

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 UMOR Conflict of Interest Review 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 UMOR Conflict of Interest Review 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 cursive script, appearing to read "Arthur Lupia".

Arthur Lupia
Interim Vice President for Research and Innovation

February 2025

Attachment A

Agreement #1

License Agreement between the University and A2 Intelligence, Inc. Reviewed by the UMOR Conflict of Interest Review Committee		
<u>Innovation Partnerships Intellectual Property File Information</u>		
Number	Title	Inventors
2024-031	Decision Making Framework	David Singer, Alexander Manohar
2024-361	Design Tool Analysis, Diagnostics, and Decision Support Framework	David Singer, Alexander Manohar, Connor Arrigan
<u>Background</u>		
A2 Intelligence, Inc. was formed to commercialize software that advances safety, reliability and efficiency in machine diagnostics and physical cyber security and desires to license the University's rights associated with the technology listed above.		
<u>Net Effects</u>	<u>Agreement Terms</u>	
<ul style="list-style-type: none">Worldwide exclusivePatents and copyrightsAll fields of useRight to commercialization	A2 Intelligence, Inc. will: <ul style="list-style-type: none">Obtain the right to grant sublicensesPay a royalty on salesReimburse patent costs The University will: <ul style="list-style-type: none">Receive equity in A2 Intelligence, Inc. The University may: <ul style="list-style-type: none">Retain the right to purchase more equity in A2 Intelligence, Inc.	
<u>University Employee; University Title; Relationship with A2 Intelligence, Inc.</u>		
<ul style="list-style-type: none">David Singer; Professor, Naval Architecture and Marine Engineering; Partial OwnerAlexander Manohar; Research Area Specialist Lead, Naval Architecture and Marine Engineering; Partial OwnerConnor Arrigan; General Laborer (temp), Athletics; Partial OwnerMichael Sypniewski; Intermittent Lecturer, Naval Architecture and Marine Engineering; Partial Owner		

Agreement #2

**Option Agreement between the University and DynaGlu Therapeutics, LLC
Reviewed by the UMOR Conflict of Interest Review Committee**

Innovation Partnerships Intellectual Property File Information

Number	Title	Inventors
2025-291	Microbial natural product for polypharmacology based drug development	Ashootosh Tripathi

Background

DynaGlu Therapeutics, LLC was formed to develop therapeutic treatments from natural products and desires to option the University's rights associated with the technology listed above.

Net Effects

- Worldwide exclusive
- Materials
- All fields of use
- Evaluation only

Agreement Terms

DynaGlu Therapeutics, LLC will:

- Pay an upfront fee

University Employee; University Title; Relationship with DynaGlu Therapeutics, LLC

- Ashootosh Tripathi; Director, Natural Products Discovery Core, Associate Research Scientist, Life Sciences Institute, Partial Owner

Agreement #3

**Option Agreement between the University and Intero Biosystems Inc.
Reviewed by the Medical School Conflict of Interest Board**

Innovation Partnerships Intellectual Property File Information

Number	Title	Inventors
2020-370	Vascularized Intestinal Organoids	Jason Spence, Emily Holloway
2021-093	Improved Physiologic Growth of Cultured Human Intestinal Tissue	Jason Spence, Emily Holloway, Charlie Childs
2022-374	iPSC Derived Serosal Mesothelial Cells	Jason Spence, Meghan Marie Capeling
2025-166	Human Intestinal Organoids 2.0: Enhanced complexity with EREG	Jason Spence, Charlie Childs, Madeline Eiken
2025-171	Inducing Apical-Out Organoids with Lysophosphatidic Acid	Jason Spence, Andrew Tidball

Background

Intero Biosystems Inc. was formed to commercialize organoids and desires to option the University's rights associated with the technology listed above.

Net Effects

- Worldwide exclusive except for 2021-093 (non-exclusive)
- Patents
- All fields of use except for 2021-093 (EGF media kit use only)
- Evaluation only

Agreement Terms

- Intero Biosystems Inc. will:
- Reimburse patent costs

University Employee; University Title; Relationship with Intero Biosystems Inc.

- Jason Spence; Professor, Internal Medicine-Gastroenterology; Partial Owner
- Charlie Childs; Research Fellow, Internal Medicine-Gastroenterology; Partial Owner

Agreement #4

License Agreement between the University and MemX Systems Corporation Reviewed by the UMOR Conflict of Interest Review Committee

Innovation Partnerships Intellectual Property File Information

Number	Title	Inventors
2019-180	Digital Foveation for Low-Power Machine Vision	Robert Dick, Ekdeep Lubana
2020-121	Intelligent Scene Caching for Video Capture Data Reduction	Robert Dick, Benjamin Simpson, Ekdeep Lubana, Yuchen Liu, Pengyuan Huang
2023-067	MemX: An Attention-Aware Smart Eyewear System for Personalized Moment Auto-Capture	Robert Dick
2023-068	Emotionship Analysis for Eyewear Devices	Robert Dick
2023-191	Unveiling Causal Attention in Dogs' Eyes with Smart Eyewear	Robert Dick
2023-459	Understanding How People Read with Smart Eyewear	Robert Dick
2024-076	Personal Context-aware Dialogue System on Smart Eyewear	Robert Dick

Background

MemX Systems Corporation was formed to commercialize personalized eyewear technology 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

MemX Systems Corporation will:

- Obtain the right to grant sublicenses
- Reimburse patent costs

The University will:

- Receive equity in MemX Systems Corporation
- Retain the right to purchase more equity in MemX Systems Corporation

University Employee; University Title; Relationship with MemX Systems Corporation

- Robert Dick; Professor, Electrical Engineering and Computer Science – Electrical and Computer Engineering (EECS – ECE) Division; Partial Owner

Agreement #5

**License Agreement between the University and OcularDx, Inc.
Reviewed by the Medical School Conflict of Interest Board and UMOR Conflict of Interest Review Committee**

Innovation Partnerships Intellectual Property File Information

Number	Title	Inventors
2019-179	Vitrector Device	Lauro Ojeda, Phuoc Nguyen, Minghui Huang, Anant Bhamri, Hakan Demirci, Thomas Gardner, Alan Cruz, Justin Holmer, Russell Miller, Jeffrey Sundstrom
2024-243	Robust Needle Tip Design for Enhanced Strength, Patient Comfort and Recovery, and Control Over Fluid Dynamics	Thomas Gardner, Lauro Ojeda, Phuoc Nguyen, Jeff Plott, Jeffrey Sundstrom

Background

OcularDx, Inc. was formed to commercialize the vitreous biopsy needle for ophthalmic applications 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

OcularDx, Inc. will:

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

The University will:

- Receive equity in OcularDx, Inc.
- Retain the right to purchase more equity in OcularDx, Inc.

University Employee; University Title; Relationship with OcularDx, Inc.

- Thomas Gardner; Professor, Ophthalmology and Visual Science; Partial Owner
- Lauro Ojeda; Research Scientist, Mechanical Engineering; Partial Owner

Agreement #6

**License Agreement between the University and Ocutheia, Inc.
Reviewed by the Medical School Conflict of Interest Board and UMOR Conflict of Interest Review Committee**

Innovation Partnerships Intellectual Property File Information

Number	Title	Inventors
7634	Reprogramming Photoreceptor Metabolism to Enhance Survival and Prevent Vision Loss	Thomas Wubben, Cagri Besirli
2020-183	Development of Novel Pyruvate Kinase Muscle Isoform 2 (PKM2) Activators for Photoreceptor Neuroprotection	Thomas Wubben, Cagri Besirli, Jason Rech, Brennan Watch

Background

Ocutheia, Inc. was formed to develop and commercialize therapeutics to treat eye conditions and desires to license the University's rights associated with the technology listed above.

Net Effects

- Worldwide exclusive
- Patents
- For treatment of eye disorders use
- Right to commercialize

Agreement Terms

Ocutheia, Inc. will:

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

The University will:

- Receive equity in Ocutheia, Inc.
- Retain the right to purchase more equity in Ocutheia, Inc.

University Employee; University Title; Relationship with Ocutheia, Inc.

- Cagri Besirli; Associate Professor, Ophthalmology and Visual Science; Partial Owner
- Thomas Wubben; Assistant Professor, Ophthalmology and Visual Science; Partial Owner
- Jason Rech; Associate Research Scientist, Director, Vahlteich Medicinal Chemistry Group, Medicinal Chemistry; Partial Owner

Agreement #7

**License Agreement between the University and PROBETRUTH, INC.
Reviewed by the UMOR Conflict of Interest Review Committee**

Innovation Partnerships Intellectual Property File Information

Number	Title	Inventors
2025-253	Robust Deepfake Detection: Defending Adversarial Attacks with Multi- Generative Knowledge Distillation	Khalid Malik, Kutub Uddin

Background

PROBETRUTH, INC. was formed to commercialize their Deeptect product to safeguard against risks posed by synthetic content and desires to license the University's rights associated with the technology listed above.

Net Effects

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

Agreement Terms

PROBETRUTH, INC. will:

- Obtain the right to grant sublicenses
- Reimburse patent costs

The University will:

- Receive equity in PROBETRUTH, INC.
- Retain the right to purchase more equity in PROBETRUTH, INC.

University Employee; University Title; Relationship with PROBETRUTH, INC.

- Khalid Malik; Professor, Flint Computer Science; Partial Owner

Agreement #8

**License Agreement between the University and Rua Diagnostics Inc.
Reviewed by the Medical School Conflict of Interest Board and UMOR Conflict of Interest Review Committee**

Innovation Partnerships Intellectual Property File Information

Number	Title	Inventors
2021-327	Asymmetrical Pneumatic Switch	Xudong Fan, Xiaheng Huang, Xiaolu Huang, Maxwell Weihao Li

Background

Rua Diagnostics Inc. was formed to commercialize technology enabling diagnostic testing for various highly prevalent and lethal diseases through the use of breath analysis with gas chromatography (GC) and desires to license the University's rights associated with the technology listed above.

Net Effects

- Worldwide exclusive
- Patents
- For human and animal gas sampling in medical applications use
- Right to commercialize

Agreement Terms

Rua Diagnostics Inc. will:

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

University Employee; University Title; Relationship with Rua Diagnostics Inc.

- Xudong Fan; Professor, Biomedical Engineering; Partial Owner
- Kevin Ward; Professor, Emergency Medicine; Partial Owner

Agreement #9

**License Agreement between the University and Side Scope, LLC
Reviewed by the Medical School Conflict of Interest Board**

Innovation Partnerships Intellectual Property File Information

Number	Title	Inventors
2023-215	AI-Powered Surgical Video Analysis	Nambi Nallasamy, Shahzad Mian, Bradford Tannen
2023-325	Deep Learning CV System for Pupil Analysis	Nambi Nallasamy, Shahzad Mian, Bradford Tannen
2025-301	Intraoperative Floppy Iris Syndrome Detection and Predictions	Nambi Nallasamy
2025-324	Residual Lens Fragment Detection and Tracking in Cataract Surgery	Nambi Nallasamy
2025-325	System for Zonular Weakness Detection and Decision Support	Nambi Nallasamy
2025-333	System and Method for Ophthalmic Surgical Planning and Incision Management	Nambi Nallasamy

Background

Side Scope, LLC was formed to commercialize software tools for the optimization of ophthalmology based surgical procedures 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

Side Scope, LLC will:

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

The University will:

- Receive equity in Side Scope, LLC

The University may:

- Retain the right to purchase more equity in Side Scope, LLC

University Employee; University Title; Relationship with Side Scope, LLC

- Nambi Nallasamy; Assistant Professor, Ophthalmology and Visual Science; Partial Owner

Agreement #10**License Agreement between the University and Supercritical Inc.
Reviewed by the UMOR Conflict of Interest Review Committee****Innovation Partnerships Intellectual Property File Information**

Number	Title	Inventors
6767	Toolkit for the Analysis of Composite Structures	Graeme Kennedy, Joaquim Martins
7690	pyOptSparse: A Common Python Wrapper for Numerical Optimization Software	Joaquim Martins, Charles Mader, Gaetan Kenway
7691	ADflow: A Computational Fluid Dynamics Solver	Joaquim Martins, Charles Mader, Gaetan Kenway
7692	pyAerostructure: A Solver for Coupled Aerodynamics and Structural Problems	Joaquim Martins, Charles Mader, Gaetan Kenway
2019-304	pyGeo: A Package to Parametrize Shapes for Design Optimization	Joaquim Martins, Charles Mader, Gaetan Kenway
2019-305	IDWarp: An Algorithm for Deforming Meshes	Joaquim Martins, Charles Mader, Gaetan Kenway
2019-306	pyWarp: An Algorithm for Deforming Structured Meshes	Joaquim Martins, Gaetan Kenway
2019-307	pyHyp: A Hyperbolic Mesh Generator for Structured Meshes	Joaquim Martins, Gaetan Kenway
2019-308	pySpline: A Library	Joaquim Martins, Gaetan Kenway
2019-309	pyLayout: A Package for Creating Finite Element Structural Models of Aircraft Wings	Joaquim Martins, Gaetan Kenway
2019-418	DAFoam: A Discrete Adjoint Implementation for OpenFOAM	Ping He, Charles Mader, Kevin Maki, Joaquim Martins
2021-220	OpenAeroStruct: A Low-Order Aerostructural Analysis and Optimization Framework	John Hwang, John Jasa, Joaquim Martins
2025-138	SplineToolbox: B-spline and NURBS kernel with analytic derivatives	Eytan Adler, Andrew Lamkin, Joaquim Martins, Anil Yildirim
2025-210	FoilGen: Airfoil geometry and mesh generation tool	Eytan Adler, Andrew Lamkin, Joaquim Martins, Anil Yildirim
2025-211	MACH-Interface: Interface that automates simulations with the MACH-Aero framework	Eytan Adler, Andrew Lamkin, Joaquim Martins, Anil Yildirim

Background

Supercritical Inc. was formed to commercialize software related to optimization of aerofoil designs and desires to license the University’s rights associated with the technology listed above.

Net Effects

- Worldwide open source non-exclusive except for 2025-211 (closed exclusive)
- Copyrights
- All fields of use
- Right to commercialize

Agreement Terms

Supercritical Inc. will:

- Obtain the right to grant sublicenses

The University will:

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

University Employee; University Title; Relationship with Supercritical Inc.

- Joaquim Martins; Professor, Aerospace Engineering; Partial Owner
- Anil Yildirim; Research Fellow, Aerospace Engineering; Partial Owner
- Andrew Lamkin; Graduate Student Research Assistant, Aerospace Engineering; Partial Owner

Agreement #11

**License Agreement between the University and ViewPoint Simulations, Inc.
Reviewed by the UMOR Conflict of Interest Review Committee**

Innovation Partnerships Intellectual Property File Information

Number	Title	Inventors
7228	Viewpoint (f/k/a Policymaker)	Elisabeth Gerber
2023-201	Center for Academic Innovation - Learning Tools Interoperability Client	Michael Wheeler
2023-202	Center for Academic Innovation - Synchronized Data Models	Ben Hayward
2023-203	Center for Academic Innovation - Core Components Library	Ben Hayward
2023-204	Center for Academic Innovation - Event Tracking Module	Ben Hayward, Dennis O'Reilly

Background

ViewPoint Simulations, Inc. was formed to commercialize the ViewPoint platform, a software solution for powering engaged learning through role-based simulations in online, hybrid and in-person educational settings, and simulation content and desires to license the University's rights associated with the technology listed above.

Net Effects

- Worldwide exclusive for 7228
- Worldwide non-exclusive for 2023-201, 2023-202, 2023-203, 2023-204
- Copyrights
- All fields of use
- Right to commercialize

Agreement Terms

ViewPoint Simulations, Inc. will:

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

The University will:

- Receive equity in ViewPoint Simulations, Inc.
- Retain the right to purchase more equity in ViewPoint Simulations, Inc.

University Employee; University Title; Relationship with ViewPoint Simulations, Inc.

- Elizabeth Gerber; Professor, Public Policy; Partial Owner