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

April 13, 2012

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

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

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

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

1. On a motion by Trustee Owen, supported by Trustee Foster, the BOARD VOTED to approve the agenda as amended to reorder certain agenda items at the request of President Simon.

2. On a motion by Trustee Owen, supported by Trustee Lyons, the BOARD VOTED to approve the minutes of the Board meeting of January 27, 2012.

3. Board of Trustees Award Presentations

Trustee Foster presented the Board of Trustees Award to the following students:

1. Dustin Baker—Major: Agribusiness Management; Member of the Honors College; 4.0 GPA

2. Claire Carpenter—Major: Communicative Sciences and Disorders; Member of the Honors College; 4.0 GPA

3. Bethany Davis—Major: Journalism; Member of the Honors College; 4.0 GPA
4. Thomas Degroote—Major: Supply Chain Management; Member of the Honors College; 4.0 GPA
5. Matthew Durak—Major: Computer Engineering; Member of the Honors College; 4.0 GPA
6. Amanda Egert—Major: Animal Science; 4.0 GPA
7. Michael Erlingis—Major: Hospitality Business; Member of the Honors College; 4.0 GPA
8. John Franklin—Major: Chemical Engineering; Member of the Honors College; 4.0 GPA
9. Chaun Gandolfo—Major: Physiology; Member of the Honors College; 4.0 GPA
10. Elizabeth Gutowski—Major: Education; Member of the Honors College; 4.0 GPA
11. Robert Hasselbeck—Major: Chemical Engineering; Member of the Honors College; 4.0 GPA
12. Katie Kanitz—Major: Agribusiness Management; 4.0 GPA
13. Jordan Kornack—Major: Accounting; Member of the Honors College; 4.0 GPA
14. Margaret LaLonde—Major: Interdisciplinary Studies in Social Science Human Resources and Society; Member of the Honors College; 4.0 GPA
15. Jonathan Massie—Major: Biochemistry and Molecular Biology; Member of the Honors College; 4.0 GPA
16. Allison Melkonian—Major: Human Biology; Member of the Honors College; 4.0 GPA
17. Julie Miannecki—Major: Journalism and Spanish; Member of the Honors College; 4.0 GPA
18. Darcey Noska—Major: Special Education—Learning Disabilities; Member of the Honors College; 4.0 GPA
19. Anna Orsini—Major: Arts and Humanities; Member of the Honors College; 4.0 GPA
20. Devan Sayles—Major: Computer Science and Media and Communication Technology; Member of the Honors College; 4.0 GPA

21. Alexandra Siciliano—Major: Packaging; Member of the Honors College; 4.0 GPA

22. Christopher Sigler—Major: Computer Engineering; Member of the Honors College; 4.0 GPA

23. James Smith—Major: International Relations; Member of the Honors College; 4.0 GPA

24. Charles Stavoe—Major: Supply Chain Management and Psychology; Member of the Honors College; 4.0 GPA

25. Katie Trumbley—Major: Human Biology; Member of the Honors College; 4.0 GPA

26. Natalie Walicki—Major: Arts and Humanities; Member of the Honors College; 4.0 GPA

27. Thomas Wilkins—Major: Biology; Member of the Honors College; 4.0 GPA

28. Nicholas Wilson—Major: Mechanical Engineering; Member of the Honors College; 4.0 GPA

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

29. Leah Bridle—Major: Interdisciplinary Studies in Social Science—International Studies and Anthropology; Member of the Honors College; 4.0 GPA

30. Megan Climans—Major: Zoology; Member of the Honors College; 4.0 GPA

31. Ryan Duffy—Major: Psychology; Member of the Honors College; 4.0 GPA

32. Negar Hosseinifar—Major: Human Biology; 4.0 GPA

33. Brice Jastrow—Major: Political Science; 4.0 GPA
34. Eric LaNoue—Major: Music Education; Member of the Honors College; 4.0 GPA

35. Andrew Mach—Major: Political Theory and Constitutional Democracy; Member of the Honors College; 4.0 GPA

36. Kaelyn Stevick—Major: Human Biology; 4.0 GPA

37. Erika Vivyan—Major: Arts and Humanities; Member of the Honors College; 4.0 GPA

4. President's Report

President Simon provided the following report to the Board.

A. President’s Higher Education Community Service Honor Roll

In March, MSU was among 110 colleges and universities in the nation to be named to the 2012 President’s Higher Education Community Service Honor Roll. This distinction is the highest federal recognition available to colleges and universities for volunteering, service-learning, and civic engagement. MSU’s Center for Service-learning and Civic Engagement is the oldest continuously operating student-volunteer unit in the nation. MSU was the only Michigan school on the list.

B. Mid-Michigan Addy Awards

MSU talent shone brightly this winter as the University was awarded one gold and two silver Mid-Michigan Addy Awards. The Addys recognize excellence in the marketing and advertising industry.

C. The New Spartan Diet

The MSU Culinary Services program and its director, Guy Procopio, were featured on the front page of Food Management magazine’s March publication. The four-page article, entitled “The Spartan Diet Gets a Major Makeover,” discusses many ways MSU is making a commitment to lead with food, including major culinary innovations in Brody and Case Halls.

D. Introduction of New Controller
Greg Deppong has been appointed as the University's Controller. Mr. Deppong has been employed by MSU for seventeen years and is a certified public accountant.

E. Dr. Rappley to Chair the AAMC Council of Deans

Dean Marsha Rappley has been elected as the chair of the Council of Deans for the Association of American Medical Colleges. In this new position, she will lead the deans of all the medical colleges in the US, Canada, and Puerto Rico in improving medical education and preparing students to meet the future needs of the health care system.

F. GLEQ Awards

Two MSU spin-off research companies took top awards in the Great Lakes Entrepreneur's Quest, a statewide business plan competition among more than 200 Michigan-based entrepreneurial ventures. BioPhotonic Solutions Inc., the East Lansing-based company led in part by MSU chemistry professor Marcos Dantus, took the first place award in the Emerging Company category for laser research. A second place award was given to Phenometrics, Inc., an East Lansing-based company led in part by Professor David Kramer that provides innovative research and development measurement tools for the algae and plant science industry.

G. Goldwater Scholars

Two MSU Honors College students were selected to receive the Goldwater Scholarship this year: Mairin Chesney, a sophomore majoring in Computer Science, and Craig Pearson, a sophomore dual majoring in Biochemistry & Molecular Biology and English. Goldwater Scholarships are awarded to undergraduates in the science, math, and engineering fields. President Simon congratulated the students on their outstanding achievement.

H. National Student Teacher of the Year

College of Education graduate Katie Kosko has been named National Student Teacher of the Year. Katie now teaches fifth-grade at Marshall Upper Elementary School in Westland. President Simon congratulated Katie on the great honor.

I. Graduate Student Appreciation Week
Graduate and Professional Student Appreciation week took place April 2 through April 6, 2012. For the first time, the Council of Graduate Students worked with the Graduate Wellness Office to host several events recognizing the significant contributions of graduate and professional students to Team MSU.

J. MSU Debate Win

The Debate team took first place in the Freshman-Sophomore Policy Debate National Competition, defeating the University of Michigan in the final round. The team was also named one of the top sixteen debate teams in the country, the youngest team to receive that honor.

K. College of Human Medicine Collaborates with Sparrow Pediatrics

Events this week marked the beginning of a new collaboration between the College of Human Medicine and Sparrow Hospital’s Pediatric Specialty Unit. Establishing a call center to assist families and physicians in navigating specialty referrals, consolidating clinics into one location, and recruiting a comprehensive array of specialists to Lansing are among future plans. The partnership will make it easier for the community to access quality child healthcare.

L. MSU/SVSU Memorandum of Understanding

The MSU College of Agriculture and Natural Resources will soon enter into a memorandum of understanding with Saginaw Valley State University’s Colleges of Science, Engineering, Technology, Education, and Business and Management. The collaborative partnership aims to enhance higher education in the agriculture and natural resources disciplines in Michigan and increase student access to these educational programs.

M. Pauline Adams Birthday

Former First Lady Pauline Adams turns 90 this week. Mrs. Adams has been a part of the MSU family for many years and is an extraordinary teacher as well as an individual who is involved in many campus activities.

4. Public Participation on Issues germane to the Agenda.

A. Energy Transition Plan
Ms. Susan Harley, MSU graduate and Michigan Policy Director for Clean Water Action, said that she is a member of the Clean Energy Now Coalition that is fighting coal pollution. The organization wants to reduce water pollution from coal. Ms. Harley said that pollutants threaten the Great Lakes, inland lakes and streams, and drinking water. Ms. Harley indicated her disappointment with the MSU Energy Transition Plan. She asked the Board to delay its vote on the plan so that it can be improved.

B. Energy Transition Plan

Ms. Talya Tavor, MSU student and President of the MSU Beyond Coal campaign, thanked President Simon for the endorsement of a student-led clean energy working group. The group will combine the efforts of students across campus and University resources in order to create a new energy transition plan that reaches 100 percent renewable energy. Ms. Tavor said that the current Energy Transition Plan did not allow students legitimate space to provide input and lacked input from experts on energy efficiency and renewable energy.

5. Personnel Actions

Provost Wilcox presented the following personnel actions:

Horne, William A., AN—Professor, Department of Small Animal Clinical Sciences, $210,000, with Tenure, effective July 1, 2012.

Luyendyk, James P., AY—Associate Professor, Department of Pathobiology and Diagnostic Investigation, $110,000, with Tenure, effective March 1, 2012.

Teahan, Sheila J., AY—Associate Professor, Department of English, to add the title of Faculty Grievance Official, Faculty Grievance Office, and for a change in salary to $95,000, effective July 1, 2012.

President Simon presented the following action:

It is recommended that the title of the position of Vice President for University Relations be changed to Vice President for Communications and Brand Strategy and that all applicable policy documents be revised to reflect the change in title, effective April 13, 2012.
Swain, Heather C., AN—Interim Vice President, University Relations, for a change in title to Vice President for Communications and Brand Strategy and for a change in salary to $215,000, effective April 13, 2012.

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

Professor Horne has worked at Neurex Corporation and Idun Pharmaceuticals in the private sector and has held faculty positions at North Carolina State, Colorado State, and, most recently, at Cornell University.

Professor Luyendyk was a post-doctoral fellow at MSU in 2005 and has worked at the Scripps Research Institute and, most recently, at the University of Kansas.

Professor Teahan has been on the faculty at MSU since 1989 and has had several roles in University Governance, including serving on the Executive Committee of Academic Council, Faculty Council, the Graduate Committee, and the University Committee on Faculty Affairs. Professor Teahan was recommended by the search committee.

THE BOARD VOTED to approve the recommendations.

6. Gifts, Grants, and Contracts


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

THE BOARD VOTED to approve the recommendations.

Vice President Gray introduced Mr. Alex Montoye, College of Education doctoral student, and Mr. Craig Pearson, Lyman Briggs College and Honors College student. Mr. Montoye made a presentation to the Board on his research on measurement issues in accelerometry. (Appendix A).
Mr. Pearson made a presentation to the Board on his research on a drug delivery device for genetic blindness. (Appendix B)

7. Finance Committee

Trustee Breslin presented the Trustee Finance Committee Report and recommendations.

A. Commercial Paper Authorization Increase

It was recommended that the Board of Trustees approve the resolution set forth in Appendix C, which authorizes the issuance of tax-exempt Commercial Paper Notes, 2012 Series D, and replace the 2010 Series C Commercial Paper Notes, and the continuation of the taxable 2008 Series B in an aggregate principal amount not to exceed $250 million. (Appendix C)

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

THE BOARD VOTED to approve the recommendation.

B. 2012-13 Housing and Dining Rate Recommendations

It was recommended that the Board of Trustees adopt the basic residence hall double room and board rate of $8,476 for freshman, transfer, and returning students who select the silver unlimited meal plan for the 2012-13 academic year.

It was recommended that the Board of Trustees adopt Spartan Village rates of $650 per month for a one-bedroom apartment and $774 per month for a two-bedroom apartment, and adopt a University Village rate of $690 per month/per person for a four-bedroom apartment, effective August 1, 2012.

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

THE BOARD VOTED to approve the recommendations.

C. New Investment Manager—Astenbeck Capital Management, LLC

It was recommended that the Board of Trustees select Astenbeck Capital Management, LLC as an investment manager.
Trustee Breslin moved to approve the recommendation, with support from Trustee Owen.

THE BOARD VOTED to approve the recommendation.

D. New Investment Manager—Kylin Management, LLC

It was recommended that the Board of Trustees select Kylin Management, LLC as an investment manager.

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

THE BOARD VOTED to approve the recommendation.

E. Project Approval—Authorization to Proceed—Administration Building—Waterproof North Entrance

It was recommended that the Board of Trustees authorize the Administration to proceed with the project entitled Administration Building—Waterproof North Entrance, and to approve a budget of $1,220,000.

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

THE BOARD VOTED to approve the recommendation.

F. Project Approval—Authorization to Proceed—South Campus Anaerobic Digester

It was recommended that the Board of Trustees authorize the Administration to proceed with the project entitled South Campus Anaerobic Digester, and to approve a budget of $5,100,000 subject to governmental regulatory approvals and upon such other terms and conditions as may be acceptable to the Vice President for Finance and Operations and Treasurer.

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

THE BOARD VOTED to approve the recommendation.

G. Project Approval—Authorization to Proceed—Music Building—Auditorium Renovations (budget adjustment and amendment)
It was recommended that the Board of Trustees authorize the Administration to amend the project entitled Music Building—Auditorium Renovations and increase the budget from $3,343,000 to $4,500,000.

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

THE BOARD VOTED to approve the recommendation.

H. Energy Transition Plan

It was recommended that the Board of Trustees adopt the Energy Transition Plan, including the overall goal of moving toward 100 percent renewable energy and the greenhouse gas reduction and campus renewable energy targets for achieving that goal, and, since the Energy Transition Plan serves a purpose similar to that of the Campus Master Plan, that the Vice President for Finance and Operations provide a progress report and Energy Transition Plan update to the campus and Board of Trustees every five years, as the Vice President for Finance and Operations does for the Campus Master Plan.

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

President Simon said that MSU has developed a set of evidence-based, comprehensive strategic planning initiatives around the built environment, sustainability, and recycling. These are dynamic documents that contain a set of goals and provide an opportunity to assess MSU's progress in a transparent way, recognizing that technology will change and that plans will have to be adjusted based on the needs of the institution, changes in technology, and a strong emphasis on ensuring that MSU is a good steward of resources.

President Simon said that the Energy Transition Plan represents an example of how MSU is a living learning laboratory. Many faculty, students, and staff are passionately interested in the subject matter covered by the Energy Transition Plan and were engaged in the analysis of Plan options. President Simon acknowledged that the approach used is not a pronouncement, but a complicated model that moves MSU into energy conservation within the built environment. The Plan sets a standard that is aggressive and requires that MSU address the realities of balancing many competing interests.
Trustee Byrum acknowledged the students who participated on the committee which developed the Plan. She said that the Energy Transition Plan is a dynamic plan. The required annual reports to the Board and five-year review will ensure that the Board and Administration are reaching the stated goals as aggressively as possible.

Trustee Foster said that a major constituent concern is cost containment within public higher education. She said that it is important that the Plan not add to the cost of tuition. The goal of 100 percent renewable energy is laudable, but only if there are viable and cost-effective ways to achieve the goal. Trustee Foster said that MSU must operate utilizing prudent, cost-effective energy sources until such time as the renewable energy sources become economically feasible.

Trustee Owen said that she supported the Energy Transition Plan.

**THE BOARD VOTED to approve** the recommendation.

8. **Policy Committee**

Trustee Byrum presented the Trustee Policy Committee Report and recommendations.

A. **Revision to Librarian Continuous Appointment System**

It was recommended that the Board of Trustees approve the revised policy on the Librarian Continuous Appointment System. (Appendix D)

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

**THE BOARD VOTED to approve** the recommendation.

B. **Revision to the Faculty Conflicts of Interest Policy**

It was recommended that the Board of Trustees approve the revised Faculty Conflicts of Interest Policy. (Appendix E)

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

**THE BOARD VOTED to approve** the recommendation.
C. Revision to the University Policy, Integrity of Scholarship and Grades

It was recommended that the Board of Trustees approve the proposed revision to the University policy, Integrity of Scholarship and Grades, as approved by the University Council on March 27, 2012. (Appendix F)

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

THE BOARD VOTED to approve the recommendation.

D. Approval of Contract Terms

It was recommended that the Board of Trustees approve the execution of an amended license agreement with InPore Technologies, Inc., consistent with earlier public notice given at a Board meeting and with the "License Amendment Term Sheet" presented to the Board. (Appendix G)

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

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

It was recommended that the Board of Trustees approve the execution of an amended publishing contract with Dr. Igor Z. Vojnovic, consistent with earlier public notice given at a Board meeting and with the "Revised Contract Term Sheet" presented to the Board. (Appendix J)

E. Request to Recognize the Research Faculty Appointment Category

Attached to these minutes is a document approved by Faculty Council on March 27, 2012. Provost Wilcox explained that the
document provides a rationale for creating a designation of "Research Faculty," the "fixed term" faculty category. Policy already allows for the appointment of fixed term instructors, assistant professors, associate professors, and professors. Because this is a new subcategory of fixed term faculty appointments, all provisions pertaining to fixed term faculty in University policy and University by-laws apply to those who are appointed as "Research Faculty."

This change creates finer differentiation within the fixed term category to provide for appointments allowing faculty to conduct research without service or teaching expectations. This category would allow flexible appointments of variable duration that would meet the specific needs of externally sponsored research projects and would allow for increased flexibility as project and research priorities change.

The proposal was reviewed by the University Committee on Graduate Studies and the University Committee on Faculty Affairs before its endorsement by Faculty Council on March 27, 2012. (Appendix K)

F. Notice of Intent to Negotiate a Contract with VerdeTurbo, Inc.

Pursuant to State Law, the Chair of the Policy Committee gave public notice of the University’s intent to negotiate contracts with VerdeTurbo, Inc., a Delaware corporation based in Lansing, Michigan.

Dr. Norbert H. Mueller, an Associate Professor in the Department of Mechanical Engineering, and his family own or have options to buy an ownership interest of more than one percent of the company. Dr. Mueller is also an officer of VerdeTurbo, Inc.

9. Audit Committee

Trustee Perles presented the Trustee Audit Committee Report.

Representatives of Plante and Moran reviewed their audit approach for the 2011-12 fiscal year with the Audit Committee. Discussions included a review of audit scope, upcoming audit issues, required disclosures, and the audit timeline.

Mr. Richard Shipman, Director of the Office of Financial Aid, presented an overview of the financial aid program at MSU. He noted that nearly 38,000 MSU students received $585 million in financial aid last year. Most
of that aid was in the form of loans to students and their parents; 15 percent of the aid was provided through need-based grants to the lowest income students. About two-thirds of the money came from the federal government, and 20 percent came from MSU's general fund.

10. Diversity Report

Senior Advisor and Director Granberry Russell presented the Diversity and Inclusion at MSU Annual Progress Report for 2010-11.

The full report can be viewed at:

11. Trustee Comments

Trustee Foster applauded the hard work of the committee that developed MSU's inaugural Energy Transition Plan. She noted that it was a spirited and active committee. Trustee Foster acknowledged Beyond Coal, Greenpeace and the other advocacy groups from MSU and across the country that lobbied diligently for their beliefs. She stated that hearing the opinions of various constituency groups is part of a robust university environment.

Trustee Perles thanked the many students who contacted him regarding the Energy Transition Plan.

Trustee Woodard stated that she had received many phone calls and emails regarding the Energy Transition Plan and thanked the students for their involvement in the issue.

Trustee Byrum congratulated the Board of Trustees GPA Award recipients. She praised the students for their achievements.

Trustee Lyons congratulated the Board of Trustees GPA Award recipients. He thanked the students for their passion regarding the Energy Transition Plan and noted that ASMSU supported the plan. Trustee Lyons welcomed Kelcey Gapske to the student liaison committee and wished Sarah Pomeroy and Brianne Mirjah well as they graduate.

Trustee Owen said that Sally Nogle and John Powell are being inducted into the National Athletic Trainers Hall of Fame. She congratulated them both.

12. Public Participation on Issues Not germane to the Agenda.

Board of Trustees Minutes 4.13.12
A. Children’s Health Equity and Access

Reverend Penny Swartz of the People’s Church of East Lansing, thanked the Board for the opportunity to speak as a representative of the faith-based organization Action of Greater Lansing on the issue of Children’s Health Equity and Access. Reverend Swartz thanked MSU for its cooperative efforts with Sparrow Hospital and its renewed efforts on the vital issue of health care for children in the region. She offered the assistance of Action of Greater Lansing in serving the health needs of the community’s children. Reverend Swartz asked the Board to make the pediatric sub-specialty health center a priority and a reality.

B. Children’s Health Equity and Access

Reverend Melvin Jones, Pastor of Union Missionary Baptist Church and member of Action of Greater Lansing, thanked the Board for the positive step that has been taken toward the actualization of an integrated children’s outpatient sub-specialty health center in Lansing. Pastor Jones stated that Action of Greater Lansing has been an advocate of this idea for more than two years. He said that Action of Greater Lansing will continue to work with MSU and Sparrow Hospital to provide care to underprivileged children in the area.

C. Chittenden Hall Renovations

Mr. Tom Moore, student at the MSU College of Law and representative of the Council of Graduate Students (COGS), said that collaboration is important not only in academia, but in all realms of knowledge and innovation. Mr. Moore noted that with increased specialization, broad collaboration and accidental partnerships are less likely to happen. Mr. Moore stated that graduate students can be isolated within their own departments. He said that MSU should encourage collaboration across specializations so that knowledge can spread, rather than be held within departments. Mr. Moore indicated that Chittenden Hall could be the place for students to create collaborations and make connections.
13. Request to Adjourn

On a motion by Trustee Owen, supported by Trustee Breslin, THE BOARD VOTED to adjourn at 11:45 a.m.

Respectfully submitted,

William R. Beekman
Secretary of the Board of Trustees
Research Presentation
To the MSU Board of Trustees
April 13, 2012

Alex Montoye
College of Education

Facilitated by the Office of the Vice President for Research and Graduate Studies
Alex Montoye is a second year doctoral student in the Department of Kinesiology, working under the direction of Dr. Karin Pfeiffer. Upon enrolling at Michigan State University in 2010, he was awarded the University Distinguished Fellowship. Alex’s research interests include implementing lifestyle interventions to reduce/prevent obesity in at-risk populations and measuring physical activity in children and adolescents using accelerometer technology. Prior to attending Michigan State University, Alex attended Alma College, graduating in 2010 with a double major in Exercise and Health Science and Mathematics. During his undergraduate studies, he spent time conducting research at Oregon State University and Penn State University via externally funded training programs. Alex can be contacted at montoyea@msu.edu.
MEASUREMENT ISSUES IN ACCELEROMETRY: EVALUATING SENSITIVITY TO CHANGE

Alexander H. Montoye¹, Karin A. Pfeiffer², FACSM, Darijan Suton¹, and Stewart G. Trost³, FACSM. ¹Michigan State University; ²Oregon State University

Introduction

• Benefits of physical activity (PA) widely accepted

• Importance of PA assessment
  – Intervention research
  – Promote PA in different populations
Accelerometry

- How it works
  - Accelerations translated into “counts”
  - Can collect counts in intervals
  - Counts used to estimate physical activity

- Previous research
  - Accelerometry used frequently in interventions and observational studies

- Few studies evaluating sensitivity of accelerometry to detect change in PA in children

Purpose

- To evaluate the sensitivity to change of two commercially available accelerometers (Actigraph and Actical)
Methods

• Subjects were 208 (102 girls, 106 boys) children and adolescents aged 6-16 years

• Consent and assent obtained

• Approved by MSU Human Subjects Review Board and OSU Institutional Review Board

• Cross-sectional design
  – Part of longitudinal study of accelerometry

Visits

<table>
<thead>
<tr>
<th></th>
<th>Low-intensity visit</th>
<th>High-intensity visit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activity time</td>
<td>40 min.</td>
<td>60 min.</td>
</tr>
<tr>
<td>Time in sedentary activities</td>
<td>50 min.</td>
<td>30 min.</td>
</tr>
<tr>
<td>Activity type</td>
<td>Light-to-moderate</td>
<td>Moderate-to-vigorous (MVPA)</td>
</tr>
<tr>
<td>Activity examples</td>
<td>Bowling, catch</td>
<td>Tag, basketball</td>
</tr>
<tr>
<td>Total duration of visit</td>
<td>90 min.</td>
<td>90 min.</td>
</tr>
</tbody>
</table>
Methods (cont.)

- Manipulation check
  - Direct observation
    - CARS (Puhl, 1990)
    - Handheld PDAs
    - 10-min observation on randomly selected participants
  - Added for group

- Sensitivity to change
  - Examined differences in different PA intensities and total counts between the low- and high-intensity visits using standardized response means (SRM)

  \[
  SRM = \frac{|High - Low|}{S.D. of |High - Low|}
  \]

- SRM values
  - Low: 0.20-0.49
  - Moderate: 0.50-0.79

Results

Table 1: SRM values for the Actigraph and Actical

<table>
<thead>
<tr>
<th></th>
<th>Actigraph</th>
<th>Actical</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sedentary</td>
<td>1.99 (1.79-2.19)</td>
<td>2.09 (1.90-2.28)</td>
</tr>
<tr>
<td>Light</td>
<td>1.32 (1.12-1.52)</td>
<td>1.43 (1.24-1.62)</td>
</tr>
<tr>
<td>Moderate</td>
<td>1.62 (1.43-1.81)</td>
<td>1.25 (1.06-1.44)</td>
</tr>
<tr>
<td>Vigorous</td>
<td>3.05 (2.36-3.24)</td>
<td><strong>4.06 (3.87-4.25)</strong></td>
</tr>
<tr>
<td>MVPA</td>
<td>3.28 (3.09-3.47)</td>
<td><strong>4.64 (4.45-4.83)</strong></td>
</tr>
<tr>
<td>Total Counts</td>
<td>3.64 (3.44-3.83)</td>
<td>3.74 (3.55-3.93)</td>
</tr>
</tbody>
</table>

Values are expressed as mean (95% confidence interval [CI]).
Conclusions and Future Directions

- Conclusions
  - Actical showed higher sensitivity than Actigraph for VPA and MVPA
  - Both accelerometers showed high sensitivity to change

- Future Directions
  - Can accelerometry detect smaller changes in PA?
  - Does sensitivity to change vary with age? Activity level?

- Larger context
  - Sensitivity to change
    - Over time (longitudinally)
    - Growth and development
  - Validity of accelerometry

Acknowledgements

- Graduate research assistants
- Undergraduate student volunteers
- Participants
- Anna Bratta

- Funded by NIHR01 HD055400
RESEARCH PRESENTATION
TO THE MSU BOARD OF TRUSTEES

APRIL 13, 2012

CRAIG PEARSON
LYMAN BRIGGS COLLEGE &
HONORS COLLEGE

Facilitated by the Office of the Vice President for
Research and Graduate Studies
Craig Pearson is a sophomore in the Honors College and Lyman Briggs College, majoring in Biochemistry & Molecular Biology and English. He was raised in Bloomfield Township, Michigan, and attended University of Detroit Jesuit High School. At MSU, Pearson writes a column for The State News on academic research, is the student managing editor of ReCUR (Red Cedar Undergraduate Research), and is active in several organizations such as the Undergraduate Research Advisory Board, the Biochemistry Club, the Biomedical Engineering Society, and H-STAR (Honors Students Actively Recruiting). He was recently named a 2012 Goldwater Scholar. Pearson plans to attend graduate school for an MD/PhD and work as a medical research faculty at a major university research and teaching hospital.
Leber Congenital Amaurosis (LCA)

- Complete vision loss by 6 months of age
- Affects 1 in 80,000
- Similar retinal degeneration diseases affect 1 in 4,000
- LCA is one of the most severe
Visual Cycle

- Light enters eye, strikes retina
- activates 11-cis-retinal
- Opsin protein signals to brain
- all-trans-retinal product recycled back to 11-cis-retinal

In Those With LCA...

- RPE65 gene malfunction
- trans retinal not recycled back to cis
- near-complete blindness
Tissue Engineering

- Fast-developing field
- Implanting materials to repair/replace biological functions
- Biocompatible polymer scaffolds → break down into safe products
- Mouse retinal cells delivered in PLGA scaffold improved vision

Our Research: Drug Delivery

- PLGA polymer + \textit{trans} retinal
- Polymer degrades → releases steady amounts
- Measure release over time with light absorbance
Current Experiments

- 2 μg/day dose necessary to restore vision
- Comparable release seen at 37 °C (body temperature)

⇒ The platform works

What's Next?
What's Next?

- Work with 11-cis-retinal
- Test release in harvested eyes (animal model)
- Implant in LCA diseased animal model

⇒ Translate from lab to patients

Acknowledgements

- Dr. Melissa Baumann
- Dr. Simon Petersen-Jones
- Dr. Debra Thompson

Questions?
RESOLUTION OF THE BOARD OF TRUSTEES OF MICHIGAN STATE UNIVERSITY AUTHORIZING THE ISSUANCE AND DELIVERY OF COMMERCIAL PAPER NOTES, SERIES D, AND PROVIDING FOR OTHER MATTERS RELATING THERETO

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, the Board has determined that financing capital projects of the University with the proceeds of tax-exempt or taxable debt, or both, will enhance the flexibility of the University with respect to its budget and financial resources, and will permit the allocation of the costs of the capital projects to the periods of the useful lives of the projects being acquired; and

WHEREAS, the University’s current high credit ratings not only reflect the financial strength of the University and its ability to repay its debt obligations, but will also permit the University to access public debt markets in the most efficient and economic manner; and

WHEREAS, the Board has determined it is necessary and desirable to provide for the temporary or permanent financing of capital projects of the University, currently under way or to be undertaken, through the issuance of Board of Trustees of Michigan State University Commercial Paper Notes, Series D (the “Series D Notes”) and the continuation of the issuance of the previously authorized Board of Trustees of Michigan State University Commercial Paper Notes, Series B (Taxable) (the “Series B Notes,” and collectively with the Series D Notes, the “Notes”) in an aggregate principal amount such that the Notes outstanding from time to time shall not exceed $250,000,000; and

WHEREAS, the Board has determined it is necessary and appropriate to refund all or part of the outstanding notes of the Board’s Commercial Paper Notes, Series C (Tax-Exempt) (the “Series C Notes”) and all or part of the outstanding Series B Notes (such notes to be refunded to be selected by an Authorized Officer (as hereinafter defined) and being herein called the “Notes to be Refunded”), and that it may be economic and appropriate to refund certain other outstanding debt obligations of the Board (such debt obligations, if any, to be refunded to be selected by an Authorized Officer and being herein called the “Bonds to be Refunded”); and

WHEREAS, the Board has approved certain capital projects to be financed and refinanced in whole or in part through the issuance of the Notes, as set forth on Exhibit A hereto, and may approve additional projects to be so financed (all such projects being herein called the “Projects”); and

WHEREAS, in order to provide for the issuance of the Series D Notes, it will be necessary for the Vice President for Finance and Operations and Treasurer, the Assistant Vice President for Business and Chief Financial Officer, and the Director of Investments and
Financial Management (each an “Authorized Officer”) or any one of them individually, to execute and deliver one or more Commercial Paper Issuance Certificates (collectively, the “Issuance Certificate”), one or more Commercial Paper Issuing and Paying Agent Agreements (collectively, the “Paying Agent Agreement”) with a bank or banks to be selected by an Authorized Officer, one or more Dealer Agreements (each a “Dealer Agreement”) with a dealer or dealers (collectively, the “Dealer”) to be designated by an Authorized Officer, and, if deemed appropriate by an Authorized Officer, an agreement or agreements relating to a liquidity or credit/liquidity facility; and

WHEREAS, the Series D Notes are to be limited and not general obligations of the Board, payable from and secured by a pledge of General Revenues (as shall be defined in the Issuance Certificate in a manner generally consistent with the definition thereof in the Commercial Paper Issuance Certificate pursuant to which the Series C Notes were issued) and moneys from time to time on deposit in the Note Payment Fund or Funds to be created pursuant to the Issuance Certificate, and may be additionally payable from Available Investments (as shall be defined in the Issuance Certificate); and

WHEREAS, it is necessary for the Board to delegate to each of the Authorized Officers the power to designate certain Authorized Representatives and Authorized Persons (each as shall be defined in the Issuance Certificate or Paying Agent Agreement) to undertake certain actions with respect to the issuance of Series D Notes; and

WHEREAS, the Series D Notes are to finally mature on or before the date five years after the date of issuance of the first Series D Note hereunder, and are intended (to the extent not previously retired) to be replaced by permanent General Revenue financing on or prior to such final maturity dates; and

WHEREAS, it is necessary to extend the date on which the Series B Notes are to finally mature; and

WHEREAS, in the exercise of its constitutional duties, and in order to prudently control and direct expenditures from the University’s funds, the Board determines it is necessary and desirable to authorize the issuance of the Notes to provide funds to finance and refinance all or part of the costs of the Projects, to refund the Notes to be Refunded and the Bonds to be Refunded, if any, and to pay certain costs incurred in connection with the issuance and sale of the Series D Notes and the refunding; and

WHEREAS, in order to be able to market and re-market the Notes, it is necessary for the Board to authorize an Authorized Officer to prepare, execute and deliver, on behalf of the Board, one or more Offering Memorandums (collectively, and as supplemented from time to time, the “Offering Memorandum”) to be circulated and used in connection with the marketing, sale and delivery of the Notes, and to take, together with other appropriate officers, agents and representatives of the Board or the University, additional actions necessary to accomplish the sale and delivery of the Notes, the administration of the commercial paper program of which the Notes are a part, and the purposes hereof, all within the limitations set forth herein; and
WHEREAS, the financing and refinancing of the Projects and the refunding of the Notes to be Refunded and the Bonds to be Refunded, if any, will serve proper and appropriate public purposes; and

WHEREAS, the Board has full power under its constitutional authority for supervision of the University, and control and direction of expenditures from the University’s funds, to authorize and acquire the Projects, to refund the Notes to be Refunded and the Bonds to be Refunded, if any, to finance and refinance by the issuance of the Notes the costs of the Projects, the costs of the refunding and the costs related to the issuance of the Notes and the refunding, and to pledge the General Revenues of the University for payment of the Series D Notes and to covenant to pay the Series D Notes from Available Investments:

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF TRUSTEES OF MICHIGAN STATE UNIVERSITY, AS FOLLOWS:

1. The Board hereby authorizes the issuance, execution and delivery of the Series D Notes of the Board, in multiple issuances on various dates, to be designated BOARD OF TRUSTEES OF MICHIGAN STATE UNIVERSITY COMMERCIAL PAPER NOTES, SERIES D, with additional or alternative series designations, as shall be determined appropriate by an Authorized Officer, in the aggregate principal amount outstanding from time to time as shall be designated by any one of the Authorized Officers, but, together with the Series B Notes, not in excess of $250,000,000 outstanding from time to time, to be dated as of a date of issuance of each Series D Note, or otherwise as shall be determined by an Authorized Officer, for the purpose of (a) financing and refinancing all or part of the costs of the Projects, (b) refunding all or a portion of the Series B Notes and the Series C Notes, as shall be determined by an Authorized Officer, (c) refunding the Bonds to be Refunded, if any, as shall be determined by an Authorized Officer, and (d) paying all or part of the costs incidental to the issuance of the Series D Notes and the refunding. The Projects as a whole are hereby determined by the Board to constitute a single governmental purpose of the Board. The Series D Notes shall not be subject to redemption prior to maturity. Each Series D Note shall mature not later than 270 days after its date of issuance, determined as shall be provided in the Issuance Certificate and Paying Agent Agreement, and all Series D Notes must mature on or before the date five years after the date of issuance of the first Series D Note hereunder. Interest on each Series D Note shall be payable on the maturity date thereof, at the rate, not in excess of 10% per annum, determined as shall be provided in the Issuance Certificate and Paying Agent Agreement. The Series D Notes shall be issued in fully registered form in the denominations, shall be subject to transfer and exchange, and shall be executed and authenticated, all as shall be provided in the Issuance Certificate. The Series D Notes shall be sold at par through the Dealer or Dealers selected by an Authorized Officer, as shall be provided in the Dealer Agreement.

Each Series B Note shall mature not later than 270 days after its date of issuance, determined as shall be provided in the Issuance Certificate and Paying Agent Agreement applicable thereto, and all Series B Notes must mature on or before December 31, 2020.
2. The Series D Notes shall be limited and not general obligations of the Board payable from and equally and ratably secured by a lien on General Revenues on a parity basis with the lien securing the Board's outstanding General Revenue bonds, notes and other obligations, now or hereafter outstanding, and by a lien on moneys from time to time on deposit in the Note Payment Fund or Funds to be created pursuant to the Issuance Certificate, as shall be provided therein. The Series D Notes may also be payable from Available Investments, as may be provided in the Issuance Certificate.

In support of its obligation to repay the Notes, the Board may, if deemed appropriate by an Authorized Officer, enter into one or more letters of credit, lines of credit, note purchase agreements or other liquidity or credit/liquidity facilities (collectively, the "Liquidity Facility"). Any reimbursement obligation (including interest) for draws under the Liquidity Facility shall be a limited and not general obligation of the Board, payable from General Revenues, and may be secured by a parity or subordinate pledge of General Revenues. The Authorized Officers are, and any one of them is, authorized to negotiate, execute and deliver, for and on behalf of the Board, such agreement or agreements (collectively, the "Liquidity Agreement") as an Authorized Officer may deem appropriate to acquire the Liquidity Facility and to provide for the repayment of draws thereunder, as provided herein.

No recourse shall be had for the payment of the principal amount of or interest on the Series D Notes, or under any Liquidity Agreement, or any claim based thereon, against the State of Michigan or against any member, officer or agent of the Board or of the University, as individuals, either directly or indirectly or, except as shall be provided in the Issuance Certificate and the Liquidity Agreement, if any, against the Board, nor shall the Series D Notes and interest with respect thereto or the obligations under any Liquidity Agreement become a lien on or be secured by any property, real, personal or mixed of the State of Michigan, the Board or the University, other than the General Revenues and the moneys from time to time on deposit in the Note Payment Fund or Funds to be created by the Issuance Certificate.

3. The right is reserved to issue additional bonds, notes or other obligations payable from General Revenues and secured on a parity or subordinated basis with the Notes and other General Revenue bonds, notes and other obligations by a lien on General Revenues, upon compliance with terms and conditions therefor as shall be set forth in the Issuance Certificate.

4. The Authorized Officers are, and any one of them is, hereby authorized and directed, in the name of the Board and as its corporate act and deed, to negotiate, execute and deliver the Issuance Certificate, the Paying Agent Agreement and one or more Dealer Agreements, consistent with the terms of this Resolution, as the Authorized Officer or Officers executing the same shall approve, which approval shall be conclusively evidenced by the execution of the respective documents. The Authorized Officers are, and any one of them is, hereby further authorized to execute and deliver any amendments to the Issuance Certificate, Paying Agent Agreement and Dealer Agreement entered into in connection with the issuance of the Series B Notes as may be necessary for the refunding of the Notes to be Refunded and the issuance of the Series D Notes, and otherwise to reflect the terms hereof.
5. The Authorized Officers are, and any one of them is, hereby authorized and directed to designate employees or agents of the Board or the University to act as Authorized Representatives with respect to the issuance of Series D Notes, and to designate Authorized Persons, who may be employees or agents of the Board or the University or employees or agents of the Dealer, to take certain actions with respect to the issuance of Series D Notes, all as shall be provided in the Issuance Certificate, the Paying Agent Agreement, or any Dealer Agreement.

6. The President of the University and the Vice President for Finance and Operations and Treasurer are, and either one of them is, hereby authorized, empowered and directed, in the name and on behalf of the Board, and as its corporate act and deed, to execute the Series D Notes by manual or facsimile signature and to deliver the Series D Notes to the purchaser in exchange for the purchase price thereof, as shall be provided in the Issuance Certificate and the Paying Agent Agreement. The Series D Notes may be issued in the form of one or more Master Notes, as shall be provided in the Paying Agent Agreement.

7. The Authorized Officers are, and any one of them is, hereby authorized to cause to be prepared and circulated the Offering Memorandum with respect to the Notes, and to update, or cause to be updated, the Offering Memorandum, through supplements or otherwise, as an Authorized Officer shall deem appropriate, or as may be required by law. Any Dealer is authorized to circulate and use, in accordance with applicable law, the Offering Memorandum, as the same may have been updated or supplemented from time to time, in the offering, sale and delivery of the Notes.

8. The Authorized Officers are, and any one of them is, hereby authorized to select the portions, if any, of the Series B Notes and the Series C Notes and of the Board’s outstanding bonds referred to in the preambles hereto as the “Notes to be Refunded” and “Bonds to be Refunded,” respectively, and to provide for the call for redemption of such bonds, and to take any and all actions necessary and appropriate to provide for the payment when due of all amounts with respect to the Notes to be Refunded and the Bonds to be Refunded from the proceeds of the Series D Notes or other authorized debt obligations of the Board, or from other available funds of the University. All Series C Notes not refunded from the proceeds of the Series D Notes or other authorized debt obligations of the Board must be retired from other available funds of the University within 90 days of the first issuance of any Series D Notes.

9. The President, the Vice President for Finance and Operations and Treasurer, the Assistant Vice President for Business and Chief Financial Officer, the Director of Investments and Financial Management, the Secretary of the Board, the Vice President for Legal Affairs and General Counsel and any Associate or Assistant General Counsel, and all other appropriate officers or representatives of the Board or the University and each one of them are authorized to perform all acts and deeds and to execute and deliver for and on behalf of the Board all instruments and documents required by this Resolution or the documents authorized hereby (including a Letter or Letters of Representations among the Board, The Depository Trust Company and other necessary entities), or necessary, expedient and proper in connection with the issuance, sale and delivery of the Series D Notes and the administration of the financing program represented by the Notes, from time to time, all as contemplated hereby or in connection with subsequent elections, approvals or determinations under the Issuance Certificate.
or other documents. Any reference to an officer of the Board or the University herein shall include any interim or acting officer appointed by the Board.

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

PROJECTS

The Projects, as that term is used in the Resolution to which this Exhibit A is attached, include the following:

Category I

<table>
<thead>
<tr>
<th>Project Description</th>
<th>Currently Estimated Approximate Cost To Be Funded From Note Proceeds (exclusive of issuance expense) (millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A. (Board approved project construction/renovation)</strong></td>
<td></td>
</tr>
<tr>
<td>Armstrong and Bryan Halls renovations, remodeling, furnishing and equipping as part of Brody Complex Master Plan</td>
<td>$29.1</td>
</tr>
<tr>
<td>Facility for Rare Isotope Beams - Phase I - Site Preparation and Excavation</td>
<td>12.6</td>
</tr>
<tr>
<td>Steam Distribution - West Circle Steam Loop and Eustace-Cole Hall to Mason Hall</td>
<td>18.5</td>
</tr>
<tr>
<td>Bailey Hall and Rather Hall renovations, remodeling, furnishing and equipping as part of Brody Complex Master Plan</td>
<td>12.0</td>
</tr>
<tr>
<td>Purchase of Grand Rapids property intended to be used in connection with the continued expansion of the College of Human Medicine in West Michigan</td>
<td>11.8</td>
</tr>
<tr>
<td>Shaw Hall - New Dining Hall and Food Emporium as part of Dining Master Plan</td>
<td>9.3</td>
</tr>
</tbody>
</table>
Category II

All projects heretofore or hereafter approved by the Board with an identified total or partial funding source as the proceeds of bonds, the Notes or other debt obligations issued by the Board.

Category III

Miscellaneous building, renovation, remodeling, site improvement, equipment, utility, information system and similar capital projects of the University, each with an estimated cost of $5,000,000 or less, including but not limited to, roof repairs and replacements; electrical, mechanical, chiller, refrigeration and steam system renovations, repairs, replacements and improvements; heating, cooling and air conditioning system renovations, repairs, replacements and improvements; structural repairs and improvements; utility distribution repairs and improvements; road and sidewalk repairs and improvements; building and building addition construction, renovation, furnishing and equipping; information and computing system acquisitions and improvements (including wiring and cabling); elevator repairs and improvements; miscellaneous landscaping and site work; and miscellaneous equipment acquisitions.
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 April 13, 2012, 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:

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
Librarian Continuous Appointment System - Faculty Handbook (DRAFT)

IV. ACADEMIC HUMAN RESOURCES POLICIES (Cont.)

The following policy was approved by the Board of Trustees on June 25, 1977 and revised on June 12, 1987, September 3, 2003, and April 13, 2012.

Appointments in the continuous appointment system are only at the ranks of Librarian III, Librarian II, and Librarian I.

The Provost of Michigan State University, in recognition of the essential contributions of librarians to academic programs, appoints, upon recommendation of the Director of Libraries, librarians at those professional levels (Librarian I-II) which do not involve an immediate award of continuous appointment status. The President approves, upon recommendation of the Director of Libraries and the Provost, appointments of librarians at the professional level (Librarian III) which confer immediate continuous appointment status to those librarians who exhibit strong evidence of the capacity for sustained professional growth.

Continuous appointment, as used in this statement, assures a librarian that she/he will not be dismissed due to capricious action by the Library administration nor will dismissal be used as a restraint on a librarian's exercise of academic freedom. Continuous appointment does not guarantee employment if positions are not funded, if there are gross violations of University or Library policies, if the librarian refuses to perform reasonable assigned duties or fails to fulfill contractual obligations, or if the librarian no longer renders satisfactory performance in his or her professional capacity at the University.

Dismissal of librarians in the continuous appointment system shall use procedures consistent with the policy on Dismissal of Tenured Faculty for Cause.

Probationary appointment periods are calculated from August 16 of the calendar year in which the appointment is effective.

When continuous appointment is granted, it is effective upon the first day of the month after the date of approval.

A librarian with the rank of Librarian III in the continuous appointment system is granted continuous appointment (appointment for an indefinite period without a terminal date) from the date of appointment at that rank.

A Librarian II who has not served previously at Michigan State University usually is appointed in the continuous appointment system for a probationary period that expires on the fourth August 15 after the appointment year. In some cases, upon the recommendation of the Director of Libraries, and with the prior approval of the Provost, the probationary period may vary in length from two to five years. If a Librarian II is reappointed, continuous appointment is granted.
Individuals appointed at the rank of Librarian II without continuous appointment have the option of requesting reappointment at any point prior to the conclusion of the stipulated probationary appointment period. A negative decision on such a request shall not preclude consideration for reappointment at the time specified upon appointment.

In unusual cases, on recommendation of the Director of Libraries and with the prior approval of the Provost and the President, a librarian initially appointed at the rank of Librarian II may be granted continuous appointment from the date of appointment.

A Librarian I who has not served previously at Michigan State University is appointed initially in the continuous appointment system for a probationary period that expires on the fourth August 15 after the appointment year and may be reappointed for an additional probationary period of three years. If at any time during these two probationary periods a Librarian I is promoted to the rank of Librarian II, continuous appointment is granted. If not promoted to the rank of Librarian II at the conclusion of the second probationary period of three years, the individual is ineligible for an additional reappointment unless a special extension is approved (see below). Individuals appointed at the rank of Librarian I without continuous appointment have the option of requesting promotion to Librarian II with continuous appointment at any point prior to the conclusion of the stipulated probationary appointment period. A negative decision on such a request shall not preclude consideration for reappointment at the normal time.

Extensions in the probationary appointment periods for all librarians appointed in the continuous appointment system require approval of the Director of Libraries and the Provost (or designee).

Procedures for the implementation of this policy are available in the Office of the Library.

**Evaluation**

All librarians are evaluated annually for the purposes of improving performance and service to the Library and the University, for continuing appointment status, and for compensation. The evaluation is made by the immediate supervisor, including consultation with the evaluated librarian.

The Library department administrators, in consultation with the supervisors and peer review committees, make personnel recommendations to the Director on such matters as salaries, hiring procedures, and continuous appointment.

The Director, based upon advice received and considering the total personnel needs of the Library, will make a final recommendation to the Provost on personnel matters.

The evaluative and consultative processes are detailed in the Librarian Personnel Handbook.
Operating Principles

The operating principles for continuous appointment of librarians are included in the Library Bylaws.

Footnote

¹ Such early reviews would occur on the normal review cycle as established by university and Library procedures.
IV. ACADEMIC HUMAN RESOURCES POLICIES (Cont.)

The following policy was approved by the Board of Trustees on June 25, 1977 and revised on June 12, 1987 and September 3, 2003.

The Provost of Michigan State University, in recognition of the essential contributions of librarians to academic programs, appoints, upon recommendation of the Director of Libraries, librarians at those professional levels (Librarian I-IV) which do not involve an immediate award of continuous appointment status. The president approves, upon recommendation of the Director of Libraries and the Provost, appointments of librarians at the professional level (Librarian IV) which confers immediate continuous appointment status to those librarians who exhibit strong evidence of the capacity for sustained professional growth.

Continuous appointment, as used in this statement, assures a librarian that she/he will not be dismissed due to capricious action by the Library administration nor will dismissal be used as a restraint on a librarian's exercise of academic freedom. Continuous appointment does not guarantee employment if positions are not funded, if there are gross violations of University or Library policies, if the librarian refuses to perform reasonable assigned duties or fails to fulfill contractual obligations, or if the librarian no longer renders satisfactory performance in his or her professional capacity at the University.

Dismissal of librarians on continuous appointment will use procedures consistent with the principles for dismissal of tenured faculty, which assure due process, as approved by the Board of Trustees. Dismissal of librarians not on continuous appointment, but prior to the expiration of the current term of appointment, shall use those procedures established for dismissal of librarians on continuous appointment.

Probationary appointment periods are calculated from August 16 of the calendar year in which the appointment is effective.

An individual appointed as Librarian I or Librarian II is appointed for a probationary period that expires on the fourth August 15 after the appointment year. This appointment may be followed by an additional three-year period. After these periods, continuous appointment will be granted if the librarian is reappointed.

In any time during the initial probationary period the individual is approved for promotion, the changed appointment will be for a period that expires on the fourth August 15 following the date of the change. If reappointed upon the conclusion of this period, continuous appointment will be awarded.

A Librarian III who has not served previously at Michigan State University is appointed to a probationary period that expires on the fourth August 15 after the appointment year. If the librarian is reappointed, continuous appointment will be granted.

A Librarian IV may, on recommendation of the Director of Libraries, be granted continuous appointment from the date of the original appointment at that rank. If a probationary appointment is made it shall be for a period that expires on the fourth August 15 after the appointment year. If reappointed upon conclusion of this period, continuous appointment will be awarded.

Procedures for the implementation of this policy are available in the Office of the Library.

Evaluation

All librarians are evaluated annually for the purposes of improving performance and service to the Library and the University, for continuing appointment status, and for compensation. The evaluation is made by the immediate supervisor, including consultation with the evaluated librarian.

The Library department administrators, in consultation with the supervisors and peer review committees, make personnel recommendations to the Director on such matters as salaries, hiring procedures, and continuous appointment.

The Director, based upon advice received and considering the total personnel needs of the Library, will make a final recommendation to the Provost on personnel matters.

The evaluative and consultative processes are detailed in the Librarian Personnel Handbook.

Operating Principles

Operating principles for continuous appointment of librarians are included in the Library Bylaws.
Conflicts of Interest, Faculty/Academic Staff

This policy was approved by the Board of Trustees on [approval date].

I. PREAMBLE

As a modern research-intensive land-grant university, Michigan State University is committed to maintaining the trust of the general public which supports it and which it serves. For the University to do so, its faculty must pursue their research, teaching, outreach, and service responsibilities with integrity and proper professional judgment in a manner consistent with the highest standards of their respective disciplines and in the best interests of the University. A faculty member’s reputation for integrity and for exercising proper professional judgment can be seriously compromised, however, if the faculty member fails to disclose a significant financial interest that is related to his/her institutional responsibilities. Moreover, an individual faculty member’s unmanaged and unresolved conflict of interest can undermine confidence in the University and, thus, harm its standing and that of its entire faculty.

This Policy addresses the disclosure, review, management, and resolution of conflicts of interest relating to the performance by faculty of their research, teaching, outreach, and service responsibilities at the University. For purposes of this Policy, a "conflict of interest" exists when a faculty member’s financial interests or other opportunities for tangible personal benefit may compromise, or reasonably appear to compromise, the independence of judgment with which the faculty member performs his/her responsibilities at the University.¹

II. APPLICABILITY²

This Policy applies to individuals appointed through the academic personnel system with research, teaching, outreach, or service institutional responsibilities. This Policy also applies to other individuals who have independent responsibility for proposing, conducting, or reporting the results of University research and other sponsored projects.³

III. IMPLEMENTATION

A. Disclosure

Faculty members must annually disclose all significant financial interests⁴ and other opportunities for tangible personal benefit that are related to the faculty member’s institutional responsibilities. Faculty members must also submit an updated disclosure within thirty days of acquiring any new significant financial interest or other opportunity for

¹ In amplification and not in limitation of the foregoing, a conflict of interest exists if a faculty member’s financial interests (or other opportunities for tangible personal benefit) directly and significantly affect the design, conduct, or reporting of the results of research or other sponsored projects.

² For purposes of this Policy, the individuals described in Section II (Applicability) will generally be referred to as "Faculty" or "Faculty Members," although the term encompasses, and the Policy applies to, all individuals described in Section II.

³ For a more detailed description of this Policy’s application to individuals involved in University research and other sponsored projects, refer to the Faculty Conflict of Interest Handbook.

⁴ A "significant financial interest" is defined in the Faculty Conflict of Interest Handbook.
tangible personal benefit. "Institutional responsibilities" refer to the faculty member's professional responsibilities on behalf of the University, which include research, teaching/education, outreach, and service activities, both within and outside the University, in the general area of expertise for which the faculty member is employed by the University.

Disclosures will be made in accordance with the procedure established by the Faculty Conflict of Interest Officer (FCOIO). Each faculty member shall provide all information necessary for the University to review, manage, and resolve any conflicts of interest involving that faculty member.

The University shall respect the confidentiality of private financial and other private information supplied by faculty, and shall not release this information publicly unless it is legally required to do so, the resolution or elimination of the conflict of interest requires public disclosure of the information, or the faculty member consents to its public disclosure.

B. Faculty Conflict of Interest Officer

The Vice President for Research and Graduate Studies (VPRGS), in consultation with representatives of the University Committee on Graduate Studies (UCGS) and the University Committee on Faculty Affairs (UCFA), will appoint a FCOIO to administer this Policy. The FCOIO shall serve as a resource to faculty and administrators on defining and addressing faculty conflicts of interest and shall convene and serve, *ex officio*, as a non-voting member of the Conflict Review Committee described in Section III.D of this Policy.

The FCOIO shall develop and maintain an institutional procedure for faculty members to report significant financial interests and other opportunities for tangible personal benefit, as required by this Policy.

The FCOIO, in consultation with relevant administrators and appropriate academic governance committees, shall arrange for the preparation of a handbook for faculty, incorporating a list of frequently asked questions, explaining and interpreting this Policy. Assessment, management, and resolution of conflicts of interest should take into account the different norms, customs, and expectations of the various disciplines found among faculty in the University.

C. College-Specific Addenda

Each college (or relevant non-college unit) is encouraged to prepare, in consultation with the FCOIO, a supplement to the conflict of interest handbook, with frequently asked questions, that addresses conflict of interest issues specific to the disciplines and activities of the faculty of that college. A college may also adopt its own addendum to this Policy to address specific conflict situations which occur in that college. Such addenda must be prepared in consultation with the FCOIO and approved by the VPRGS. College-specific addenda must be consistent with, and no less stringent than, the provisions of this Policy and federal law and regulations regarding conflict of interest.

D. Conflict Review Committee

The VPRGS, in consultation with representatives of the UCGS and the UCFA, shall appoint a Conflict Review Committee (CRC) composed of at least five faculty members from different disciplines, one of whom they will select as chairperson. At the discretion of the VPRGS, additional members may be appointed to the CRC. CRC members shall serve for staggered three-year terms and may be reappointed to additional terms. The FCOIO shall convene the CRC and serve, *ex officio*, as a non-voting member. The FCOIO and CRC have the authority to invite any input they deem necessary to assess a potential conflict of interest.
The FCOIO shall make the initial assessment about the existence of a conflict of interest based on the extent to which a disclosed significant financial interest or opportunity for tangible personal benefit could reasonably be expected to affect, or be perceived to affect, a faculty member's performance of a University responsibility. If the FCOIO determines that a disclosed interest may create a real or potential conflict of interest, the FCOIO shall forward the disclosure to the CRC for additional assessment. If the CRC determines that no conflict of interest exists, it shall inform the faculty member and the VPRGS of that determination in writing. If the CRC determines that a conflict of interest exists as a result of the disclosures made by the faculty member, or as a result of a report made by another party, the CRC shall develop a written plan for the resolution or management of the conflict of interest.

The CRC may consult with the faculty member, the faculty member's unit administrators, the FCOIO, and appropriate representatives of the central administration in developing a plan.

The FCOIO shall submit the plan to the faculty member and the faculty member's unit administrators for review and comment. If the faculty member does not agree with the CRC's plan for the management or resolution of the conflict of interest, the faculty member may file a written objection detailing the nature of his/her objections with the VPRGS within ten days of receiving notice of the CRC's plan. The CRC's plan, along with any written comments submitted by unit administrators, and the objections of the faculty member shall be submitted to the VPRGS. The VPRGS may accept the CRC's plan or decide to implement an alternative plan for the management or resolution of the conflict of interest. The VPRGS shall issue his/her decision within thirty days of his/her receipt of the CRC's plan and any supplemental material. The VPRGS shall report his/her decision to the CRC, faculty member, unit administrators, and FCOIO.

In devising the plan to address the conflict of interest, the CRC shall seek to employ the least intrusive management techniques that will suffice to resolve the ethical and legal concerns arising from the conflict.

The CRC may recommend to the Provost and VPRGS the issuance of specific guidelines to investigators and other faculty regarding common conflict situations.

IV. SPECIFIC REQUIREMENTS FOR RESEARCH AND PROJECTS FUNDED BY THE PUBLIC HEALTH SERVICE AND NATIONAL SCIENCE FOUNDATION

The Public Health Service (PHS) and National Science Foundation (NSF) have developed policies and procedures to ensure that the design, conduct, and reporting of research funded under PHS or NSF grants, cooperative agreements, and contracts will not be biased by conflicts of interest affecting the investigators responsible for such research.

The PHS/NSF regulations require that each institution and investigator applying for, receiving, or being supported by PHS/NSF funds be compliant with PHS/NSF rules regarding training and disclosure prior to applying for funds and the establishment of conflict of interest management plans prior to the expenditure of funds.

Investigators applying to PHS or NSF must disclose to the University all "significant financial interests" (as defined in the regulations) related to the investigator's institutional

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5 For purposes of this Policy, references to a faculty member's "unit administrators" include the relevant department chair, dean, and/or separately reporting director.

6 This thirty-day period may be extended by the FCOIO upon the written request of the VPRGS.
responsibilities. Further, investigators participating in PHS- or NSF-funded research are required to submit an updated disclosure of significant financial interests within thirty days of acquiring any new significant financial interest.

A conflict of interest exists if the University determines that the investigator has a significant financial interest that could directly and significantly affect the design, conduct, or reporting of PHS- or NSF-funded research. The University will not authorize the expenditure of any funds under a PHS- or NSF-funded research project until (a) all investigator disclosures have been reviewed for potential conflicts of interest; and (b) if a conflict of interest exists, a plan satisfactory to the VPRGS to manage the conflict of interest has been developed and implemented.

To the extent that these or any other legal requirements are more stringent than this Policy, they will take precedence. For a detailed description of the disclosure requirements applicable to PHS/NSF investigators, refer to the “Guidelines on Conflict of Interest Pertaining to Applications for NSF and PHS Research Support,” which is a supplement to this Policy.

V. NON-COMPLIANCE

A faculty member who violates this Policy is subject to disciplinary action. Any University employee or student who knowingly files a false allegation that this Policy has been violated, or who knowingly provides false information to or intentionally misleads University officials who are investigating an alleged violation of this Policy, may be subject to disciplinary action. The VPRGS shall establish a mechanism, after consulting with the FCOIO, for investigating concerns or allegations regarding significant financial interests and other opportunities for tangible personal benefit of faculty which are not reported as required under this Policy. The review and investigation of concerns or allegations that this Policy has been violated will be conducted confidentially to the extent permitted by law, except insofar as information needs to be disclosed so that the University may effectively investigate the matter or take corrective action.

If the failure of a faculty member to comply with this Policy has biased the design, conduct, or reporting of funded research, the University may, and in some cases is required to, notify the awarding agency of the compliance failure and the corrective action taken by the University.

VI. TIMING OF IMPLEMENTATION

The current Faculty Conflicts of Interest Policy was approved by the Board of Trustees on April 13, 2006. This revised Faculty Conflicts of Interest Policy shall supersede the current Policy upon approval by the Board of Trustees.

Effective August 24, 2012, all individuals who have independent responsibility for proposing, conducting, or reporting the results of University PHS- or NSF-funded research must be in compliance with this Policy and related University policies and guidelines applicable to PHS- or NSF-funded research.

The President, in consultation with the VPRGS, shall determine the timing of implementation of the annual reporting requirement under Section III, Part A of this Policy for covered individuals to whom the foregoing paragraph does not apply. Such individuals shall comply with the disclosure requirements set forth in the Faculty Conflicts of Interest Policy approved by the Board of Trustees on April 13, 2006 until the President has determined that the disclosure requirements set forth in this revised Policy are applicable to them, which shall be no later than January 1, 2015.
Appendix: Role, Appointment, and Evaluation of the Faculty Conflict of Interest Officer (FCOIO)

1. Role of the FCOIO

   A. Serves as an information resource to faculty and administrators on defining and addressing conflicts of interest, as defined in the Policy.

   B. Prepares an institutional procedure to be used in establishing conflict reporting mechanisms.

   C. Convenes the Conflict Review Committee (CRC) and serves, *ex officio*, as a non-voting member.

   D. In consultation with relevant administrators and appropriate faculty committees, arranges preparation of a handbook incorporating a list of frequently asked questions explaining and interpreting the Policy.

2. Appointment of the FCOIO

   A. The FCOIO shall be appointed by the Vice President for Research and Graduate Studies (VPRGS) after consultation with representatives of the University Committee on Graduate Studies (UCGS) and University Committee on Faculty Affairs (UCFA). The FCOIO shall serve at the pleasure of the VPRGS.

   B. The FCOIO shall report to the VPRGS. The FCOIO shall keep the Provost and President informed about the implementation of this Policy and about educational and other activities of his/her office.

   C. Should the FCOIO recuse himself/herself from FCOIO duties with regard to a particular conflict of interest, the VPRGS shall appoint a substitute after consultation with the chairperson of the Academic Subcommittee of the UCGS.

3. Evaluation of FCOIO

   The VPRGS shall evaluate the performance of the FCOIO at intervals not to exceed five years pursuant to criteria established by the President, Provost, and VPRGS in consultation with the UCGS. The VPRGS shall submit the results of this evaluation to the President, the Provost, and the UCGS.
March 22, 2012

MEMORANDUM

TO: Dr. William A. Anderson, Chair, University Committee on Faculty Affairs

FROM: Theodore H. Curry, Associate Provost and Associate Vice President of Academic Human Resources, Office of the Provost

RE: Proposed Revisions to the Faculty Conflicts of Interest Policy

I write following the University Committee on Faculty Affairs' ("UCFA") endorsement of the proposed revision to the Faculty Conflicts of Interest Policy on March 13, 2012. The UCFA endorsed the proposed revision on the condition that (a) the UCFA receive annual reports concerning the implementation of the new annual disclosure requirement, and (b) the deadline for University-wide implementation of the annual disclosure be moved back one year, from the date initially proposed of January 1, 2014, to January 1, 2015. The revised policy will now be submitted to the Faculty Senate for approval at its meeting of March 27, 2012.

The existing Faculty Conflicts of Interest Policy was approved by the Board of Trustees on April 13, 2006. The policy revisions are intended to both (a) reflect the best practices of other comparable research-intensive universities and (b) address new requirements of the Public Health Service ("PHS"), which require implementation and compliance by August 24, 2012.

In sum, the main substantive changes to the policy are as follows:

1. The revised policy covers all individuals appointed through the academic personnel system with research, teaching, outreach, or service institutional responsibilities. Additionally, although most individuals involved in research and sponsored projects are covered by the current policy, the revised policy makes this coverage explicit, covering all individuals who have independent responsibility for proposing, conducting, or reporting the results of University research and other sponsored projects.

2. Consistent with the best practices of other CIC institutions, the revised policy requires annual reports of faculty members' significant financial interests ("SFI"). By contrast, the current policy requires faculty to self-report as potential conflicts arise. The annual reporting requirement of the revised policy will be implemented in stages, beginning with PHS/NSF investigators (see Section VI). This gradual implementation of annual reporting will permit the University to develop the administrative capacity to process the larger volume of disclosures that will be generated under the revised policy.

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1 As in the revised policy, references to "faculty" and "faculty members" in this memo refer to all individuals described in Section II of the revised policy (i.e. individuals appointed through the academic personnel system with research, teaching, outreach, or service institutional responsibilities and individuals who have independent responsibility for proposing, conducting, or reporting the results of University research and other sponsored projects.)
3. The revised policy requires the disclosure of all SFIs related to the faculty member’s “institutional responsibilities” (as defined in the revised policy). The current policy, by contrast, requires that SFIs be disclosed only when the faculty member assumes a University responsibility that would be affected by an existing SFI. This revision to the policy is consistent with best practices and responsive to new regulatory requirements concerning the scope of financial disclosures needed to identify and manage conflicts of interest.

4. The revised policy gives the Faculty Conflict of Interest Officer (“FCOIO”) greater responsibility to administer the policy, including responsibility for (a) developing an institutional procedure for faculty to report SFIs, and (b) making the initial assessment of disclosed SFIs, a responsibility that falls to unit administrators and deans under the current policy. As explained in more detail in Point 7 below, this change is intended to create greater uniformity in the standards by which potential conflicts are assessed.

5. The revised policy gives colleges greater latitude to address conflict of interest issues specific to the disciplines and activities of their respective faculty by permitting the development of college-specific addenda to the main faculty policy. The current policy provides colleges more limited means to address such concerns.

6. Whereas the Conflict Review Committee (“CRC”) is composed of only three faculty members with advisory responsibilities under the current policy, the revised policy provides that the CRC is composed of at least five faculty members with expanded responsibilities. Additional members may also be appointed at the discretion of the Vice President for Research and Graduate Studies (“VPRGS”).

7. The revised policy changes the manner in which potential conflicts are evaluated and managed with the goal of streamlining the process and imposing greater uniformity in its implementation. This is accomplished by centralizing the assessment and management of conflicts of interest by shifting responsibilities from unit administrators and deans to the FCOIO and CRC.

8. As noted above, the revised policy adds a new section (IV.) to address specific requirements applicable to PHS and NSF investigators, including new PHS requirements effective August 24, 2012.
Conflicts of Interest, Faculty

This policy was approved by the Board of Trustees on April 13, 2006.

1. (a) As a modern research-intensive land-grant university, Michigan State University must maintain the trust of the general public which supports it and which it serves. For the University to do so, its faculty must pursue their research, teaching, outreach, and service responsibilities with integrity and proper professional judgment in a manner consistent with the highest standards of their respective disciplines and in the best interests of the University. A faculty member's reputation for integrity and for exercising proper professional judgment can be seriously compromised, however, if the faculty member fails to avoid or disclose a conflict of interest. Moreover, an individual faculty member's unmanaged and unresolved conflicts of interest can undermine confidence in the University and, thus, harm its standing and that of its entire faculty.

(b) This Policy addresses the disclosure, review, management, and resolution of conflicts of interest relating to the performance by faculty of their research, teaching, outreach, and service responsibilities at the University. For purposes of this Policy, a conflict of interest exists when a faculty member's financial interests or other opportunities for tangible personal benefit may compromise, or reasonably appear to compromise, the independence of judgment with which the faculty member performs his/her responsibilities at the University.

1 Although "faculty" is used throughout for simplicity, this Policy applies to all individuals appointed with pay through the academic personnel system other than graduate assistants.

2. The President, in consultation with a joint subcommittee of the University Graduate Council (UGC) and the University Committee on Faculty Affairs (UCFA), will appoint a Faculty Conflict of Interest Information Officer (FCOIIIO) to serve as a resource to faculty and administrators on defining and addressing conflicts of interest and to convene the Conflict Review Committee described in Paragraph 6.

3. Each faculty member is responsible for disclosing his/her own conflicts of interest in accordance with the procedure established under Paragraph 4(a).

4. (a) (i) The FCOIIIO shall prepare a model college procedure for faculty members to report their own conflicts of interest.

(ii) Any college that chooses not to adopt the model procedure may develop its own procedure for its faculty to report their conflicts of interest, provided that the Vice President for Research and Graduate Studies (VPRGS) approved the procedure after consulting with the FCOIIIO.

(b) The VPRGS shall establish a mechanism, after consulting with the FCOIIIO, for investigating concerns or allegations regarding conflicts of interest on the part of faculty which are not self-reported.

5. (a) The conduct of research by faculty, particularly research involving human subjects, and efforts to commercialize intellectual property created by faculty present situations in which the disclosure and management of conflicts of interest are
especially important. The University administrators charged to manage those areas shall, therefore, prepare disclosure processes, in consultation with academic governance, that accord with applicable legal requirements, including rules imposed by external funding sources, and that permit the timely assessment and resolution of conflicts of interest relating to research and to commercialization of intellectual property created by faculty.

(b) The University will not make expenditures on externally funded sponsored research or transfer rights in intellectual property to entities in which faculty have a financial interest unless all required disclosures have been made and any conflicts of interest identified as a result of the disclosures have been evaluated and resolved.

6. The VPRGS shall establish a Conflict Review Committee (CRC) composed of three faculty members from different disciplines, one of whom they will select as chairperson. The deans and the director of the National Superconducting Cyclotron Laboratory (NSCL), after consultation with the relevant faculty advisory body at the college/NSCL, will nominate faculty candidates. Final selection of the faculty members will be made by the joint subcommittee of the UGC and the UCFA. CRC members shall serve for staggered three-year terms. They may be reappointed to additional terms. The FCOIO shall convene the CRC and may assist the CRC in its deliberations.

7. (a) When a faculty member self-reports a possible conflict of interest pursuant to the procedure established in Paragraph 4(a), the faculty member’s unit administrator should review the disclosure with the faculty member’s dean. If the unit administrator and the dean agree that no conflict of interest exists, they shall inform the faculty member and the VPRGS of that determination in writing.

(b) (i) If any conflict of interest is identified as a result of the disclosures made by a faculty member under Paragraph 4(a), or as a result of a report made by another party and investigated pursuant to the mechanism established in Paragraph 4(b), the faculty member’s unit administrator shall develop a written plan for the resolution or management of the conflict of interest in consultation with the faculty member, the FCOIO, and, depending on the subject matter of the conflict, appropriate representatives of the central administration.

(ii) The plan shall be submit, first, to the faculty member’s dean for approval, then to the CRC for review and comment, and, finally, to the VPRGS, who may accept the plan or decide to implement another plan for the management or resolution of the conflict of interest.

(iii) If the dean does not approve the plan developed by the unit administrator, the dean may adopt a different plan for the management or resolution of the conflict of interest. In that event, both plans shall be submitted to the CRC for its review and comment. After receiving the recommendations of the CRC on the matter, the VPRGS shall decide on the plan for the management or resolution of the conflict of interest, and shall report his/her decision to the CRC, faculty member, unit administrator, and dean.

(iv) If the faculty member does not agree with the unit administrator’s plan for the management or resolution of the conflict of interest, the faculty member may submit an alternative plan to the dean. The dean may accept the faculty member’s plan, the unit administrator’s plan, or formulate a different plan. The plans of the faculty member, unit administrator, and dean shall be distributed to the members of
the CRC, which shall submit its recommendations on the matter to the VPRGS. The
VPRGS shall decide on the plan for the management or resolution of the conflict of
interest, and shall report his/her decision to the CRC, faculty member, unit
administrator, and dean.

(v) In devising the plan to address the conflict of interest, the unit administrator,
the dean, and the VPRGS shall seek to employ the least intrusive management
techniques that will suffice to resolve the ethical and legal concerns arising from the
conflict. Sometimes conflict of interest situations may be satisfactorily addressed
through public disclosure of the faculty member's financial interest (or other
opportunity for tangible personal benefit) that is the cause of the conflict of interest.
On other occasions, stronger measures may be required to resolve or eliminate a
serious conflict of interest.

2 In this Policy, "dean" means deans of colleges and the equivalent unit administrators for faculty
appointed in non-college units.

8. The University encourages faculty authorship of instructional materials and does not
discourage the use of faculty-authored materials in the faculty member's courses. To
avoid the semblance of any conflict of interest, however, each academic unit should
establish guidelines appropriate to its circumstances for the selection of instructional
materials whose purchase by students results in a financial benefit to the faculty
member who assigns those materials.

9. Each faculty member shall supply the appropriate administrators with all information
necessary for those administrators to review, manage, and resolve any conflicts of
interest involving that faculty member. The University shall respect the confidentiality
of private financial and other private information supplied by faculty, and shall not
release this information publicly unless it is legally required to do so, or unless the
resolution or elimination of the conflict of interest requires the public disclosure of the
information, or unless the faculty member consents to its public disclosure.

10. A faculty member who violates this Policy may be subject to disciplinary action as may
apply to violations of other University policies.

11. Any member of the University community who knowingly files a false allegation that
this Policy has been violated, or who knowingly provides false information to or
intentionally misleads University officials who are investigating an alleged violation of
this Policy, may be subject to disciplinary action.

12. The FCOIIIO, in consultation with relevant administrators and appropriate faculty
committees, shall arrange for the preparation of a handbook for faculty, incorporating
a list of frequently asked questions, explaining and interpreting this Policy.
Assessment, management, and resolution of conflicts of interest should take into
account the different norms, customs, and expectations of the various disciplines
found among faculty in the University. Therefore, each college (or relevant non-
college unit) is encouraged to prepare, in consultation with the FCOIIIO, a supplement
to the handbook, with frequently asked questions, that addresses conflict of interest
issues specific to the disciplines and activities of the faculty of that college.
1. Role of the FCOIIO

A. Serves as an information resource to faculty and administrators on defining and addressing conflicts of interest, as defined in the policy (Paragraph 2).

B. Prepares a model college procedure to be used in establishing conflict reporting mechanisms (Paragraph 4(a)).

C. Convenes the Conflict Review Committee (CRC) and assists the CRC in its deliberations (Paragraph 6).

D. Arranges preparation of a handbook incorporating a list of frequently asked questions explaining and interpreting the Policy in consultation with relevant administrators and appropriate faculty committees (Paragraph 12).

2. Appointment of the FCOIIO

A. The FCOIIO shall be appointed, preferably from the tenured faculty of Michigan State University, by the President after consultation with a joint subcommittee of the University Graduate Council (UGC) and the University Committee on Faculty Affairs (UCFA).

B. The FCOIIO shall report to the President and shall keep the Provost and VPRGS informed about implementation of the Policy and about educational and other activities of his/her office.

C. Should the FCOIIO recuse himself/herself from FCOIIO duties with regard to a particular conflict of interest, the President shall appoint a replacement after consultation with the chairperson of the Academic Subcommittee of UGC.

3. Evaluation of FCOIIO

A. The FCOIIO shall submit a report annually to the UGC describing progress on the implementation of the Policy, relevant consultations with college faculty and administrators, the caseload of and topics addressed by the CRC, and educational and other activities by the FCOIIO.

B. The UGC shall evaluate the performance of the FCOIIO at intervals not to exceed five years pursuant to criteria established by the President, Provost, and VPRGS in consultation with the UGC. The UGC shall submit the results of this evaluation of the FCOIIO to the President, the Provost, and the VPRGS.

4. Nature of Appointment and Other Matters

A. The FCOIIO shall serve at the pleasure of the President on a half-time basis for renewable terms of five years.

B. The Office of the VPRGS shall provide the FCOIIO with administrative support.
UCUS recommended changes (in red) to section one of the:

Integrity of Scholarship and Grades

1. The principles of truth and honesty are recognized as fundamental to a community of scholars. The University expects both instructors and students to honor these principles and, in so doing, to protect the validity of University education and grades. Practices that maintain the integrity of scholarship and grades include providing accurate information for academic and admission records, adherence to unit-approved professional standards and honor codes, and completion of original academic work by the student to whom it is assigned, without unauthorized aid of any kind. To encourage adherence to the principles of truth and honesty, instructors should exercise care in planning and supervising academic work, and implement proctoring standards appropriate to the design of the course.

-Revised February 24, 2009, Board of Trustees

-Revised February 12, 2010, Board of Trustees
LICENSE AMENDMENT TERM SHEET

Party: InPore Technologies, Inc.

License: Amended Exclusive License.

Term: From the effective date of the agreement extending to the expiration of the last to expire of the patents.

Technology: U.S. Patent Nos. 5,672,556; 5,712,402; 5,785,946; 5,800,800; 5,855,864; 6,162,414; 6,193,943; 6,410,473; 6,413,902; 5,622,684; 5,795,559; 5,800,799; 6,649,083; 6,465,387; 6,946,109; 7,132,165; 6,800,266; 6,506,485; 6,641,657; 6,607,705; 6,585,952; 6,746,659; 6,702,993; 6,770,258; 6,706,169; 6,869,906; 7,128,892; 6,843,977; 6,713,643; 7,067,687; 7,166,265; 7,485,282; 7,449,164; 7,714,156; 7,879,31; and U.S. Patent Application Nos. 12/520,960; 13/005,739; 13/190,699; 13/110,239; and U.S. Provisional Patent Application No. 61/584,791; and improvements.

The parties may add or remove technologies under the agreement, including improvements generated under a separate sponsored research agreement, provided that the change does not affect the financial consideration of the parties or the nature or extent of any pecuniary interest of MSU personnel.


Payment Terms:

Payment of $5,000 by August 15, 2012; a running royalty ranging from 2.0 to 5.0% on net sales corresponding to cost of product per kilogram; 50% on all sublicensing revenues; annual minimum royalty payments reaching $125,000 in calendar year 2017; additional payment of approximately $62,000 by February, 2014 (to cover approximately $58,000 in patent legal costs and $4,000 in minimum royalties due MSU under existing license); patent costs after effective date to be paid as incurred.

Services Provided:

By MSU to InPore Technologies, Inc.: None contemplated under agreement
By InPore Technologies, Inc. to MSU: None contemplated under 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.
RESEARCH CONTRACT TERM SHEET

Party: Technova Corporation

Contracts: Sponsored Research Agreement
"Materials Processing and Characterization"

Term: April 15, 2012 to December 31, 2019

Payment Terms: $80,000

Services Provided: By MSU to Technova: testing and evaluation of sustainable materials intended to replace conventional materials

By Technova to MSU: none

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

Organization Type: Incorporated, Michigan-based small business.

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

Party: Ubiquitous Energy, Inc.

Contracts: Sponsored Research Agreement
"Packaging and Lifetime of Transparent Organic Solar Cells"

Term: April 14, 2012 to August 30, 2012

Payment Terms: $4,887

Services Provided: By MSU to Ubiquitous: fabrication and evaluation of molecular photovoltaic cells
By Ubiquitous to MSU: none

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

Organization Type: Delaware corporation based in Boston, Massachusetts

Personnel Interest: Dr. Richard Lunt, an Assistant 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
REVISED CONTRACT TERM SHEET

Party: Dr. Igor Z. Vojnovic

Project Description: Provision to the MSU Press of editing services for the manuscript of a book tentatively titled *Sustainability: A Global Urban Context*. The manuscript is expected to consist of a collection of essays about urban sustainability and the challenge of having most of the world’s population residing in an urban environment.

Term: From effective date of agreement until cessation of sales and royalty payments, if any.

Contractual Terms: MSU Press standard publishing terms and conditions apply. Dr. Vojnovic will receive as royalty 2.5% of net revenue from copies sold for each edition of the work, 50% of all net revenues actually received for the exploitation or disposition of secondary or subsidiary rights (such as digests, condensations, translations, or reprints), five free copies of each edition, plus the right to purchase for personal use on a non-returnable basis additional copies at a 40% discount from the retail rate.

Services Provided: By MSU to Dr. Vojnovic:
Publication of the book.
By Dr. Vojnovic to MSU:
Editing of the book manuscript.

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

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

Personnel Interest: This contract will be directly with Dr. Vojnovic, who will receive the totality of the contemplated remuneration.
RESEARCH FACULTY APPOINTMENT CATEGORY

PREAMBLE: The research faculty appointment category is established to meet the needs of a research intensive, land grant university in the recruitment and retention of individuals who support the research mission of the University. Research faculty appointments are consistent with the University’s need to retain the flexibility to adjust its programs to meet the changing needs of the modern research University.

Research faculty are appointed on a fixed term basis, i.e., with an end date; they are not eligible for tenure. Research faculty are supported by sponsored projects or other non-appropriated University funds. The appointment is contingent on the availability of funding and cannot extend beyond the period of availability of supporting funds (see section on bridge funding).

RANKS: Research faculty are appointed at the rank of research assistant professor, research associate professor or research professor in an academic department, school and/or college.

DUTIES AND RESPONSIBILITIES: Research faculty may serve as principal investigators or project directors on research awards and are expected to seek independent external funding in areas related to the research mission and goals of the academic unit(s). Research faculty may not be assigned regular teaching responsibilities and may not participate in the governance of the University or of an academic unit. In rare cases where a research faculty member is considered for a teaching (or other non-research) assignment, the effort of the research faculty appointment must be reduced accordingly so that the research appointment is not funding the teaching appointment. Similarly, effort related to proposal writing may not be funded by external sources.

TERMS OF APPOINTMENT: Research faculty are recruited and appointed on a fixed term basis through the academic hiring procedures.

The initial appointment for a research assistant professor is normally for three years, but may range from one to three years. The initial appointment for research associate professors and research professors is for five years. In all cases, the length of the appointment is based on the external funding and may not exceed the end date of the external support. Research faculty may be appointed on an annual (AN) or academic year (AY) basis. Appointments are normally full time, with a minimum of 5% of effort supported by the general fund in order to allow time for proposal writing. Consistent with the Fixed Term Appointment policy, research faculty appointments may be eliminated for budgetary reasons prior to the ending date of the current appointment with a 30 day written notice.

PERFORMANCE REVIEW: Research faculty are expected to meet the research standards for comparably ranked tenure system faculty. Units must establish procedures for the review of research faculty in accordance with the principles in the policy on Annual Performance Review for Fixed Term Faculty and Academic Staff.
Four months prior to the end date of the appointment, a reappointment review must be conducted by the relevant academic unit that assesses the effectiveness of the research faculty member in fulfilling the research mission of the unit and in obtaining and sustaining external support. The review should also include an evaluation of the academic unit's research goals and the likely role of the research faculty member in achieving these goals in the future.

The purpose of this review is to determine whether to recommend an additional appointment, or not to reappoint. The research faculty member must be informed in writing of her/his appointment status 90 days prior to the appointment end date.

**REAPPOINTMENT:** Reappointment is at the discretion of the appointing unit, college, and Office of the Provost. Decisions not to reappoint may be for failure to meet unit standards for competence or performance, and/or changes in program needs or in economic circumstances, e.g., lack of external funding support. A research faculty member must be informed in writing regarding reappointment 90 days prior to the appointment end date.

Subject to the availability of external funding support, research faculty may be reappointed for the following periods:

- Research Assistant professor: up to 3 years;
- Research associate professor: up to 5 years;
- Research professor: up to five years.

**PROMOTION:** Research faculty may be promoted at any time in accordance with the annual timetable for promotion recommendations. Promotion to research associate professor or research professor requires meeting unit standards and criteria, including the qualifications specified below.

**QUALIFICATIONS FOR RESEARCH FACULTY RANKS** (Colleges, departments and schools may have additional standards and criteria):

1. Research assistant professor
   a. Terminal degree (or equivalent) appropriate to the field;
   b. Evidence of productive scholarship, including external funding support;
   c. Evidence of ability to fulfill relevant responsibilities in the research enterprise.

2. Research associate professor
   a. Terminal degree (or its equivalent) appropriate to the field;
   b. Record of productive scholarship, including evidence of sustained external research funding and salary support;
   c. Fulfillment of important responsibilities in the research enterprise.

3. Research professor
   a. Terminal degree (or its equivalent) appropriate to the field;
   b. Record of research excellence as in independent investigator, including an established record of continued research funding;
c. Unmistakable evidence of national or international recognition by peers.

BRIDGE FUNDING: Bridge funding may be available to provide salary and benefit support for research faculty who experience a short term gap in external (sponsored) funding due to factors beyond their control. Eligibility for bridge funding is determined by the rank of the research faculty member and the years of service in that rank at MSU, as specified below:

<table>
<thead>
<tr>
<th>Rank (years of service)</th>
<th>Funding Eligibility (salary and benefits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research assistant professor</td>
<td></td>
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<tr>
<td>Less than 3 years of service</td>
<td>Not eligible</td>
</tr>
<tr>
<td>3-5 Years of service</td>
<td>Up to 2 months of salary and benefits</td>
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<tr>
<td>Research associate professor and Research professor</td>
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<tr>
<td>Less than 3 years of service</td>
<td>Up to 6 months of salary and benefits</td>
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<tr>
<td>3 or more years of service</td>
<td>Up to 12 months salary and benefits</td>
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The Office of the Vice President for Research and Graduate Studies (VPRGS) administers a central bridging fund which covers 50% of the total bridging costs. The appointing unit and/or college must provide the other 50% of the cost. Bridge funding is not an entitlement; approval by the VPRGS and Associate Provost for Academic Human Resources is based on consideration of the following factors:

- The quality and significance of the research faculty member’s work;
- The research faculty member’s past experience in obtaining external support for her/his work;
- The quality and significance of the research plan of the research faculty member;
- The potential for the research faculty member to obtain external support in the future;
- Evidence that the research faculty member has a grant application that is expected to be funded in the near future by an external agency, given the placement of the proposal(s) in the funding cycle;
- Evidence that the research faculty member’s work is in keeping with unit and institutional priorities;
- A statement by the appointing unit regarding the research faculty member’s continued employment.

Bridge funding requests are to be submitted by the appointing unit with the above information, including the dollar support required and a statement by the appointing unit that if the request is approved, it will cover 50% of the cost of salary and benefits. The request must be endorsed by the dean(s) with the final decision made jointly by the VPRGS and the Associate Provost for Academic Human Resources.
PAY and BENEFITS: Research faculty are covered by the same salary guidelines that apply to other non-union fixed term faculty. The guidelines provide for pay adjustments (usually annual) based on merit. Research faculty are covered by the same benefit programs applicable to other non-union fixed term faculty and academic staff, e.g., health, dental and prescription drug coverage, retirement plan, etc. Eligibility for coverage under such programs is the same as for other non-union fixed term faculty.

TERMINATION AND DISCIPLINE: Termination may occur during the term of the contract for cause or for unforeseen changes in budgetary circumstances.

Dismissal for cause during the appointment period may be the result of incompetence, or serious personal or professional misconduct including, but not limited to, failure to carry out assigned duties, theft or misuse of University property, acts of moral turpitude, insubordination, intellectual dishonesty, use of professional authority to exploit others, or violation of University rules and regulations. Prior to dismissal, the unit administrator shall confer with the dean and the Associate Provost for Academic Human Resources and provide written notice of the reason(s) for dismissal, projected date of dismissal and an opportunity to respond.

Disciplinary action other than dismissal may be imposed after the unit administrator has conferred with the dean and has provided the research faculty member with written notice of the pending disciplinary action, reason(s) for the disciplinary action, and an opportunity to respond.

Upon dismissal or other disciplinary action, the unit administrator shall provide the research faculty member with written notice of the right to file a grievance under the Faculty Grievance Policy. A research faculty member dismissed for cause will be terminated no earlier than 30 days from the date of the termination notice.

Terminations may also be implemented during the appointment period for budgetary reasons. In such cases, the research faculty member will be notified in writing of the effective date of termination at least thirty days prior to the effective date of separation.

Research faculty are covered by the provisions of the Faculty Grievance Policy.

TRANSFER OF RESEARCH FACULTY TO OTHER APPOINTMENT CATEGORIES: Research faculty are eligible to apply for tenure system or other position openings in accordance with standard University appointment policies and procedures.