## THE UNIVERSITY OF MICHIGAN REGENTS COMMUNICATION

## ACTION REQUEST

<u>Subject:</u> 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,

Rebecca Cunningham

Vice President for Research and Innovation

February 2024

lulum

## **Attachment A**

## Agreement #1

# License Agreement between the University and Digital Blue Corporation Reviewed by the UMOR Conflict of Interest Review Committee

Innovation Partnerships Intellectual Property File Information			
Number	Title	Inventors	
2021-273	A Semi-Discrete Damage Finite Element Method for the Progressive Failure Analysis of Composite Laminates	Tony Waas, Hoang Nguyen	
2021-352	Integrated Computational Materials Engineering (ICME) Based Fatigue Modeling Software for Composite Structures	Tony Waas, Royan D'Mello	
2022-027	A Mesh-Compatible Inter-Laminar Modelling Approach for Delamination Prediction in Composite Laminates to use with the Semi- Discrete Method	Tony Waas	
2023-597	A New 3D EST Code for Damage and Failure Analysis of Fiber Reinforced Laminates	Tony Waas, Shiyao Lin	
2024-276	Matlab GUI/App for laminate virtual testing	Antony Waas, Royan D'Mello, Minh Hoang Nguyen, Andy Li, Riya Agarwal	
2024-277	Abaqus-python scripts for SD2M and eSD2M	Antony Waas, Royan D'Mello, Minh Hoang Nguyen, Andy Li, Vignesh Shankar Iyer, Zhuocheng Sun	
2024-278	Abaqus plugins for SD2M and eSD2M	Antony Waas, Royan D'Mello, Minh Hoang Nguyen, Andy Li, Zhuocheng Sun	
2024-279	Matlab scripts for input file enhancement	Antony Waas, Minh Hoang Nguyen	
2024-280	EST and cohesive mixed-mode model	Antony Waas, Minh Hoang Nguyen	
2024-281	Neural network model for cure simulation	Antony Waas, Royan D'Mello, Minh Hoang Nguyen	
2024-282	Matlab and Python codes for RVE generation	Antony Waas, Royan D'Mello, Minh Hoang Nguyen, Jiawen Xie, Christian Heinrich	

## **Background**

Digital Blue Corporation was formed to develop, provide, and support computational software products for

the modeling of fiber-reinforced plastic composite structures, and desires to license the University's rights associated with the technology listed above.

#### **Net Effects**

- Worldwide exclusive except for 2023-597 (non-exclusive)
- Patents and copyrights
- All fields of use
- Right to commercialize

#### **Agreement Terms**

Digital Blue Corporation will:

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

The University will:

• Receive equity in Digital Blue Corporation

## University Employee; University Title; Relationship with Digital Blue Corporation

- Anthony Waas; Professor, Aerospace Engineering; Partial Owner
- Royan D'Mello; Assistant Research Scientist, Aerospace Engineering; Partial Owner
- Minh Hoang Nguyen; Research Fellow, Aerospace Engineering; Partial Owner

## **Agreement #2**

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

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

Number	Title	Inventors
7385	SiPM Array-Based Multispectral Optical Probes for Image-Guided Radiotherapy	Issam El Naqa, Samuel DeBruin, Roy Clarke, Nicholas Cucinelli, Ibrahim Oraiqat

#### Background

Endectra, LLC was formed to commercialize sensor networks for defense, medical, and industrial 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**

Endectra, LLC will:

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

The University will:

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

## University Employee; University Title; Relationship with Endectra, LLC

• Roy Clarke; Professor, Physics; Partial Owner

## License Agreement between the University and INTE Optoelectronics L.L.C. Reviewed by the UMOR Conflict of Interest Review Committee

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

Number	Number Title	
2024-023	Development of high-refractive-index silicon rich silicon nitride (SiNx) films for metalens design	Yasha Yi
2024-034	2D OPAs Aperiodic wide beam tuning	Yasha Yi, Bowen Yu

#### **Background**

INTE Optoelectronics L.L.C. was formed to develop silicon photonics chips, which have the potential to replace conventional camera lenses, lenses for medical devices, lidars, and sensors across various applications, and desires to license the University's rights associated with the technology listed above.

NT.	~4	<b>Effects</b>	
	et.	ETTECTS	

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

## **Agreement Terms**

INTE Optoelectronics L.L.C. will:

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

The University will:

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

## University Employee; University Title; Relationship with INTE Optoelectronics L.L.C.

• Yasha Yi; Professor, Electrical and Computer Engineering, UM-Dearborn; Partial Owner

## License Agreement between the University and Kidney Intel, LLC Reviewed by the Medical School Conflict of Interest Board

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

Number	Title	Inventors
2024-268	Kidney Essentials Class Series	Terrie Holewinski

## **Background**

Kidney Intel, LLC was formed to commercialize and train health systems on the Kidney Essentials program for nutrition/wellness for patients with chronic kidney disease (CKD), 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**

Kidney Intel, LLC will:

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

The University may:

- Receive equity in Kidney Intel, LLC
- Retain the right to acquire equity in Kidney Intel, LLC

## University Employee; University Title; Relationship with Kidney Intel, LLC

• Terrie Holewinski; Registered Dietitian Nutritionist, MM UMMG Registered Dietitians; Partial Owner

## License Agreement between the University and Kidou Systems LLC Reviewed by the UMOR Conflict of Interest Review Committee

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

Number	Title	Inventors	
2024-222	Robust Control Strategy for Autonomous Mobility with Offboard Visual Positioning System	Bogdan Epureanu, Koji Shiono	

#### **Background**

Kidou Systems LLC was formed to provide autonomous teleoperation of robotic vehicles, 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**

Kidou Systems LLC will:

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

The University will:

- Receive equity in Kidou Systems LLC
- Retain the right to purchase more equity in Kidou Systems LLC

## University Employee; University Title; Relationship with Kidou Systems LLC

• Bogdan Epureanu; Professor, Mechanical Engineering; Partial Owner

License Agreement between the University and SC2 Technologies Inc. Reviewed by the UMOR Conflict of Interest Review Committee

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

Number	Number Title	
2021-497	I-SCRAM: A Software Tool for IoT Supply Chain Risk Analysis and Mitigation	Junaid Farooq

## **Background**

SC2 Technologies Inc. was formed to commercialize software related to supply chain cyber risk assessment and mitigation, 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**

SC2 Technologies Inc. will:

• Obtain the right to grant sublicenses

The University will:

- Receive equity in SC2 Technologies Inc.
- Retain the right to purchase more equity in SC2 Technologies Inc.

## University Employee; University Title; Relationship with SC2 Technologies Inc.

• Junaid Farooq; Assistant Professor, Electrical and Computer Engineering, UM–Dearborn; Partial Owner