

**THE UNIVERSITY OF MICHIGAN
REGENTS COMMUNICATION**

ACTION REQUEST

Subject: Commercialization Agreements with the University of Michigan

Action Requested: Approval of Commercialization Agreements

Preamble:

Statutory conflicts of interest situations were identified by Innovation Partnerships while reviewing commercialization agreements that then triggered a review by the Medical School Conflict of Interest Board and/or the OVPR Conflict of Interest Committee. Plans for management of the possible risks associated with the conflicts of interest will be developed and approved by the Board and/or Committee and may require agreement by the parties involved.

These proposed commercialization agreements (“Agreements”) fall under the State of Michigan Conflict of Interest Statute because employees of the University of Michigan (“University”) have outside activities, relationships, or interests in the companies described in Attachment A. The law permits such Agreements provided they are disclosed to the Board of Regents (“Regents”) of the University and approved in advance by a 2/3 vote.

Background:

These companies were formed to commercialize University technologies and desire to option, license, or reassign the University’s rights associated with them. Innovation Partnerships selected these companies as University partners and negotiated the terms of the proposed agreements in accordance with University policy and its accepted licensing principles.

Agreement Terms Include:

The University will retain ownership of the optioned, licensed, or reassigned technologies and may continue to further develop and use them internally. No use of University services or facilities, nor any assignment of University employees, is obligated or contemplated under the Agreements. Standard disclaimers of warranties and indemnification apply, and the Agreements may be amended by consent of the parties, such as adding related technology. University procedures for approval of these changes will be followed and additional conflict of interest review will be done as appropriate. Terms specific to each Agreement are described in Attachment A.

Net Effect:

Innovation Partnerships has negotiated and finalized the terms of the option, license, or reassignment agreements for patents, technology, or content related to University technologies for particular fields of use. The companies will obtain the right to evaluate, use, and/or commercialize the University technologies. The net effects specific to each Agreement are described in Attachment A.

Recommendations:

These matters have been reviewed and approved by the Medical School Conflict of Interest Board and/or the OVPR Conflict of Interest Committee. In light of this disclosure and our finding that the Agreements were negotiated in conformance with standard University practices, I recommend that the Board of Regents approve the Agreements between the University and the companies outlined in Attachment A.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Arthur Lupia', with a stylized flourish at the end.

Arthur Lupia
Vice President for Research and Innovation

November 2025

Attachment A

Agreement #1

License Agreement between the University and Aquora Biosystems, Inc. Reviewed by the OVPR Conflict of Interest Committee		
<u>Innovation Partnerships Intellectual Property File Information</u>		
Number	Title	Inventors
2018-457	High Surface Area Biofilm Structure with Multiple-Pass Recirculation for Biological Treatment	Lutgarde Raskin, Nishant Jalgaonkar, Steven Skerlos, Timothy Fairley-Wax
2022-396	Thermal Management and Substance Delivery Method for Mesh and Membrane Bioreactors	Lutgarde Raskin, Steven Skerlos, Timothy Fairley-Wax, Land Barnum, Liam Maloney, Carla Voigt, Katherine Giammalvo
<u>Background</u> Aquora Biosystems, Inc. was formed to develop a membrane bioreactor technology that utilizes increased membrane surface area and recirculation to treat aqueous waste streams and produce biofuels and desires to license the University's rights associated with the technology listed above.		
<u>Net Effects</u> - Worldwide exclusive - Patents - All fields of use - Right to commercialize		<u>Agreement Terms</u> Aquora Biosystems, Inc. will: - Obtain the right to grant sublicenses - Pay a royalty on sales - Reimburse patent costs The University will: - Receive equity in Aquora Biosystems, Inc. The University may: - Retain the right to purchase more equity in Aquora Biosystems, Inc.
<u>University Employee; University Title; Relationship with Aquora Biosystems, Inc.</u> - Timothy Fairley-Wax; Research Area Specialist Senior, Civil & Environmental Engineering; Partial Owner - Lutgarde Raskin; Professor, Civil & Environmental Engineering; Partial Owner - Steven Skerlos; Professor, Mechanical Engineering; Partial Owner		

Agreement #2**License Agreement between the University and Enexa Bio Inc
Reviewed by the OVPR Conflict of Interest Committee****Innovation Partnerships Intellectual Property File Information**

Number	Title	Inventors
2025-054	STING inhibitors for treatment of autoimmune diseases, metabolic diseases, and neurodegenerative diseases	Hongyi Zhao, Zhongwei Liu, Luchen Zhang, Hannah Myatt and Duxin Sun
2025-184	PI3K modulators and uses thereof	Hanning Wen, Mahamadou Djibo, Shuai Mao, Fang Ke, Luchen Zhang and Duxin Sun

Background

Enexa Bio Inc was formed to develop treatment for autoimmune, metabolic, and neurodegenerative diseases and desires to license the University's rights associated with the technology listed above.

Net Effects

- Worldwide exclusive
- Patents
- All fields of use
- Right to commercialize

Agreement Terms

Enexa Bio Inc will:

- Obtain the right to grant sublicenses
- Pay a royalty on sales
- Reimburse patent costs
- Pay an upfront fee

The University will:

- Receive equity in Enexa Bio Inc

University Employee; University Title; Relationship with Enexa Bio Inc

- Duxin Sun; Professor, Pharmaceutical Sciences; Partial Owner

Agreement #3

License Agreement between the University and IGYM L.L.C. Reviewed by the OVPR Conflict of Interest Committee

Innovation Partnerships Intellectual Property File Information

Number	Title	Inventors
2019-207	Projection Based Augmented Reality System for Inclusive Recreational Sports	Roland Graf, Hun Seok Kim, Sun Young Park

Background

IGYM L.L.C. was formed to develop, sell, and install hardware and software based inclusive augmented reality games and room-sized interactive systems that remove physical and social barriers to play and desires to license the University's rights associated with the technology listed above.

Net Effects

- Worldwide exclusive
- Patents
- All fields of use
- Right to commercialize

Agreement Terms

IGYM L.L.C. will:

- Obtain the right to grant sublicenses
- Pay a royalty on sales
- Reimburse patent costs

The University will:

- Receive equity in IGYM L.L.C.
- Retain the right to purchase more equity in IGYM L.L.C.

University Employee; University Title; Relationship with IGYM L.L.C.

- Roland Graf; Professor, Art and Design; Partial Owner
- Michael Nebeling; Associate Professor, Information; Partial Owner

Agreement #4
License Agreement between the University and Scan Lab Corporation
Reviewed by the OVPR Conflict of Interest Committee
Innovation Partnerships Intellectual Property File Information

Number	Title	Inventors
2022-105	Experiments in the application of LiDAR Scanning Datasets in Immersive Technologies	Robert Adams, Dawn Gilpin

Background

Scan Lab Corporation was formed to commercialize technology for LIDAR scanning and conversion into virtual environments and desires to license the University's rights associated with the technology listed above.

Net Effects

- Worldwide exclusive
- Copyrights
- All fields of use
- Right to commercialize

Agreement Terms

Scan Lab Corporation will:

- Obtain the right to grant sublicenses
- Pay a royalty on sales

The University will:

- Receive equity in Scan Lab Corporation

The University may:

- Retain the right to purchase more equity in Scan Lab Corporation

University Employee; University Title; Relationship with Scan Lab Corporation

- Robert Adams; Associate Professor, Architecture; Partial Owner
- Dawn Gilpin; Lecturer IV, Architecture and Urban Planning; Partial Owner

Agreement #5**License Agreement between the University and Tensor Machines Inc.
Reviewed by the OVPR Conflict of Interest Committee****Innovation Partnerships Intellectual Property File Information**

Number	Title	Inventors
2023-485	Linking2Source: Source Detection and Localization through Physical Fingerprinting	Hafiz Malik
2024-129	Lightweight Physical Fingerprinting using Selective Sampling and Transfer Learning	Hafiz Malik, Rafi Ud Daula Refat
2026-162	Thermal Radiation Pattern-Based Electronic Device Authentication	Hafiz Malik, Saad Kiyani, Hsan Arif
2026-163	Electromagnetic Radiation pattern-based Fingerprinting for Electronic Device Authentication	Hafiz Malik, Saad Kiyani, Hsan Arif, Fazal Rahaman Pasha Mohammed
2026-165	Multimodal Fusion of Thermal and Electromagnetic Radiation and System Power Profile for Robust Device Authentication	Hafiz Malik, Saad Kiyani, Hsan Arif, Fazal Rahaman Pasha Mohammed

Background

Tensor Machines Inc. was formed to commercialize a robust, non-invasive system for hardware authentication and integrity verification by optimally fusing device thermal emissions, electromagnetic interference (EMI) radiation signatures, and input/output power profiles through deep learning and desires to license the University's rights associated with the technology listed above.

Net Effects

- Worldwide exclusive
- Patents
- All fields of use
- Right to commercialize

Agreement Terms

Tensor Machines Inc. will:

- Obtain the right to grant sublicenses
- Pay a royalty on sales
- Reimburse patent costs

The University will:

- Receive equity in Tensor Machines Inc.
- Retain the right to purchase more equity in Tensor Machines Inc.

University Employee; University Title; Relationship with Tensor Machines Inc.

- Hafiz Malik; Professor, Dearborn Electrical and Computer Engineering; Partial Owner