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

June 26, 2020

President Stanley called the meeting of the Board of Trustees to order at 8:00 a.m. via livestream.

Trustees present: Dianne Byrum, Joel Ferguson, Melanie Foster, Dan Kelly, Renee Knake, Brian Mosallam, Brianna Scott, and Kelly Tebay.

University officers present: President Stanley, Interim Provost and Executive Vice President Sullivan; Executive Vice President Beauchamp; Vice President and General Counsel Quinn, Secretary Barr; Senior Vice President Woo, Vice Presidents Bales, Bollman, Byelich, Gore, Guerrant, Haas, Heil, Maybank, Swain and Wilbur; Assistant Vice President Gage; and Senior Advisor and Director Granberry Russell. Faculty liaisons present: Richard Fulton, Jennifer Johnson, and Anna Pegler-Gordon. Student liaisons present: Meagan Abel, Kaitlyn Bolton and Abii-Tah Bih.

All actions taken were by unanimous vote of the Trustees present, unless otherwise noted. On a motion by Trustee Byrum, supported by Trustee Scott, the BOARD VOTED to approve the agenda.

2. On a motion by Trustee Kelly, supported by Trustee Mosallam, the BOARD VOTED to approve the minutes of the May 15, 2020 Board of Trustees meeting.

3. Public Participation
   a. Victor Rodriguez-Pereira – MSU not providing enough or accurate information regarding enrollments and finances.

4. President’s Report

President Stanley provided the following report to the Board:

When I arrived at MSU I emphasized our shared mission of creating a safer, more diverse, and more inclusive and welcoming campus. The events of the last few months have tragically and powerfully driven home the importance of that goal, not only for our campus but for our country.

The disproportionate impact of COVID-19 on the Black community in our state, and many others, has highlighted the need to more aggressively address health disparities and economic inequities that have fueled the far greater death rates among Blacks. We’ve seen too many searing images of brutality against Black
Americans, including the murder of George Floyd, and we agree the need for action and fundamental change is indisputable.

I believe the Michigan State University community is galvanized by this opportunity for change, and we will respond. It helps that we have a head start. Under the leadership of Luis Garcia and Wanda Lipscomb, the DEI Strategic Planning Committee has already been working for months on pushing diversity, equity and inclusion forward at MSU. Their efforts include benchmarking where we stand compared to our peers in a number of key areas; inventorying and evaluating our programs dealing with diversity, equity and inclusion at both the unit and central level; and the difficult work of prioritizing which challenges we need to tackle first, and how we bring our approaches to scale. This work is crucial, and we will now accelerate our efforts. With assistance from Paulette Granberry Russell, I have asked the DEI Strategic Planning Committee to create a smaller task force to identify areas that deserve more immediate attention. I have also empowered them to add any additional content experts, as faculty or researchers that they deem helpful.

One topic we know will be considered is safety on campus, and one critical component of that is policing. I communicated my belief in the need for police accountability in the letter to the Spartan community earlier this month. It also noted that our police department already practices the “8 Can’t Wait” police conduct policies advocated by Project Zero. I look forward to more open discussions on this issue in the coming weeks.

This university-wide focus on DEI will require commitment from all our leaders. Last week I learned from provost-designee Dr. Teresa Woodruff and Interim Provost Sullivan about the efforts of the Provost’s office to identify and eradicate policies, practices and behaviors that create barriers to success for students of color. These include financial aid reforms, general education reform, curricular analysis and expansion of the first-year seminars program. Dr. Woodruff and Dr. Thomas Jeitschko, who is graciously serving as acting provost, will be fully engaged on this.

I want to update you briefly on the multicultural center feasibility study. The planning and steering committees conducted interviews last month with two minority-owned architectural firms that were the finalists for the project, and they have selected one. Feasibility study planning work will get underway next month.

I want to now turn to the fall reopening of campus. The initial work of the COVID-19 Reopening Campus Task Force is complete and now we are in full preparation mode and implementing the actions needed to return people to campus. Twenty-two subcommittees are providing recommendations and will remain active throughout the return to campus.
One of the encouraging aspects about reopening is that Michigan has been much further ahead than other states in containing the coronavirus. However, localized outbreaks such as we saw recently in this community underscore the importance of personal responsibility and taking the necessary steps to protect ourselves and others, including wearing a cloth face-covering in public spaces, physical distancing, and avoiding large gatherings. All these factors will help us keep everyone safer and they are key as we open campus.

I’m pleased we could announce a letter of intent with Henry Ford Health System earlier this month to create a new, deep partnership that will improve health care in Michigan. This alliance will increase each partner’s basic and translational research capacity, expand educational opportunities for both entities, create more educational opportunities for our medical, osteopathic and nursing students and for our MSU clinicians. A proposed partnership on public health in southeast Michigan will focus on addressing some of the health disparities that are so clearly shown by the vastly disproportionate impact of COVID-19 on the Black community. We see great potential for this alliance.

On a positive note, a new validation of Michigan State’s quality came out recently when we were ranked in the top eight percent of higher education institutions in the nation by the publisher of the QS World University Rankings. Key components of this ranking are an institution’s commitment to diversity, success in helping students get employed after graduation, and its commitment to being a global university, all areas of strength for Michigan State University.

Last week, at my request, Stephen Hsu resigned as senior vice president for research and innovation at MSU, and he will return to the faculty on July 1, 2020. Today I ask the Board of Trustees to approve the appointment of Douglas Gage as interim vice president for research and innovation. Doug currently serves as the assistant vice president for research and innovation and has led important efforts such as the Global Impact Initiative for the office. He is currently playing a vital role in bringing back research to the campus.

Doug is a plant scientist by training and has great experience in the industry, having served in advisor and senior leadership positions. I thank Doug for stepping up for this role, and we’ll begin a national search for vice president for research and innovation nearer to Fall.

Finally, I want to conclude by again expressing my deep thanks to Terry Sullivan for her willingness to serve as Michigan State University’s provost over the past months. Terry has served MSU as she served her other distinguished institutions, with intelligence, decisiveness, expertise, empathy, and a true commitment to the success of each and every member of the MSU community, including students, staff and faculty.
It has been a privilege for me to work with her, and I know you all join me in wishing her all the best as she returns to the University of Virginia to resume her post-presidential sabbatical. Terry, thank you so much. And to Thomas Jeitschko, thank you for your willingness to serve as Acting Provost for the next month. And I know all of us look forward to the arrival of our new Provost, Theresa Woodruff, on August 1, 2020. She is already highly engaged with the university and is contributing in many areas.

This concludes my report to the Board.

5. Gift, Grant and Contract


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

THE BOARD VOTED to approve the recommendation.

6. Personnel Actions

Interim Provost Sullivan presented the following personnel actions:

Appelo, Daniel, AY – Associate Professor, Department of Computational Mathematics, Science and Engineering, with Tenure, effective August 16, 2020.

Bohnert, Kip, AY – Associate Professor, Department of Epidemiology and Biostatistics CHM, with Tenure, effective August 16, 2020.

Byrne-Jimenez, Monica, AN – Associate Professor, Department of Educational Administration, with Tenure, effective July 1, 2020.

Fowkes-Gajan, Robert, AN – Professor, Department of Small Animal Clinical Sciences, with Tenure, effective August 1, 2020.

Green, Jennifer, AY – Associate Professor, Department of Statistics and Probability, with Tenure, effective August 16, 2020.

Munsterman, Amelia, AN – Associate Professor, Department of Large Animal Clinical Sciences, with Tenure, effective July 1, 2020.

Ondersma, Steven, AY – Professor, Department of Obstetrics, Gynecology and Reproductive Biology, with Tenure, effective August 16, 2020.
Robertson, Quinetta, AY – Professor, Department of Management, with Tenure, effective August 16, 2020.

Small, Leigh, AN – Professor, College of Nursing, with Tenure, effective July 1, 2020.

Williams, Sheneka, AN – Professor, Department of Educational Administration, with Tenure, effective June 1, 2020.

Gage, Douglas, AN – Assistant Vice President, OVPRGS, Research and Innovation, for a change to Interim Vice President for Research and Innovation, effective July 1, 2020.

Jeitschko, Thomas, AN – Associate Provost & Dean, The Graduate School, for a change to Acting Provost and Executive Vice President for Academic Affairs, effective July 1, 2020.

Zierler, Matthew, AN – Associate Dean, Honors College, for a change to Interim Dean, effective June 13, 2020.

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

THE BOARD VOTED to approve the recommendations.

Assistant Vice President Gage introduced Dr. Jack Lipton, College of Human Medicine, who gave the Board a presentation entitled “COVID-19 Testing: Innovation, Adaptation, and Scaling Up” (Appendix A)

7. Committee on Budget and Finance

Trustee Foster presented the Trustee Budget and Finance Committee Report and the following recommendations and resolutions.

A. 2020-21 Budget Development Guidelines

It was recommended that the Board of Trustees adopt the 2020-21 Budget Development Guidelines which include revenue and expenditure totals for the 2020-21 fiscal year.

BE IT RESOLVED, that the Board of Trustees adopts the attached 2020-21 Budget Development Guidelines (FY21 Budget Guidelines). Appendix B

BE IT FURTHER RESOLVED, that the Administration is directed to develop and implement the 2020-21 General Fund, MSU AgBioResearch, Michigan
State University Extension, and Intercollegiate Athletics budgets in accordance with the FY21 Budget Guidelines.

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

THE BOARD VOTED to approve the recommendation.

B. Fund Functioning as an Endowment
Homer Nowlin Estate Income Utilization Amendment

It was recommended that the Board of Trustees amend the Homer Nowlin Estate income distribution to fully utilize expendable resources in order to enhance programs in communities, agriculture and natural resources.

BE IT RESOLVED, that the Board of Trustees of Michigan State University hereby amends the distribution of the Homer Nowlin Estate expendable income as follows:

- 80% of spending policy distributions to the Homer Nowlin Chair in Water Research;
- 15% of spending policy distributions to the Homer Nowlin Chair in Consumer Responsive Product Agriculture; and
- 5% of spending policy distributions plus royalty income to the College of Agriculture and Natural Resources Dean’s discretionary account.

BE IT FURTHER RESOLVED, that if either of the Chair positions are vacant, the funds allocated to the vacant position can be transferred, at the Dean’s discretion, to the Dean’s discretionary account until the position is filled.

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

THE BOARD VOTED to approve the recommendation.

C. Fund Functioning as an Endowment
Stanley and Selma Hollander Artist & Scholar Guest Lecture Series

It was recommended that the Board of Trustees establish a fund functioning as an endowment to provide support for the College of Arts and Letters.

BE IT RESOLVED, that the Board of Trustees of Michigan State University hereby establishes a fund functioning as an endowment entitled “Stanley and Selma Hollander Artist & Scholar Guest Lecture Series.”
Trustee Foster moved to approve the recommendation, with support from Trustee Kelly.

THE BOARD VOTED to approve the recommendation.

D. Fund Functioning as an Endowment
Stanley and Selma Hollander Endowed Scholarship in Theatre

It was recommended that the Board of Trustees establish a fund functioning as an endowment to provide support for the College of Arts and Letters.

BE IT RESOLVED, that the Board of Trustees of Michigan State University hereby establishes a fund functioning as an endowment entitled “Stanley and Selma Hollander Endowed Scholarship in Theatre.”

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

THE BOARD VOTED to approve the recommendation.

E. Fund Functioning as an Endowment
John Wettaw Chemistry Scholarship

It was recommended that the Board of Trustees establish a fund functioning as an endowment to provide scholarships to undergraduate students majoring in Chemistry.

BE IT RESOLVED, that the Board of Trustees of Michigan State University hereby establishes a fund functioning as an endowment entitled “John Wettaw Chemistry Scholarship.”

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

THE BOARD VOTED to approve the recommendation.

8. Committee on Academic Affairs

Trustee Byrum presented the Trustee Academic Affairs Committee Report.

“The Committee on Academic Affairs received an update from Interim Provost Sullivan on academic personnel matters and reopening. The Board also reviewed proposed amendments to the Bylaws for Academic Governance.”

9. Committee on Audit, Risk and Compliance
Trustee Kelly presented the Trustee Audit, Risk and Compliance Committee Report and the following recommendations and resolutions.

A. Policy 02-07-03 (Settlement of Claims and Litigation)

It was recommended that the Board of Trustees approve adoption of a new Policy 02-07-03 (Settlement of Claims and Litigation) included as Attachment A hereto.

BE IT RESOLVED, that the Board of Trustees of Michigan State University hereby approves the adoption of Policy 02-07-03 (Settlement of Claims and Litigation) included as Attachment A hereto. (Appendix C)

Trustee Kelly moved to approve the recommendation, with support from Trustee Scott.

THE BOARD VOTED to approve the recommendation.

B. Approval of Contract Terms

It was recommended that the Board of Trustees approve a contract between Michigan State University and BoroPharm, Inc., a company in which faculty members Robert Maleczka and Professor Milton Smith hold a financial interest.

BE IT RESOLVED, that the Board of Trustees of Michigan State University hereby approves a service agreement with BoroPharm, Inc. consistent with earlier public notice given at a Board meeting and with an “Amended Service Agreement Term Sheet” presented to the Board for inclusion in its minutes. (Appendix D)

It was recommended that the Board of Trustees approve a contract between Michigan State University and FibrosIX, LLC, a company in which MSU faculty member Dr. Richard R. Neubig holds a financial interest.

BE IT RESOLVED, that the Board of Trustees of Michigan State University hereby approves a service agreement with FibrosIX, LLC consistent with earlier public notice given at a Board meeting and with a “Service Agreement Term Sheet” presented to the Board for inclusion in its minutes. (Appendix E)

It was recommended that the Board of Trustees approve a contract between Michigan State University and FibrosIX, LLC, a company in which MSU faculty member Dr. Richard R. Neubig holds a financial interest.
BE IT RESOLVED, that the Board of Trustees of Michigan State University hereby approves a service agreement with FibrosIX, LLC consistent with earlier public notice given at a Board meeting and with a “Service Agreement Term Sheet” presented to the Board for inclusion in its minutes. (Appendix F)

It was recommended that the Board of Trustees approve a contract between Michigan State University and FibrosIX, LLC, a company in which MSU faculty member Dr. Richard R. Neubig holds a financial interest.

BE IT RESOLVED, that the Board of Trustees of Michigan State University hereby approves a service agreement with FibrosIX, LLC consistent with earlier public notice given at a Board meeting and with a “Service Agreement Term Sheet” presented to the Board for inclusion in its minutes. (Appendix G)

It was recommended that that the Board of Trustees approve a contract between Michigan State University and Great Lakes Crystal Technologies, Inc., a company in which MSU faculty member Dr. Timothy Grotjohn holds an interest.

BE IT RESOLVED, that the Board of Trustees of Michigan State University hereby approves service agreement with Great Lakes Crystal Technologies, Inc. consistent with earlier public notice and with a “Service Agreement Term Sheet” presented to the Board for inclusion in its minutes. (Appendix H)

It was recommended that the Board of Trustees approve a contract between Michigan State University and Jolt Energy Storage Technologies LLC, a company in which Professor Thomas Guarr holds a financial interest.

BE IT RESOLVED, that the Board of Trustees of Michigan State University hereby approves a service agreement with Jolt Energy Storage Technologies LLC consistent with earlier public notice given at a Board meeting and with a “Service Agreement Term Sheet” presented to the Board for inclusion in its minutes. (Appendix I)

It was recommended that the Board of Trustees approve a contract between Michigan State University and the National Pesticide Safety and Education Center, in which MSU employee Mr. Tom Smith holds an interest.

BE IT RESOLVED, that the Board of Trustees of Michigan State University hereby approves a corrected service agreement with the National Pesticide Safety and Education Center consistent with earlier public notice given at a Board meeting and with a “Corrected Agreement Term Sheet” presented to the Board for inclusion in its minutes. (Appendix J)
It was recommended that the Board of Trustees approve a contract between Michigan State University and Adam Candeub, an MSU faculty member.

BE IT RESOLVED, that the Board of Trustees of Michigan State University hereby approves a copyright license agreement with Adam Candeub consistent with earlier public notice given at a Board meeting and with a “Copyright License Agreement Term Sheet” presented to the Board for inclusion in its minutes. (Appendix K)

It was recommended that the Board of Trustees approve a contract between Michigan State University and Jetfire Power, LLC, a company in which MSU faculty member Dr. Harold Schock holds a financial interest.

BE IT RESOLVED, that the Board of Trustees of Michigan State University hereby approves a license agreement with Jetfire Power, LLC, consistent with earlier public notice given at a Board meeting and with a “License Agreement Term Sheet” presented to the Board for inclusion in its minutes. (Appendix L)

It was recommended that the Board of Trustees approve a contract between Michigan State University and Dr. Hiram Fitzgerald, an MSU faculty member.

BE IT RESOLVED, that the Board of Trustees of Michigan State University hereby approves a publishing contract with Dr. Hiram Fitzgerald, consistent with earlier public notice given at a Board meeting and with a “Publishing Contract Term Sheet” presented to the Board for inclusion in its minutes. (Appendix M)

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

THE BOARD VOTED to approve the recommendations.

F. Notice of Intent to Negotiate Contracts

Pursuant to State law, the Chair of the Trustee Committee on Audit, Risk and Compliance gave public notice of the University’s intent to negotiate a contract with Lansing Biosciences, LLC. Dr. Brett Etchebarne, an Assistant Professor in the Department of Osteopathic Medical Specialties, Dr. Mary Hughes, the Chair of the Department of Osteopathic Medical Specialties, and members of their families, have, or have options to buy, an interest in the company or are officers or paid employees of the company.

Pursuant to State law, the Chair of the Trustee Committee on Audit, Risk
and Compliance gave public notice of the University’s intent to negotiate a contract with Dr. Pero Dagbovie, University Distinguished Professor of History and Associate Dean of the Graduate School.

Pursuant to State law, the Chair of the Trustee Committee on Audit, Risk and Compliance gave public notice of the University’s intent to negotiate a contract with Data Logistics. Dr. Gina Karasek, an Information Technologist in MSU’s IT Services Analytics and Data Solutions unit, and members of her family, have, or have options to buy, an interest in the company or are officers or paid employees of the company.

10. Committee on Student Life and Culture

Trustee Scott presented the Trustee Student Life and Culture Committee Report.

“The Committee on Student Life and Culture discussed the Annual Diversity Report and diversity, equity, and inclusion matters with Senior Advisor for Diversity Paulette Granberry Russell, and received an update on election related activities and initiatives from Senior Vice President Kathy Wilbur and MSUvote Co-Chairs Renee Brown and Sue Webster.

MSUvote is a non-partisan civic engagement program that has been in place for 20 years. The goal is for students to become informed and engaged citizens who are lifelong voters. We encourage the entire Spartan community, students, faculty, staff, Deans and administrators to fully embrace the MSUvote plans for student engagement and education for the upcoming election. This will include education on the issues, as well as voter registration and absentee voting initiatives, and programming on civic engagement and civil discourse. You can find more information by visiting msuvote.msu.edu.”

11. Chairperson’s Report and Trustee Comments

Chairperson Byrum stated her concern about recent events regarding racial justice, and health disparities with coronavirus. She said the campus community must work on diversity, equity, and inclusion. Chair Byrum stated the Board’s commitment to work on these issues. She noted that it is Deb Moriarty’s last meeting as chair of the faculty steering committee. She welcomed Jennifer Johnson, who will be the next chair. She congratulated Coach Tom Izzo for being named coach of the decade by the Big Ten. She also recognized athletes Draymond Green, Denzel Washington, and Cassius Winston for their awards.

She thanked Interim Provost Sullivan for her service to MSU this past year. On behalf of the Board of Trustees, Trustee Byrum presented a resolution to Dr. Teresa Sullivan. (Appendix N)
Trustee Byrum moved to approve the recommendation, with support from Trustee Kelly.

THE BOARD VOTED to approve the recommendation.

Vice Chairperson Kelly echoed the statements of Trustee Byrum. He stated his gratitude toward Dr. Sullivan and thanked her for her work.

Trustee Ferguson echoed Trustee Kelly’s statements and thanked Dr. Sullivan for her work.

Trustee Foster thanked Trustee Byrum for her comments. She thanked Dr. Sullivan for her service to MSU, in particular for her service on the Presidential Search Committee. She congratulated Coach Izzo for his award and congratulated the players. She acknowledged the DEI conversations.

Trustee Knake echoed the comments of Chairperson Byrum and stated her commitment to diversity, equity, and inclusion efforts. She thanked Dr. Stanley for his leadership. Trustee Knake said that she is working to review documents to increase reforms for transparency and accountability.

Trustee Mosallam stated his commitment to diversity, equity, and inclusion efforts. He said that he is committed to making a difference. Trustee Mosallam thanked Deb Moriarty for her work on the Faculty Liaison Committee and welcomed Jennifer Johnson to the Committee. He echoed the positive comments about Dr. Sullivan and wished her the best.

Trustee Scott thanked Dr. Sullivan for her work. She welcomed the new students to the Liaison Committee and stated that she looks forward to working with them. Trustee Scott noted her support for the Black Lives Matter movement and her commitment to equality and justice. She stated she understands the battle. She congratulated Coach Izzo and the athletes.

Trustee Tebay stated her support for Black Lives Matter and echoed Trustee Scott’s comments. She thanked Dr. Rodriguez-Pereira for his comments and stated that all of campus will work to share the burden of coronavirus financial difficulties. Trustee Tebay thanked Dr. Gage for stepping into his new leadership position. She welcomed Jennifer Johnson, and thanked Deb Moriarty for her service on the Faculty Liaison Committee. Trustee Tebay thanked Dr. Sullivan for her service.

Trustee Scott added that there is no place for racism or hate on campus.

Trustee Mosallam echoed her comments.
12. Request to Adjourn

On a motion by Trustee Kelly, supported by Trustee Byrum, THE BOARD VOTED to adjourn at 9:04 a.m.

Respectfully submitted,

Nakia Barr
Secretary of the Board of Trustees
COVID-19 Screening: Innovation, Adaptation, and Scale-Up

Responding to the pandemic’s testing challenges through science and flexible persistence.

Jack W. Lipton, Ph.D.
Founding Chair and Professor
Department of Translational Neuroscience
College of Human Medicine
How does viral testing work?

- Collect a sample: 
  - nasopharyngeal swab, nasal swab, oropharyngeal swab, saliva
- Extract viral genetic material
- Transcribe viral RNA into cDNA
- Amplify and detect
CHANGE THE PLATFORM

• A: qPCR
  • Less sensitive
  • Data is not quantitative

• B: Droplet digital PCR
  • 500x more sensitive than qPCR
  • Data is quantitative
CHANGE THE SAMPLE

• Nasopharyngeal swabs
  • Requires an expert to administer
  • Requires extensive PPE
  • Variable quality depending on technique

• Saliva Collection
  • Can be self-collected
  • No PPE required
  • More genetic material collected
We Have a Coronavirus Test—Let Us Use It

Suspend regulations that prevent research labs from conducting diagnostic checks.

By Jack W. Lipton and Caryl E. Sortwell
April 15, 2020 12:44 pm ET
“Many college and university laboratories have multiple high-throughput platforms that would enable them to fully test their student bodies and faculties on a regular basis, particularly if incidence of the disease is low enough to enable effective pooled testing....Individuals or pools that test positive would be sent for confirmatory diagnostic testing by a certified laboratory.”
CHANGE IN THE COMMUNITY

Identification of asymptomatic cases by screening essential workers

Irving E. Vega – PI
Jack Lipton
Joseph Patterson
Allyson Cole-Strauss
Andrew Umstead
Claudia Finkelstein

“Thank you so much, Irving, for testing the people at San Jose Obrero yesterday. A couple of the participants called me yesterday to tell me what a wonderful doctor you are, and that you took the time to go out to the community to test them. They also said we need more Spanish-speaking doctors like him, in the community for our people.”
CHANGE THE THROUGHPUT

Regular, IRB-approved screening of volunteer asymptomatic workers in MSU’s Grand Rapids Research Center

Caryl E. Sortwell – PI
Jack Lipton
Joseph Patterson
Allyson Cole-Strauss
Andrew Umstead
Claudia Finkelstein

Pooled PCR plate screens 1,056 subjects
Reopening Campus Task Force

Charged by Pres. Stanley

Led by Drs. Beauchamp and Weismantel

- COVID-19 detection initiative:
  - Test symptomatic students and employees with clinical diagnostic tests at Olin/Sparrow
  - Bi-weekly, voluntary screening for students and employees at highest-risk of COVID-19 transmission, or at high-risk of susceptibility, using academic laboratories, saliva samples, and pooling strategies
Acknowledgments:

**Research Team**
- Caryl Sortwell
- Joe Patterson
- Allyson Cole-Strauss
- Irving Vega
- John Beck
- Andrew Umstead
- Claudia Finkelstein

**Testing Committee**
- Birgit Puschner
- Joan Rose
- Victor DiRita
- Dru Montri
- Jade Mitchell
- Annette O’Connor
- Krishna Yelleswarapu
- Lynn Kriser

**Connect:**

Jack W. Lipton
- liptonj@msu.edu
- 616-234-0950

Assistant: Betsy Matazel
- matazel@msu.edu
MEMORANDUM

To: Committee on Budget and Finance

From: Samuel L. Stanley, Jr., M.D.  President

Subject: 2020-21 Budget Development Guidelines

RECOMMENDATION
The Trustee Finance Committee recommends that the Board of Trustees adopt the 2020-21 Budget Development Guidelines which include revenue and expenditure totals for the 2020-21 fiscal year.

RESOLUTION
BE IT RESOLVED, that the Board of Trustees adopts the attached 2020-21 Budget Development Guidelines (FY21 Budget Guidelines).

BE IT FURTHER RESOLVED, that the Administration is directed to develop and implement the 2020-21 General Fund, MSU AgBioResearch, Michigan State University Extension, and Intercollegiate Athletics budgets in accordance with the FY21 Budget Guidelines.

BACKGROUND:
Attachment A summarizes revenues and expenditures for the 2020-21 budget. Attachment B provides detailed general fund revenue and expenditure changes for the proposed 2020-21 budget.

In May of 2021 the Board of Trustees approved the tuition and fee rate structure for the 2020-21 academic year. Approved tuition and fee rates are the same as 2019-20 rates. Rates for the resident entering class are unchanged since the 2017-18 academic year, and broader undergraduate tuition and fee rates are unchanged for the second consecutive year.

The proposed 2020-21 Budgets for the General Fund, MSU AgBioResearch, Michigan State University Extension, and Intercollegiate Athletics totals $1.664.9 million, a $52.6 million decline from the previous fiscal year. Summary schedules for the 2020-21 General Fund budget follow.
The 2020-21 budgets are designed to initiate University operations during a period of very dynamic circumstances and will be closely monitored as COVID-19 issues evolve and related economic implications change.

# 2020-21 General Fund Budget Summary

## Revenue Assumptions

<table>
<thead>
<tr>
<th></th>
<th>FY20</th>
<th>FY21 Proposal</th>
<th>Change</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appropriations</td>
<td>$292M</td>
<td>$246M</td>
<td>-$46M</td>
<td>Reflects a 15% reduction to operating appropriations, corrects FY20 appropriation</td>
</tr>
<tr>
<td>Tuition and Fees</td>
<td>$1,082M</td>
<td>$1,019M</td>
<td>-$63M</td>
<td>Includes additional resident undergraduates, fewer domestic non-resident students, significant international enrollment displacement</td>
</tr>
<tr>
<td>Investment Income Allocation</td>
<td>$30M</td>
<td>$12M</td>
<td>-$18M</td>
<td>Loss of annual GF component due to reserves spend-down/balancing for debt service needs</td>
</tr>
<tr>
<td>Indirect Cost Recovery &amp; Other</td>
<td>$76M</td>
<td>$78M</td>
<td>$2M</td>
<td>Includes funding from several institutional sources</td>
</tr>
<tr>
<td>One Time Resources</td>
<td>Na</td>
<td>$90M</td>
<td>$90M</td>
<td>Includes funding from several institutional sources</td>
</tr>
<tr>
<td>Indirect Cost Recovery and Pass-Through Additions</td>
<td>Na</td>
<td>$2M</td>
<td>$2M</td>
<td>Increments for online/distance education programming and indirect cost recoveries</td>
</tr>
<tr>
<td><strong>Total Revenues</strong></td>
<td><strong>$1,479M</strong></td>
<td><strong>$1,446M</strong></td>
<td><strong>-$33M</strong></td>
<td></td>
</tr>
</tbody>
</table>

June 26, 2020
## Expense Assumptions

<table>
<thead>
<tr>
<th></th>
<th>FY20</th>
<th>FY21 Proposal</th>
<th>Change</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial Aid</td>
<td>$185M</td>
<td>$192M</td>
<td>$7M</td>
<td>Includes a 4% increase to financial aid budgets</td>
</tr>
<tr>
<td>Salary and Benefits</td>
<td>$909M</td>
<td>$943M</td>
<td>$34M</td>
<td>Includes market funding, UNTF contractual raise increment, FY20 annualization amounts, support staff contractual increases, increments for health and other fringe benefits; incorporates PY framework and pass-through additions into FY21 base</td>
</tr>
<tr>
<td>Graduate Assts./Students</td>
<td>$65M</td>
<td>$68M</td>
<td>$3M</td>
<td>Reflects funding for stipend increases, change to healthcare, hourly rate increase for student employees</td>
</tr>
<tr>
<td>Utilities</td>
<td>$52M</td>
<td>$48M</td>
<td>-$4M</td>
<td>Reflects a 9% operating reduction and $0.8M in funding for new space requirements</td>
</tr>
<tr>
<td>Supplies &amp; Services/Operations</td>
<td>$256M</td>
<td>$255M</td>
<td>-$1M</td>
<td>1% across-the-board SS&amp;E adjustment; $1M in library collections funding; 2% operations increase, change to budgeted auxiliary abatement</td>
</tr>
<tr>
<td>Unit Reductions</td>
<td>0%</td>
<td>-3%</td>
<td>-$20M</td>
<td>Reflects $20M in unit reductions</td>
</tr>
<tr>
<td>Expenditure offsets</td>
<td>Na</td>
<td>-$45M</td>
<td>-$45M</td>
<td>$30M above-the-match retirement, $15M/2.3% salary reduction</td>
</tr>
<tr>
<td>Framework/Pass-Through Additions</td>
<td>$10M/$2M</td>
<td>$4M/$2M</td>
<td>Na</td>
<td>Framework includes $3M recurring for technology, $1M for Academic Competitiveness; Pass-through allocations Increment for online/distance education and indirect cost recoveries</td>
</tr>
</tbody>
</table>

**Total Expenditures** | $1,479M | $1,446M | -$33M |
Overview

The proposed 2020-21 budgets for the University General Fund, MSU AgBioResearch, Michigan State University Extension, and Intercollegiate Athletics total $1.66 billion, representing a contraction of $52.6 million compared to budgeted 2019-20 values.

Board action authorizes the administration to develop and implement 2020-21 budgets in accordance with the following 2020-21 Budget Development Guidelines (FY21 Budget Guidelines):

Revenues

1. State appropriations are estimated at $245.5 million, a decrease of $46.3 million or 15 percent from FY20 budgeted values. This planning estimate anticipates state funding cuts for 2020-21 Higher Education Appropriations resulting from the coronavirus pandemic.

2. The general fund operating budget for 2020-21 has been developed based on revenue estimates of $1,446 million. The major revenue items in the budget are: $245.5 million in appropriations; $1,019.5 million in tuition and fees; $89.6 million in other revenues, which are composed primarily of investment income and indirect cost recovery; and $90.3 million in one-time resources. Additionally, the budget includes pass-through allocations of $1.8 million in new revenue-based initiatives and research facilitation proceeds.

3. Pursuant to the Board of Trustees action on May 15, 2020, tuition and fee rates for the 2020-21 academic year are frozen at 2019-20 levels. Selected tuition and fee rates including non-resident osteopathic and veterinary medicine have been reduced to better reflect market conditions and an ongoing attempt to limit student debt.

Expenditures

4. Major expenditure items include funding for student financial aid; utilities, including the cost of utilities for newly constructed space; employee compensation; and supplies, services, and equipment increments. A 3.0 percent budget reduction will be implemented in addition to the 1.0 percent program efficiency and reinvestment fund reallocation. Specific expenditure recommendations are:

   a. Regular student financial aid increase of $6.7 million, or 4 percent of 2019-20 budget totals.
b. Continuing utility costs reduction of $4.7 million, or 9 percent; $0.75 million in new funding includes utility, facility, and operational costs for newly constructed space.

c. Employee compensation adjustments, including increases in benefits, of $24.6 million. Health care cost increase of 3 percent necessary to mitigate current year short-fall and other benefits cost increase of 2.5 percent. Compensation and benefits amounts include $45 million in temporary reductions to salary and wage levels, above-the-match retirement contributions, and executive management salary.

   i. A 0.5 percent segment is recommended for market adjustments administered centrally and targeted for ranked faculty, but open to all faculty and academic staff. Centrally administered market raises will be effective October 1, 2020.

   ii. Stipend ranges for graduate assistants holding research or administrative appointments increase by 2.0 percent. Stipend increases for individual assistants will be determined by the employing units.

      Compensation adjustments, including stipends, health care, and graduate assistant tuition waiver, for assistants holding teaching appointments are determined through collective bargaining.

   iii. Existing minima and maxima pay ranges for student labor increase by 4.0 percent.

   iv. Increases in pay rates for undergraduate and professorial assistants will parallel student labor adjustments.

   v. Salary and wage adjustments for most other employee groups subject to collective bargaining agreements.

d. An increment for supplies, services, and equipment of $1.5 million or 1 percent. Unit allocations can be differential, based upon identified programmatic need. $1M in funding for Library acquisitions.

e. An increment for other budgetary adjustments of $3 million, which includes funding for additional debt service and other general University purposes. Recognition of $7 million of tax on auxiliary revenue as an offset to university expenditures.

f. Budget reduction of 3.0 percent assessed on all major administrative units.
g. Continuation of 1.0 percent reinvestment fund. Reinvestments address normal year-to-year programmatic adjustments. Over the past 20 years, internal reallocations totaling $94 million have been implemented across campus.

h. Continuation of $12 million Technology/Teaching and Learning Fund. Allocations from this Fund are made on nonrecurring basis to enhance instructional technology.

5. Expenditures for incremental revenue-based initiatives and research facilitation of $1.8 million include the following:
   a. Virtual, off-campus, and other programs totaling -$2.2 million; and
   b. Indirect cost recovery pass-through to units of $4.0 million.

6. Funding of $4.0 million for University initiatives focused on academic competitiveness, and on information technology stabilization, student success analytics, research computing, campus and classroom Wi-Fi improvements, and other technology-based projects.

7. General Fund expenditures for 2020-21 will be based on the budget and, upon completion of the current year, resources carried forward for subsequent expenditure. Carry forward amounts noted in the 2020-21 financial statements.

8. The 2 percent tax on auxiliary income derived from external sources continues in 2020-21. This tax is not levied on internal budget transfers.

General

9. In the event anticipated FY21 general fund revenues are reduced, deferred, delayed, or otherwise vary from the estimates included in these Guidelines, additional one-time resources, unit reductions, or adjustments to tuition and fee rates may be identified to mitigate any revenue variance. Alternatively, in the event the anticipated FY21 general fund revenues exceed the estimates included in these Guidelines, the use of one-time resources will be reduced to offset the revenue increase. Should revenue increases exceed the budgeted value of one-time resources, any temporarily implemented wage and benefit concessions will be reduced or eliminated equal to the amount of the additional revenues in excess of one-time resource need.

10. Budgeted General Fund totals include the transfer of the MSU College of Law into broader campus operations.

11. Other University budgets, including those for MSU AgBioResearch, the Michigan State University Extension Service, and the Department of Intercollegiate Athletics, have been developed within available resources and in accordance with University-wide guidelines for compensation adjustments as outlined above.
12. Proceeds from non-donor, administrative-based trust income may be used to fund just-in-time, debt service, academic infrastructure requirements, or any combination thereof. Expenditures will be reported annually as part of the financial statements. Other sources of funds for these expenses include the 2 percent tax noted in paragraph 8 and debt financing. Just-in-time infrastructure requirements necessary to support University utilities are accounted for in the 9 percent reduction in continuing utility costs.

# MICHIGAN STATE UNIVERSITY
## 2020-21 BUDGETS
### Overview

#### ESTIMATED REVENUES

<table>
<thead>
<tr>
<th>Source</th>
<th>State Appropriation</th>
<th>Federal Funds</th>
<th>Tuition &amp; Fee Funds</th>
<th>Other</th>
<th>Restricted</th>
<th>2020-21 Total</th>
<th>2019-20 Total</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>University General Fund</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$1,446,000,000</td>
<td>$1,479,200,000</td>
<td>-$33,200,000</td>
</tr>
<tr>
<td>MSU AgBioResearch</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$41,547,755</td>
<td>$45,151,324</td>
<td>-$3,603,569</td>
</tr>
<tr>
<td>MSU Extension</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$48,643,220</td>
<td>$53,324,766</td>
<td>-$4,681,546</td>
</tr>
<tr>
<td>Intercollegiate Athletics</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$128,703,793</td>
<td>$139,780,662</td>
<td>-$11,076,869</td>
</tr>
<tr>
<td>Total Estimated Revenues</td>
<td>$301,339,955</td>
<td>$18,982,329</td>
<td>$1,019,497,000</td>
<td>$137,403,793</td>
<td>$6,648,691</td>
<td>$1,664,894,768</td>
<td>$1,717,456,752</td>
<td>-$52,561,984</td>
</tr>
</tbody>
</table>

#### ESTIMATED EXPENDITURES

<table>
<thead>
<tr>
<th>Source</th>
<th>State Appropriation</th>
<th>Federal Funds</th>
<th>University Funds</th>
<th>Other</th>
<th>Restricted</th>
<th>2020-21 Total</th>
<th>2019-20 Total</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>University General Fund</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$1,446,000,000</td>
<td>$1,479,200,000</td>
<td>-$33,200,000</td>
</tr>
<tr>
<td>Michigan Agricultural Experiment Station</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$41,547,755</td>
<td>$45,151,324</td>
<td>-$3,603,569</td>
</tr>
<tr>
<td>MSU Extension</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$48,643,220</td>
<td>$53,324,766</td>
<td>-$4,681,546</td>
</tr>
<tr>
<td>Intercollegiate Athletics</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$128,703,793</td>
<td>$139,780,662</td>
<td>-$11,076,869</td>
</tr>
<tr>
<td>Total Estimated Expenditures</td>
<td>$1,664,894,768</td>
<td>$1,717,456,752</td>
<td>$52,561,984</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Michigan State University
#### 2020-21 General Fund Budget Guidelines

**Attachment B**

<table>
<thead>
<tr>
<th>Revenues</th>
<th>2019-20</th>
<th>2020-21</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Beginning Base</strong></td>
<td>$1,479.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>State Appropriations</td>
<td>5.1</td>
<td>(4.6)</td>
<td>(9.7)</td>
</tr>
<tr>
<td>Student Tuition and Fees</td>
<td>0.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Enrollment Change</td>
<td>59.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other tuition and enrollment actions</td>
<td>4.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Investment Income Allocation</td>
<td>2.0</td>
<td>(18.0)</td>
<td>(16.0)</td>
</tr>
<tr>
<td>IDC inflation factor</td>
<td>2.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Indirect Cost Recovery</td>
<td>4.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Revenue-Based Initiatives</td>
<td>2.2</td>
<td>(2.2)</td>
<td>(4.4)</td>
</tr>
<tr>
<td>One-time Resources</td>
<td>90.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total Estimated Revenues</strong></td>
<td>$1,479.2</td>
<td>$1,446.0</td>
<td>($33.2)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Expenditures</th>
<th>2019-20</th>
<th>2020-21</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Beginning Base</strong></td>
<td>$1,479.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Financial Aid</td>
<td>6.7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Salaries &amp; Benefits</td>
<td>24.8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Utilities &amp; New Space</td>
<td>(4.0)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supplies and Services</td>
<td>2.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Operating</td>
<td>(4.0)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Framework</td>
<td>4.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Research Facilitation Support</td>
<td>4.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Revenue-Based Initiatives</td>
<td>(2.2)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Expenditure offsets</td>
<td>(45.0)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Base Budget Reduction</td>
<td>(20.0)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total Estimated Expenditures</strong></td>
<td>$1,479.2</td>
<td>$1,446.0</td>
<td>($33.2)</td>
</tr>
</tbody>
</table>
MEMORANDUM

To: Committee on Audit, Risk and Compliance

From: Brian Quinn
General Counsel and VP for Legal Affairs

Subject: Policy 02-07-03 (Settlement of Claims and Litigation)

RECOMMENDATION
The Trustee Committee on Audit, Risk and Compliance recommends that the Board of Trustees approve adoption of a new Policy 02-07-03 (Settlement of Claims and Litigation) included as Attachment A hereto.

RESOLUTION
BE IT RESOLVED, that the Board of Trustees of Michigan State University hereby approves the adoption of Policy 02-07-03 (Settlement of Claims and Litigation) included as Attachment A hereto.

BACKGROUND
Pursuant to Article 4 of the Bylaws of the Board of Trustees of Michigan State University, the General Counsel is authorized “to execute all legal documents including those required for purposes of litigation and/or court proceedings.” Currently, there is no formal requirement for Board involvement in the settlement of a claim or litigation aside from the Board’s general authority over university funds. This policy establishes specific requirements for reporting, consent, and oversight of the settlement of a claim or litigation, and reserves certain authority in the Board itself.

cc: Board of Trustees, S. Stanley, T. Sullivan, N. Beauchamp, N. Barr, M. Zeig, M. Tarrant
As used in this Policy, the terms “claim” and “litigation” shall have the following meanings:

a. "Claim" means a dispute in which a demand for payment is asserted in some manner other than through litigation.

b. "Litigation" means (1) a lawsuit filed in a federal or state court; (2) an arbitration proceeding; or (3) a matter before a federal or state administrative agency.

The General Counsel shall have the authority to settle a claim or litigation for $750,000 or less, subject to the availability of funds. The General Counsel shall have the authority to settle a claim or litigation for more than $750,000 with a report to and the consent of the Board of Trustees. Accordingly, a settlement of any claim or litigation for more than $750,000 shall be tentative, subject to a report to and the consent of the Board of Trustees, and such report and consent shall normally be sought at the next executive session of the Board of Trustees.

Adopted 06/26/2020
AMENDED SERVICE AGREEMENT TERM SHEET

Party: BoroPharm, Inc.

Agreement: BoroPharm, Inc. and MSU executed a two-year pilot plant use and space agreement regarding certain services to be provided at the MSU Bioeconomy Institute in Holland, Michigan, with effect on December 13, 2011. Sequential amendments to the agreement extending the contract period first to December 5, 2015, then to December 5, 2017.

Term: Effective date – December 2022

Payment Terms: According to the attached rate sheet

Services Provided: By MSU to BoroPharm, Inc.: Pilot plant scale-up of chemical syntheses

By BoroPharm, Inc. to MSU: None contemplated under the agreement

Use of University Facilities/Personnel: Use of pilot plant infrastructure and operational staff for execution of pilot plant synthesis runs at the MSU facility in Holland, MI for production of chemical intermediates, process optimization, and related research.

Organization Type: Delaware Corporation

Personnel Interest: Professor and Chairperson Robert Maleczka and Professor Milton Smith, both of the Department of Chemistry, and members of their families own or have options to buy an ownership interest of more than 1% of the company.
# MSU Bioeconomy Institute - Holland, Michigan
## Scale-up Plant Rates
As of February 1, 2020 --- (MSU reserves the right to modify rates at any time)

<table>
<thead>
<tr>
<th>Infrastructure</th>
<th>Mill Room, Vacuum Tray or Rotary Dryer (no additional processing steps)</th>
<th>850 L Hastelloy Agitated / Pen Dryer</th>
<th>200 L Glass-lined</th>
<th>400 L Glass-lined, 120 L High Temperature Still</th>
<th>900 L Glass-lined or Stainless, or any volume Hastelloy, including low temperature reactor</th>
<th>2000 L Glass-lined</th>
<th>4000 L Glass-lined</th>
</tr>
</thead>
<tbody>
<tr>
<td>First day in consecutive plant work period</td>
<td>$872</td>
<td>$1,570</td>
<td>$3,271</td>
<td>$4,026</td>
<td>$5,033</td>
<td>$6,039</td>
<td>$7,046</td>
</tr>
<tr>
<td>Each additional consecutive plant work day, including filtering, centrifugation, drying, milling, etc.</td>
<td>$872</td>
<td>$1,570</td>
<td>$1,290</td>
<td>$1,688</td>
<td>$1,966</td>
<td>$2,483</td>
<td>$2,880</td>
</tr>
<tr>
<td>Daily Blending Operation (single vessel, no major auxiliary equipment, no heating or cooling)</td>
<td>---</td>
<td>---</td>
<td>$693</td>
<td>$654</td>
<td>$1,057</td>
<td>$1,280</td>
<td>$1,495</td>
</tr>
</tbody>
</table>

### Personnel

<table>
<thead>
<tr>
<th>Non-Friday Prime Shift: hourly rate up to 10 hrs per day</th>
<th>All other time worked; hourly rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plant Operator</td>
<td>$96.00</td>
</tr>
<tr>
<td>Shift Manager / Mechanical / Electrical / Instrumentation</td>
<td>$112.00</td>
</tr>
<tr>
<td>Chemist/Engineer</td>
<td>$161.00</td>
</tr>
</tbody>
</table>

### Other

MSU mark-ups of mutually agreed charges for optional supplies and services provided by MSU

| Raw materials (if not privately arranged) | 26% |
| Waste disposal (if not privately arranged) | 26% |
| Pilot Plant consumables | 26% |
| Consulting Engineers | 26% |
| Other expenses, absent separate agreement | 26% |

### Volume Discounts

Volume Discounts are applied for a single customer on "Infrastructure" charges within a January 1st to December 31st calendar year, absent explicit preemption by other specific, contract-defined rates. More than one discount may not be applied at any time, however, Infrastructure charges from both MSU BI Holland and Lansing may be combined for the purposes of calculating volume discounts.

N.B. --- Volume discounts do NOT apply to the “Personnel” or “Other” expense categories.

Discounts are not applicable to clients that have been more than 45 days delinquent on any payments over the previous 12 months.

Discounts on Infrastructure calendar year cumulative charges, see notes above:

| $100,000 to $250,000 | 5% |
| $250,000 | 10% |
SERVICE AGREEMENT TERM SHEET

Party: FibrosIX, LLC

Agreement: MSU will perform testing in human dermal fibroblasts (business connect reference number 40596).

Term: July 2020 – December 2020

Payment Terms: $18,106 to MSU in fees for service

Services Provided: By MSU to FibrosIX, LLC: Test the efficacy of 10 novel compounds in reducing TGF-β induced ACTA2 mRNA levels in normal primary human dermal fibroblasts

By FibrosIX, LLC to MSU: None contemplated under the agreement

Use of University Facilities/ Personnel: Work to be performed in the Life Sciences Building 6by, or supervised by, Erika Lisabeth

Organization Type: Michigan limited liability company

Personnel Interest: Dr. Richard R. Neubig, Professor and Chair of the Department of Pharmacology and Toxicology, and members of his family, own or have options to buy an ownership interest of more than 1% of the company.
SERVICE AGREEMENT TERM SHEET

Party: FibrosiX, LLC

Agreement: MSU will perform biomarker testing (Business Connect reference number 40597)

Term: July 2020 – December 2020

Payment Terms: $32,396 to MSU in fees for service

Services Provided:
- By MSU to FibrosiX, LLC: Animal oral dosing and blood collection
- By FibrosiX, LLC to MSU: None contemplated under the agreement

Use of University Facilities/Personnel: Work to be performed in the Life Sciences Building by, or supervised by, Teresa Kreiger-Burke

Organization Type: Michigan limited liability company

Personnel Interest: Dr. Richard R. Neubig, Professor and Chair of the Department of Pharmacology and Toxicology, and members of his family, own or have options to buy an ownership interest of more than 1% of the company.
## SERVICE AGREEMENT TERM SHEET

**Party:** FibrosIX, LLC

**Agreement:** MSU, as a subrecipient under an NIH grant, will perform testing services to refine doses of bleomycin in an animal study for pulmonary fibrosis under a project entitled, “Intraperitoneal Bleomycin DRF in Mice.”

**Term:** Effective date to December 31, 2020

**Payment Terms:** $22,843 to MSU in fees for service

**Services Provided:**
- By MSU to FibrosIX, LLC: Conduct a study to refine doses of bleomycin in mouse model
- By FibrosIX, LLC to MSU: None contemplated under the agreement

**Use of University Facilities/Personnel:** Work to be performed at MSU’s Life Sciences Building by, or supervised by, Dr. Teresa Krieger-Burke

**Organization Type:** Michigan limited liability company

**Personnel Interest:** Dr. Richard R. Neubig, Professor and Chair of the Department of Pharmacology and Toxicology, and members of his family, own or have options to buy an ownership interest of more than 1% of the company.
## SERVICE AGREEMENT TERM SHEET

**Party:** Great Lakes Crystal Technologies, Inc.

**Agreement:** Subcontract from Great Lakes Crystal Technologies, Inc. prime award from the US Department of the Navy to MSU (IP00472862)

**Term:** Effective date – June 8, 2021

**Payment Terms:** $75,337.66 payment to MSU for services

**Services Provided:**
- By MSU to Great Lakes Crystal Technologies, Inc.: Develop a preliminary design of a diamond semiconductor pulse shaper including diamond device structure and specifications for the doping levels of the diamond semiconducting layers
- By Great Lakes Crystal Technologies, Inc. to MSU: None completed under the agreement

**Use of University Facilities/Personnel:** Services conducted in the Engineering Building by or under Dr. Sergey Baryshev

**Organization Type:** Michigan corporation

**Personnel Interest:** Dr. Timothy Grotjohn, a Professor in the Department of Electrical and Computer Engineering, and members of his family, have, or have options to buy, an interest in the company or are officers or paid employees of the company.
SERVICE AGREEMENT TERM SHEET

Party: Jolt Energy Storage Technologies LLC

Agreement: Use of pilot plant infrastructure and operational staff at the MSU Bioeconomy Institute facility in Holland, MI for production of chemical intermediates, process optimization, and related research.

Term: Effective date - two years

Payment Terms: According to the attached rate sheet

Services Provided: By MSU to Jolt Energy Storage Technologies LLC:
Pilot plant scale-up of chemical syntheses

By Jolt Energy Storage Technologies LLC to MSU:
None contemplated under the agreement

Use of University Facilities/ Personnel: Pilot plant and operational staff at the MSU facility in Holland, MI

Organization Type: Michigan limited liability company

Personnel Interest: Professor Thomas Guarr, R&D Director of the MSU Bioeconomy Institute, and members of his family, own or have options to buy an ownership interest of more than 1% of the company. Professor Guarr is also an officer of Jolt Energy Storage Technologies LLC.
## MSU Bioeconomy Institute - Holland, Michigan
### Scale-up Plant Rates
As of February 1, 2020 -- (MSU reserves the right to modify rates at any time)

<table>
<thead>
<tr>
<th>Infrastructure</th>
<th>Mill Room, Vacuum Tray or Rotary Dryer</th>
<th>850 L Hastelloy Agitated Pan Dryer</th>
<th>400 L Glass-lined, 120 L High Temperature Still</th>
<th>900 L Glass-lined or Stainless; or any volume Hastelloy, including low temperature reactor</th>
<th>2000 L Glass-lined</th>
<th>4000 L Glass-lined</th>
</tr>
</thead>
<tbody>
<tr>
<td>First day in consecutive plant work period</td>
<td>$872</td>
<td>$1,570</td>
<td>$3,271</td>
<td>$4,026</td>
<td>$5,033</td>
<td>$6,039</td>
</tr>
<tr>
<td>Each additional consecutive plant work day, including filtering, centrifugation, drying, milling, etc.</td>
<td>$872</td>
<td>$1,570</td>
<td>$1,290</td>
<td>$1,688</td>
<td>$1,966</td>
<td>$2,483</td>
</tr>
<tr>
<td>Daily Blending Operation (single vessel, no major auxiliary equipment, no heating or cooling)</td>
<td>---</td>
<td>---</td>
<td>$693</td>
<td>$654</td>
<td>$1,057</td>
<td>$1,280</td>
</tr>
</tbody>
</table>

### Personnel
- **Mon-Friday Prime Shift:** hourly rate up to 10 hrs per day
- **All other time worked:** hourly rate

<table>
<thead>
<tr>
<th>Role</th>
<th>Hourly Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plant Operator</td>
<td>$96.00</td>
</tr>
<tr>
<td>Shift Manager / Mechanical / Electrical / Instrumentation</td>
<td>$112.00</td>
</tr>
<tr>
<td>Chemist/Engineer</td>
<td>$161.00</td>
</tr>
</tbody>
</table>

### Other
- MSU mark-ups of mutually agreed charges for optional supplies and services provided by MSU
- Raw materials (if not privately arranged): 26%
- Waste disposal (if not privately arranged): 26%
- Pilot Plant consumables: 26%
- Consulting Engineers: 26%
- Other expenses, absent separate agreement: 26%

### Volume Discounts
- Volume Discounts are applied for a single customer on "Infrastructure" charges within a January 1st to December 31st calendar year, absent explicit preemption by other specific, contract-defined rates. More than one discount may not be applied at any time, however, Infrastructure charges from both MSU BI Holland and Lansing may be combined for the purposes of calculating volume discounts.
- N.B. -- Volume discounts do NOT apply to the "Personnel" or "Other" expense categories.
- Discounts are not applicable to clients that have been more than 45 days delinquent on any payments over the previous 12 months.

<table>
<thead>
<tr>
<th>Volume Discount</th>
<th>Infrastructure Calendar Year Cumulative Charges</th>
</tr>
</thead>
<tbody>
<tr>
<td>$100,000 to $250,000</td>
<td>5%</td>
</tr>
<tr>
<td>$250,000</td>
<td>10%</td>
</tr>
</tbody>
</table>
CORRECTED AGREEMENT TERM SHEET

**Party:** National Pesticide Safety and Education Center ("NPSEC")

**Corrected Agreement:** The duration and payment terms are adjusted as indicated below.

**Term:** Extended to cover the time period between February 18, 2020 and March 26, 2020 from initial term of February 1, 2019 to January 31, 2020

**Payment Terms:** $149,759.45 to MSU in fees for service

**Services Provided:**
- By MSU to NPSEC: provide Executive Director services to the Center’s Board
- By NPSEC to MSU: none contemplated under the agreement

**Use of University Facilities/ Personnel:** Efforts of Mr. Tom Smith in Agriculture Hall at MSU

**Organization Type:** Michigan nonprofit corporation

**Personnel Interest:** Mr. Tom Smith is the Associate Director of MSU's Institute of Agricultural Technology and is the Executive Director of the National Pesticide Safety and Education Center.
### COPYRIGHT LICENSE AGREEMENT TERM SHEET

<table>
<thead>
<tr>
<th>Party:</th>
<th>Adam Candeub</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agreement:</td>
<td>Copyright License Agreement</td>
</tr>
<tr>
<td>Background:</td>
<td>Adam Candeub previously participated in the development of an educational video game for Michigan State University College of Law (&quot;COL&quot;). COL entered a Copyright License Agreement (&quot;Existing Agreement&quot;), dated February 4, 2014, with LugusLegis, LLC (a company owned by Adam Candeub) in which the company provided COL with a non-exclusive license to use the video game within its educational programs and at other institutions.</td>
</tr>
<tr>
<td>Licensed Content:</td>
<td>Criminal Procedure video game including scenarios designed to illustrate teaching objectives of the course in Criminal Procedure. Licensed content includes all future versions of the video game and any adaptations and improvements on it.</td>
</tr>
<tr>
<td>Term:</td>
<td>From the effective date of the full integration of COL into MSU through February 4, 2029. The existing agreement will terminate upon integration of the COL into MSU.</td>
</tr>
<tr>
<td>Payment Terms:</td>
<td>MSU to pay Adam Candeub $6,000 for technical support during the summer 2021 academic semester. MSU to pay the first $10,000 of gross revenue to Adam Candeub; MSU to retain the next $165,000 of gross revenue; thereafter, MSU to pay Adam Candeub 34% of gross revenue.</td>
</tr>
<tr>
<td>Services Provided:</td>
<td>None.</td>
</tr>
<tr>
<td>Personnel Interest:</td>
<td>Adam Candeub is a party to this agreement as an individual. He is an MSU faculty member appointed in the College of Law as a Professor of Law and is the Director of the Intellectual Property, Information &amp; Communications Law Program.</td>
</tr>
</tbody>
</table>
**LICENSE AGREEMENT TERM SHEET**

**Party:** Jetfire Power, LLC  

**Agreement:** Exclusive license in all fields of use  


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

**Term:** Effective Date – to the last to expire of the patents

**Payment Terms:** Royalties of $0.33-$0.66 per engine; 10-25% on all sublicensing revenues; milestone payment upon change in control (2%) and patent cost reimbursements

**Services Provided:** None contemplated under the agreement

**Organization Type:** Michigan limited liability company

**Personnel Interest:** Dr. Harold Schock, Professor in the Department of Mechanical Engineering and members of his family own or have options to buy an ownership interest of more than 1% of the company.
PUBLISHING CONTRACT TERM SHEET

Party: Dr. Hiram Fitzgerald

Project Description: Service as series co-editor for Transformations in Higher Education: The Scholarship of Engagement (THE)

Term: Effective date extending two years

Agreement: Dr. Fitzgerald will receive two free copies of each published work, and additional copies at a 40% discount from the retail prices.

Services Provided: By MSU to Dr. Fitzgerald: Publication of book series

By Dr. Fitzgerald to MSU: Co-editing the book manuscripts

Use of University Facilities/Personnel: Not Applicable

Organization Type: Dr. Fitzgerald is contracting as an individual

Personnel Interest: This contract will be directly between Dr. Fitzgerald, a Distinguished Professor in the Department of Psychology, and MSU.
The Board of Trustees of Michigan State University today extends its gratitude and best wishes to Teresa A. Sullivan upon completion of her duties as interim provost.

Interim Provost Sullivan stepped into her role Oct. 1, 2019, after agreeing to serve as an advisor to this Board and its presidential selection committee in 2018, in advance of her retirement as the eighth president of the University of Virginia.

Valedictorian of her high school graduating class in Jackson, Mississippi, Sullivan launched her career at Michigan State. In addition to other accomplishments, she was named a presidential fellow by President Emeritus Clifton R. Wharton, Jr. She graduated with high honors among the inaugural class of MSU’s James Madison College in 1970.

Earning her doctorate in sociology from the University of Chicago, she joined the faculty at the University of Texas. She went on to hold several academic and administrative posts, including chair of the sociology department, vice provost, vice president and dean of graduate studies, and executive vice chancellor for academic affairs.

Prior to becoming the University of Virginia’s first woman president in 2010, her distinguished career took her to the University of Michigan, where she served as provost and executive vice president for academic affairs from 2006 to 2010.

She is a veteran of many of the institutional and societal conflicts buffeting higher education, bringing experience and professionalism that proved invaluable in managing those challenges faced by this university. Greatest among them was the sudden disruption posed by the novel coronavirus pandemic. She was a key figure in the university’s swift pivot to remote work and online learning modalities in the spring of 2020. In doing so she devoted additional measures of attention to guide MSU’s responses to completion of the academic year, implementation of the online summer semester and critical planning for a fall campus reopening.

Therefore, it is the Board’s fond hope that Terry Sullivan’s well-earned return to her faculty appointment in Virginia is graced with a more placid and wholly fulfilling scholarly life.

Interim Provost Sullivan served her alma mater during a difficult interlude with admirable dedication and distinction. Therefore, be it resolved that the Board of Trustees of Michigan State University offers this salute to Dr. Teresa A. Sullivan with our most sincere thanks.