April 22, 2022

MEMORANDUM

To: Committee on Audit, Risk and Compliance

From: Douglas A. Gage
Vice President for Research and Innovation

Subject: Approval of Contract Terms: FibrosIX, Inc.

RECOMMENDATION
The Trustee Committee on Audit, Risk and Compliance recommends that the Board of Trustees approve a contract between Michigan State University and FibrosIX, Inc., a Michigan corporation, in which MSU faculty member Dr. Richard R. Neubig holds a financial interest.

RESOLUTION
BE IT RESOLVED, that the Board of Trustees of Michigan State University hereby approves a service agreement with FibrosIX, Inc., consistent with earlier public notice and with a “Purchase Agreement Term Sheet” now presented to the Board for inclusion in its minutes.

BACKGROUND
In compliance with State law, public notice of the University’s intent to negotiate contracts with FibrosIX, Inc., a Michigan corporation, was given at the Board of Trustees meeting on June 15, 2016. The terms of a purchase agreement are now presented for Board approval.

Dr. Richard R. Neubig, a Professor and Chair of the Department of Pharmacology and Toxicology, 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.

The attached “Purchase Agreement Term Sheet” summarizes the agreement that MSU has negotiated with FibrosIX, Inc.

cc: Board of Trustees, S. Stanley, M. Woo, T. Woodruff, N. Beauchamp, M. Zeig, B. Mattes, B. Quinn, N. Stuart
PURCHASE AGREEMENT TERM SHEET

Party: FibrosIX, Inc.

Agreement: MSU to purchase one Round Single Beam Ion Source from FibrosIX, Inc.

Payment Terms: $4,675.00 to FibrosIX, Inc. for one Round Single Beam Ion Source

Services Provided:
- By MSU to FibrosIX, Inc.: None
- By FibrosIX, Inc. to MSU: None

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

Organization Type: Michigan corporation

Personnel Interest: Dr. Richard R. Neubig, a Professor and Chair of the Department of Pharmacology and Toxicology, 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.
April 22, 2022

MEMORANDUM

To: Committee on Audit, Risk and Compliance
From: Douglas A. Gage
Vice President for Research and Innovation

Subject: Approval of Contract Terms: Great Lakes Crystal Technologies, Inc.

RECOMMENDATION
The Trustee Committee on Audit, Risk and Compliance recommends that the Board of Trustees approve a contract between Michigan State University and Great Lakes Crystal Technologies, Inc., a Michigan corporation, in which MSU faculty member Dr. Timothy Grotjohn holds a financial interest.

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

BACKGROUND
In compliance with State law, public notice of the University's intent to negotiate contracts with Great Lakes Crystal Technologies, Inc., a Michigan corporation, was given at the Board of Trustees meeting on September 6, 2019. The terms of a service agreement are now presented for Board approval.

Dr. Timothy Grotjohn, a Professor in the Department of Electrical and Computer Engineering, and members of his family own or have options to buy an ownership interest of more than 1% of the company.

The attached “Service Agreement Term Sheet” summarizes the agreement that MSU has negotiated with Great Lakes Crystal Technologies, Inc.

cc: Board of Trustees, S. Stanley, M. Woo, T. Woodruff, N. Beauchamp, M. Zeig, B. Mattes, B. Quinn, N. Stuart
SERVICE AGREEMENT TERM SHEET

Party: Great Lakes Crystal Technologies, Inc.

Project Description: Next Generation Diamond Materials for High-Resolution Quantum Sensors

Term: 02/14/22-11/13/22

Payment Terms: $76,734 payment to MSU for services

Services Provided: By MSU to Great Lakes Crystal Technologies, Inc.: MSU will optically detect magnetic resonance (ODMR) to characterize the room temperature coherence properties of single color center defects as well as optical spectroscopy to characterize the approximate number and type of defected created

By Great Lakes Crystal Technologies, Inc. to MSU: None contemplated under this agreement

Use of University Facilities/Personnel: Work is to be performed at MSU’s Biomedical-Physical Sciences Building by Dr. Johannes Pollanen, Dr. Marco Dantus, Dr. Elias Garratt, and Dr. Shannon Nicley

Organization Type: Michigan corporation

Personnel Interest: Dr. Timothy Grotjohn, a Professor in the Department of Electrical and Computer Engineering, and members of his family own or have options to buy an ownership interest of more than 1% of the company.
April 22, 2022

MEMORANDUM

To: Committee on Audit, Risk and Compliance

From: Douglas A. Gage
Vice President for Research and Innovation

Subject: Approval of Contract Terms: Great Lakes Crystal Technologies, Inc.

RECOMMENDATION
The Trustee Committee on Audit, Risk and Compliance recommends 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 a financial interest.

RESOLUTION
BE IT RESOLVED, that the Board of Trustees of Michigan State University hereby approves a contract with Great Lakes Crystal Technologies, Inc. consistent with earlier public notice and with an “Rights Allocation Agreement Term Sheet” now presented to the Board for inclusion in its minutes.

BACKGROUND
In compliance with State law, public notice of the University’s intent to negotiate contracts with Great Lakes Crystal Technologies, Inc., a Michigan corporation, was given at the Board of Trustees meeting on September 6, 2019. The terms of Rights Allocation Agreement are now presented for Board approval.

Dr. Timothy Grotjohn, a Professor in the Department of Electrical and Computer Engineering, and members of his family own or have options to buy an ownership interest of more than 1% of the company.

The attached “Rights Allocation Agreement Term Sheet” summarizes the agreement that MSU has negotiated with Great Lakes Crystal Technologies, Inc.

cc: Board of Trustees, S. Stanley, M. Woo, T. Woodruff, N. Beauchamp, M. Zeig, B. Mattes, B. Quinn, N. Stuart
RIGHTS ALLOCATION AGREEMENT TERM SHEET

Party: Great Lakes Crystal Technologies, Inc.

Agreement: Allocation of rights in intellectual property and rights to carry out follow-on research, development or commercialization. This agreement is required by the U.S. Department of Energy under the Prime Award (Contract No. DE-SC0022406) and relates to Sponsored Research Agreement Subcontract: “Next Generation Diamond Materials for High-Resolution Quantum Sensors”

Term: Effective date to date of STTR project with option rights to MSU intellectual property extending up to 18 months thereafter.

Rights Allocation: Ownership of intellectual property rights created under the Subcontract described above shall be consistent with MSU’s patent and copyright policies. Great Lakes Crystal Technologies, Inc. will have an option to acquire rights to MSU technology developed with the STTR funds provided under the subcontract.

Services Provided: By MSU to Great Lakes Crystal Technologies: None
By Great Lakes Crystal Technologies to MSU: None

Use of University Facilities/Personnel: None

Organization Type and Domicile: Michigan corporation

Personnel Interest: Dr. Timothy Grotjohn, a Professor in the Department of Electrical and Computer Engineering, and members of his family own or have options to buy an ownership interest of more than 1% of the company.
April 22, 2022

MEMORANDUM

To: Committee on Audit, Risk and Compliance

From: Douglas A. Gage
Vice President for Research and Innovation

Subject: Approval of Contract Terms: Great Lakes Crystal Technologies, Inc.

RECOMMENDATION
The Trustee Committee on Audit, Risk and Compliance recommends that the Board of Trustees approve a contract between Michigan State University and Great Lakes Crystal Technologies, Inc., a Michigan corporation, in which MSU faculty member Dr. Timothy Grotjohn holds a financial interest.

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

BACKGROUND
In compliance with State law, public notice of the University’s intent to negotiate contracts with Great Lakes Crystal Technologies, Inc., a Michigan corporation, was given at the Board of Trustees meeting on September 6, 2019. The terms of a service agreement are now presented for Board approval.

Dr. Timothy Grotjohn, a Professor in the Department of Electrical and Computer Engineering, and members of his family own or have options to buy an ownership interest of more than 1% of the company.

The attached “Service Agreement Term Sheet” summarizes the agreement that MSU has negotiated with Great Lakes Crystal Technologies, Inc.

cc: Board of Trustees, S. Stanley, M. Woo, T. Woodruff, N. Beauchamp, M. Zeig, B. Mattes, B. Quinn, N. Stuart
## SERVICE AGREEMENT TERM SHEET

<table>
<thead>
<tr>
<th><strong>Party:</strong></th>
<th>Great Lake Crystal Technologies.</th>
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<td><strong>Sponsored Research Agreement:</strong></td>
<td>X-ray diffraction services</td>
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<tr>
<td><strong>Term:</strong></td>
<td>April 22, 2022 – April 21, 2024</td>
</tr>
<tr>
<td><strong>Payment Terms:</strong></td>
<td>Not to exceed $32,000 to MSU to fund the testing services</td>
</tr>
</tbody>
</table>
| **Services Provided:** | By MSU to Great Lake Crystal Technology: X-ray diffraction analysis of materials. 
By Great Lake Crystal Technology to MSU: None contemplated under this agreement |
| **Use of University Facilities/Personnel:** | MSU Facilities, Dr. Alexandra’s Laboratory in the Engineering Building has an x-ray diffractometer. |
| **Organization Type:** | Michigan corporation |
| **Personnel Interest:** | Dr. Timothy Grotjohn, a Professor in the Department of Electrical and Computer Engineering, and members of his family own or have options to buy an ownership interest of more than 1% of the company. |
April 22, 2022

MEMORANDUM

To: Committee on Audit, Risk and Compliance

From: Douglas A. Gage
Vice President for Research and Innovation

Subject: Approval of Contract Terms: EeroQ Corporation

RECOMMENDATION
The Trustee Committee on Audit, Risk and Compliance recommends that the Board of Trustees approve a contract between Michigan State University and EeroQ Corporation, a Delaware corporation, in which MSU faculty member Dr. Johannes Pollanen holds a financial interest.

RESOLUTION
BE IT RESOLVED, that the Board of Trustees of Michigan State University hereby approves a sponsored research agreement with EeroQ Corporation, consistent with earlier public notice and with a “Sponsored Research Agreement Term Sheet” now presented to the Board for inclusion in its minutes.

BACKGROUND
In compliance with State law, public notice of the University’s intent to negotiate contracts with EeroQ Corporation, a Delaware corporation, was given at the Board of Trustees meeting on June 21, 2017. The terms of a sponsored research agreement are now presented for Board approval.

Dr. Johannes Pollanen, a Jerry Cowen Chair of Experimental Physics and Assistant Professor in the Department of Physics and Astronomy, and members of his family own or have options to buy an ownership interest of more than 1% of the company.

The attached “Sponsored Research Agreement Term Sheet” summarizes the agreement that MSU has negotiated with EeroQ Corporation.

cc: Board of Trustees, S. Stanley, M. Woo, T. Woodruff, N. Beauchamp, M. Zeig, B. Mattes, B. Quinn, N. Stuart
<table>
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<tr>
<th><strong>SPONSORED RESEARCH AGREEMENT TERM SHEET</strong></th>
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<tr>
<td><strong>Party:</strong> EeroQ Corporation</td>
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<tr>
<td><strong>Sponsored Research Agreement:</strong> Phase 6: On-chip charge sensor for single electron detection</td>
</tr>
<tr>
<td><strong>Term:</strong> July 1, 2022 – December 31, 2022</td>
</tr>
<tr>
<td><strong>Payment Terms:</strong> $50,000 to MSU to fund the research</td>
</tr>
</tbody>
</table>
| **Services Provided:** By MSU to EeroQ Corporation: continued work toward development of a sensor  
  By EeroQ Corporation to MSU: None contemplated under this agreement |
| **Use of University Facilities/Personnel:** Keck Microfabrication Facility at MSU in East Lansing. |
| **Organization Type:** State of Delaware, C-Corporation |
| **Personnel Interest:** Johannes Pollanen, a Jerry Cowen Chair of Experimental Physics and Assistant Professor in the Department of Physics and Astronomy, and members of his family own or have options to buy an ownership interest of more than 1% of the company. |
April 22, 2022

MEMORANDUM

To: Committee on Audit, Risk and Compliance

From: Douglas A. Gage  
Vice President for Research and Innovation

Subject: Approval of Contract Terms:  Stephen D.H. Hsu

RECOMMENDATION

The Trustee Committee on Audit, Risk and Compliance recommends that the Board of Trustees approve an assignment agreement between Michigan State University and Stephen D.H. Hsu, an MSU faculty member.

RESOLUTION

BE IT RESOLVED, that the Board of Trustees of Michigan State University hereby approves an assignment agreement with Stephen D.H. Hsu consistent with an “Assignment Agreement Term Sheet” now presented to the Board for inclusion in its minutes.

BACKGROUND

In compliance with State law, public notice of the terms of the agreement with Stephen D.H. Hsu, was provided prior to this board meeting. The terms of an assignment agreement are now presented for Board approval.

Dr. Hsu is a professor in the Department of Physics and Astronomy in the College of Natural Science.

The attached “Assignment Agreement Term Sheet” summarizes the agreement between MSU and Dr. Hsu.

cc: Board of Trustees, S. Stanley, M. Woo, T. Woodruff, N. Beauchamp, M. Zeig, B. Mattes, B. Quinn, N. Stuart
ASSIGNMENT AGREEMENT TERM SHEET

Party: Dr. Stephen D.H. Hsu

Agreement Description: MSU will assign to Dr. Stephen D.H. Hsu the copyright to all existing Manifold podcasts, which were hosted by Dr. Hsu and Dr. Corey Washington, and related Manifold podcast materials, pursuant to Section IX of the MSU Copyright Policy.

Section IX of the MSU Copyright Policy contemplates instances in which academic University Authors, such as Dr. Hsu, may be assigned title to copyrights on University-owned material.

MSU retains the right to use the copyrights for its internal purposes.

Term: N/A

Payment Terms: MSU will provide to Dr. Hsu copies of existing episodes and supporting materials at MSU’s cost for reproduction and transfer.

Use of University Facilities/ Personnel: None

Organization Type: N/A

Pecuniary Interest: Dr. Hsu is a professor in the Department of Physics and Astronomy in the College of Natural Science.
April 22, 2022

MEMORANDUM

To: Committee on Audit, Risk and Compliance
From: Douglas A. Gage, Ph.D., Vice President for Research and Innovation
Subject: Approval of Contract Terms: Portera Therapeutics, Inc.

RECOMMENDATION
The Trustee Committee on Audit, Risk and Compliance recommends that the Board of Trustees approve a contract between Michigan State University and Portera Therapeutics, Inc., a company in which MSU faculty member Dr. Jetze Tepe holds a financial interest.

RESOLUTION
BE IT RESOLVED, that the Board of Trustees of Michigan State University hereby approves an option agreement with Portera Therapeutics, Inc. consistent with earlier public notice and with an “Option Agreement Term Sheet” now presented to the Board for inclusion in its minutes.

BACKGROUND
In compliance with State law, public notice of the University’s intent to negotiate contracts with Portera Therapeutics, Inc., a Delaware C-corporation, was given at the Board of Trustees meeting on December 17, 2021. The terms of an option agreement are now presented for Board approval.

Dr. Jetze Tepe, a Professor in the Department of Chemistry and members of his family own or have options to buy an ownership interest of more than 1% of the company. Dr. Tepe is the scientific founder of Portera Therapeutics and is an officer in the company.

The attached “Option Agreement Term Sheet” summarizes the agreement that MSU has negotiated with Portera Therapeutics, Inc.

cc: Board of Trustees, S. Stanley, M. Woo, T. Woodruff, N. Beauchamp, M. Zeig, B. Mattes, B. Quinn, N. Stuart
OPTION AGREEMENT TERM SHEET

Party: 
Portera Therapeutics, Inc.

Agreement: 
Option agreement for an exclusive world-wide license to the following:


TEC2022-0022, “Proteasome enhancers and uses thereof,” PCT application PCT/US2021/045448

TEC2022-0023, “Proteasome enhancers and uses thereof,” PCT application PCT/US2021/045446

TEC2022-0024, “Proteasome enhancers and uses thereof,” PCT application PCT/US2021/045440

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: 
Two years from the effective date of the option agreement, with a one year extension available.

Financial Terms: 
Initial equity grant of Common Stock equal to 8% of Portera’s fully-diluted equity calculated prior to Portera’s Series Seed Preferred financing; second equity grant of Common Stock to be made in connection with Portera’s next qualified financing to bring MSU up to 3.5% of Portera’s fully-diluted equity on up to
$10,000,000 raised in the next qualified financing.

License agreement financial terms to include:
(1) Royalties on net sales of products in the range of 2% to 3%:
(2) Non-royalty sublicense consideration of not more than 20%:
(3) Pre-commercialization milestone payments in the range of $100,000 to $5 million but in no event greater than $25 million in aggregate;
(4) Minimum annual royalty payments not exceeding $300,000 annually.

Services Provided:
By MSU to Portera: None
By Portera to MSU: None

Use of University Facilities/Personnel:
None

Organization Type and Domicile:
Delaware C-corporation

Personnel Interest:
Dr. Jetze Tepe, a Professor in the Department of Chemistry and members of his family own or have options to buy an ownership interest of more than 1% of the company. Dr. Tepe is the scientific founder of Portera Therapeutics and is an officer in the company.
April 22, 2022

MEMORANDUM

To: Committee on Audit, Risk and Compliance

From: Douglas A. Gage
Vice President for Research and Innovation

Subject: Approval of Contract Terms: RedoxBlox, Inc.

RECOMMENDATION
The Trustee Committee on Audit, Risk and Compliance recommends that the Board of Trustees approve a contract between Michigan State University and RedoxBlox, Inc., a Delaware corporation, in which MSU faculty members Dr. James Klausner, Professor in the College of Engineering, Joerg Petrasch, Associate Professor in the College of Engineering, Kelvin Randhir, Research Associate in the College of Engineering, Nima Rahmatian, Research Associate in the College of Engineering, and Alessandro Bo, a doctoral student in the College of Engineering, owns or has options to buy, an interest in the company or are officers or paid employees of the company.

RESOLUTION
BE IT RESOLVED, that the Board of Trustees of Michigan State University hereby approves a Sponsored Research agreement with RedoxBlox, Inc., consistent with earlier public notice and with a “Sponsored Research Agreement Term Sheet” now presented to the Board for inclusion in its minutes.

BACKGROUND
In compliance with State law, public notice of the University’s intent to negotiate contracts with RedoxBlox, Inc., a Michigan corporation was given at the Board of Trustees meeting on February 12, 2021. The terms of a Sponsored Research agreement are now presented for Board approval.

James Klausner, Professor in the College of Engineering, Joerg Petrasch, Associate Professor in the College of Engineering, Kelvin Randhir, Research Associate in the College of Engineering, Nima Rahmatian, Research Associate in the College of Engineering, and Alessandro Bo, a doctoral student in the College of Engineering, owns or has options to buy, an interest in the company or are officers or paid employees of the company.
The attached “Sponsored Research Agreement Term Sheet” summarizes the agreement that MSU has negotiated with RedoxBlox, Inc.

cc: Board of Trustees, S. Stanley, M. Woo, T. Woodruff, N. Beauchamp, N. Barr, M. Zeig, B. Mattes, B. Quinn, N. Stuart
SPONSORED RESEARCH AGREEMENT TERM SHEET

Party: RedoxBlox Inc.

Agreement: US Dept of Energy Prime; Cooperative Agreement STORES Plus-Up

Term: 12/01/2021 - 05/31/2024

Payment Terms: $344,045 to MSU

Services Provided: By MSU to RedoxBlox, Inc.: MSU will lay the foundation for low-cost, long-duration stationary electricity storage that will enhance grid resiliency, provide low-cost energy capacity, support grid infrastructure, and enable a greater share of intermittent renewable resources in the generation mix.

Use of University Facilities/Personnel: Trout Building; Dr. James Klausner

Organization Type: Delaware corporation

Personnel Interest: James Klausner, Professor in the College of Engineering, Joerg Petrasch, Associate Professor in the College of Engineering, Kelvin Randhir, Research Associate in the College of Engineering, Nima Rahmatian, Research Associate in the College of Engineering, and Alessandro Bo, a doctoral student in the College of Engineering, has or has options to buy, an interest in the company or are officers or paid employees of the company.
April 22, 2022

MEMORANDUM

To: Committee on Audit, Risk and Compliance

From: Douglas A. Gage
Vice President for Research and Innovation

Subject: Approval of Contract Terms: Infrastructure Analytics Company

RECOMMENDATION
The Trustee Committee on Audit, Risk and Compliance recommends that the Board of Trustees approve a contract between Michigan State University and Infrastructure Analytics Company, a Wyoming corporation in which MSU faculty member Dr. Nizar Lajnef holds a financial interest.

RESOLUTION
BE IT RESOLVED, that the Board of Trustees of Michigan State University hereby approves a sponsored research agreement with Infrastructure Analytics Company consistent with earlier public notice and with a "Sponsored Research Agreement Term Sheet" now presented to the Board for inclusion in its minutes.

BACKGROUND
In compliance with State law, disclosure of the public servant’s pecuniary interest in Infrastructure Analytics Company was made a matter of record in the official proceedings of the Board of Trustees. The terms of a sponsored research agreement are now presented for Board approval.

Dr. Nizar Lajnef, a Professor in the Department of Civil and Environmental Engineering owns or has options to buy an ownership interest of more than 1% of the company.

The attached “Sponsored Research Agreement Term Sheet” summarizes the agreement that MSU has negotiated with Infrastructure Analytics Company.

cc: Board of Trustees, S. Stanley, M. Woo, T. Woodruff, N. Beauchamp, M. Zeig, B. Mattes, B. Quinn, N. Stuart
## SPONSORED RESEARCH AGREEMENT TERM SHEET

**Party:** Infrastructure Analytics Company  
**Agreement:** Infrastructure-to-Everything (I2X) Communication Technology for Autonomous and Connected Vehicle Support  
**Term:** 03/21/22-07/01/22  
**Financial Terms:** $30,000 to MSU  
**Services Provided:**  
- By MSU to Infrastructure Analytics Company: MSU will provide verification of prototypes in small scale field deployment studies.  
- By Infrastructure Analytics Company to MSU: None  
**Use of University Facilities/Personnel:** Engineering Building; Dr. Ali Zokaie and Dr. Nizar Lajnef  
**Organization Type and Domicile:** Wyoming Corporation  
**Personnel Interest:** Dr. Nizar Lajnef, a Professor in the Department of Civil and Environmental Engineering owns or has options to buy an ownership interest of more than 1% of the company.