

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

December 10, 2010

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

Trustees present: Dianne Byrum, Joel Ferguson, Melanie Foster, Colleen McNamara, Donald Nugent, Faylene Owen, and George Perles.

Trustee absent: Diann Woodard

University officers present: President Simon, Senior Associate Provost Youatt, Vice President Poston, Secretary Beekman, Vice President and General Counsel Noto, Vice Presidents Gray, Groves, June, and Webster, Acting Vice President Swain, and Senior Advisor and Director Granberry Russell. Faculty liaisons present: Deborah Moriarty, John Powell, and Mariam Sticklen. Student liaisons present: Justin Epstein, Stefan Fletcher, Emeka Igwe, and Christopher Schotten.

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

1. On a motion by Trustee Foster, supported by Trustee Nugent, the **BOARD VOTED to approve** the agenda.
2. On a motion by Trustee Byrum, supported by Trustee Foster, the **BOARD VOTED to approve** the minutes of the Board meeting of November 5, 2010.
3. Board of Trustees Award Presentations

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

1. Jeffrey Lolkus—Major: Crop and Soil Science; Member of the Honors College; 4.0 GPA
2. Andrew Para—Major: Zoology; Member of the Honors College; 4.0 GPA
3. Megan Travis—Major: Accounting; 4.0 GPA

Trustees Ferguson and Foster acknowledged the Board of Trustees Award recipients who were not able to attend:

4. Roy Dong—Major: Computer Engineering/Second Degree: Economics; Member of the Honors College; 3.9867 GPA
5. Thomas Ganley—Major: Electrical Engineering; 3.9872 GPA
6. Jolie Ngo—Major: Nursing; 4.0 GPA

4. President's Report

President Simon presented the following report to the Board.

A. MSU Trustee Faylene Owen Accident Update

It is a pleasure to welcome Trustee Owen back to the Board's meeting. She and her husband, Trustee Emeritus Owen, continue to recover from a recent car accident.

B. College of Engineering Design Day

The College of Engineering Design Day is being held today at the MSU Union. Design Day is an opportunity for engineering students to display their independent projects. Featured work includes a regenerative turbine pump, smart glass technologies, and a wellness portal to track data from medical devices, such as insulin pumps.

C. Commencement

MSU fall commencement is today and tomorrow at the Breslin Student Events Center, and 1,722 undergraduate degree candidates and 714 advanced degree candidates will graduate. Commencement speakers include Elinor Ostrom, Nobel laureate, Earvin "Magic" Johnson Jr., philanthropist, entrepreneur, and NBA and MSU basketball star, Leonard Slatkin, music director of the Detroit Symphony Orchestra, and Jeff Immelt, chairman of General Electric Co.

D. 2010 Distinguished Service to Agriculture (DSA) Award

At its 91st Annual Meeting on December 2, 2010, The Michigan Farm Bureau named Trustee Don Nugent, a long-time farmer, public servant and philanthropist, as the recipient of the 2010 Distinguished Service to Agriculture (DSA) Award. The DSA Award

is the Michigan Farm Bureau's highest honor and recognizes individuals who have made exceptional contributions to the state's agriculture industry.

E. Student Debate Team Wins in Detroit

One of MSU's debate teams won first place at the Motor City Classic Tournament hosted by Wayne State in October. MSU defeated the University of Michigan in the finals. MSU's debate team has won the national title three times since 2004.

F. Eli Broad College of Business Ranking Rises

The Eli Broad College of Business has vaulted into the top 20 American business schools in the latest rankings by Bloomberg *Businessweek*. The Broad College came in 20th overall and 7th among public universities—its highest *Businessweek* ranking ever.

G. MSU Professor Making Supercomputers More Accessible

Under the direction of Professor Wolfgang Bauer, MSU is expanding the super-conducting capacity and accessibility of its Institute for Cyber-Enabled Research for researchers requiring large-scale computer systems. The system upgrade will make MSU a leader in research designed to advance computer metrics and other scientific endeavors.

H. FoodCorps

MSU is helping launch a national program called FoodCorps to improve access to healthy, affordable food for vulnerable children and to train young leaders for careers in food and agriculture. Through FoodCorps, young adults will be placed as FoodCorps educators in high need communities. They will build school gardens, provide nutrition education, and help develop local food purchasing programs at school sites.

I. Food to Electricity

MSU is investigating how it might turn food waste from the dining halls into electricity. The new Brody Square Dining Hall has installed a food pulper to break down almost 3000 pounds of organic waste per week. Steve Safferman, director of MSU's anaerobic digestion research and education center, anticipates providing MSU with the applicable potential of this research in 18 months.

J. Recycling Center Recognized with “Green” Award

MSU’s commitment to the environment continues to be recognized. MSU’s Surplus Store and Recycling Center has earned the U.S. Green Building Council’s Leadership in Energy and Environmental Design gold certification—its second highest designation. The Center opened in 2009 and includes many green features.

K. Athletics

The President noted that it is important to acknowledge the success of the MSU football team and its great 11-1 season and the success of the women’s cross country team, which won a Big Ten Championship. She wished good luck to the MSU Field Hockey and Men’s Soccer teams as they advance to the NCAA tournament.

L. MSU’s Academic All Big Ten Numbers

MSU student-athletes ranked second in the Conference in the number of Academic All Big Ten honorees for Fall 2010, with 84 MSU student-athletes from seven sports attaining this distinction.

M. Mark Haas Introduction

Dave Brower, Assistant Vice President, Chief Financial Officer, and Controller, has announced his retirement from MSU in November 2011. The President said that during his distinguished career, Dave has been an extraordinary leader of and asset to, MSU.

Vice President Poston introduced Mr. Mark Haas as Mr. Brower’s replacement. Mr. Haas was previously the Deputy Treasurer for the State of Michigan.

N. Broad Art Museum Director

Mr. Michael Rush has been named the first Director of the Eli and Edythe Broad Art Museum. Mr. Rush was most recently the Director of the Rose Art Museum at Brandeis University and was recommended after a national search. Mr. Rush is a widely published author and critic.

O. Lee June Resolution

Trustee Ferguson presented a Board of Trustees resolution to Dr. Lee June honoring him for his service to MSU. (Appendix A)

5. There was no Public Participation on Issues Germane to the Agenda.

6. Personnel Actions

Senior Associate Provost Youatt presented the following personnel action:

Gabilondo, Joseba, promotion to Associate Professor, Department of Spanish and Portuguese.

Trustee McNamara **moved to approve** the recommendation, with support from Trustee Byrum.

THE BOARD VOTED to approve the appointment.

President Simon presented the following personnel action:

Maybank, Denise, B., AN—Senior Associate Vice President, Office of the Vice President for Student Affairs and Services, for a change in title to Interim Vice President, Office of the Vice President for Student Affairs and Services, effective January 1, 2011.

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

THE BOARD VOTED to approve the appointment.

7. Gifts, Grants, and Contracts

Vice President Gray presented the Gifts, Grants, and Contracts Report for the period September 3, 2010 through November 30, 2010. The total value for this period is \$111,134,790.

Trustee Nugent **moved to approve** the report, supported by Trustee Byrum.

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

Vice President Gray introduced Dr. Weiming Li, Professor in the College of Agriculture and Natural Resources. Dr. Li made a presentation to the Board on his research on sea lampreys. (Appendix B)

8. Finance Committee

Trustee Owen presented the Trustee Finance Committee Report and recommendations.

A. Fund Functioning as an Endowment—Gary L. Blanchard Fund

It was recommended that the Board of Trustees establish a fund functioning as an endowment entitled the Gary L. Blanchard Fund.

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

THE BOARD VOTED to approve the recommendation.

B. Endowment Spending; Board Investment Policy

It was recommended that the Board of Trustees amend its Investment Policy by deleting Section XI of that Policy and replacing it with the new Section XI set forth. (Appendix C)

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

THE BOARD VOTED to approve the recommendation.

C. Sale of Approximately 1.4 Acres of the Saginaw Valley Research and Extension Center

It was recommended that the Board of Trustees authorize the sale of approximately 1.4 acres (including the grain storage facility located on the site) of the Saginaw Valley Research and Extension Center property to Leroy and Virginia Schluckebier for \$95,000, with such other terms and conditions as may be acceptable to the Vice President for Finance and Operations and Treasurer.

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

THE BOARD VOTED to approve the recommendation.

D. Merit Loan Guarantee

It was recommended that the Board of Trustees approve an assessment agreement with Merit Network Inc. (Appendix D)

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

THE BOARD VOTED to approve the recommendation.

- E. Authorization to Plan—Steam Distribution—Replace Deteriorated Steam Service to Spartan Stadium and Central Services

It was recommended that the Board of Trustees authorize the Administration to plan for the project entitled Steam Distribution—Replace Deteriorated Steam Service to Spartan Stadium and Central Services.

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

THE BOARD VOTED to approve the recommendation.

- F. Project Approval—Authorization to Proceed—*The School of Hospitality Business—Culinary Management Education Laboratory Renovations*

It was recommended that the Board of Trustees authorize the Administration to proceed with the project entitled *The School of Hospitality Business—Culinary Management Education Laboratory Renovations*, and to approve a budget of \$2,600,000.

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

THE BOARD VOTED to approve the recommendation.

- G. Project Approval—Authorization to Proceed—Case Hall—First Floor Renovations of Dining Hall

It was recommended that the Board of Trustees authorize the Administration to proceed with the project entitled Case Hall—First Floor Renovations of Dining Hall and to approve a budget of \$20,000,000.

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

THE BOARD VOTED to approve the recommendation.

- H. Project Approval—Authorization to Proceed—Bailey Hall and Rather Hall Renovations (*budget and scope adjustment*)

It was recommended that the Board of Trustees authorize the Administration to amend the project scope to include the renovation of Rather Hall.

It was recommended that the Board of Trustees authorize the Administration to increase the budget from \$17,700,000 to \$35,000,000 for the project now entitled Bailey Hall and Rather Hall Renovations.

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

THE BOARD VOTED to approve the recommendations.

I. Project Approval—Authorization to Proceed—Brody Complex—Steam and Communications Master Plan—Phase III

It was recommended that the Board of Trustees authorize the Administration to proceed with the project entitled Brody Complex—Steam and Communications Master Plan—Phase III, and to approve a budget of \$2,350,000.

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

THE BOARD VOTED to approve the recommendation.

9. Policy Committee

Trustee McNamara presented the Trustee Policy Committee Report and recommendations.

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

It was recommended that the Board of Trustees approve recommended changes to items 1.1.2.5, 5.2.5.2.1, and 5.2.6.1 of the *Bylaws for Academic Governance*, as approved by Academic Council on November 16, 2010, with the changes to be effective Fall Semester, 2011. (Appendix E)

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

THE BOARD VOTED to approve the recommendation.

B. Approval of Contract Terms

It was recommended that the Board of Trustees approve the execution of a publishing contract with Dr. Thomas Dietz, consistent with earlier public notice given at a Board meeting and with the "Publishing Contract Term Sheet" presented to the Board. (Appendix F)

It was recommended that the Board of Trustees approve the execution of a research agreement with *Northern Technologies International Corporation*, consistent with earlier public notice given at a Board meeting and with the "Research Contract Term Sheet" presented to the Board. (Appendix G)

It was recommended that the Board of Trustees approve the execution of a research agreement with *KTM Industries, Inc.*, consistent with earlier public notice given at a Board meeting and with the "Research Contract Term Sheet" presented to the Board. (Appendix H)

It was recommended that the Board of Trustees approve the execution of a purchase agreement with *InPore Technologies, Inc.*, consistent with earlier public notice given at a Board meeting and with the "Purchase Agreement Term Sheet" presented to the Board. (Appendix I)

Trustee McNamara **moved to approve** the recommendations, with support from Trustee Byrum.

THE BOARD VOTED to approve the recommendations.

10. Compensation Committee

Trustee Nugent presented the Trustee Compensation Committee Report.

Each year at this time the Board of Trustees considers the President's compensation consistent with Section 4a of the employment contract between President Simon and the Board. The Compensation Committee has met twice over the last month for that purpose.

In June of this year, at its annual retreat, the Board conducted an evaluation of the President. At that time, the Board conveyed to President Simon its uniform support for her leadership of MSU. President Simon's leadership is recognized as exceptional both within and outside of the University, and President Simon continues to excel on the established performance criteria.

In 2008, at her request, President Simon's salary was not increased. At that time, she thought it was inappropriate to receive a salary increase in the context of the severe economic difficulties facing the state and the University. Again, in 2009 President Simon requested her salary not be increased.

The Board must keep the salary of MSU's president competitive with the salaries of presidents of peer institutions. Consistent with the University's goals regarding faculty compensation, it is the intention of the Board that the total compensation of MSU's president remain in the mid-range among the presidents of the public universities in the Big Ten and other comparable institutions.

Though her strong and dedicated leadership merits a significant salary increase, Dr. Simon has requested that the Board of Trustees not raise her salary for a third consecutive year because of the University's challenging financial circumstances. Honoring her wishes, the Board will continue to pay President Simon with the annual salary of \$520,000 per year established by the Board on December 7, 2007.

Finally, the Board applauds the commitment that Drs. Roy J. and Lou Anna K. Simon have made to give back to the University through their generous, regular, and substantial financial contributions, including prior salary increases. They provide a tremendous example of philanthropy for Team MSU and the Spartan Community.

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

THE BOARD VOTED to approve the recommendation.

11. Shaping the Future Update

Vice President Poston commended Physical Plant for concentrating on reducing construction costs while increasing quality. During the past 10 years construction managers have been used for the University's larger, more complex projects. Over the years, Physical Plant noticed that construction managers and their large staffs were not critical for the smaller projects. As a result, Physical Plant developed the capability to function as the construction manager on smaller projects. A significant savings is achieved when construction management is handled internally.

The cost of energy is in flux and has been in a state of flux for quite a while. MSU's demand for energy continues to increase at a predictable level. The focus has been energy conservation. Data assessments has

been collected over the past year. Based on this data, a long-term energy plan will be developed. The intent is to engage the entire campus in the planning effort.

12. Don Nugent Resolution

Trustee Ferguson presented a Board of Trustees resolution to Trustee Don Nugent honoring him for his service to MSU. (Appendix J)

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

THE BOARD VOTED to approve the recommendation.

13. Colleen McNamara Resolution

Trustee Foster presented a Board of Trustees resolution to Trustee Colleen McNamara honoring her for her service to MSU. (Appendix K)

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

THE BOARD VOTED to approve the recommendation.

14. Trustees' Comments

At the request of Trustee Ferguson, Mr. John Powell, faculty liaison to the Board, presented a resolution from the MSU Academic Community honoring Trustees McNamara and Nugent:

On the eve of the completion of the term of office of Trustees Colleen McNamara and Don Nugent as members of the MSU Board of Trustees, the MSU community, represented in the Academic Council, extends a sincere "thank you" for their leadership and service to MSU. The faculty, graduate and undergraduate students recognize the impact of their efforts as the University has successfully navigated through a number of challenges. Throughout their terms of office, they have continually sought input from the faculty and academic community. Their dedication, patience and engagement during the past 16 years represent an essential part of the growth and development of MSU as a community. Trustees McNamara and Nugent embody the true spirit of "advancing knowledge and transforming lives." We wish them continued success and happiness in their endeavors and look forward to seeing them around campus.

Trustee Ferguson thanked both Trustees McNamara and Nugent for their years of service to MSU. He stated that Trustee McNamara has added

value to MSU in so many ways and that he hoped that she would continue to be involved on campus. Trustee Ferguson said that Trustee Nugent has been a quiet leader who always placed MSU first and that he looked forward to Trustee Nugent's continued presence at MSU events.

Trustee Owen said that she hoped both Trustee McNamara and Trustee Nugent would continue to be involved at MSU.

Trustee Byrum thanked Trustees McNamara and Nugent for their service to MSU.

Trustee Perles thanked Trustees McNamara and Nugent for their contributions to Team MSU.

Trustee Foster wished Trustees McNamara and Nugent the best and thanked them for their work at MSU.

President Simon said that Trustees McNamara and Nugent have made an indelible mark on MSU. She thanked them both for their service and friendship and gave them her best wishes.

Trustee McNamara thanked everyone for their kind words. She stated that she felt blessed and honored to have served on the Board of Trustees at MSU.

Trustee Nugent said that while he always knew that MSU was a significant organization, he never knew how significant until serving on the Board. He noted that there are Spartans everywhere. Trustee Nugent thanked the faculty and staff for their dedication and commitment to the University. He said it was an honor to serve Team MSU.

15. Public Participation on Other Issues

A. Graduate Employees Union (GEU) Contract Negotiations

Mr. Samuel Otten, President of the GEU, said that negotiations are scheduled to begin in January 2011 for a new Teaching Assistants contract. Graduate students complete approximately two-thirds of the grading on campus and nearly half of all undergraduate course sections are taught by Teaching Assistants. Mr. Otten said that Teaching Assistants are integral to the instructional mission of MSU. The Teaching Assistants main issues are stipend levels and health care coverage.

B. MSU Energy Infrastructure Policy

Ms. Hannah Borland, MSU student, said MSU has the largest on-campus coal plant in the nation. She stated that MSU emits a 600-mile radius of pollution. Coal burning contributes to global warming. Ms. Borland stated that coal mining contributes to health issues and is environmentally destructive.

Ms. Justine Becker, MSU student, said that another energy option is natural gas, though it is dangerous to the environment. Along with coal, natural gas emits carbon dioxide and methane. Ms. Becker stated that the methods used to harvest natural gas are leading to health problems. Due to these issues, natural gas should not be considered a good option for MSU.

Mr. Adam Liter, MSU student, said that MSU Greenpeace is concerned with the dangers of using coal and natural gas. He stated that renewable energy sources should be considered in order to address health and environmental issues.

Ms. Tabitha Skervin, MSU student, asked that MSU stop using coal and start using all renewable energy sources. She asked that MSU make a public commitment not to use natural gas harvested by the fracking process.

16. Request to Adjourn

On a motion by Trustee Ferguson, supported by Trustee Byrum, **THE BOARD VOTED to adjourn** at 11:45 a.m.

Respectfully submitted,



William R. Beekman
Secretary of the Board of Trustees

RESOLUTION HONORING LEE JUNE

Michigan State University Board of Trustees
December 10, 2010

The Board of Trustees of Michigan State University today extends its appreciation and best wishes to Vice President and Associate Provost Lee June.

As MSU's vice president for student affairs and services and associate provost for academic student services and multicultural issues, Dr. June has been a strong and unflinching advocate for all students and student issues.

Dr. June has been vice president and associate provost since 1996. Prior to that he served in an acting capacity beginning in 1994.

It was under Dr. June's leadership that MSU made tremendous progress in improving both the quality and quantity of services provided to students.

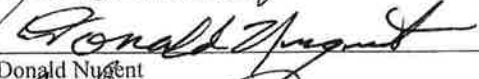
He helped expand services to a broad cross-section of under-represented, underserved and diverse populations. Under his leadership the LBGT Resource Center and Migrant Student Services were greatly expanded.

Dr. June is the recipient of numerous awards and recognitions, including the 2006 All-University Excellent in Diversity – Lifetime Achievement Award, the Living Legend Award from the Black Student Alliance, and the Muslim Student Association Award for outstanding commitment to students.

Dr. June's academic career includes authorship and editor/co-editor of five books, and author or co-author of more than 30 journal articles and book chapters. His research and writing have focused on such areas as the effective delivery of support services to students, multicultural counseling, and grief-focused counseling and psychotherapy.

As he leaves the vice president's office and returns to the ranks of faculty, the MSU Board of Trustees offers Lee June its heart-felt thanks and congratulations on a job well done, and best wishes for the future.


Joel I. Ferguson, Chairman

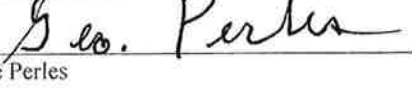

Donald Nugent


Faylene Owen


Dianne Byrum


Melanie Foster, Vice Chairperson


Colleen McNamara


George Perles


Diann Woodard

RESEARCH PRESENTATION

TO THE MSU BOARD OF TRUSTEES

DECEMBER 10, 2010

DR. WEIMING LI

**COLLEGE OF AGRICULTURE AND
NATURAL RESOURCES**

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

Sea Lamprey: Perpetual, Ugly and Sexy



Weiming Li



MICHIGAN STATE
UNIVERSITY

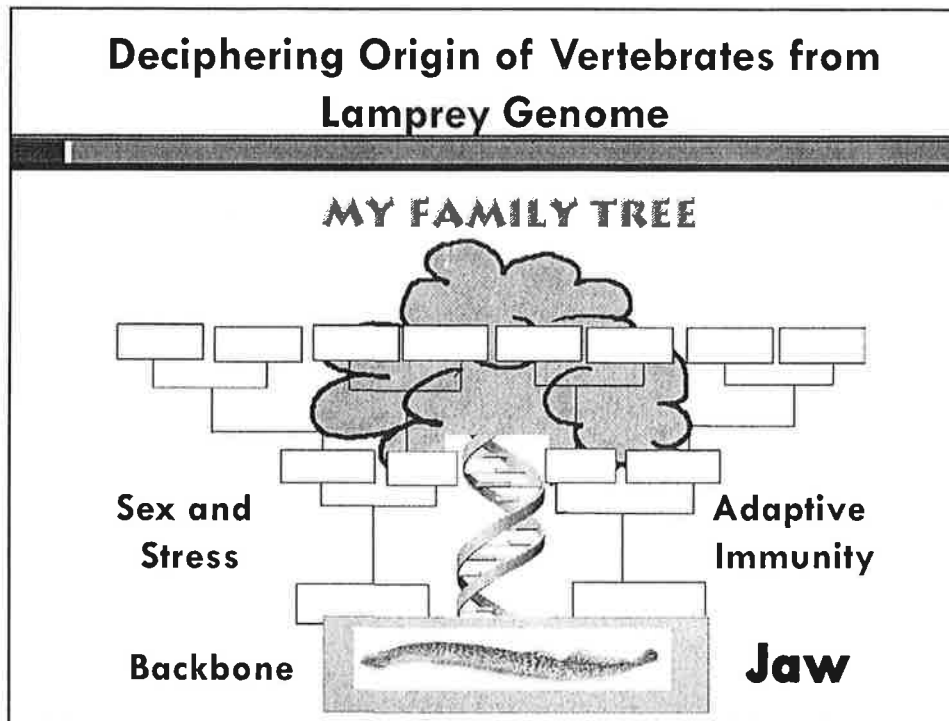
Sea Lamprey

Species of Interest



Focus on four themes:

- Genomics
- Endocrinology
- Neurobiology
- Pheromone Communication



Lamprey on Steroids

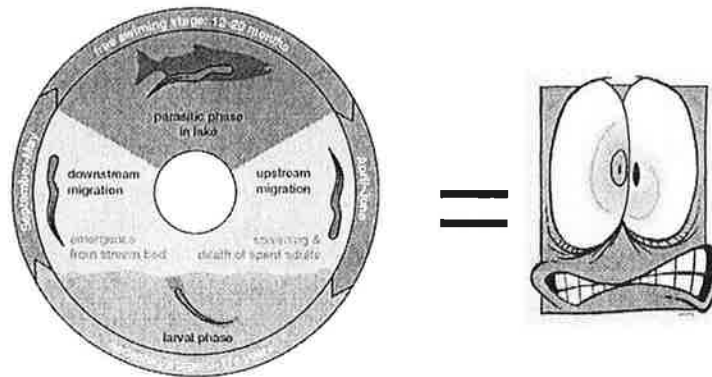
Lampreys do not have androgen. Really?

Androstenedione

Bryan, et al. 2007. Biol. Reprod. See also Science 2007 .

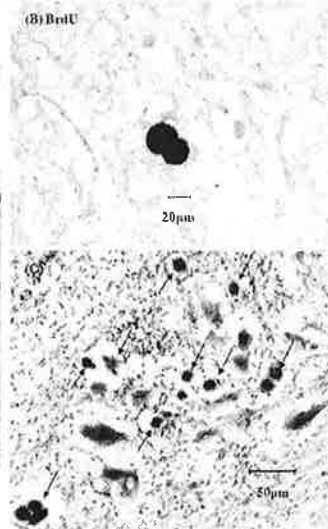
Life is Stressful, even for a Lamprey

Corticoid-corticoid receptor system



Close, et al. 2010. PNAS.

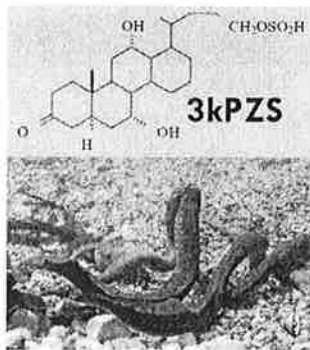
To Age Gracefully, Sniff Often



Chung-Davidson, et al. 2008. J. Neuroscience.

Love at First Smell

- Identified a sex pheromone, 3-keto-petromyzonol sulfate (**3kPZS**), released by mature males during spawning



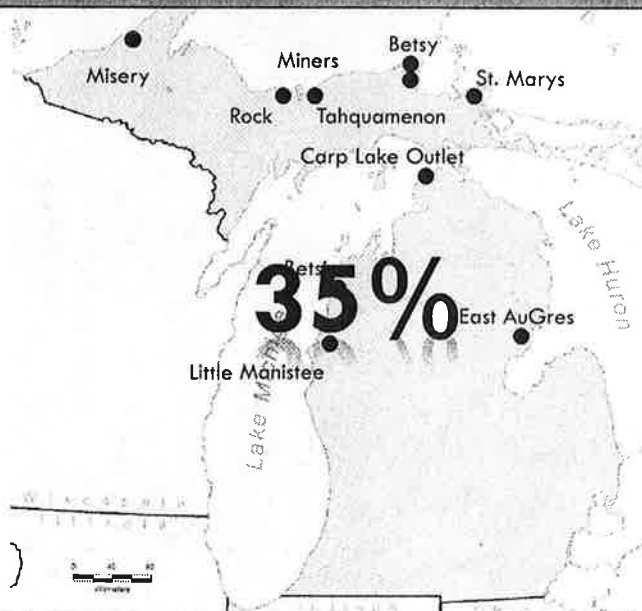
Li et al. 2002. Science.

Johnson et al. 2009. PNAS.

The Japan Times



First EPA and Environment Canada Sanctioned Field Application of Vertebrate Pheromone

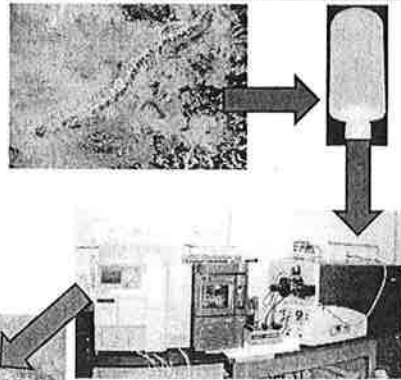


Population Guestimate

Old: Electroshocking



New: LC/MS/MS



Acknowledgements



GLFC, NSF, NIH, DOE, USGS, USFWS, Canada DFO,
GLPF

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.¹ 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% 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

¹ 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"

calculation. 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 the Investment Advisory Subcommittee. In connection with these reviews, the University's investment staff shall present analyses 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 2(a)(i) 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

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.

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 paragraph 2(a)(i) 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 paragraph 2(a)(ii) 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 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.

**RESOLUTION OF THE BOARD OF TRUSTEES OF
MICHIGAN STATE UNIVERSITY
APPROVING AN ASSESSMENT AGREEMENT WITH MERIT NETWORK, INC,**

WHEREAS, the Board of Trustees of Michigan State University (the “Board”) is a body corporate created by and existing under the Constitution of the State of Michigan with full constitutional authority over and general supervision of Michigan State University (the “University”) and control and direction of all expenditures from the University’s funds; and

WHEREAS, Merit Network, Inc. (“Merit”), a Michigan nonprofit corporation, has been formed to promote computer resource sharing through the provisions of resources, including a high-speed research and education network within the State of Michigan for use by public universities in Michigan and other education and research groups and institutions; and

WHEREAS, the governing members of Merit are the Board, the Regents of the University of Michigan (the “Regents”), and ten other public universities in Michigan (collectively, the “Members”); and

WHEREAS, Merit has been awarded grants from the federal government in the approximate amount of \$103,000,000 to be used for the construction of additional network facilities within Michigan; and

WHEREAS, in order to receive and utilize the federal grant for the purposes described above, it is necessary for Merit to borrow an amount not to exceed \$8,000,000 through the issuance of a tax-exempt bond (the “Bond”) by the Michigan Strategic Fund, the proceeds of which will be loaned to, and repaid with interest by, Merit; and

WHEREAS, J.P. Morgan Chase Bank (the “Bank”), has agreed to purchase the Bond, but only upon the execution of an Assessment Agreement (the “Assessment Agreement”) by the Members, under which the Members agree to pay to Merit sufficient funds to pay the debt service requirements on the Bond; and

WHEREAS, the benefits to the University from its membership in Merit and from the indebtedness to be incurred by Merit and guaranteed under the Assessment Agreement include:

- Service by Merit to its Members by providing advanced networking services on an extremely high-quality network infrastructure. As controlling Members of Merit the universities ensure themselves that they have a trusted source for network connectivity.
- As Members of Merit, the public universities in the State of Michigan have access to and control a technology network. They are their own regulators of costs and the policies on

that network. Access, both in scope and capacity, is not dictated by an outside service provider. The Members have available to their facilities almost unlimited use of bandwidth. In the last six years alone, the Members have increased their utilization of the Merit infrastructure by tenfold with no increase in cost over the last five of those years.

- Merit is the only provider in Michigan allowed multiple connections to Internet2 and to other Midwest regional networks required for research purposes. Merit partners with over 20 national and international networks to provide peering relationships and a direct path to and from other networks for exchanging sensitive data. This connectivity permits Michigan-based universities to work with other institutions across the nation on research and educational projects over their own networks.
- Merit is the neutral party that allows the Members to work together on connectivity and other collaborative opportunities. It gives the Members a venue for resolving networking issues and allows all of them to leverage the benefits of a large, robust infrastructure. Merit regularly contributes to these activities staff, expertise and resources that would not necessarily be available to all Members.
- Merit provides services to the majority of the Members' remote campuses and offices throughout the State, including hospitals, libraries, extension offices, computing centers, and research facilities. Economies of scale would be lost by having multiple service providers.
- Merit allows for a conduit of information flow between other state-funded universities across the nation that control their own networks. This enables the universities in Michigan to partake in a larger social, educational and research network of participants.
- Merit, with its own research staff, is a partner in funded network research endeavors; immediate availability to a controlled environment is paramount to network research. The Members benefit, both directly and indirectly, from the research engagements Merit enters into by fostering synergies between network researchers and operational groups across Michigan and the nation to push the boundaries of networking.
- Merit's connections with national initiatives, other regional networking organizations, and Michigan's educational and research communities puts the Members in a strong position to identify relevant trends, key technologies, and opportunities for learning that are shared among the Members. This interaction allows the universities to not only stay abreast of networking developments but to guide protocol on regional networks to the benefit of the universities.
- Membership in Merit provides residual interests in the assets of Merit upon its dissolution; and

WHEREAS, the Bond is being delivered and sold under certain provisions of the Internal Revenue Code of 1986, as amended, which provisions expire on December 31, 2010; and

WHEREAS, the execution and delivery of the Assessment Agreement by the Members of Merit requires that the governing board of each public university Member authorize such execution and delivery, and it may not be possible for all of the Members to achieve such authorization in time to permit the Bond to be delivered on or before December 31, 2010; and

WHEREAS, in order to assure that the Bond can be delivered prior to December 31, 2010, it is necessary for the Board and the Regents to each agree that they will assume up to one-half of the liabilities under the Assessment Agreement until such time as the remaining Members have authorized and executed the Assessment Agreement, upon which the liabilities of the Board and the Regents will be proportionately reduced; and

WHEREAS, the Board in the exercise of its constitutional duties, has determined that the guarantee of a portion of Merit's obligation with respect to the Bond through the execution and delivery by and on behalf of the Board of the Assessment Agreement as described above is in the interest of the University;

NOW, THEREFORE, BE IT RESOLVED AS FOLLOWS:

1. The guarantee by the Board of a portion of the obligations of Merit in connection with the Bond through the execution and delivery of the Assessment Agreement is hereby authorized and approved; provided, however, that the obligations of the Board under the Assessment Agreement shall be limited obligations of the Board, payable solely from General Revenues, as defined in the trust agreements under which the Board has issued its General Revenue Bonds. As provided in the Assessment Agreement, the Board's liabilities may be increased in the case of default by any other Member, but in no event shall the Board's obligations under the Assessment Agreement exceed the principal amount of four million dollars (\$4,000,000), plus interest on that principal amount and any penalties, premiums or other charges related to that principal amount.

2. The form of the Assessment Agreement on file with the Secretary of the Board is hereby approved, and the Vice President for Finance and Operations and Treasurer and the Director of Investments and Financial Management (each an "Authorized Officer") or either of them individually are hereby authorized to execute and deliver the Assessment Agreement substantially in such form, with such changes not inconsistent with the terms of this Resolution as the executing officer may determine appropriate, as evidenced by his signature thereon. Each of the Authorized Officers and each other appropriate officer or representative of the Board is hereby authorized to negotiate, execute and deliver, for and on behalf of the Board, any other certificates, opinions, documents or instruments necessary to effect the purposes of this Resolution.

3. The Board finds that the value of the benefits derived and to be derived by the University from its membership in Merit and from the proceeds of the indebtedness related to the Bond exceeds the liabilities to be incurred by the Board from its execution and delivery of the Assessment Agreement.

4. All resolutions or parts of resolutions or other proceedings of the Board in conflict herewith are hereby repealed insofar as such conflict exists.

I hereby certify that the attached is a true and complete copy of a resolution adopted by the Board of Trustees of Michigan State University on _____, __, 2010, in accordance with applicable law, and that the minutes of the meeting at which the resolution was adopted were kept and will be or have been made available at the Office of the Secretary of the Board of Trustees of Michigan State University.

I further certify as follows:

1. Present at the meeting were the following Board members:

Absent from the meeting were the following Board members:

2. The following members of the Board voted for the adoption of the Resolution:

The following members of the Board voted against adoption of the Resolution:

RESOLUTION DECLARED ADOPTED.

Secretary, Board of Trustees of
Michigan State University

The following amended *Bylaws* were approved by Faculty Council and Academic Council on November 16, 2010:

Old Version Showing Changes

1.1.2.5. A full time fixed-term faculty member, who has served at least three consecutive years ~~and is engaged in the activities of the Unit on a regular basis, and or specialists in the continuing appointment system,~~ may be elected to an academic governance body, with the exception of University Committee on Faculty Tenure, as a representative of any unit in which the person holds regular faculty status.

5.2.5.2.1. ~~In formulating policy r~~Regarding the regular season and post-season tickets and trips, voting members of the Athletic Council shall strive to minimize the award of special privileges to themselves ~~that are uncharacteristic of those generally available to faculty.~~ Nonetheless, it is expected that Athletic Council will fulfill responsibilities related to institutional representation as appropriate throughout the year.

5.2.6.1. ~~A report of P~~policies regarding regular season and post-season trips, as well as a record of the disbursement of complimentary tickets and trips, shall be ~~reported~~ included in the annual report of Athletic Council to University Council.

New Version

1.1.2.5. A full-time fixed-term faculty member, who has served at least three consecutive years and is engaged in the activities of the Unit on a regular basis, may be elected to an academic governance body, with the exception of the University Committee on Faculty Tenure, as a representative of any unit in which the person holds faculty status.

5.2.5.2.1. Regarding the regular season and post-season tickets and trips, voting members of the Athletic Council shall strive to minimize the award of special privileges to themselves. Nonetheless, it is expected that Athletic Council will fulfill responsibilities related to institutional representation as appropriate throughout the year.

5.2.6.1. A report of policies regarding regular season and post-season trips, as well as a record of the disbursement of complimentary tickets and trips, shall be included in the annual report of Athletic Council to University Council.

PUBLISHING CONTRACT TERM SHEET

Party: Dr. Thomas Dietz

Project Description: Editorial co-preparation of *Climate Change in the Great Lakes Region: Decision-Making Under Uncertainty*.

Term: Initial manuscript delivery expected by December 2010.

Contractual Terms: MSU Press standard publishing terms and conditions apply. For each edition published by the MSU Press, Dr. Dietz and the co-editor will receive a royalty of 2.5% of net revenues from the work, five free copies of the work, and the right to purchase for personal use, on a non-returnable basis, additional copies of the work at a 40% discount from the retail rate.

Services Provided: By MSU to Dr. Dietz:
Publication of the book.
By Dr. Dietz to MSU:
Editorial co-preparation of the work.

Use of University Facilities/Personnel:
None under contemplated agreement.

Organization Type: Dr. Dietz will be acting as an individual scholar.

Personnel Interest: This contract will be directly with Dr. Dietz, a faculty member in the Department of Sociology, who will receive the totality of the contemplated remuneration.

RESEARCH CONTRACT TERM SHEET

Party: Northern Technologies International Corporation

Contract: Sponsored Research Agreement from Northern Technologies International Corporation to MSU
“Design & Engineering of Non-Plastic Waste Bags Based on Biofiber – Organic & Inorganic Modifier Hybrids”

Term: December 10, 2010 to January 31, 2011

Payment Terms: Northern Technologies International Corporation will pay MSU \$22,909

Services Provided: By MSU to Northern Technologies International Corporation: research regarding formulation and engineering of chemically modified, marine biodegradable, biofiber-based, non-plastic waste bags.

By Northern Technologies International Corporation to MSU: None under contemplated agreement.

Use of University Facilities/Personnel:

Use of MSU facilities and personnel by Northern Technologies provided at prevailing industrial rates for sponsored research.

Organization Type: Delaware corporation based in Circle Pines, Minnesota.

Personnel Interest: Dr. Ramani Narayan, a Professor in the Department of Chemical Engineering and Materials Science, and his family own or have options to buy an ownership interest of more than 1% of the company. Dr. Narayan is also an officer of Northern Technologies International Corporation.

RESEARCH CONTRACT TERM SHEET

Party: KTM Industries, Inc.

Contract: Research subcontract from KTM Industries, Inc. to MSU
“STTR Phase II: Design and engineering of biodegradable, starch based biofoams for protective packaging applications”

Term: December 10, 2010 to August 31, 2012

Payment Terms: \$200,000

Services Provided: By MSU to KTM Industries: research regarding bio-foam materials and the formulation and optimization of manufactured sheets in relation to foam sheet composition.

By KTM Industries to MSU: none.

Use of University Facilities/Personnel:
Use of MSU facilities/personnel by KTM Industries provided at relevant rates for sponsored research.

Organization Type: Michigan corporation based in Lansing, Michigan.

Personnel Interest: Dr. Ramani Narayan, a Professor in the Department of Chemical Engineering and Materials Science, and Dr. Marcos Dantus, a Professor in the Department of Chemistry, and their families each own or have options to buy an ownership interest of more than 1% of the company. Dr. Narayan is also an officer of KTM Industries.

PURCHASE AGREEMENT TERM SHEET

Party: InPore Technologies, Inc. (formerly Claytec, Inc.)

Contract: Purchase of scientific materials, namely, mesoporous silicates.

Payment Terms: \$300 upon delivery of materials to MSU.

Services Provided: By MSU to InPore Technologies, Inc.: None under contemplated agreement.
By InPore Technologies, Inc. to MSU: None under contemplated agreement.

Use of University Facilities/Personnel:
No use of MSU facilities/personnel by InPore Technologies, Inc. under the purchase agreement.

Organization Type: Incorporated Michigan-based small business.

Personnel Interest: Dr. Thomas J. Pinnavaia, a Professor in the Department of Chemistry, and his immediate family own or have an option to buy an equity interest of more than 1% of the company. Dr. Pinnavaia is also an officer of InPore Technologies, Inc.

RESOLUTION HONORING DONALD W. NUGENT

Michigan State University Board of Trustees
December 10, 2010

The Board of Trustees of Michigan State University today extends to Donald W. Nugent its deep gratitude and appreciation for service to his university.

Trustee Nugent was elected to the Board of Trustees in 1994 and re-elected in 2002.

Trustee Nugent is a long-time Spartan, having earned a Bachelor of Science degree in agriculture from MSU in 1965. His wife, Gail, has a Bachelor of Arts degree in education from MSU.

In his time on the board, Trustee Nugent has kept a keen eye on the university's finances, chairing the board's Finance Committee for many years. He has also served as Chairperson of the Board. Trustee Nugent has been a driving force behind some of MSU's most important achievements, including the Facility for Rare Isotope Beams, the Broad Art Museum, the Secchia Center in Grand Rapids, as well as major enhancements to MSU's athletic facilities.

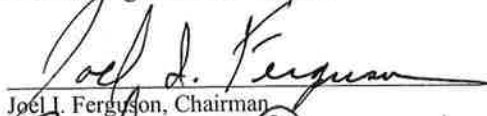
He also has been a regular presence at many university events, including groundbreakings, dedications, fundraising activities and commencement exercises.

A life-long resident of Frankfort, Trustee Nugent owns and operates Nugent Farms, producing cherries and apples in Benzie and Leelanau counties. He is the founder of Graceland Fruit Cooperative.

Very active in his community, Trustee Nugent serves on the board of directors of the Traverse Bay Economic Development Corporation.

He also is a member of the Frankfort Rotary Club, the Michigan Food Processors Association, the Michigan Horticultural Society, and the Farm Bureau.

It is with much respect, admiration and gratitude that the MSU Board of Trustees offers Donald Nugent its best wishes for the future.


Joel I. Ferguson, Chairman

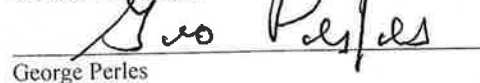

Faylene Owen


Dianne Byrum

Diann Woodard


Melanie Foster, Vice Chairperson


Colleen McNamara


George Perles

RESOLUTION HONORING COLLEEN M. McNAMARA

Michigan State University Board of Trustees
December 10, 2010

The Board of Trustees of Michigan State University today extends a special tribute to Trustee Colleen M. McNamara.

Trustee McNamara was elected to her first eight-year term on the board in 1994 and was re-elected in 2002.

During her time on the board, Trustee McNamara has been a strong advocate for students. She is president of the McNamara Scholarship Foundation, which has awarded more than \$500,000 in college scholarships to minority students.

Trustee McNamara is the executive director of the Michigan Cable Telecommunications Association, which represents cable television companies through the state.

She has freely shared her knowledge, working with students and staff in MSU's Department of Telecommunication, Information Studies and Media on issues related to cable television and telecommunications public policy.

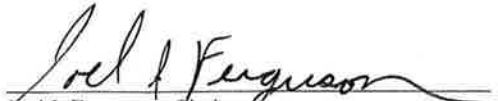
Trustee McNamara has been a key figure in many of MSU's recent accomplishments, including the Facility for Rare Isotope Beams, the Broad Art Museum, the redevelopment of MSU's residential dining services, and the expansion of the College of Osteopathic Medicine into Southeast Michigan.

Trustee McNamara has served as chairperson of the board's Policy Committee. She also is a member of the MSU College of Law Board of Trustees.

Very active in the community, Trustee McNamara is a member of the board of directors of the Education Child Care Center in Lansing. She also has been a member of the board of directors for the Lansing Symphony, Concerned Citizens for the Arts, and the Michigan Sports Hall of Fame.

A true Spartan, Trustee McNamara has a Bachelor of Arts degree in social science from MSU.

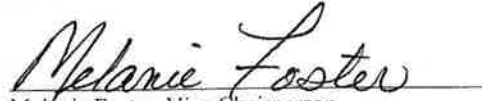
For her leadership and extraordinary efforts to advocate for MSU and its students, the Board of Trustees extends its heartfelt thanks and sincere gratitude to Colleen McNamara.

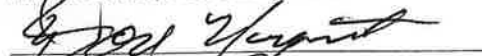

Joel I. Ferguson, Chairman

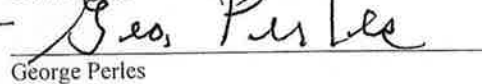

Faylene Owen


Dianne Byrum

Diann Woodard


Melanie Foster, Vice Chairperson


Don Nugent


George Perles