

FEBRUARY MEETING, 2019

The University of Michigan
Ann Arbor
February 21, 2019

The regents met at 4:00 p.m. at the Postma Family Golf Course Club House in the Glick Ballroom. Present were President Schlissel and Regents Acker, Behm, Bernstein, Brown, Ilitch, Ryder Diggs and Weiser. Also present were Vice President Baird, Chancellor Borrego, Vice President Churchill, Chancellor Grasso, Vice President Harper, Executive Vice President Hegarty, Vice President Hu, Vice President Lynch, Vice President Michels, Vice President Pendse, Provost Philbert, Executive Vice President Runge and Vice President Wilbanks. Regent White was absent.

Call to Order and President's Opening Remarks

President Schlissel welcomed Regents Jordan Acker and Paul Brown to their first board meeting along with Vice President for Development Tom Baird.

He commended the facilities and operations teams who provided critical services during last month's reduction in campus operations due to extreme cold. Buses ran their normal routes to ensure that students and employees had safe transportation, and some buses served as warming stations. Maintenance teams proactively inspected pipes to help prevent breaks and custodians monitored buildings for safety and assisted students. The professionals at Michigan Medicine continued to provide world-class care to patients, including the staff who ensure the accessibility of medical and parking facilities. Staff in housing, dining, public safety and other campus units maintained high levels of service as did the staff at the UM-Dearborn and UM-Flint campuses.

President Schlissel said that he had recently testified before the House Appropriations Subcommittee on Higher Education and Community Colleges in Lansing and advocated for increased state support of Michigan's 15 public institutions. He is optimistic that Governor Whitmer will set a goal for post-secondary educational attainment.

President Schlissel turned to the recommendation of six faculty members for Thurnau Professorships. Named after Arthur F. Thurnau, a student at the University of Michigan from 1902 to 1904, the professorships recognize faculty for outstanding contributions to undergraduate education. This year's recommendations are: Henriette Elvang, professor of physics; Bogdan Epureanu, professor of mechanical engineering and professor of electrical engineering and computer science; Sandra R. Gunning, professor of Afroamerican and African studies, professor of American culture, professor of English language and literature, and professor in the Honors Program; Sandra R. Levitsky, associate professor of sociology; Adam C. Simon, professor of Earth and environmental sciences, and professor of environment; and Michaela T. Zint, professor of environment and sustainability. He congratulated all of the nominees.

President Schlissel congratulated three UM assistant professors who were selected as 2019 Sloan Research Fellows. This honor is awarded by the Alfred P. Sloan Foundation to 126 early-career scientists, engineers and mathematicians each year. Adam Falk, president of the Alfred P. Sloan Foundation, said: "Sloan Research Fellows are the best young scientists working today. To be a Sloan Fellow is to be in the vanguard of 21st-century science." UM's 2019 Sloan Fellows are: Reetuparna Das, assistant professor of electrical engineering and computer science; Alison Narayan,

assistant professor of chemistry, and research assistant professor in the Life Sciences Institute; and Alexandra Rosati, assistant professor of psychology and anthropology.

President Schlissel said that 26 UM students earned Fulbright grants this year. Fulbright grants were also awarded to five faculty scholars on the Ann Arbor and Flint campuses and he applauded all the awardees.

President Schlissel thanked the hundreds of students who planned to engage in alternative spring break service activities surrounding rural and urban poverty, environmental justice, domestic violence, HIV and AIDS awareness, and immigration and refugee rights. He also wished student-athletes the best of luck as the Big Ten championship season begins, which will include hosting the Big Ten Men's and Women's Indoor Track and Field Championships.

He called on Vice President Hu for the annual research report.

Annual Research Report

Vice President for Research Hu reported research expenditures for FY2018 of \$1.55 billion that includes \$852 million with the federal government. Large awards were received for designing and manufacturing next-generation computing systems, predicting cavity risk in young children, and for exploring continuity and changes in the American economic and social life. Commercializing research through the Office of Technology Transfer resulted in 21 new startups, 484 new inventions, 169 U.S. Patents issued, and 218 license and option agreements.

Consent Agenda

Minutes. Vice President Churchill submitted for approval the minutes of the meeting of December 6, 2018.

Reports. Executive Vice President Hegarty submitted the Investment Report, the Plant Extension Report, and the Regents Report on Non-Competitive Purchases equal to or in excess of \$10,000 from single sources, September 16, 2018 through December 15, 2018. There was no University Human Resources Report.

Litigation Report. Vice President Lynch had no additional report.

Research Report. Vice President Hu had no additional report.

University of Michigan Health System. Executive Vice President Runge said that later in the meeting he would present a supplemental item for Michigan Medicine Laundry services.

Student Life. Vice President Harper had no report.

University of Michigan-Dearborn. Chancellor Grasso had no report.

University of Michigan-Flint. Chancellor Borrego added her congratulations to those receiving Fulbright awards including two UM-Flint awardees. Dr. Seyed Mehdiian, professor in the School of Management, is receiving his fourth Fulbright award, and Dr. Suleyman Uludag, associate professor of computer science, will receive his second such award.

Chancellor Borrego said that a highlight of Black History Month was when she welcomed to campus legendary civil rights activist and co-founder of the Black Panther Party, Bobby Seale. She said, “At UM-Flint we value diversity and see it as a strength rather than something to fight against.”

Central Student Government Report. Central Student Government (CSG) President Daniel Greene gave an update on his annual report to the student body. He also spoke of advocacy efforts regarding Wendy’s restaurants and their lack of support

for the fair food program and changes CSG would like to see with vendor contracts. He also noted efforts to address student hunger issues, the 'One Michigan' effort to encourage more resources for UM-Flint and UM-Dearborn and the new policy on the disclosure of felony charges and convictions.

Voluntary Support. Vice President Baird reported an updated number of \$5.28 billion, including \$1.2 billion in student support.

Personnel Actions/Personnel Reports. Provost Philbert presented a number of personnel actions and reports. He also commented on the deaths of two former employees. He said, "William Gosling served as director of the University Libraries from 1998 to 2005. With a background in library technical services, he was admirably suited to lead the university's migration to a new electronic systems of information storage and retrieval. We continue to benefit from the foresight and care he brought to this work. Gerald Gurin was a professor of higher education and a research scientist at ISR for 44 years. His scholarly work on mental health was a catalyst for the creation of community mental health centers. With his wife, Patricia Gurin, he did pioneering work that led to the development of the Program for Research on Black Americans. Following retirement, Gerry Gurin was an active part the Office of Academic and Multicultural Initiatives, mentoring younger generations in social science and diversity research."

Retirement Memoirs. Vice President Churchill submitted five retirement memoirs.

Memorials. No deaths of active faculty were reported to the regents.

Degrees. Degree lists for December 2018 and changes to previously approved degree lists were presented for approval.

Approval of Consent Agenda. On a motion by Regent Bernstein, seconded by Regent Ryder Diggs, the regents unanimously approved the consent agenda.

Alternative Asset Commitments

Executive Vice President Hegarty said, “I do wish to make the board aware that the TCV X LP \$50 million investment is in a \$2.5 billion venture fund managed by TCV, the founder of which is Jay Hoag who serves on the university’s Investment Advisory Committee. The committee does not advise the university on specific investments but instead provides general advice on the outlook of the asset classes in which the university invests. The university has invested to great success in various TVC funds for many years. Mr. Hoag had no role in the university’s decision to invest in the TCV X fund. Therefore, I do not believe that there is any conflict of interest with this investment.”

Executive Vice President Hegarty reported on the university’s follow-on investments with previously approved partnerships with a commitments of \$10 million to Zell Equity International VI Andean Tower Partners Co-Investment; \$50 million to Kuramo Africa Opportunity Fund III, L.P. and Kuramo Africa Opportunity Co-Investment Vehicle III, L.P.; \$3 million to CNK Fund I, L.P.; \$50 million to TCVX, L.P.; \$50 million to Carmel Partners Fund VII, L.P.; \$20 million to Mosaic Ventures II, L.P.; and \$50 million to KHP Fund V, L.P.

Alumni Center Renovation

Chuck Lewis, principal at Integrated Design Solutions, presented the schematic design for the Alumni Center Renovation, including additions totaling 350 square feet of space providing additional meeting space, staff offices, lounge areas and collaborative spaces. On a motion by Regent Ilitch, seconded by Regent Ryder Diggs, the regents unanimously approved the schematic design for the Alumni Center Renovation project and authorized proceeding with construction provided that bids are within the approved budget.

Bonisteel Boulevard Water Main and Road Reconstruction

On a motion by Regent Behm, seconded by Regent Ryder Diggs, the regents unanimously approved the Bonisteel Boulevard water main and road reconstruction project as presented and authorized proceeding with construction provided that bids are within the approved budget.

Michigan Medicine Laundry Services Project

Executive Vice President Hegarty brought forward a supplement item for the Michigan Medicine Laundry Services Project located in Detroit, which would replace a very old facility on campus. The most cost-effective option is to enter into a cooperative arrangement with other non-profit hospitals by becoming a member of the Metropolitan Detroit Area Hospital Services Inc. (MDAHS), a Michigan nonprofit corporation.

On a motion by Regent Behm, seconded by Regent Acker, the regents authorized the executive vice president for medical affairs and dean of the Medical School, or the executive vice president and chief financial officer to: approve, consent to, execute, and deliver, as applicable, a members agreement and other governance

documents necessary to permit the university to become a member of MDAHS; negotiate, approve, execute and deliver the linen supply agreement for and on behalf of the university, in such form and upon such terms and conditions as either such officer shall approve; execute and deliver any other agreements and instruments contemplated by the governance documents or linen supply agreement; and to take any other actions necessary or desirable to accomplish the transactions described.

Conflicts of Interest

On a motion by Regent Bernstein, seconded by Regent Behm, the regents unanimously approved the following conflict of interest items except Give and Take Inc., MemryX Inc., and ArborMetrix, that fall under the State of Michigan Conflict of Interest Statute.

On a motion by Regent Bernstein, seconded by Regent Behm, the regents approved conflict of interest Give and Take Inc. and ArborMetrix, that fall under the State of Michigan Conflict of Interest Statute with Regent Weiser recusing himself.

On a motion by Regent Behm, seconded by Regent Bernstein, the regents approved the conflict of interest item MemryX Inc., that falls under the State of Michigan Conflict of Interest Statute, with Regent Brown recusing himself.

The following information is provided in compliance with statutory requirements:

Authorize Execution of Investment Agreements Under the MINTS Program for Give and Take Inc.

An agreement with Give and Take Inc. was approved.

1. The parties to the contract are the Regents of the University of Michigan and Give and Take Inc.

2. The agreement is for financing agreements up to a total of \$5 million in potential investments (through one or more rounds of financing) under MINTS for a software platform.
3. The pecuniary interest arises from the fact that University of Michigan employee Wayne Baker part owner of the company and a member of the board of directors of Give and Take Inc.

Authorize Execution of Investment Agreements Under the MINTS Program for GreenMark Biomedical Inc.

An agreement with GreenMark Biomedical Inc. was approved.

1. The parties to the contract are the Regents of the University of Michigan and GreenMark Biomedical Inc.
2. The agreement is for financing agreements up to a total of \$5 million in potential investments (through one or more rounds of financing) under MINTS for minimally invasive diagnostic and therapeutic agents for dental caries.
3. The pecuniary interest arises from the fact that University of Michigan employee Joerg Lahann is a member of the board of directors of GreenMark Biomedical Inc.

Authorize Execution of Investment Agreements Under the MINTS Program for MemryX Inc.

An agreement with MemryX Inc. was approved.

1. The parties to the contract are the Regents of the University of Michigan and MemryX Inc.
2. The agreement is for financing agreements up to a total of \$5 million in potential investments (through one or more rounds of financing) under MINTS for developing a RRAM-based in-memory computing.
3. The pecuniary interest arises from the fact that University of Michigan employees Wei D. Lu and Zhengya Zhang are part owners and members of the board of directors of MemryX.

Authorize Execution of Investment Agreements Under the MINTS Program for Ripple Science Corporation

An agreement with Ripple Science Corporation was approved.

1. The parties to the contract are the Regents of the University of Michigan and Ripple Science Corporation.
2. The agreement is for financing agreements up to a total of \$5 million in potential investments (through one or more rounds of financing) under MINTS for web-based software and registry.
3. The pecuniary interest arises from the fact that University of Michigan employee Nestor Lopez-Duran is a part owner and member of the board of directors of Ripple Science Corporation.

Authorization for the University of Michigan to Enter into License Agreements with Venture Accelerator Firms Located at the North Campus Research Complex

Agreements with InheRET, MemryX and Phrixus Pharmaceuticals, Inc. were approved.

1. The parties to the contract are the Regents of the University of Michigan, InheRET, MemryX and Phrixus Pharmaceuticals, Inc.
2. The service to be provided is the lease of space in the North Campus Research Complex Venture Accelerator located at 1600 Huron Parkway, Ann Arbor, Michigan with access to common area space within the building. The lease durations including all options for renewal are outlined in the spreadsheet. The leases will use the standard University of Michigan Venture Accelerator lease template. The tenant companies will pay the rates as stipulated in the attached spreadsheet for the current term and option years as indicated. The tenant companies will be responsible for providing monthly updates concerning their business progress to the University of Michigan's Office of Technology Transfer personnel for advice concerning obtaining technology assessment, business consulting, technical assistance, capital raising, or other business services.
3. The pecuniary interest arises from the fact that University of Michigan employees listed on the spreadsheet are owners and/or officers of the tenant companies.

Authorization for the University to enter into an agreement with Michigan Aerospace Corporation

An agreement with Michigan Aerospace Corporation was approved.

1. The parties to the contract are the Regents of the University of Michigan and its Department of Climate and Space Sciences and Engineering and Michigan Aerospace Corporation.
2. The agreement is for a duration one year at a total cost not to exceed \$96,000. Michigan Aerospace Corporation will be supplying all the necessary resources and personnel to fulfill this contract. The remaining base contract terms and conditions are typical to those used in Procurement Services' standard templates for other similar contracts entered into by the regents.
3. The pecuniary interest arises from the fact that University of Michigan employee Lennard Fisk is stockholder, director and co-founder of Michigan Aerospace Corporation.

Authorization for the University to enter into an agreement with ArborMetrix

An agreement with ArborMetrix was approved.

1. The parties to the contract are the Regents of the University of Michigan and its Department of Pediatric Critical Care Consortium (PC4), the Department of Urology (MVC) and ArborMetrix.
2. The agreement is for a duration of five annual subscription payments at a total cost not to exceed \$405,000. ArborMetrix will be supplying all the necessary resources and personnel to fulfill this contract. The remaining base contract terms and conditions are typical to those used in Procurement Services' standard templates for other similar contracts entered into by the regents.
3. The pecuniary interest arises from the fact that University of Michigan employee Justin B. Dimick is an employee, stockholder and owner of ArborMetrix.

Authorization for the University to enter into a contract with Invenio Imaging, Inc.

An agreement with Invenio Imaging, Inc. was approved.

1. The parties to the contract are the Regents of the University of Michigan and its Department of Neurosurgery and Invenio Imaging, Inc.
2. The agreement is for a duration of four years at a total cost not to exceed \$310,758. Invenio Imaging, Inc. will be supplying all the necessary resources and personnel to fulfill this contract. The remaining base contract terms and conditions are typical to those used in Procurement Services' standard templates for other similar contracts entered into by the regents.
3. The pecuniary interest arises from the fact that University of Michigan employee Daniel Orringer is part owner of Invenio Imaging, Inc.

Authorization for the University to enter into a contract with InGlobal Learning Design

An agreement with InGlobal Learning Design was approved.

1. The parties to the contract are the Regents of the University of Michigan and its Flint Early Childhood Development Center and InGlobal Learning Design.
2. The agreement is for a duration of two years at a total cost not to exceed \$225,000. InGlobal Design will be supplying all the necessary resources and personnel to fulfill this contract. The remaining base contract terms and conditions are typical to those used in Procurement Services' standard templates for other similar contracts entered into by the regents.
3. The pecuniary interest arises from the fact that University of Michigan employees Michael A. Fahy, Jeffrey A. Stanzler and Jeffrey Kupperman are directors of InGlobal Learning Design.

Authorization for the University to enter into a contract with Rydberg Technologies Inc.

An agreement with Rydberg Technologies Inc. was approved.

1. The parties to the contract are the Regents of the University of Michigan and its Department of Physics and Rydberg Technologies Inc.
2. The agreement is for a duration of two years at a total cost not to exceed \$6,000. Rydberg Technologies Inc. will be supplying all the necessary resources and personnel to fulfill this contract. The remaining base contract terms and conditions are typical to those used in Procurement Services' standard templates for other similar contracts entered into by the regents.
3. The pecuniary interest arises from the fact that University of Michigan employee Georg Raithel is consultant, stockholder and co-owner of Rydberg Technologies Inc.

Authorization for the University to enter into a contract with Morph Biosciences

An agreement with Morph Biosciences was approved.

1. The parties to the contract are the Regents of the University of Michigan and its Department of Surgery and Morph Biosciences.
2. The agreement is for a duration of one year at a total cost not to exceed \$28,000.

Morph Biosciences will be supplying all the necessary resources and personnel to fulfill this contract. The remaining base contract terms and conditions are typical to those used in Procurement Services' standard templates for other similar contracts entered into by the regents.

3. The pecuniary interest arises from the fact that University of Michigan employee David C. Olson is owner of Morph Biosciences.

Authorization for the University to enter into a transact with k-Space Associates, Inc.

An agreement with k-Space Associates, Inc. was approved.

1. The parties to the contract are the Regents of the University of Michigan and its Department of Electrical Engineering and Computer Science and k-Space Associates, Inc.
2. The agreement is for a one time purchase of a BandiT wafer and thin-film temperature monitor at a total cost not to exceed \$2,660. k-Space Associates, Inc. will be supplying all the necessary resources and personnel to fulfill this contract. The remaining base contract terms and conditions are typical to those used in Procurement Services' standard templates for other similar contracts entered into by the regents.
3. The pecuniary interest arises from the fact that University of Michigan employee Roy Clarke is stockholder and director of k-Space Associates, Inc.

Authorization for the University to enter into a transact with CubeWorks, Inc.

An agreement with CubeWorks, Inc. was approved.

1. The parties to the contract are the Regents of the University of Michigan and its Department of Electrical Engineering and Computer Science and CubeWorks, Inc.
2. The agreement is for a one time purchase at a total cost not to exceed \$50,586. CubeWorks, Inc. will be supplying all the necessary resources and personnel to fulfill this contract. The remaining base contract terms and conditions are typical to those used in Procurement Services' standard templates for other similar contracts entered into by the regents.
3. The pecuniary interest arises from the fact that University of Michigan employees David Blaauw, Dennis Sylvester, David Wentzloff, Prabal Dutta, ZhiYoong Foo, Gyouho Kim, Seok Hyeon Jeong and Yeejong Kim are stockholders of CubeWorks, Inc.

Authorization for the University to enter into a transact with Astronautical Development, LLC

An agreement with Astronautical Development, LLC was approved.

1. The parties to the contract are the Regents of the University of Michigan and its Department of Aerospace Engineering and Astronautical Development, LLC.
2. The agreement is for a one time purchase at a total cost not to exceed \$3,000. Astronautical Development, LLC will be supplying all the necessary resources and personnel to fulfill this contract. The remaining base contract terms and conditions are typical to those used in Procurement Services' standard templates for other similar contracts entered into by the regents.
3. The pecuniary interest arises from the fact that University of Michigan employee James W. Cutler is owner of Astronautical Development, LLC.

Authorization for the University to enter into a transact with Reames Consulting dba “Guideline Consulting”

An agreement with Reames Consulting dba “Guideline Consulting” was approved.

1. The parties to the contract are the Regents of the University of Michigan and its Museum of Natural History and Reames Consulting.
2. The agreement is for a duration of one year at a total cost not to exceed \$32,400. Reames Consulting will be supplying all the necessary resources and personnel to fulfill this contract. The remaining base contract terms and conditions are typical to those used in Procurement Services’ standard templates for other similar contracts entered into by the regents.
3. The pecuniary interest arises from the fact that University of Michigan employee Griffin Reames is owner of Reames Consulting.

Authorization for the University to transact with Harge Dance Stories

An agreement with Harge Dance Stories was approved.

1. The parties to the contract are the Regents of the University of Michigan, its Department of Dance and Harge Dance Stories.
2. The agreement is for a one time purchase at a total cost not to exceed \$1,720. Harge Dance Stories will be supplying all the necessary resources and personnel to fulfill this contract. The remaining base contract terms and conditions are typical to those used in Procurement Services’ standard templates for other similar contracts entered into by the regents.
3. The pecuniary interest arises from the fact that University of Michigan employee Jennifer Harge is owner of Harge Dance Stories.

Authorization for the University to transact with Shimmy Shack

An agreement with Shimmy Shack was approved.

1. The parties to the contract are the Regents of the University of Michigan, its Michigan Dining and Shimmy Shack.
2. The agreement is for a duration of three years at a total cost not to exceed \$100,000. Shimmy Shack will be supplying all the necessary resources and personnel to fulfill this contract. The remaining base contract terms and conditions are typical to those used in Procurement Services’ standard templates for other similar contracts entered into by the regents.
3. The pecuniary interest arises from the fact that University of Michigan employee Debra Levantrosser is owner of Shimmy Shack.

Option Agreement between the University of Michigan and Advanced Lidar Semantics, Inc.

An option agreement with Advanced Lidar Semantics, Inc. to option from the University of Michigan the university's rights associated with the following technologies was approved:

UM OTT File No. 6621 entitled, "Kirigami Nanocomposites";
UM OTT File No. 7574 entitled, "Materials-Sensing LIDARs for Robotics, Drones, and Vehicles with Different Degrees of Automation";
UM OTT File No. 2018-451 entitled, "Kirigami Chiroptical Modulators for Circular Dichroism Measurements in Terahertz and Other Parts of Electromagnetic Spectrum."

1. The parties to the contract are the Regents of the University of Michigan and Advanced Lidar Semantics, Inc.
2. Agreement terms include granting Advanced Lidar Semantics, Inc. an exclusive option for the next 12 months to obtain an exclusive license. Advanced Lidar Semantics, Inc. will pay an option fee and reimburse patent costs during this period. The university will retain ownership of the optioned technology and may continue to further develop it and use it internally. No use of university services or facilities, nor any assignment of university employees, is obligated or contemplated under the agreement. Standard disclaimers of warranties and indemnification apply, and the agreement 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.
3. The pecuniary interest arises from University of Michigan employee Nicholas Kotov's ownership interest in Advanced Lidar Semantics, Inc.

Research Agreement between the University of Michigan and Chalmers J. Lyons Academy of Oral and Maxillofacial Surgery

A research agreement with Chalmers J. Lyons Academy of Oral and Maxillofacial Surgery to fund a project entitled, "Use of Remotely Controlled Mandibular Positioner (RCMP) to Predict Treatment Outcomes of Maxillomandibular Advancement Surgery for Obstructive Sleep Apnea" (ORSP #19-PAF03914) was approved.

1. The parties to the contract are the Regents of the University of Michigan, its Department of Oral and Maxillofacial Surgery and Chalmers J. Lyons Academy of Oral and Maxillofacial Surgery.
2. The terms of the agreement conform to University policy. The period of performance for the project is approximately one (1) year. The amount of funding support will not exceed \$25,000. Since research projects are often amended, this agreement includes provisions for changes in time and scope. University procedures for approval of these changes will be followed and additional conflict of interest review will be done as appropriate.
3. The pecuniary interest arises from the fact that University of Michigan employee Dr.

Brent Ward is the treasurer of the board of directors of Chalmers J. Lyons Academy of Oral and Maxillofacial Surgery.

Research Agreement between the University of Michigan and ChemXLerate LLC

A research agreement with ChemXLerate LLC to amend a research agreement previously approved by the regents on October 15, 2015 to include the proposal entitled, “Quality Testing of Organic Solids 2018-2020” (ORSP #19-PAF03286) was approved.

1. The parties to the contract are the Regents of the University of Michigan, its Department of Chemistry and ChemXLerate LLC.
2. The terms of the amendment conform to university policy. The period of performance for the project is approximately two (2) years. The amount of funding support will be increased by \$26,619. Since research projects are often amended, this agreement includes provisions for changes in time and scope. University procedures for approval of these changes will be followed and additional conflict of interest review will be done as appropriate.
3. The pecuniary interest arises from the fact that University of Michigan employees Adam Matzger and Antek Wong-Foy are part owners of ChemXLerate LLC.

Sponsored Activity Agreement between the University of Michigan and the Cardiac Neurodevelopmental Outcome Collaborative

A sponsored activity agreement with Cardiac Neurodevelopmental Outcome Collaborative to fund a sponsored activity entitled, “CNOC – P4C Central Neurodevelopment Database Collaboration” (ORSP #19-PAF03331) was approved.

1. The parties to the contract are the Regents of the University of Michigan, its Department of Pediatrics and Cardiac Neurodevelopmental Outcome Collaborative.
2. The terms of the agreement conform to university policy. The period of performance for the project is approximately two (2) years. The amount of funding support will not exceed \$75,000. Since projects are often amended, this agreement includes provisions for changes in time and scope. University procedures for approval of these changes will be followed and additional conflict of interest review will be done as appropriate.
3. The pecuniary interest arises from the fact that University of Michigan employee Dr. Caren Goldberg is the co-chair of the Cardiac Neurodevelopmental Outcome Collaborative.

Research Agreement between the University of Michigan and Eli Lilly and Company

A research agreement with Eli Lilly and Company to fund a project entitled, “In-Vivo Predictive Methods to Mitigate Performance Issues Related to Gastric pH” (ORSP #19-PAF04808) was approved.

1. The parties to the contract are the Regents of the University of Michigan, its Department of Pharmaceutical Sciences and Eli Lilly and Company.
2. The terms of the agreement conform to university policy. The period of performance for the project is approximately eighteen (18) months. The amount of funding support will not exceed \$188,743. Since research projects are often amended, this agreement includes a provision for changes in time and scope. University procedures for approval of these changes will be followed and additional conflict of interest review will be done as appropriate.
3. The pecuniary interest arises from the fact that University of Michigan employee Dr. Marschall Runge is a paid member of the board of directors of Eli Lilly and Company.

Subcontract Agreement between the University of Michigan and Endectra, LLC

A subcontract agreement with Endectra, LLC to fund a NIH (prime) STTR Phase I project entitled, “Cerenkov Multi-Spectral Imaging (CMSI) for Adaptation and Real-Time Imaging in Radiotherapy” (ORSP #19-PAF03315) was approved.

1. The parties to the contract are the Regents of the University of Michigan, its Department of Radiation Oncology and Endectra, LLC.
2. The terms of the agreement conform to University policy. The period of performance for the project is approximately one (1) year. The amount of funding support will not exceed \$129,084. Since research projects are often amended, this agreement includes a provision for changes in time and scope. University procedures for approval of these changes will be followed and additional conflict of interest review will be done as appropriate.
3. The pecuniary interest arises from the fact that University of Michigan employee Roy Clarke is part owner of Endectra, LLC.

Option Agreement between the University of Michigan and Endovascular Engineering Inc.

An option agreement with Endovascular Engineering Inc. to option from the University of Michigan the university’s rights associated with the following technology was approved: UM OTT File No. 7305 entitled, “Aspiration Catheter”.

1. The parties to the contract are the Regents of the University of Michigan and Endovascular Engineering Inc.
2. Agreement terms include granting Endovascular Engineering Inc. an option with the right to negotiate an exclusive license. The university will retain ownership of the licensed technology and may continue to further develop it and use it internally. No use of university services or facilities, nor any assignment of university employees, is obligated or contemplated under the agreement. Standard disclaimers of warranties and indemnification apply, and the agreement 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.
3. The pecuniary interest arises from the fact that University of Michigan employee Dr. Luis Savastano is part owner of Endovascular Engineering Inc.

License Agreement between the University of Michigan and Good Business Analytics LLC

A license agreement with Good Business Analytics LLC to license from the University of Michigan the university's rights associated with the following technology was approved: UM OTT File No. 2019-217 entitled, "Psychometric Screening Tool for Hiring".

1. The parties to the contract are the Regents of the University of Michigan and Good Business Analytics LLC.
2. Agreement terms include granting Good Business Analytics LLC an exclusive license with the right to grant sublicenses. Good Business Analytics LLC will pay a royalty on sales. The university will retain ownership of the licensed technology and may continue to further develop it and use it internally. No use of university services or facilities, nor any assignment of university employees, is obligated or contemplated under the agreement. Standard disclaimers of warranties and indemnification apply, and the agreement 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.
3. The pecuniary interest arises from the fact that University of Michigan employee Achyuta Adhvaryu is part owner of Good Business Analytics LLC.

Research Agreement between the University of Michigan and The Hope Foundation

A research agreement with The Hope Foundation to fund a project entitled, "A Dyadic Survey Study of Colorectal Cancer Survivors and their Partners" (ORSP #19-PAF03364) was approved.

1. The parties to the contract are the Regents of the University of Michigan, its Department of Internal Medicine and The Hope Foundation.
2. The terms of the agreement conform to university policy. The period of performance for the project is approximately two (2) years. The amount of funding support will not exceed \$62,500. Since research projects are often amended, this agreement includes a provision for changes in time and scope. University procedures for approval of these changes will be followed and additional conflict of interest review will be done as appropriate.
3. The pecuniary interest arises from the fact that University of Michigan employee James Rae is the secretary of the board of directors for The Hope Foundation.

Research Agreement between the University of Michigan and The Hope Foundation

A research agreement with The Hope Foundation to fund a project entitled, "Central Processing of Biospecimens from the SWOG 8814 Clinical" (ORSP #19-PAF04074) was approved.

1. The parties to the contract are the Regents of the University of Michigan, its Department of Internal Medicine and The Hope Foundation.
2. The terms of the agreement conform to university policy. The period of performance for the project is approximately one (1) year. The amount of funding support will not exceed \$90,163. Since research projects are often amended, this agreement includes a provision for changes in time and scope. University procedures for approval of these changes will be followed and additional conflict of interest review will be done as appropriate.
3. The pecuniary interest arises from the fact that University of Michigan employee James Rae is the secretary of the board of directors for The Hope Foundation.

License Agreement between the University of Michigan and MemryX Inc.

A license agreement with MemryX Inc. to license from the University of Michigan the university's rights associated with the following technologies was approved:

UM OTT File No. 7123 entitled, "Field-Programmable Crossbar Array for Reconfigurable Computing";
UM OTT File No. 7427 entitled, "Sparse Coding with Memristor Networks";
UM OTT File No. 2018-329 entitled, "Memory Processing Unit (MPU)"; and
UM OTT File No. 2018-488 entitled, "General-Purpose Compute-SRAM for In-Memory Compute Applications."

1. The parties to the contract are the Regents of the University of Michigan and MemryX Inc.
2. Agreement terms include granting MemryX Inc. an exclusive license with the right to grant sublicenses. MemryX Inc. will pay a royalty on sales and reimburse patent costs. The university may receive equity in MemryX Inc., along with the right to purchase more equity. The university will retain ownership of the licensed technology and may continue to further develop it and use it internally. No use of university services or facilities, nor any assignment of university employees, is obligated or contemplated under the agreement. Standard disclaimers of warranties and indemnification apply, and the agreement 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.
3. The pecuniary interest arises from the fact that University of Michigan employees Wei Lu and Zhengya Zhang are part owners of MemryX Inc.

Subcontract Agreement between the University of Michigan and NOTA Laboratories LLC

A subcontract agreement with NOTA Laboratories LLC to fund a NIH (prime) SBIR Phase I project entitled, "Photochemical Generation of Gas Phase Nitric Oxide from Immobilized S-Nitrosothiols for Biomedical Applications" (ORSP #19-PAF03482) was approved.

1. The parties to the contract are the Regents of the University of Michigan, its Department of Chemistry and NOTA Laboratories LLC.
2. The terms of the agreement conform to University policy. The period of performance for the project is approximately one (1) year. The amount of funding support will not exceed \$50,838. Since research projects are often amended, this agreement includes a provision for changes in time and scope. University procedures for approval of these changes will be followed and additional conflict of interest review will be done as appropriate.
3. The pecuniary interest arises from the fact that University of Michigan employees Mark Meyerhoff, Dr. Mark Zacharek and Dr. Marc Hersenson are part owners of NOTA Laboratories LLC.

Research Agreement between the University of Michigan and Oncopia Therapeutics, LLC

A research agreement with Oncopia Therapeutics, LLC to amend a research agreement previously approved by the regents on March 29, 2018 to include the project entitled, "Oncopia: Development of protein degraders" (ORSP #19-PAF03446) was approved.

1. The parties to the contract are the Regents of the University of Michigan, its Department of Internal Medicine and Oncopia Therapeutics, LLC.
2. The terms of the amendment conform to university policy. The period of performance for the project is approximately twelve (12) months. The amount of funding support will be increased by \$2,400,000 and will not exceed \$3,600,000. Since research projects are often amended, this agreement includes provisions for changes in time and scope. University procedures for approval of these changes will be followed and additional conflict of interest review will be done as appropriate.
3. The pecuniary interest arises from the fact that University of Michigan employees Shaomeng Wang and Dr. Arul Chinnaiyan are part owners of Oncopia Therapeutics, LLC.

Subcontract Agreement between the University of Michigan and Prenovo

A subcontract agreement with Prenovo to fund a NIH (prime) STTR Phase I project entitled, "A robust platform for the assessment and management of Crohn's Disease patients" (ORSP #19-PAF01127) was approved.

1. The parties to the contract are the Regents of the University of Michigan, its Department of Internal Medicine and Prenovo.
2. The terms of the agreement conform to University policy. The period of performance for the project is approximately nine (9) months. The amount of funding support will not exceed \$46,278. Since research projects are often amended, this agreement includes a provision for changes in time and scope. University procedures for approval of these changes will be followed and additional conflict of interest review will be done as appropriate.
3. The pecuniary interest arises from the fact that University of Michigan employees Dr. Stewart Wang, Jane Sullivan and Nicholas Wang are part owners of Prenovo.

Research Agreement between the University of Michigan and PsiKick, Inc.

A research agreement with PsiKick, Inc. to fund a project entitled, “Industrial Application of Batteryless Wireless Sensors in Industrial Applications” (ORSP #19-PAF03635) was approved.

1. The parties to the contract are the Regents of the University of Michigan, its Department of Electrical Engineering and Computer Science and PsiKick, Inc.
2. The terms of the agreement conform to university policy. The period of performance for the project is approximately two (2) years. The amount of funding support will not exceed \$15,600. Since research projects are often amended, this agreement includes provisions for changes in time and scope. University procedures for approval of these changes will be followed and additional conflict of interest review will be done as appropriate.
3. The pecuniary interest arises from the fact that University of Michigan employee David Wentzloff is part owner of PsiKick, Inc.

License Agreement between the University of Michigan and S3D Precision Dispensing, Inc.

A license agreement with S3D Precision Dispensing, Inc. to license from the University of Michigan the university’s rights associated with the following technologies was approved: UM OTT File No. 5572 entitled, “An Integrated Electrohydrodynamic Jet Printhead for Flexible Micro/Nano-Manufacturing” and UM OTT File No. 7816 entitled, “Rapidly Wetted Pin Style Electrohydrodynamic Jet Printhead.”

1. The parties to the contract are the Regents of the University of Michigan and S3D Precision Dispensing, Inc.
2. Agreement terms include granting S3D Precision Dispensing, Inc. an exclusive license to the above technology from the university. The university will retain ownership of the licensed technology and may continue to further develop it and use it internally. No use of university services or facilities, nor any assignment of university employees, is obligated or contemplated under the agreement. Standard disclaimers of warranties and indemnification apply, and the agreement 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.
3. The pecuniary interest arises from the fact that University of Michigan employees Kira Barton and Lai Yu Leo Tse are part owners of S3D Precision Dispensing, Inc.

Subcontract Agreement between the University of Michigan and Soar Technology, Inc.

A subcontract agreement with Soar Technology, Inc. to fund a DARPA (prime) sponsored project entitled, “Serial Interactions in Imperfect Information Games Applied

to Complex Military Decision Making (SI3-CMD)” (ORSP #19-PAF02456) was approved.

1. The parties to the contract are the Regents of the University of Michigan, its Department of Computer Science and Engineering and Soar Technology, Inc.
2. The terms of the agreement conform to University policy. The period of performance for the project is approximately eighteen (18) months. The amount of funding support will not exceed \$400,000. Since research projects are often amended, this agreement includes a provision for changes in time and scope. University procedures for approval of these changes will be followed and additional conflict of interest review will be done as appropriate.
3. The pecuniary interest arises from the fact that University of Michigan employee John Laird is part owner of Soar Technology, Inc.

Subcontract Agreement between the University of Michigan and Therapeutic Systems Research Laboratories, Inc.

A subcontract agreement with Therapeutic Systems Research Laboratories, Inc. to fund a NIH (prime) SBIR Phase I project entitled, “A novel combination therapy to targeting biofilms in diabetic foot ulcer infections” (ORSP #19-PAF03761) was approved.

1. The parties to the contract are the Regents of the University of Michigan, its Department of Internal Medicine and Therapeutic Systems Research Laboratories, Inc.
2. The terms of the agreement conform to University policy. The period of performance for the project is approximately four (4) years. The amount of funding support will not exceed \$84,407. Since research projects are often amended, this agreement includes a provision for changes in time and scope. University procedures for approval of these changes will be followed and additional conflict of interest review will be done as appropriate.
3. The pecuniary interest arises from the fact that University of Michigan employees Gordon Amidon and Gregory Amidon are part owner and paid member of the board of directors, respectively, of Therapeutic Systems Research Laboratories, Inc.

Research Agreement between the University of Michigan and Xoran Technologies LLC

A research agreement with Xoran Technologies LLC to fund a project entitled, “Initial Clinical Validation of a Novel portable CT Scanner in the Neurological ICU” (ORSP #19-PAF04729) was approved.

1. The parties to the contract are the Regents of the University of Michigan, its Department of Neurosurgery and Xoran Technologies LLC.
2. The terms of the agreement conform to university policy. The period of performance for the project is approximately one (1) year. The amount of funding support will not exceed \$39,404. Since research projects are often amended, this agreement includes provisions for changes in time and scope. University procedures for approval of these changes will be followed and additional conflict of interest review will be done as appropriate.
3. The pecuniary interest arises from the fact that University of Michigan employee Neal

Clinthorne is part owner of Xoran Technologies LLC.

New Degree Program

On a motion by Regent Bernstein, seconded by Regent Behm, the regents unanimously approved the Doctor of Engineering and Automotive Systems and Mobility at UM-Dearborn, beginning in September 2019 as described.

Change in Name of an Existing Administrative Office

On a motion by Regent Ryder Diggs, seconded by Regent Behm, the regents unanimously approved a change in the name of the UM-Dearborn Office of the Provost and Vice Chancellor for Academic Affairs to the UM-Dearborn Office of the Provost and Executive Vice Chancellor for Academic Affairs, effective January 1, 2020.

Public Comment

The regents heard public comments from: Allie Parker, citizen, on medical practices; Matt Eckman, citizen, on bad science from the C.S. Mott Children's Hospital; Griffin St. Onge, student, on the One University campaign; Kimberly Daley, staff, on ethical food purchases; Arifad Javed, faculty, on the recent raise and its impact on LEO faculty; Jono Sturt, faculty, on the One University Coalition; Matthew Hoostal, staff, on food purchases to enhance humane labor conditions; Shane McParland, citizen, on ethical food purchases; and Madeline Cooke, student, on ethical food on campus.

Regent Weiser said, "On behalf of the board, I want to thank all the speakers for taking the time to come and share their views. These are complex issues and it is helpful for us to hear your thoughts."

Adjournment

The meeting was adjourned at 5:14 p.m. The next meeting will take place on March 28, 2019.