as follows:

- Liquidity Pool shall be composed of short-term and intermediate-term commercially available funds and up to a \$75 million bank line of credit or its equivalent. These funds would be available on a daily basis. The target amount for the Liquidity Pool would be \$125 million (12-month average). The benchmark for performance of the short-term funds would be the 91-day Treasury Bill rate. The benchmark for performance of the intermediate-term funds would be the Merrill Lynch 1-3 year Treasury index. The combined size of the short-term and intermediate-term pool would be 15% of the overall operating cash pool (12-month average), subject to a minimum of \$50 million (12-month average).
 - The balance, 85%, of the overall cash pool would be available for investment as long-term capital of the University. A portion (25% target) would be invested in total return oriented fixed income security funds. The benchmark for the total return oriented fixed income security funds would be the Lehman Brothers Aggregate Bond Index. The remainder (60% target) would be transferred to one or more trusts, held therein as endowment funds, and invested in accordance with the terms of the applicable trust instrument, generally in the University's Common Investment Fund.

It is recognized that, from time to time, the investment performance of the trusts may differ significantly from that of the fixed income securities, thereby creating an imbalance with respect to the above-referenced targets. Efforts to rebalance the portfolio will be made to the extent permitted by the provisions of the trusts.

The funds invested in the trusts as described above would be established as part of the University's "endowment funds," as that term is used in Article IX, Section 19 of the Michigan Constitution. Since these funds are not needed for



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MSU is an altinmative action, aqual-opportunity institution. Trustee Finance Committee – Revised Investment Strategy Page 2 July 26, 2000

liquidity purposes, the endowment funds classification, which denotes that the funds are part of the long-term capital of the University, is more consistent with the investment approach contemplated.

- Each trust described in paragraph 3 shall have a term of at least five years and 4. shall be irrevocable for its term. Upon termination of each trust, the trust assets will revert to the University. The sole beneficiary of the trusts shall be the University. Each trust instrument shall provide for an investment policy for the investment of the trust funds which shall comply with the prudence standards set forth in applicable Michigan law relating to investment of trust funds, taking into account the investment of all endowment and other funds of the University. Subject to the above, each trust shall be permitted to invest in equity securities and in fixed income securities, including market rate promissory notes and other market rate debt obligations of the University. Any borrowings by the University from the trusts, and any borrowings by the University pledging any receipts from the trusts, would be subject to the prior approval of the Board of Trustees of the University. In general, it is anticipated that the trust assets shall be invested as part of the University's Common Investment Fund. Each trust instrument shall establish, or provide for the establishment and appropriate modification over time, of expenditure policies consistent with the Uniform Management of Institutional Funds Act and consistent with the University's expenditure policy from time to time in effect with respect to other endowment funds of the University, which is designed to provide over the term of the trust for some increase in the value of the trust as a hedge against inflation.
- 5. The President and the Vice President for Finance and Operations and Treasurer are hereby authorized and directed to take whatever actions they, or either of them, deem appropriate to establish, maintain and account for (wording changed and approved at the full Board meeting held on July 26, 2000) the trusts described in paragraphs 3 and 4, including preparation, execution and delivery, for and on behalf of the Board, of appropriate trust instruments, consistent with the terms of this resolution, with trustees who are members of the Finance Committee of the Board of Trustees of the University, and transfers of funds to the trusts as set forth herein.
- 6. The targets contained in this pooled cash management structure are established with a recognition that a significant transition period (target eight quarters) is anticipated to complete movement of funds into this new structure. The transition period, beginning within 90 days from the approval of this Resolution, will minimize the risk of unexpected fluctuations in markets.
- 7. The Vice President for Finance and Operations and Treasurer shall report to the Finance Committee **and the Board of Trustees** (wording added and approved at the full Board meeting held on July 26, 2000) on at least an **semi**annual (changed to semiannual and approved at the full Board meeting

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held on July 26, 2000) basis on the transition and shall make recommendations, if necessary, to adjust these guidelines. The Vice President for Finance and Operations and Treasurer shall have the authority to appoint fund managers for the short-term, intermediate-term and the total return oriented fixed income security funds, and shall report such appointments to the Finance Committee and the Board of Trustees.

BACKGROUND:

Over the past few years, Finance staff have undertaken an ongoing review of cash management practices. Opportunities exist to establish a portion of the cash pool as long-term capital and to further increase the return on the pool, consistent with maintaining and enhancing the value of principal and prudent amounts of liquidity for operational needs. Investing a portion of these funds in longer duration strategies is a prudent means of enhancing the pool's growth. The recommended revised investment strategy will enable the University to have a greater likelihood of improved returns while bearing a small amount of additional risk. The overall strategy for cash management would be added to the annual review of investments currently done by the Finance Committee.

ATTACHMENT 2

BE IT RESOLVED that the University's pooled cash management strategy shall be as follows:

- 1 The University's overall cash pool shall be divided, for management and investment purposes, into two parts, the Pooled Cash Fund and a series of endowment trusts. The Pooled Cash Fund shall consist of the Liquidity Pool and the Liquidity Reserve Pool. The main purpose of the Liquidity Pool is to provide a liquid source of funds to meet the University's daily cash requirements. The main purpose of the Liquidity Reserve Pool is to provide a source of funds in case the Liquidity Pool is not sufficient to meet the University's cash needs. The target amounts, investment objectives, performance goals, benchmarks; investment guidelines, and other requirements for the Liquidity Pool and Liquidity Reserve Pool shall be established in the Investment Policy, as from time to time in effect. If authorized by the Investment Policy, the Liquidity Pool may be composed, in part, of a bank line of credit or its equivalent.
- 2. The balance of the overall cash pool shall be available for investment as longterm capital of the University. It shall be transferred to one or more trusts, held therein as endowment funds, and invested in accordance with the terms of the applicable trust instrument, generally in the University's Common Investment Fund established under the Investment Policy.
- 3. The funds invested in the trusts as described above shall be established as part of the University's "endowment funds," as that term is used in Article IX, Section 19 of the Michigan Constitution. Since these funds are not needed for liquidity purposes, the endowment funds classification, which denotes that the funds are part of the long-term capital of the University, is more consistent with the investment approach contemplated.
- 4. Each trust described in paragraph 3 shall have a term of at least five years and shall be irrevocable for its term. Upon termination of each trust, the trust assets will revert to the University. The sole beneficiary of the trusts shall be the University. Each trust instrument shall provide for an investment policy for the investment of the trust funds which shall comply with the prudence standards set forth in applicable Michigan law relating to investment of trust funds, taking into account the investment of all endowment and other funds of the University. Subject to the above, each trust shall be permitted to invest in equity securities and in fixed income securities, including market rate promissory notes and other market rate debt obligations of the University. Any borrowings by the University from the trusts, and any borrowings by the University pledging any receipts from the trusts, shall be subject to the prior approval of the Board. In general, it is anticipated that the trust assets shall be invested as part of the University's Common Investment Fund. Each trust instrument shall establish, or provide for

the establishment and appropriate modification over time, of expenditure policies consistent with the Uniform Prudent Management of Institutional Funds Act and consistent with the University's expenditure policy from time to time in effect with respect to other endowment funds of the University, which is designed to provide for current expenditures for the purposes of the endowment funds, including the trusts, as well as for the maintenance over time of the purchasing power of the endowment funds, including the trusts.

- 5. The President and the Vice President for Finance and Operations and Treasurer are hereby authorized and directed to take whatever actions they, or either of them, deem appropriate to establish the trusts described in paragraphs 3 and 4, including preparation, execution, and delivery, for and on behalf of the Board, of appropriate trust instruments, consistent with the terms of this resolution, with trustees who are members of the Finance Committee of the Board of Trustees of the University, and transfers of funds to the trusts as set forth herein.
- 6. The Vice President for Finance and Operations and Treasurer shall report to the Investment Advisory Subcommittee, the Finance Committee, and the Board of Trustees on the Pooled Cash Fund, the Common Investment Fund, and the endowment trusts pursuant to the Investment Policy and the trust instruments and shall make recommendations, if necessary, to adjust these guidelines, including through amendments to the Investment Policy.

TRUSTEES EMERITI

Trustees Emeriti are former members of the Board of Trustees of Michigan State University. The University benefits when Trustees Emeriti continue to function as advocates for the University with donors, alumni, government officials, representatives of business and labor, members of the media, and Michigan's citizens. The Office of the Secretary will work with University officials to make sure that information about the University and higher education generally is provided regularly to Trustees Emeriti. This information will include copies of the President's letters to supporters of the University, the Alumni Magazine, the magazines published by the Colleges, athletic booster group mailings, and Wharton Center materials, along with complimentary subscriptions to <u>The State News</u> and to <u>The Chronicle of Higher</u> <u>Education</u>.

To facilitate activities by Trustees Emeriti on behalf of the University, the following will be offered to Trustees Emeriti: library card; car registration permit; parking lot gate pass; the option to purchase up to four tickets to Wharton Center events; the option to purchase up to four season football and up to four season men's and women's basketball tickets, in the same seat locations they had the previous season, with the obligation to pay any seat premiums normally mandated for that seat location¹; admission to the indoor section of the Spartan Club prior to and during each home football game; the option to purchase up to two season hockey tickets in the same seat location they had the previous season, with the obligation to pay any seat premiums normally mandated for that seat location ¹; the option to purchase one parking pass per sport in zone 1 for home football and basketball games and lot J(67) for hockey games; the option to purchase up to four tickets to the University of Michigan/Michigan State football game when that game is played at the University of Michigan; the option to purchase up to two tickets to the Notre Dame/Michigan State football game when that game is played at Notre Dame; and the option to purchase up to four tickets to any post-season game in any sport.

In addition, Trustees Emeriti may receive complimentary tickets to athletic contests and Wharton Center events, and a free pass to use the Forest Akers golf courses, when the tickets/pass will be used for entertainment purposes to benefit the University. Information about the University purpose for which the tickets/pass will be used must be provided to the Office of the Secretary at the time the complimentary tickets/pass are requested.

Enacted: 3/31/78 Amended: 12/1/83, 2/3/84, 6/7/91, 9/18/98, 7/17/06, 4/16/10

01-01-08

¹Access to special seating areas in athletic venues is contingent solely upon donor status and is not covered under this policy.

- Purchase of on Urology Clinic.
- \$ 2,900
- ervices/Personnel:
- No University facilities, services, or personnel will be utilized under the terms of this purchase.
- Michigan Professional Limited Liability Company

Dr. Max Rizer, a Health Team physician and assistant

PROFESSIONAL SERVICES CONTRACT TERM SHEET

Party:	Spectra Data and Research, Inc.
Contract:	Professional services contract to serve as facilitator of community engagement events on behalf of WKAR.
Term:	April 16, 2010 to December 31, 2010
Payment:	\$3,500

Use of University Facilities/Services/Personnel:

No University facilities, services, or personnel will be utilized by Spectra Data and Research, Inc. under the terms of the professional services contract.

Organization Type: Michigan corporation based in Mason

Personnel Interest:

Dr. Mark Urban-Lurain, an academic specialist appointed in the College of Engineering and the College of Natural Science, and his immediate family hold an ownership interest which exceeds 1% of the company. Dr. Urban-Lurain is also an officer of the company.

AMENDED LICENSE AGREEMENT TERM SHEET

Party: GEMA Diagnostics, Inc.

License: Second Amendment to License Agreement AGR-538

Term: Extending to the expiration of the last to expire of the patents

Technology: MSU Invention Disclosure (ID) TEC2004-0093 "A Method for Identifying Genes and Gene Products that Can Be Used as Markers for Fertility, Ovarian Function and Ore-Fertilization of Fetus/Newborn Viability"

Technology's Potential Commercial Utilization:

A screening technique used by fertility clinics to identify the most viable occytes for fertilization.

- Payment Terms: Payment of one thousand dollars (\$1000.00) upon signing. Licensee has restructured royalty minimums to begin in 2011. Annual minimum for 2011 is ten thousand dollars (\$10,000.00) and for 2012 and beyond is fifty thousand dollars (\$50,000.00).
- Services Provided: By MSU to GEMA Diagnostics: None By GEMA Diagnostics to MSU: None
- Use of University Facilities/Personnel:

No University facilities/personnel will be utilized by GEMA Diagnostics under the terms of this Agreement.

- Organization Type: Incorporated, Michigan-based small business
- **Personnel Interest:** Dr. Jose Cibelli, a professor in the Department of Animal Science, and his immediate family own or have options to buy an equity interest of more than 1% of the company. Dr. Cibelli is also an officer of *GEMA* Diagnostics, Inc.

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RESTATED AND AMENDED LICENSE TERM SHEET

Party:	XG Sciences, Inc.
License:	Restated and Amended Exclusive License on the Technology in all fields (with certain exceptions pursuant to third-party agreements if elected within 60 days of the effective date) and an option to license other related Technology for up to three (3) years from the effective date.
Term:	Extending to the expiration of the last to expire of the patents or 25 years whichever comes first.
Technology:	MSU Invention Disclosures TEC2002-0038 "Inexpensive Method for Producing Graphite Nanoplatelets"; TEC2004- 0075 "Conductive Coatings Produced by Monolayer Deposition on Surfaces"; TEC2005-0088 "Method for Producing Metalloic Nanoparticles on Solid Surfaces especially Carbon and Graphite"; TEC2006-0039 "Hybrid Micro-Nano-Composite Material and Method to Prepare Thereof"; TEC2006-0054 "Continuous Process for Producing Exfoliated Nano-Graphite Platelets"; TEC2006-0070 "Electro- Conductive Nylon with High Barrier Property and Method to Prepare Thereof"; TEC2007-0072 "Micropatterning of Low Cost and Highly Conductive Exfoliated Graphite Nanoplatelets (xGnPs) using Microcontact Printing"; TEC2007-0121 "Conductive Sheet Molding Compound with Carbon Based Nanomaterials"; TEC2007-0122 "Conductive Coating of Substrate with Carbon-Based Nanomaterials"; TEC2007-0139 "Plasticized Cellulose as a Potential Alternative to Petroleum Based Polymers"; TEC2007-0150 "Modification of the Mechanical, Thermal, and Electrical Properties of Elastomer- Based Materials by the Addition of Exfoliated Graphite Nano- Platelets"; TEC2008-0002 "High-Performance Biosensors Based on Exfoliated Graphite Nanoplatelets and Nanometal Decorations"; TEC2008-003 "Materials and Process for Sub- 10 Nanometer Integrated Circuit Lines"; TEC2008-0038 "Metal nanoparticle and conducting polymer nanocomposites for energy devices"; TEC2008-0039 "Electrospinning ordered arrays of cellulose nitrate fibers"; TEC2008-0042 "Electrically Conductive, Optically Transparent Films of Exfoliated Graphite Nanoplatelets (Graphene)"; TEC2008- 0074 "Single Graphene Sheets Decorated With Metal Nanoparticles"; TEC2008-0079 "xGnP-based Lubricant"; TEC2009-0006 "Polyoxometalate-based Modification of

Exfoliated Graphite Nanoplatelets to Produce Electrocatalysts': TEC2009-0020 "Fabrication of Electrically Conductive and Optically Transparent Films with Graphene NanoPlatelets or Other Nanoparticles"; TEC2009-0029 "MetalOxide Nanosheet Monolayer Film Synthesis for Electrochemical Energy Storage and Photocatalytic Applications"; TEC2009-0030 "Electrically Conductive Highly Aligned Multilayer Free Standing Film of Exfoliated Graphite Nanoplatelets (Graphene)"; TEC2009-0031 "Exfoliated Graphite Nanoplatelets (Graphene) and Conductive Polymer Multilaver Free Standing Film Electrode for Ultra and Supercapacitor Applications"; TEC2009-0113 "Exfoliated Graphite Nano Platelet (xGnP) anodes for Li-ion batteries": TEC2010-0027 "Nanostructured Electrodes for Exfoliated Graphite Nanoplateletes for Supercapacitor Applications"; and TEC2010-0047 "Simple Dry Process for Scalable Production of High Surface Area, Graphene Nanoplatelets".

Technology's Potential Commercial Utilization:

Broad applications involving composite materials and components.

- **Payment Terms:** Payment of \$10,000 due on signing; \$3,000 plus patent costs to date for each Invention Disclosure elected; a running royalty of 2% to 4% of net sales and any sublicensing revenues with annual minima ranging from \$10,000 to \$50,000 starting in calendar year 2011.
- Services Provided: By MSU to XG Sciences: None under contemplated agreement.

By XG Sciences to MSU: None under contemplated agreement.

Use of University Facilities/Personnel:

No use of MSU facilities/personnel by XG Sciences under the contemplated agreement.

Organization Type: Incorporated, Michigan-based small business.

Personnel Interest:

Dr. Lawrence T. Drzal, a University Distinguished Professor in the Department of Chemical Engineering and Material Science, Dr. Hiroyuki Fukushima, a Research Specialist in the Composite Materials and Structures Center, and Dr. InHwan Do, a Research Specialist in the Composite Materials and Structures Center, and their immediate families each own or have options to buy an equity interest of more than 1% of the company. Dr. Drzal is also an officer of *XG Sciences, Inc.*