

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

July 2024

**Attachment A**

**Agreement #1**

<b>Option Agreement between the University and BlueShift Carbon, Inc. Reviewed by the UMOR Conflict of Interest Review Committee</b>		
<b><u>Innovation Partnerships Intellectual Property File Information</u></b>		
<b>Number</b>	<b>Title</b>	<b>Inventors</b>
2021-445	Electrochemical Direct Air Capture of CO <sub>2</sub> using Redox-Active Textiles	David Kwabi, Trisha Andrew
<b><u>Background</u></b>		
BlueShift Carbon, Inc. was formed to develop and commercialize an electrochemical system for the direct ocean capture of CO <sub>2</sub> and desires to option the University's rights associated with the technology listed above.		
<b><u>Net Effects</u></b> <ul style="list-style-type: none"><li>● Worldwide exclusive</li><li>● Patents</li><li>● All fields of use</li><li>● Evaluation only</li></ul>	<b><u>Agreement Terms</u></b> BlueShift Carbon, Inc. will: <ul style="list-style-type: none"><li>● Pay an upfront fee</li></ul>	
<b><u>University Employee; University Title; Relationship with BlueShift Carbon, Inc.</u></b> <ul style="list-style-type: none"><li>● David Kwabi; Assistant Professor, Mechanical Engineering; Partial Owner</li></ul>		

## Agreement #2

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

### **Innovation Partnerships Intellectual Property File Information**

<b>Number</b>	<b>Title</b>	<b>Inventors</b>
2021-445	Electrochemical Direct Air Capture of CO <sub>2</sub> using Redox-Active Textiles	David Kwabi, Trisha Andrew

### **Background**

BlueShift Carbon, Inc. was formed to develop and commercialize an electrochemical system for the direct ocean capture of CO<sub>2</sub> 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**

BlueShift Carbon, Inc. will:

- Obtain the right to grant sublicenses
- Reimburse patent costs

The University will:

- Receive equity in BlueShift Carbon, Inc.

The University may:

- Retain the right to purchase more equity in BlueShift Carbon, Inc.

### **University Employee; University Title; Relationship with BlueShift Carbon, Inc.**

- David Kwabi; Assistant Professor, Mechanical Engineering; Partial Owner

### Agreement #3

**License Agreement between the University and Fibarcode, LLC  
Reviewed by the UMOR Conflict of Interest Review Committee**

**Innovation Partnerships Intellectual Property File Information**

<b>Number</b>	<b>Title</b>	<b>Inventors</b>
2022-261	System for Photonic Identification and Tracking of Textiles	Max Shtein, Brian Iezzi

**Background**

Fibarcode, LLC was formed to commercialize fiber-based textile labeling 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**

Fibarcode, LLC will:

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

The University will:

- Receive equity in Fibarcode, LLC
- Retain the right to purchase more equity in Fibarcode, LLC

**University Employee; University Title; Relationship with Fibarcode, LLC**

- Brian Iezzi; Research Associate I (temp), Materials Science and Engineering; Partial Owner

**Agreement #4**

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

**Innovation Partnerships Intellectual Property File Information**

<b>Number</b>	<b>Title</b>	<b>Inventors</b>
7670	Numerical Representations of Internet Hosts and Network Signatures	Mingyan Liu, Armin Sarabi
2020-516	Adaptive Network Probing Using Machine Learning	Mingyan Liu, Armin Sarabi, Kun Jin, Tongxin Yin
2024-598	Bootstrapping LLM-based Text Annotations using AI Chatbots	Mingyan Liu, Armin Sarabi
2024-599	Developing Cyber Risk Assessment Models via LLM-based Fingerprinting of Internet Measurements	Mingyan Liu, Armin Sarabi

**Background**

SignetRisk Analytics, Inc. was formed to develop the next generation of cyber risk data and analysis capabilities to power the rapidly growing cyber risk quantification and management market and desires to license the University’s rights associated with the technology listed above.

**Net Effects**

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

**Agreement Terms**

SignetRisk Analytics, Inc. will:

- Obtain the right to grant sublicenses
- Reimburse patent costs

The University will:

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

**University Employee; University Title; Relationship with SignetRisk Analytics, Inc.**

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