

MINUTES OF THE MEETING
OF THE
MICHIGAN STATE UNIVERSITY
BOARD OF TRUSTEES

September 8, 2016

President Simon called the meeting of the Board of Trustees to order at 9:30 a.m. in the Board Room.

Trustees present: Brian Breslin, Dianne Byrum, Joel Ferguson, Melanie Foster, Mitch Lyons, Brian Mosallam, George Perles, and Diann Woodard.

University officers present: President Simon, Provost and Executive Vice President Youatt, Executive Vice President Udpa, Vice President and Secretary Beekman, Vice President and General Counsel Noto, Vice Presidents Burnham, Gore, Groves, Haas, Hsu, Maybank, and Swain, Chief Investment Officer Zecher, Senior Advisor and Director Granberry Russell, and Associate Vice President and Interim Chief Information Officer McCurdy. Faculty liaisons present: Deborah Moriarty, Laura McCabe, Phylis Floyd, and Joseph Francese. Student liaisons present: Mariah Hill, Dee Jordan, Lorenzo Santavicca, and Angel Trevino.

All actions taken were by unanimous vote of the Trustees present, unless otherwise noted.

1. On a motion by Trustee Lyons, supported by Trustee Breslin, the **BOARD VOTED to approve** the agenda.
2. On a motion by Trustee Foster, supported by Trustee Lyons, the **BOARD VOTED to approve** the minutes of the June 15, 2016 Board of Trustees meeting.
3. President's Report

President Simon provided the following report to the Board.

A. University Achievements

Two MSU programs and 23 students have been awarded the national Presidential Volunteer Service Award, which honors volunteers who have set a standard for service and sustained commitment to civic participation.

The MSU College of Human Medicine has been selected as the winner of the 2016 AAMC Spenser Foreman Award for Outstanding

Community Service, recognizing a medical school for its commitment to community service and social needs, and evidence of a true partnership with the community.

B. Faculty and Staff Achievements

James McCusker, Professor of Chemistry in MSU's College of Natural Science, has been named a Fellow of the Royal Society of Chemistry. Joan Rose, a Professor of Fisheries and Wildlife in MSU's College of Agriculture and Natural Resources has won the 2016 Stockholm Water Prize, awarded by the King of Sweden.

MSU has earned gold status in the Veteran-Friendly School program, established by the Michigan Veterans Affairs Agency to recognize institutions of higher learning for their dedication to student veterans and dependents.

MSU's Office of Communications and Brand Strategy won both an Emmy Award and a Telly award this year.

C. Alumni Achievements

College of Music graduate Jonathan Kirkland will play George Washington in upcoming performances of the Broadway hit show Hamilton.

MSU graduate Steve Price and a team of 18 domino builders have set a world record for a circle field and an American record for total toppled dominoes. Price has appeared on TV shows such as, "America's Got Talent" and "The Rachael Ray Show."

D. Athletic Achievements

Emily Regan, a 2010 MSU graduate and 2010 Big Ten Rower of the Year, won a gold medal at the Summer Olympics in Brazil. Regan is the first former Spartan rower to win an Olympic gold medal.

Also winning gold, Draymond Green became the third Spartan to win an Olympic Gold Medal in men's basketball.

The Big Ten named Denzel Valentine the Jesse Owens Athlete of the Year. Valentine is the third Spartan to receive the honor.

4. Personnel Actions

Provost Youatt presented the following personnel actions:

Lyons, Thomas, AN – Professor, Department of Agricultural, Food and Resource Economics, \$205,000, with Tenure, effective September 1, 2016.

Einhorn, Todd C, AY- Associate Professor, Department of Horticulture, \$125,000, with Tenure, effective August 16, 2016.

Petchauer, Emery, AY – Associate Professor, Department of English; Teacher Education, \$83,000, with Tenure, effective August 16, 2016.

Wolfgang, Aurora, AY – Professor, Department of Romance and Classical Studies, \$95,000, with Tenure, effective August 16, 2016.

Banzhaf, Wolfgang, AY – Professor, John R Koza Chair in Genetic Programming, Department of Computer Science and Engineering, \$185,000, with Tenure, effective August 16, 2016.

Beauchamp, Norman, AN – Dean, College of Human Medicine; Professor, Department of Radiology, \$475,000, with Tenure, effective October 1, 2016.

Chen, Honglei, AY – Professor, Department of Epidemiology and Biostatistics, \$148,500, with Tenure, effective August 16, 2016.

Trustee Byrum **moved to approve** the recommendations, with support from Trustee Lyons.

THE BOARD VOTED to approve the resolution.

5. Gifts, Grants, and Contracts

Vice President Hsu, presented the Gifts, Grants, and Contracts Report for the period May 17, 2016 through August 8, 2016. The report is a compilation of 766 gifts, grants, and contracts, plus 64 consignment/non-cash gifts, with a total value of \$121,153,847.

Trustee Ferguson **moved to approve** the recommendation, with support from Trustee Breslin.

THE BOARD VOTED to approve the resolution.

Vice President Hsu introduced Marcos Dantus, a University Distinguished Professor and MSU Foundation Professor in the Departments of Chemistry

and Physics & Astronomy in the College of Natural Science. Professor Dantus made a presentation to the Board on biomedical imaging and diagnosis based on ultrafast lasers. (Appendix A)

6. Finance Committee

Trustee Foster presented the Trustee Finance Committee Report and recommendations.

A. 2017 Housing Rate Recommendations for 1855 Place and University Village Apartments

It was recommended that the Board of Trustees authorize the Administration to implement academic year 2017-18 apartment rates for 1855 Place and University Village Apartments.

BE IT RESOLVED, the Board of Trustees hereby adopts rates, effective August 1, 2017, for the new 1855 Place single student apartments of \$785 per person/per month for a four-bedroom efficiency unit, \$810 per person/per month for a four-bedroom flat unit, \$850 per person/per month for a four-bedroom townhouse apartment, \$875 per person/per month for a two-bedroom efficiency unit, \$895 per person/per month for a two-bedroom standard unit, and \$995 per person/per month for a studio unit; and

BE IT FURTHER RESOLVED, that the existing 1855 Place one-bedroom family apartment rate shall remain at \$800 per unit/per month, and the existing 1855 Place two-bedroom family apartment shall remain at \$925 per unit/per month; and

BE IT FURTHER RESOLVED, that the University Village single student apartment rate shall increase two percent to \$733 per person/per month for a four-bedroom unit.

Trustee Foster **moved to approve** the recommendations, with support from Trustee Mosallam.

THE BOARD VOTED to approve the resolution.

B. Fund Functioning as an Endowment—Schmidtke-Wagner Scholarship

It was recommended that the Board of Trustees establish a fund functioning as an endowment to provide support for scholarships to graduates of Menominee High School.

BE IT RESOLVED, that the Board of Trustees hereby establishes a fund functioning as an endowment entitled "Schmidtke-Wagner Scholarship".

Trustee Foster **moved to approve** the recommendation, with support from Trustee Ferguson.

THE BOARD VOTED to approve the resolution.

C. Sale of Membership Interest in Radiation Oncology Alliance

It was recommended that the Board of Trustees authorize the transfer of Michigan State University's membership interest in Radiation Oncology Alliance to McLaren Greater Lansing.

BE IT RESOLVED, that the Board of Trustees of Michigan State University hereby authorizes the transfer of Michigan State University's membership interest in Radiation Oncology Alliance to McLaren Greater Lansing for \$2.5 million and upon such other terms and conditions as may be acceptable to the Provost.

Trustee Foster **moved to approve** the recommendation, with support from Trustee Breslin.

THE BOARD VOTED to approve the resolution.

D. Purchase of Michigan State University Federal Credit Union Building-Crescent Road

It was recommended that the Board of Trustees authorize the purchase of the building owned by Michigan State University Federal Credit Union and located at 600 East Crescent Road, East Lansing, Michigan.

BE IT RESOLVED, that the Board of Trustees of Michigan State University hereby authorizes the Administration to purchase the building located at 600 East Crescent Road, East Lansing, Michigan, for \$5,000,000 and upon such other terms and conditions as may be acceptable to the Executive Vice President for Administrative Services.

Trustee Foster **moved to approve** the recommendation, with support from Trustee Lyons.

THE BOARD VOTED to approve the resolution.

E. Authorization to Plan—2016-2017 Major Maintenance Projects

It was recommended that the Board of Trustees authorize the Administration to plan for various major maintenance projects identified through the University's capital renewal and energy conservation programs.

BE IT RESOLVED, that the Board of Trustees of Michigan State University hereby authorizes the Administration to plan for the projects entitled "2016-2017 Major Maintenance Projects".

Trustee Foster **moved to approve** the recommendation, with support from Trustee Mosallam.

THE BOARD VOTED to approve the resolution.

F. Authorization to Plan—Parking Lot 92—Reconstruction and Expansion

It was recommended that the Board of Trustees authorize the Administration to plan for reconstruction and expansion of Parking Lot 92 to repair significant deterioration and expand capacity.

BE IT RESOLVED, that the Board of Trustees of Michigan State University hereby authorizes the Administration to plan for the project entitled "Parking Lot 92—Reconstruction and Expansion".

Trustee Foster **moved to approve** the recommendation, with support from Trustee Lyons.

THE BOARD VOTED to approve the resolution.

G. Project Approval—Authorization to Proceed—Data Center—Business Continuity and High Performance Computing

It was recommended that the Board of Trustees authorize the Administration to proceed with the construction of a data center and a related utility extension to address the University's needs for expanded compute capacity, better security, improved business continuity in the event of flooding, and high-performance research computing. This upgrade of the University's computing facilities is part of a balanced approach to improved technology support on

campus that also involves the use of cloud services and virtualization.

BE IT RESOLVED, that the Board of Trustees of Michigan State University hereby authorizes the Administration to proceed with the construction project entitled "Data Center—Business Continuity and High Performance Computing," with a total project budget of \$46,000,000. The budget is comprised of \$36,500,000 for construction, \$5,500,000 utility extension and a \$4,000,000 project contingency.

Trustee Foster **moved to approve** the recommendation, with support from Trustee Ferguson.

THE BOARD VOTED to approve the resolution.

Trustee Foster voiced her objection that the construction manager for the data center project is headquartered outside the State of Michigan. She further added that, in her time on the Board, contracting with out-of-state construction managers is unprecedented, and that in the future, she would like the Board to be more aware of the selection process for construction managers of major construction projects on campus.

Dan Bollman, Associate Vice President of Infrastructure Planning and Facilities, stated that while the construction manager is headquartered out-of-state, the subcontractors on the project are Michigan firms, and payments to those firms will represent a substantial portion of the budget.

7. Policy Committee

Trustee Byrum presented the Trustee Policy Committee Report and recommendations.

A. Faculty Member Dismissal for Cause

It was recommended that the Board of Trustees adopt the April 15, 2016 recommendation of the University Committee on Faculty Tenure ("UCFT") Dismissal for Cause Hearing Committee and that such personnel action be made effective immediately.

BE IT RESOLVED, that the Board of Trustees hereby adopts the April 15, 2016 recommendation of the UCFT Dismissal for Cause Hearing Committee; and be it further

RESOLVED, that the Board of Trustees directs the Provost to implement this personnel action immediately.

Trustee Byrum **moved to approve** the recommendation, with support from Trustee Lyons.

THE BOARD VOTED to approve the resolution.

B. Approval of Contract Terms

It was recommended that the Board of Trustees approve a contract between Michigan State University and *FreezeBack, LLC*, a company in which faculty member Dr. Jose Cibelli holds a financial interest.

BE IT RESOLVED, that the Board of Trustees of Michigan State University hereby approves a sponsored research agreement with *FreezeBack, LLC*, consistent with earlier public notice given at a Board meeting and with the "Sponsored Research Agreement Term Sheet" presented to the Board. (Appendix B)

It was recommended that the Board of Trustees approve a contract between Michigan State University and *FreezeBack, LLC*, a company in which faculty member Dr. Jose Cibelli holds a financial interest.

BE IT RESOLVED, that the Board of Trustees of Michigan State University hereby approves a rights allocation agreement with *FreezeBack, LLC*, consistent with earlier public notice given at a Board meeting and with the "Rights Allocation Agreement Term Sheet" presented to the Board. (Appendix C)

It was recommended that the Board of Trustees approve a contract between Michigan State University and *Essence Health, LLC*, a company in which faculty member Dr. Ramakrishna Mukkamala holds a financial interest.

BE IT RESOLVED, that the Board of Trustees of Michigan State University hereby approves an option agreement with *Essence Health, LLC*, consistent with earlier public notice given at a Board meeting and with the "Option Agreement Term Sheet" presented to the Board. (Appendix D)

It was recommended that the Board of Trustees approve an option agreement between Michigan State University and *Piezonix, LLC*, a company in which faculty member Dr. Nizar Lajnef holds a financial interest.

BE IT RESOLVED, that the Board of Trustees of Michigan State University hereby approves an option agreement with *Piezonix, LLC*; consistent with earlier public notice given at a Board meeting and with the "Option Agreement Term Sheet" presented to the Board. (Appendix E)

Trustee Byrum **moved to approve** the recommendations, with support from Trustee Lyons.

THE BOARD VOTED to approve the resolutions.

G. Notice of Intent to Negotiate Contracts

Pursuant to State law, Trustee Byrum gave public notice of the University's intent to negotiate contracts with *non sequitur media, LLC*, a Michigan limited liability company. Dr. Mark Sullivan, an Associate Professor in the Department of Music, and members of his family have, or have options to buy, an interest in the company.

Pursuant to State law, Trustee Byrum gave public notice of the University's intent to negotiate contracts with *Photography Associates, Inc.*, a Michigan corporation. Dr. Peter Glendinning, a Professor in the Department of Art, Art History, and Design, and members of his family have, or have options to buy, an interest in the company.

Pursuant to State law, Trustee Byrum gave public notice of the University's intent to negotiate contracts with Rajmohan Gandhi, Visiting Hannah Distinguished Professor in the James Madison College.

Pursuant to State law, Trustee Byrum gave public notice of the University's intent to negotiate contracts with *Talapo Therapeutics, Inc.*, a Delaware corporation. Dr. Erik Martinex, an Assistant Professor in the Department of Biochemistry, and members of his family have, or have options to buy, an interest in the company.

8. Audit Committee

Trustee Breslin reported that while the Audit Committee does not have any action items at this time, it did receive an overview of the functions of the Internal Audit office and reviewed that office's audit plan for the coming year. The Committee also reviewed key areas of risk for the University with Internal Audit Director Marilyn Tarrant. Trustee Breslin also reported that the Committee received information about the athletic department's compliance with NCAA rules.

9. Trustee Comments

Trustee Ferguson commented on the high caliber of the meeting and spoke about the impact the MSU has on the world.

Trustee Woodard commended Dr. Dantus on his excellent presentation to the Board and expressed her excitement for the upcoming academic year.

Trustee Mosallam thanked Dr. Dantus for his presentation and congratulated the Spartans who won Olympic gold in Rio. He also welcomed Rob McCurdy, the Interim Chief Information Officer.

Trustee Foster congratulated Jim Cotter and the Office of Admissions for the work of admitting the Class of 2020, noting that over 70 percent of undergraduate students are Michigan residents. Trustee Foster also welcomed Rob McCurdy and extended her best wishes to the students, faculty, administration, and staff for the upcoming academic year.

Trustee Byrum welcomed everyone back to MSU for the academic year and also expressed her excitement about the upcoming academic conference.

Trustee Perles expressed his excitement for both the academic and athletic aspects of the upcoming academic year.

Trustee Breslin commended Professor Bruce Dale for his July 11, 2016 article in the Wall Street Journal, in which Dr. Dale defended American agriculture.

Trustee Lyons thanked Vice Presidents Gore, Maybank, and Swain as well as Dr. Dantus for their presentations.

10. There was no Public Participation on Issues Not Germane to the Agenda.

11. Request to Adjourn

On a motion by Trustee Lyons, supported by Trustee Ferguson, **THE BOARD VOTED to adjourn** at 10:55 p.m.

Respectfully submitted,



William R. Beekman
Vice President and Secretary of the Board of Trustees

APPENDIX A

**RESEARCH
PRESENTATION
TO THE MSU BOARD OF TRUSTEES**

SEPTEMBER 8, 2016

**MARCOS DANTUS
COLLEGE OF NATURAL SCIENCE**

Facilitated by the Office of the Vice President for
Research and Graduate Studies

Marcos Dantus

Marcos Dantus, a University Distinguished Professor and MSU Foundation Professor in the Departments of Chemistry and Physics & Astronomy, has pioneered the use of spectrally and temporally shaped ultrafast laser pulses.

Dantus, who joined MSU in 1993, received his doctorate from the California Institute of Technology in 1991 and worked with A. H. Zewail (1999 Nobel Prize in Chemistry recipient) on the development of Femtosecond Transition State Spectroscopy, now known as Femtochemistry. Dantus' development of an instrument capable of automated laser pulse compression is enabling research around the world as well as novel fiber-laser designs.

At MSU, Dantus has published more than 200 scholarly articles and has been issued 25 patents. He is a member of the National Academy of Inventors, and a fellow of both the Optical Society of America and the Physics Society of America. He regularly collaborates with different branches of the U.S. Department of Defense, and has collaborations with Harvard, UC Irvine, and Case Western medical clinics.

Presentation for the MSU Board of Trustees, September 8, 2016

Biomedical imaging and diagnosis based on ultrafast lasers



Marcos Dantus

dantus@msu.edu

MICHIGAN STATE
UNIVERSITY



Development of a new ultrafast laser sources at MSU

Collaboration with Prof. F. Wise from Cornell U.

More than 20 issued MSU patents

Technology commercialized

MIIPS® Box
Biophotonic Solutions Inc.

Fiber laser oscillators capable of generating 35fs pulses

Application: Biomedical Imaging

- **Skin cancer** (most common cancer in the US)
- **Breast cancer margins** (1/4 M new cases per year in the US)*
- **Retinal disease** (diabetic retinopathy affects 4M people in the US, macular degeneration affects 8M in the US)**

The three projects use the same laser, similar technology, and are compatible with the Cancer Moonshot initiative announced by President Obama in 2016

*SEER Stat Fact Sheets: Female Breast Cancer; <http://seer.cancer.gov/statfacts/html/breast.html>

**Statistics and Data, Prevalence of Blindness Data; https://nei.nih.gov/eyedata/pbd_tables

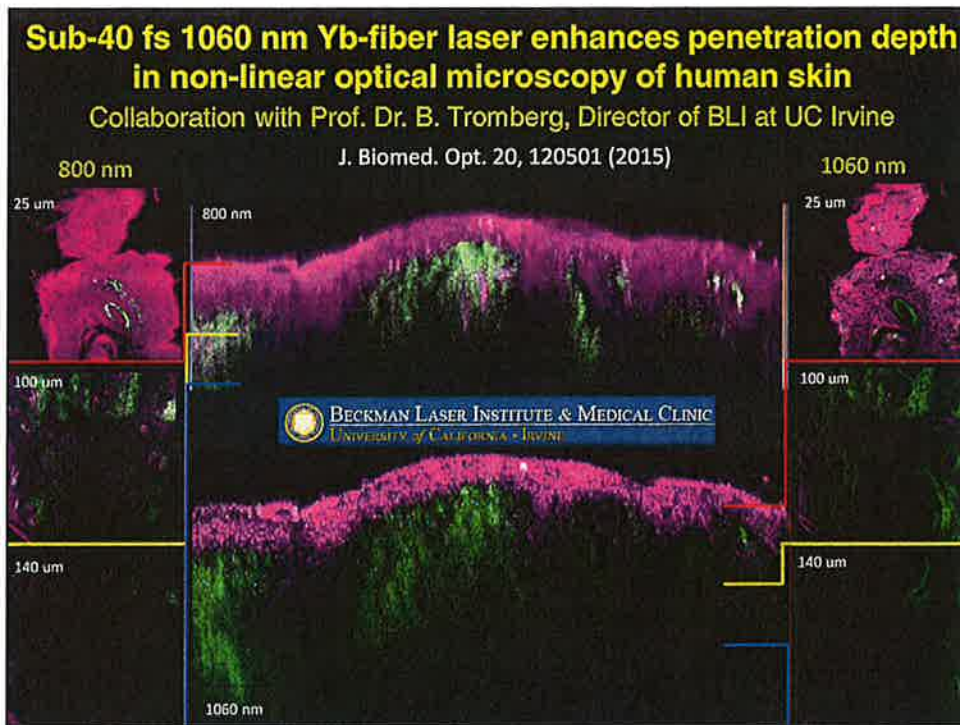
Toward Optical Biopsies

Motivation: Presently it can take a month between initial visual inspection of a mole to surgical removal. The biopsy report, which can take an extra week, is based purely on cell morphology.



Melanoma
www.cancernews.com

The need: "Information rich" imaging that depends on chemical composition! Ideally it can take place at the clinic and is available upon initial visit.

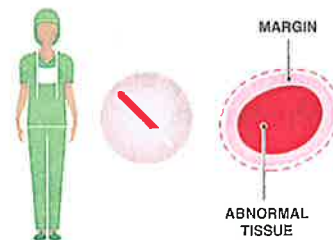


Better Margin Detection

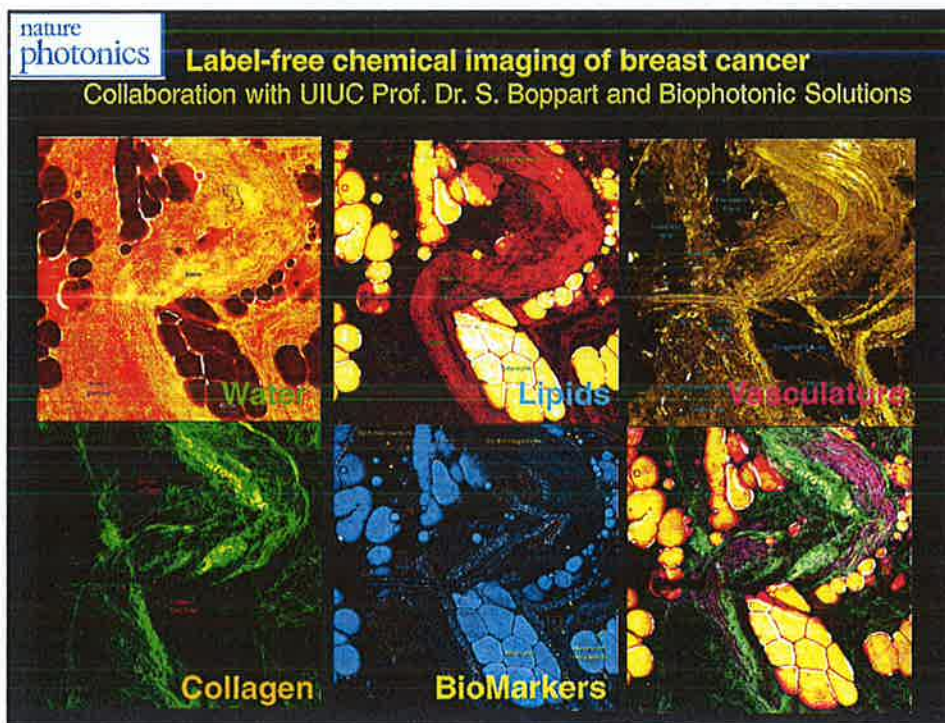
Motivation: Presently the pathologist determines if the tumor has been completely removed based on microscopic analysis of slides.

The need: "Information rich" imaging that depends on chemical composition! Ideally taking place during the surgery.

SURGERY OFTEN INVOLVES REMOVING THE TUMOR AND NEARBY MARGINS.



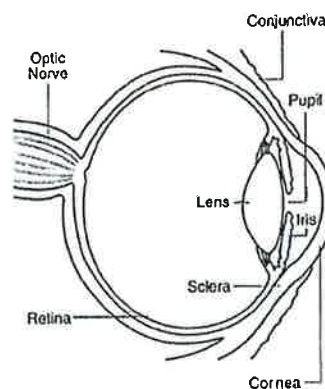
<http://www.nationalbreastcancer.org/breast-cancer-surgery>



Retinal Disease Diagnosis

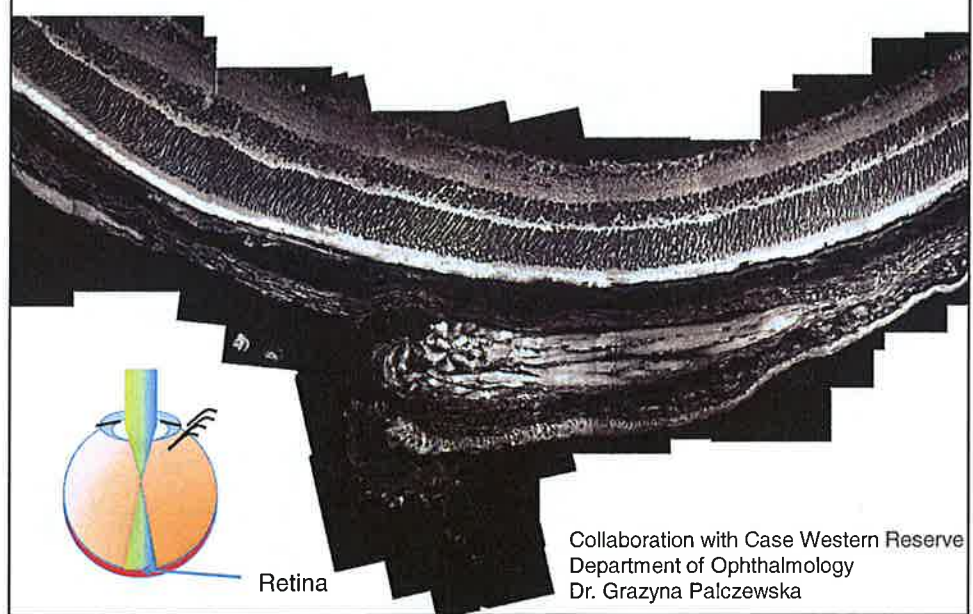
Motivation: Presently retinal imaging does not provide cellular morphology or chemical information.

The need: "Information rich" imaging that depends on chemical composition! Ideally the same laser can be used for the therapy.



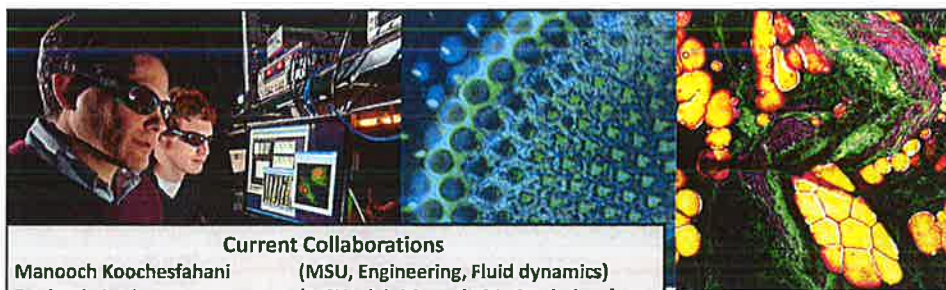
<https://nei.nih.gov/health/dryeye/dryeye>

Retinal Imaging and Diagnosis



Retinal Imaging and Diagnosis



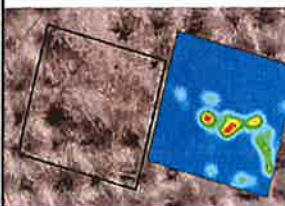


Current Collaborations

Manooch Koochesfahani	(MSU, Engineering, Fluid dynamics)
Benjamin Levine	(MSU, ab initio and MD simulations)
Ned Jackson	(MSU, organic chemistry)
Gavin Reid	(MSU, Chemistry, Proteomics)
Chong-Yu Ruan	(MSU, ultrafast electron diffraction)
Warren Beck	(MSU, Multidimensional Microscopy)
<u>Arnoczky, Steven</u>	<u>(MSU, Chair of Vet. Surgery)</u>
<u>Dana Spence</u>	<u>(MSU, Chemistry, blood)</u>
Rebecca Anthony	(MSU, Engineering, nanoparticles)
Gary Blanchard	(MSU, Chemistry, Impact sensing)
David Kaufman	(MSU, Neurology, concussion)
Grazyna Palczewska	(Case Western Reserve, Ophthalmology)
Bruce Tromberg	(UC Irvine, Beckman Laser Institute)
Sunney Xie	(Harvard, SRS microscopy)
Conor Evans	(Harvard, Biomedical imaging)
Frank Wise	(Cornell, fiber laser design)
Stephen Boppart	(UIUC, femtosecond endoscopy)

Additional collaborations through Biophotonic Solutions Inc.

Towards diagnosis and treatment with ultrafast lasers



Working with a diverse team



20 Post docs
 31 Graduate students
 52 Undergraduates
 6 High school students



SPONSORED RESEARCH AGREEMENT TERM SHEET

Party: FreezeBack, LLC

Agreement: Subcontract under the National Institutes of Health (grant number TBD, prime award from Grant Application No. 143125): Sponsored Research Agreement Subcontract: "(STTR Phase I) Cryopreservation and Cloning of Somatic Cells to Preserve Zebrafish Germplasm"

Term: Effective date to May 31, 2017

Payment Terms: MSU awarded \$97,700 in reimbursements under the grant for services provided

Services Provided:

By MSU to FreezeBack, LLC: Collection of somatic cells from zebrafish embryos, store in liquid nitrogen, recover live fish by thawing the somatic cells as donor cells in somatic cell nuclear transfer (SCNT), grow cloned embryos

By FreezeBack, LLC to MSU: None contemplated under agreement

Use of University Facilities/ Personnel: Dr. Jose Cibelli, a Professor in the Department of Animal Science, will provide the services described above.

Organization Type: Michigan limited liability company

Personnel Interest: Dr. Jose Cibelli, a Professor in the Department of Animal Science, and members of his family own or have options to buy an ownership interest of more than 1% of the company.

RIGHTS ALLOCATION AGREEMENT TERM SHEET

Party:	FreezeBack, LLC
Agreement:	Allocation of rights in intellectual property and rights to carry out follow-on research, development, or commercialization. This agreement is required by the National Institutes of Health under the Prime Award (grant number TBD) from Grant Application No. 143125 and relates to Sponsored Research Agreement (SRA) Subcontract: "(STTR Phase I) Cryopreservation and Cloning of Somatic Cells to Preserve Zebrafish Germplasm".
Term:	Concurrent with the SRA Subcontract term - Effective date to May 31, 2017
Payment:	Payment terms are included in the Sponsored Research Agreement Term Sheet between FreezeBack, LLC and MSU.
Rights Allocation:	Ownership of intellectual property rights created under the Subcontract described above shall be consistent with MSU's patent and copyright policies.
Organization Type:	Michigan limited liability company
Personnel Interest:	Dr. Jose Cibelli, a Professor in the Department of Animal Science, and members of his family own or have options to buy an ownership interest of more than 1% of the company.

OPTION AGREEMENT TERM SHEET

Party: Essence Health, LLC

Option: Exclusive option on patent rights

Term: Eighteen months from the effective date of the agreement

Technology: MSU Invention Disclosure Nos.: TEC2013-0021
Methods and Apparatus for Determining Cuff Blood Pressure, US patent application Serial No. 14/012,124

TEC2016-0022 Methods and Apparatus for Determining Cuff Blood Pressure, US provisional patent application Serial No. 62/217,331

TEC2016-0082 Method of Cuff-less Blood Pressure Measurements, US provisional patent application Serial No. 62/303,074

The parties may add or remove technologies under the agreement, including improvements generated under a separate sponsored research agreement, provided that the change does not affect the financial consideration of the parties or the nature or extent of any pecuniary interest of MSU personnel.

Technology's Potential Commercial Utilization: Hemodynamic monitoring, including blood pressure monitoring

Payment Terms: \$20,000 payable to MSU

Services Provided: By MSU to Essence Health, LLC: None
By Essence Health, LLC to MSU: None

Use of University Facilities/Personnel: None

Organization Type: Delaware corporation

Personnel Interest: Dr. Ramakrishna Mukkamala, Professor in the Department of Electrical and Computer Engineering, and members of his family own or have options to buy an equity interest of more than 1% of the company.

OPTION AGREEMENT TERM SHEET

Party: Piezonix, LLC

Option: Exclusive option on patent rights

Term: Twelve months from the effective date of the agreement

Technology: MSU Invention Disclosure Nos. TEC2006-0098 and TEC 2009-0014, both entitled "Self-Powered Sensor"; U.S. Patent Nos. 7,757,565 and 8,056,420 both entitled "Self-Powered Sensor"

The parties may add or remove technologies under the agreement, including improvements generated under a separate sponsored research agreement, provided that the change does not affect the financial consideration of the parties or the nature or extent of any pecuniary interest of MSU personnel.

Technology's Potential Commercial Utilization: Self-powered monitors attached to, or embedded in, structural materials or components for monitoring stress history of the materials or components

Payment Terms: \$1,000 up front fee payable to MSU

Services Provided: By MSU to Piezonix, LLC: None contemplated under agreement
By Piezonix, LLC to MSU: None contemplated under agreement

Use of University Facilities/Personnel: None

Organization Type: Michigan limited liability company

Personnel Interest: Dr. Nizar Lajnef, an Associate Professor in the Department of Civil and Environmental Engineering, and members of his family own or have options to buy an equity interest of more than 1% of the company.