

**MICHIGAN STATE  
UNIVERSITY**

December 8, 2022

**APPROVED**  
**DECEMBER 16, 2022**  
**BOARD OF TRUSTEES**  
**MICHIGAN STATE UNIVERSITY**

**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: *Akeila Bio, LLC*

**RECOMMENDATION**

The Trustee Committee on Audit, Risk and Compliance recommends that the Board of Trustees approve a contract between Michigan State University and Akeila Bio, LLC, a Michigan LLC, in which three MSU professors, and their families, hold or will hold financial interests.

**RESOLUTION**

BE IT RESOLVED that the Board of Trustees of Michigan State University hereby approves an Option agreement with Akeila Bio, LLC, consistent with earlier public notice and with an Option "Agreement Term Sheet" now presented to the Board for inclusion in its minutes.

**BACKGROUND**

The terms of an option agreement are now presented for Board approval. These MSU professors developed a chemical compound that can be used to treat a specific, rare type of cancer. They are currently researching whether that compound has broader applications for other types of cancers. The company has contracted with MSU the option to license the technology. The MSU faculty will continue to research this compound and its applications for MSU during the option period.

The attached "Agreement Term Sheet" summarizes the agreement that MSU has negotiated with Akeila Bio, LLC.

cc: Board of Trustees, T. Woodruff, M. Woo, N. Beauchamp, M. Zeig, J. Swartz, B. Quinn, L. Kriser, T. Jeitschko



Office of  
**RESEARCH  
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## OPTION AGREEMENT TERM SHEET

<b>Party:</b>	Akeila Bio, LLC
<b>Project Description:</b>	<p>Option agreement for:</p> <p>(A) an exclusive world-wide license to the following TEC2018-0088, "Retinoid X Receptor (RXR) Agonists", PCT application PCT/US2020/014195, National phase applications 17/423,289 (US) and 20741204.0 (EP) TEC2023-0048, provisional application 63/381,641; and</p> <p>(B) non-exclusive license to technical information associated with the above filings</p> <p><i>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.</i></p>
<b>Term:</b>	Twelve months from effective date and extendable for an additional twelve months
<b>Payment Terms:</b>	Option Fee of \$1,000.00; additional one year extension fee \$4,000.00.
<b>Services Provided:</b>	<p>By MSU to Akeila Bio: None contemplated under this agreement.</p> <p>By Akeila Bio to MSU: None contemplated under this agreement.</p>
<b>Use of University Facilities/Personnel:</b>	None
<b>Organization Type:</b>	LLC, Michigan Corporation
<b>Personnel Interest:</b>	Dr. Edmund Ellsworth, Professor in the Department of Pharmacology and Toxicology, Dr. Karen Liby, Professor in the Department of Pharmacology and Toxicology, Dr. Ana Mendes Leal, Assistant Professor in the Department of Pharmacology and Toxicology and members of their families, will own or have options to buy ownership interest of more than 1% of the company.

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December 8, 2022

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**MICHIGAN STATE UNIVERSITY**

**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: *Brinter, Inc.*

**RECOMMENDATION**

The Trustee Committee on Audit, Risk and Compliance recommends that the Board of Trustees approve a contract between Michigan State University and Brinter, Inc., a private corporation based in Finland with an office in California, for which MSU Senior Specialist in Biomedical Engineering, Dr. Nureddin Ashammakhi, is a paid advisor.

**RESOLUTION**

BE IT RESOLVED, that the Board of Trustees of Michigan State University hereby approves a loan agreement with Brinter, Inc., consistent with earlier public notice and with a "Loan Agreement Term Sheet" now presented to the Board for inclusion in its minutes.

**BACKGROUND**

The terms of a loan agreement are now presented for Board approval. Dr. Ashammakhi is a paid advisor for the company. Dr. Ashammakhi seeks to use the printer for three-dimensional (3D) bioprinting projects and training unrelated to Brinter. It will benefit Brinter, Inc to have feedback on the functionality and user interface of the printer. Similarly, if MSU is able to develop biomaterials with improved properties for 3D printing, it will benefit Brinter, Inc and all other companies that make 3D bioprinters generally. MSU will have the benefit of using the printer to further its research into bioprinting projects. The fair market value of the printer is from \$30,000 to \$50,000; renting it would cost around \$3000 a month. Dr. Ashammakhi has no ownership interest in Brinter.

The attached Loan Agreement summarizes the agreement that MSU has negotiated with Brinter, Inc.

cc: Board of Trustees, T. Woodruff, M. Woo, T. Jeitschko, N. Beauchamp,  
M. Zeig, J. Swartz, B. Quinn, L. Kriser



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## LOAN AGREEMENT

**Party:** Brinter, Inc.

**Project Description:** Brinter seeks to loan MSU a three-dimensional printer at no charge in exchange for MSU providing feedback on printer functionality. MSU may purchase equipment at a later date.

**Term:** Approval date + six months

**Payment Terms:** No cost loan of printer.

**Services Provided:** By MSU to Brinter: testing and providing feedback on loaned printer.  
By Brinter to MSU: none

**Use of University Facilities/Personnel:** MSU will use the printer to support research projects.

**Organization Type:** Privately held corporation based in Finland.

**Personnel Interest:** Dr. Ashammakhi is a paid advisor for Brinter. He has no ownership interest in the company.

# MICHIGAN STATE UNIVERSITY

December 8, 2022

## MEMORANDUM

**APPROVED**  
**DECEMBER 16, 2022**  
**BOARD OF TRUSTEES**  
**MICHIGAN STATE UNIVERSITY**

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

### RECOMMENDATION

The Trustee Committee on Audit, Risk and Compliance recommends that the Board of Trustees approve a contract between Michigan State University and *EeroQ, Inc.*, a Delaware Corporation, in which MSU employee Dr. Johannes Pollanen holds a financial interest. Dr. Pollanen and members of his family receive payments, owns, or have options to buy an ownership interest valued over \$100,000.

### RESOLUTION

BE IT RESOLVED that the Board of Trustees of Michigan State University hereby approves an amendment to an existing Sponsored Research Agreement with *EeroQ, 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

The terms of a Sponsored Research Agreement are now presented for Board approval. MSU has had a Sponsored Research Agreement with *EeroQ, Inc.*, since 2018. As part of this agreement, Entity funds one, full-time post-doctoral research assistant to develop “on-chip sensor for single electron detection” technology. The funding includes 55% for indirect costs, which is the maximum allowable for federal contracts. Entity pays MSU \$50,000 for every six-month renewal of the agreement.

Dr. Pollanen is a co-founder of *EeroQ, Inc.* its Chief Science Officer (CSO), the PI of the research project for MSU, and oversees the funded post-doctoral fellow. Effective August 16, 2022, and through May 16, 2023, his MSU appointment was reduced to 60%. The remainder of the time, he works for *EeroQ*. As the CSO, Dr. Pollanen provides technical guidance and consultation on a quantum computing platform that the company is building. *EeroQ, Inc.*, has become a successful and renowned entity.

The attached Sponsored Research Agreement Term Sheet summarizes the agreement that MSU has negotiated with Advervent Biotherapeutics.

cc: Board of Trustees, T. Woodruff, M. Woo, T. Jeitschko, N. Beauchamp, M. Zeig, J. Swartz, B. Quinn, L. Kriser



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## SPONSORED RESEARCH AGREEMENT TERM SHEET

**Party:** EeroQ, Inc.

**Sponsored Research Agreement:** Phase 7: On-chip charge sensor for single electron detection

**Term:** January 1, 2023 – June 30, 2023

**Potential Commercial Application:** Quantum computing and sensing for applications in information processing and charge sensing.

**Payment Terms:** \$50,000 to MSU to fund the research

**Services Provided:** By MSU to EeroQ, Inc: continued work toward development of a sensor  
By EeroQ, Inc 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 receive payments, own, or have options to buy an ownership interest valued over \$100,000.

**MICHIGAN STATE  
UNIVERSITY**

November 4, 2022

**APPROVED**  
**DECEMBER 16, 2022**  
**BOARD OF TRUSTEES**  
**MICHIGAN STATE UNIVERSITY**

**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: Motion Grazer AI

**RECOMMENDATION**

The Trustee Committee on Audit, Risk and Compliance recommends that the Board of Trustees approve a contract between Michigan State University and Motion Grazer AI (MGAI), a Michigan for-profit corporation, in which MSU faculty members Dr. Madonna Benjamin, Dr. Daniel Morris, and Dr. Michael Lavagnino hold financial interests.

**RESOLUTION**

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

**BACKGROUND**

The terms of a Service Agreement are now presented for Board approval. MSU is a subrecipient of an NSF grant of which MGAI was the prime recipient. Under this subaward, MSU will be responsible for developing and testing machine learning algorithms for MGAI's the posture detection system, which would enable the device to automatically detect and track sows when multiple sows are in the field of view and estimate their 3D posture in real time. Currently, to evaluate motion trajectory and location of joints, researchers must physically paint skeletal landmarks (dots) on the sow. The proposed device could automatically detect and track posture without requiring physical markers made on sows. Because Dr. Benjamin, Dr. Morris, and Dr. Lavagnino hold an ownership interest in the company, Dr. Yuzhen Lu will be the Principal Investigator on the project.

The attached Service Agreement Term Sheet summarizes the agreement that MSU has negotiated with Motion Grazer AI.

cc: Board of Trustees, T. Woodruff, M. Woo, T. Jeitschko, N. Beauchamp, M. Zeig, J. Swartz, B. Quinn, L. Kriser



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## SERVICE AGREEMENT TERM SHEET

**Party:** Motion Grazer AI

**Project Description:** Swine Automatic Lameness Sensor

**Term:** 1/1/2023 - 12/31/2023

**Payment Terms:** \$90,056

**Services Provided:** By MSU to Motion Grazer AI: MSU will configure and build a prototype SIMKit with an updated sensor and processor. MSU will be responsible for the posture detection system, enabling this to automatically detect and track sows when multiple sows are in the field of view, and estimate their 3D posture in real time.  
By Motion Grazer AI to MSU: None

**Use of University Facilities/Personnel:** Farrall Hall

**Organization Type:** For-profit Michigan Corporation.

**Personnel Interest:** Dr. Madonna Benjamin, Dr. Daniel Morris, and Dr. Michael Lavagnino are founding members of MGAI. Because of this, Dr. Yuzhen Lu will serve as the Principal Investigator on the project.



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**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: *Gary Powell*

**RECOMMENDATION**

The Trustee Committee on Audit, Risk and Compliance recommends that the Board of Trustees approve a Purchase Agreement between Michigan State University and Gary Powell, an MSU employee.

**RESOLUTION**

BE IT RESOLVED, that the Board of Trustees of Michigan State University hereby approves a Purchase Agreement with Gary Powell, consistent with earlier public notice and with the Agreement now presented to the Board for inclusion in its minutes.

**BACKGROUND**

The terms of the Purchase Agreement are now presented for Board approval. Mr. Powell, a Research Assistant II at the MSU Agronomy Farm with the MSU Weed Science Program purchased a field cultipacker for the terms included in the attached Purchase Agreement Term Sheet. Mr. Powell purchased this equipment using his personal funds, with the intent that MSU may want to buy the equipment from him. This purchase agreement would allow MSU to buy the equipment from Mr. Powell so he can recoup the funds he spent when buying it. Mr. Powell retired from MSU in September 2022. MSU Procurement and Logistics has obtained a receipt from Mr. Powell to verify that it is purchasing the equipment for the same purchase price that Mr. Powell paid.

The attached Purchase Agreement Term Sheet summarizes the agreement between MSU and Mr. Powell for this purchase.

cc: Board of Trustees, T. Woodruff, M. Woo, T. Jeitschko, N. Beauchamp, M. Zeig, J. Swartz, B. Quinn, L. Kriser



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## PURCHASE AGREEMENT TERM SHEET

**Party:** Gary Powell

**Purchase Description:** MSU Weed Science Program seeks to purchase a field cultipacker from Mr. Powell, a former MSU employee. MSU's standard purchase order terms and conditions will apply to this purchase.

**Term:** One-time purchase.

**Payment Terms:** \$19,250.00

**Use of University  
Facilities/Personnel:** None

**Organization Type:** Individual

**Personnel Interest:** Former MSU employee owns the equipment and seeks to sell it to MSU.