

**THE UNIVERSITY OF MICHIGAN  
REGENTS COMMUNICATION**

ACTION REQUEST

Subject: Technology Transfer Agreements with the University of Michigan

Action Requested: Approval of Technology Transfer Agreements

Preamble:

Statutory conflicts of interest situations were identified by the Office of Technology Transfer (“OTT”) while reviewing technology transfer 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 technology transfer 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. OTT 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:

OTT has negotiated and finalized the terms of the option, license, or reassignment agreements for patents, technology, or content related to University OTT files 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,



Rebecca Cunningham  
Vice President for Research

May 2021

**Attachment A**

**Agreement #1**

License Agreement between the University and Courage Therapeutics, Inc. Reviewed by the UMOR Conflict of Interest Review Committee		
<u>Office of Technology Transfer Intellectual Property File Information</u>		
Number	Title	Inventors
2019-392	Analogues of AgRP for the Treatment of Anorexia Nervosa, Cachexia, and other Disorders of Food Intake and Energy Homeostasis	Roger Cone, Patrick Sweeney, Savannah Williams
2019-393	Treatment of Anorexia Nervosa and other Disorders of Eating and Energy Homeostasis with MC3R Agonists	Roger Cone, Patrick Sweeney
2021-198	D-TRP8-G-MSH Variant Peptides	Roger Cone, Luis Eduardo Diaz Gimenez, Savannah Williams, Tomi Sawyer
2021-285	Setmalanotide Variant Peptides	Roger Cone, Luis Eduardo Diaz Gimenez, Savannah Williams, Tomi Sawyer
<b><u>Background</u></b>		
<p>Courage Therapeutics, Inc. was formed to develop and commercialize peptides and small molecules for the treatment of various types of eating disorders, such as anorexia nervosa and obesity and desires to license the University’s rights associated with the technology listed above.</p>		
<p><b><u>Net Effects</u></b></p> <ul style="list-style-type: none"> <li>● Worldwide exclusive</li> <li>● Patents</li> <li>● All fields of use</li> <li>● Right to commercialize</li> </ul>	<p><b><u>Agreement Terms</u></b></p> <p>Courage Therapeutics, Inc. will:</p> <ul style="list-style-type: none"> <li>● Obtain the right to grant sublicenses</li> <li>● Pay a royalty on sales</li> <li>● Pay an upfront fee</li> <li>● Reimburse patent costs</li> </ul> <p>The University will:</p> <ul style="list-style-type: none"> <li>● Receive equity in Courage Therapeutics, Inc.</li> <li>● Retain the right to purchase more equity in Courage Therapeutics, Inc.</li> </ul>	
<p><b><u>University Employee; University Title; Relationship with Courage Therapeutics, Inc.</u></b></p> <ul style="list-style-type: none"> <li>● Roger Cone; Vice Provost and Director of the Biosciences Initiative, Office of the Provost and Executive Vice President for Academic Affairs, Director and Research Professor, Life Sciences Institute; Partial Owner</li> </ul>		

## Agreement #2

### License Agreement between the University and EIQ, Inc. Reviewed by the Medical School Conflict of Interest Board

#### Office of Technology Transfer Intellectual Property File Information

Number	Title	Inventors
2018-262	Automated Assessment of Bowel Damage in Intestinal Diseases	Stewart Wang, Ryan William Stidham, Binu Enchakalody, Mahmoud M Al-Hawary, Ashish Wasnik
2019-034	Automated Endoscopic Scoring of Ulcerative Colitis Severity	Brahmajee K Nallamothu, Ryan William Stidham, Akbar Waljee, Wenshuo Liu
2019-275	Automated Anatomic and Regional Location of Disease Features in Colonoscopy Videos	Sayedmohammadreza Soroushmehr; Heming Yao; Ryan William Stidham; Kayvan Najarian; Jonathan Gryak
2021-281	Automated Detection of Areas of Interest in Colonoscopy Videos	Heming Yao; Ryan William Stidham; Kayvan Najarian; Jonathan Gryak
2021-282	Anatomic Localization in Colonoscopy Videos	Heming Yao; Ryan William Stidham; Kayvan Najarian; Jonathan Gryak

#### Background

EIQ, Inc. was formed to commercialize an automated colonoscopy scoring product called EndoscopIQ initially developed at Prenovo (formerly known as Prehab Technologies, LLC) and develop other tools utilizing the Mayo Scoring System and desires to license the University's rights associated with the technology listed above.

#### Net Effects

- Worldwide exclusive for 2018-262, 2019-034, 2019-275
- Worldwide non-exclusive for 2021-281, 2021-282
- Patents and copyrights
- All fields of use
- Right to commercialize

#### Agreement Terms

EIQ, Inc. will:

- Obtain the right to grant sublicenses
- Reimburse patent costs

The University will:

- Receive equity in EIQ, Inc.

The University may:

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

#### University Employee; University Title; Relationship with EIQ, Inc.

- Stewart Wang; Professor, Surgery; Board of Directors Member
- June Sullivan; Admin. Manager Assoc. Healthcare, General Surgery Administration; Board of Directors Member

### Agreement #3

**Option Agreement between the University and Entos, Inc.  
Reviewed by the UMOR Conflict of Interest Review Committee**

#### Office of Technology Transfer Intellectual Property File Information

Number	Title	Inventors
2021-331	Sterically Hindered Esters for Pain Management	Tim Cernak

#### Background

Entos, Inc. was formed to accelerate molecular discovery with physics-based machine learning and desires to option the University's rights associated with the technology listed above.

#### Net Effects

- Worldwide exclusive
- Invention
- For human and veterinarian use
- Evaluation rights

#### Agreement Terms

Entos, Inc. will:

- Reimburse patent costs

#### University Employee; University Title; Relationship with Entos, Inc.

- Timothy Cernak; Assistant Professor, Medicinal Chemistry; Partial Owner

### Agreement #4

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

#### Office of Technology Transfer Intellectual Property File Information

Number	Title	Inventors
2021-183	phactor™ - A Software for High-Throughput Experimentation in Chemistry	Tim Cernak, Babak Mahjour

#### Background

Entos, Inc. was formed to accelerate molecular discovery with physics-based machine learning and desires to license the University's rights associated with the technology listed above.

#### Net Effects

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

#### Agreement Terms

Entos, Inc. will:

- Pay a royalty on sales
- Pay an upfront fee

#### University Employee; University Title; Relationship with Entos, Inc.

- Timothy Cernak; Assistant Professor, Medicinal Chemistry; Partial Owner

## Agreement #5

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

### **Office of Technology Transfer Intellectual Property File Information**

<b>Number</b>	<b>Title</b>	<b>Inventors</b>
2019-334	Property Modulation with Chemical Transformations	Tim Cernak, Babak Mahjour, Sean McCarthy, Andrew McGrath, Yuning Shen, Rui Zhang

### **Background**

Entos, Inc. was formed to accelerate molecular discovery with physics-based machine learning and desires to license the University's rights associated with the technology listed above.

### **Net Effects**

- Worldwide non-exclusive
- Patents
- All fields of use
- Right to practice the claims of the patent for internal use

### **Agreement Terms**

Entos, Inc. will:

- Pay a royalty on sales
- Pay an annual license fee and/or fee per project

### **University Employee; University Title; Relationship with Entos, Inc.**

- Timothy Cernak; Assistant Professor, Medicinal Chemistry; Partial Owner

**Agreement #6**

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

**Office of Technology Transfer Intellectual Property File Information**

<b>Number</b>	<b>Title</b>	<b>Inventors</b>
2020-043	SGLT Inhibitor Drug for Treating Cystic Fibrosis Complications	Yuqing Chen, Jifeng Zhang, Jie Xu, Fei Sun, Xiubin Jiang, Jian-Ping Jin
2021-252	SGLT Inhibitor Drug for Treating Pulmonary Diseases	Yuqing Chen, Jie Xu, Michael Lannuzzi, Charles Bisgaier

**Background**

GeneToBe LLC was formed to commercialize technology on sodium glucose co-transporter (SGLT) inhibitors to treat pulmonary 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**

GeneToBe LLC will:

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

The University may:

- Receive equity in GeneToBe LLC
- Retain the right to purchase more equity GeneToBe LLC

**University Employee; University Title; Relationship with GeneToBe LLC**

- Yuqing Chen; Professor, Internal Medicine-Cardiovascular Medicine; Partial Owner

**Agreement #7**

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

**Office of Technology Transfer Intellectual Property File Information**

<b>Number</b>	<b>Title</b>	<b>Inventors</b>
7363	Electric Medical Record DataSifter	Ivaylo Dinov, Simeone Marino, John Vandervest

**Background**

GrayRain, LLC was formed to commercialize and further develop a software tool to create a synthetic data set alternative to electronic medical records/electronic health records (EMR/EHR) data warehouses 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**

GrayRain, LLC will:

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

The University may:

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

**University Employee; University Title; Relationship with GeneToBe LLC**

- Ivaylo Dinov; Professor, Nursing; Partial Owner
- Simeone Marino; Research Computer Specialist, Nursing; Partial Owner



**Agreement #8**

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

**Office of Technology Transfer Intellectual Property File Information**

<b>Number</b>	<b>Title</b>	<b>Inventors</b>
2019-247	Online Body Shape Models	Byoung-Keon Park, Matthew Reed
2021-211	Portable Anthropometry System	Byoung-Keon Park, Matthew Reed

**Background**

HumanShape, LLC was formed to commercialize and develop software, models, know-how and consulting around custom anthropometric measurement and modeling and desires to license the University's rights associated with the technology listed above.

**Net Effects**

- Worldwide exclusive license for 2021-211
- Worldwide non-exclusive license for 2019-247
- Copyrights
- All fields of use
- Right to commercialize

**Agreement Terms**

HumanShape, LLC will:

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

The University may:

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

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

- Matthew Reed; Research Professor, University of Michigan Transportation Research Institute (UMTRI); Partial Owner
- Byoung-Keon Park; Assistant Research Scientist, UMTRI; Partial Owner

## Agreement #9

### License Agreement between the University and Lympharma LLC. Reviewed by the Medical School Conflict of Interest Board

#### Office of Technology Transfer Intellectual Property File Information

Number	Title	Inventors
5651	Antitumor Compounds	Brian Ross, Marcian Van Dort, Christopher Whitehead
6123	Dual-Inhibitor Antitumor Compounds	Brian Ross, Marcian Van Dort
7058	Bifunctional MEK/PI3K Inhibitors for Therapeutic Application	Brian Ross, Marcian Van Dort
7617	Method for Improving Solubility and Bioavailability of Compounds	Brian Ross, Marcian Van Dort

#### Background

Lympharma LLC. was formed to commercialize cancer therapeutics and desires to license the University's rights associated with the technology listed above.

#### Net Effects

- Worldwide exclusive
- Patents
- For therapeutics
- Right to commercialize

#### Agreement Terms

Lympharma LLC. will:

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

The University may:

- Receive equity in Lympharma LLC.
- Retain the right to purchase more equity in Lympharma LLC.

#### University Employee; University Title; Relationship with Lympharma LLC.

- Brian Ross; Professor, Radiology; Partial Owner

**Agreement #10**

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

**Office of Technology Transfer Intellectual Property File Information**

<b>Number</b>	<b>Title</b>	<b>Inventors</b>
2021-166	Development of Novel Biochar Products	Jose Alfaro, Lizze Rentana

**Background**

Mbrace, Inc. was formed to commercialize novel biochar products 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**

Mbrace, Inc. will:

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

The University may:

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

**University Employee; University Title; Relationship with Mbrace, Inc.**

- Jose Alfaro; Clinical Assistant Professor, Environment and Sustainability; Partial Owner

**Agreement #11**

**Amendment to License Agreement between the University and Precision Trauma, LLC  
Reviewed by the Medical School Conflict of Interest Board**

**Office of Technology Transfer Intellectual Property File Information**

<b>Number</b>	<b>Title</b>	<b>Inventors</b>
2019-226	Abdominal, Pelvic, and Junctional Hemorrhage Control Device	Kevin Ward, Jeff Plott

**Background**

Precision Trauma, LLC was formed to commercialize hemorrhage-control solutions. The University has equity in Precision Trauma, LLC that was obtained through a license agreement established on September 10, 2020. No University employees had a relationship with Precision Trauma, LLC at that time. Precision Trauma, LLC now desires to amend the license agreement to add the University's rights associated with the technology listed above.

**Net Effects**

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

**Agreement Terms**

Precision Trauma, LLC will:

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

The University will:

- Retain the right to purchase more equity

**University Employee; University Title; Relationship with Precision Trauma, LLC**

- Kevin Ward; Professor, Emergency Medicine; Partial Owner