

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

August 31, 2018

President Engler called the meeting of the Board of Trustees to order at 8:00 a.m. in the Board Room.

Trustees present: Brian Breslin, Joel Ferguson, Melanie Foster, Dan Kelly, Mitch Lyons, Brian Mosallam, George Perles (via phone).

Trustee absent: Dianne Byrum

University officers present: President Engler, Provost and Executive Vice President Youatt, Executive Vice Presidents Udpa and Wilbur, Secretary Barr, Vice President and General Counsel Young, Vice Presidents Gore, Guerrant, Haas, Hsu, Maybank, and Swain, and Senior Advisor and Director Granberry Russell. Faculty liaisons present: Jennifer Johnson, Rob LaDuca, Deborah Moriarty. Student liaisons present: Ben Burke, Ten-niah Kinney, James Liu, and Katherine Rifiotis.

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

1. On a motion by Trustee Breslin, supported by Trustee Foster, the **BOARD VOTED to approve** the agenda.
2. On a motion by Trustee Kelly, supported by Trustee Breslin, the **BOARD VOTED to approve** the minutes of the June 22, 2018 and July 17, 2018 Board of Trustees meetings.

3. Personnel Action

President Engler presented the following personnel action.

Barr, Nakia, AN – Assistant General Counsel, for an additional title of Secretary of the Board of Trustees, Executive Management, effective August 31, 2018.

On a motion by Trustee Foster, supported by Trustee Mosallam, the **BOARD VOTED to approve** the action.

4. Public Participation

- A. Edward Aboufadel
- B. Grace French
- C. Natalie Venuto Hawkins
- D. Joan Meinke
- E. John Nevin

5. President's Report

President Engler provided the following report to the Board.

A. University Achievements

MSU's campus is a lot busier and louder as approximately 8,400 freshmen arrived Saturday to begin their journeys as Spartans. They were joined by returning students on Monday for a total of more than 15,000 students living on campus during the 2018-2019 academic year. Spartan Spectacular was held on August 28 and included a welcome back cookout and student organization fair.

This year's incoming class is MSU's largest and most diverse, with increased enrollment for African-American, Hispanic and Asian students. More than 76 percent of the new students are from Michigan and the median GPA is 3.77.

Twenty-two incoming students have been awarded scholarships to cover full tuition, room and board and a stipend for up to eight semesters of undergraduate study at Michigan State University. The scholarships, considered among the most competitive awards in the country, are valued at approximately \$120,000 for in-state students and \$220,000 for out-of-state students.

A space that once powered the university will soon empower students for generations to come. Today at 1:30 p.m., MSU will break ground on the new STEM Teaching and Learning Facility. The new structure at Shaw Lane and Red Cedar Road will include modern teaching laboratories that incorporate active learning principles and foster cross-disciplinary teaching and learning, as well as support developing and evolving changes in related curriculum and its delivery. This completes a trio of building projects started since the last meeting, including the Music Pavilion and Water Treatment Plant.

B. Student Achievements

Maeve Geary, a senior hospitality business student in the Eli Broad College of Business, earned the Statler Foundation Scholarship of Excellence. This is the seventh consecutive year that the Statler Foundation has recognized a Michigan State University student as the recipient. The national scholarship is awarded to students enrolled full-time in a hotel management program and planning to pursue a career in hospitality after graduating.

C. Faculty and Staff Achievements

Catherine Ryu, MSU associate professor of Japanese literature, received the prestigious 2018 Esperanto "Access to Language Education" Award, presented by CALICO (the Computer Assisted Language Consortium), the Esperantic Studies Foundation, and Lernu.net, for her online database of the Mandarin language, Tone Perfect. The app and database come from Ryu's 2015 Tone Perception and Efficacy Study where Ryu and her team studied the perception of tonal differences.

D. Athletics

On August 21, thousands of Michigan State fans filled the concourse at Spartan Stadium for the 16th annual "Meet the Spartans." The event gave Spartan fans the chance to meet the entire 2018 Michigan State football team and receive autographs from players and head coach Mark Dantonio. Fans also toured the press box, visited the Spartan Stadium field and met with Sparty and the Spartan cheerleaders and dance team.

The 2018 football season kicks off tonight at Spartan Stadium against the Utah State Aggies. Best of luck to MSU's Spartans!

6. Gift, Grant, and Contract Report

Vice President Hsu presented the Gifts, Grants, and Contracts Report for the period May 22, 2018 through August 3, 2018. The report is a compilation of 667 gifts, grants, and contracts plus 48 consignment/non-cash gifts, with a total value of \$155,049,062.

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

THE BOARD VOTED to approve the recommendation.

Vice President Hsu introduced Dr. Ingo Braasch, Assistant Professor of Integrative Biology. Professor Braasch gave a presentation on Evolution, Development, and Disease (Appendix A).

7. Personnel Actions and Information Reports

Provost Youatt presented the following personnel actions.

Brooks, Kinitra, AY-Associate Professor, Department of English, with Tenure, effective August 16, 2018.

Grant, Darren, AY-Professor, Department of Physics and Astronomy, with Tenure, effective October 1, 2018.

Kao, Tsui-Sui, AY– Associate Professor, College of Nursing, with Tenure, effective August 16, 2018.

Kopper, Claudio, AY-Associate Professor, Department of Physics and Astronomy, with Tenure, effective October 1, 2018.

Kronenberg, Felix, AN– Associate Professor, Department of Linguistics and Germanic, Slavic, Asian & African Languages, with Tenure, effective August 16, 2018.

Savolainen, Peter, AY– MSU Foundation Professor, Department of Civil and Environmental Engineering, with Tenure, effective August 31, 2018.

Other Personnel Actions

Largent, Mark, AN – Associate Dean, Associate Provost for Undergraduate Education, for a change in title to Interim Associate Provost for Undergraduate Education and Interim Dean of Undergraduate Studies, Executive Management, effective September 1, 2018.

Quinn, Brian, AN – Senior Associate General Counsel, for a change in title to Acting Deputy General Counsel, Executive Management, effective August 31, 2018.

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

THE BOARD VOTED to approve the recommendations.

8. Consent Agenda

To expedite the business of the Board and focus energies on items of greatest importance, the Board adopted a consent agenda that included the following items.

A. Committee on Budget and Finance (items i, ii, iii, and vii)

i. Committee on Budget and Finance Charter

It was recommended that the Board of Trustees ratify the Committee on Budget and Finance Charter for fulfilling its responsibilities with respect to matters relating to the budget and finances of the University.

BE IT RESOLVED, that the Board of Trustees of Michigan State University ratifies the Committee on Budget and Finance Charter for fulfilling its responsibilities with respect to matters relating to the budget and finances of the University.

ii. Amendment to Fund Functioning as an Endowment Harris "Frank" Beeman Scholarship

It was recommended that the Board of Trustees amends the eligibility criteria of a fund functioning as an endowment in the Department of Recreational Sports and Fitness Services.

BE IT RESOLVED, that the Board of Trustees of Michigan State University hereby amends the eligibility criteria of the fund functioning as an endowment entitled "Harris 'Frank' Beeman Scholarship."

iii. Long-Term Lease with the State of Michigan Department of Agriculture and Rural Development (Geagley Laboratory)

It was recommended that the Board of Trustees approve entering into a lease agreement with the State of Michigan Department of Agriculture and Rural Development (MDARD) for the buildings and land associated with the current Geagley Laboratory located at 1615 S. Harrison Road in East Lansing, Michigan.

BE IT RESOLVED, that the Board of Trustees of Michigan State University hereby authorizes the Administration to enter into a long-term lease agreement with the State of Michigan Department of Agriculture and Rural Development for a term that may exceed ten

years, and upon such other terms and conditions as may be acceptable to the Executive Vice President for Administrative Services.

- vii. Project Approval – Authorization to Proceed - Incinerator Storage Building (*landscape change*)

It was recommended that the Board of Trustees authorize the Administration to proceed with construction of a storage building to house university generated containerized materials readied for incineration.

BE IT RESOLVED, that the Board of Trustees of Michigan State University hereby authorizes the Administration to proceed with the project entitled "Incinerator Storage Building."

B. Committee on Academic Affairs (items i, iii, v, and vi)

- i. Committee on Academic Affairs Charter

It was recommended that the Board of Trustees ratify the Committee on Academic Affairs Charter for fulfilling its responsibilities with respect to matters relating to academic affairs at the University and upholding the mission of offering undergraduate and graduate education of the highest possible quality, encouraging meaningful research and experimentation, and diffusing knowledge and information.

BE IT RESOLVED, that the Board of Trustees ratifies the Committee on Academic Affairs Charter for fulfilling its responsibilities with respect to matters relating to academic affairs at the University and upholding the mission of offering undergraduate and graduate education of the highest possible quality, encouraging meaningful research and experimentation, and diffusing knowledge and information.

- iii. Change of Name: Muck Soils Research Farm (MSRF) to the Corey Marsh Ecological Research Center (CMERC)

It was recommended that the Board of Trustees approve changing the name of the Muck Soils Research Farm (MSRF) to the Corey Marsh Ecological Research Center (CMERC).

BE IT RESOLVED, that the Board of Trustees of Michigan State University hereby approves changing the name of the Muck Soils

Research Farm (MSRF) to the Corey Marsh Ecological Research Center (CMERC).

v. Renumbering of Policies for Creation of Policy Library

It was recommended that the Board of Trustees authorize the renumbering of University policies to facilitate the creation of a University Policy Library.

BE IT RESOLVED, that the Board of Trustees hereby authorizes the renumbering of University policies to facilitate the creation of a Policy Library.

vi. Change of Name: Cook Hall to Cook-Seevers Hall

It was recommended that the Board of Trustees approve changing the name of Cook Hall to Cook-Seevers Hall.

BE IT RESOLVED, that the Board of Trustees of Michigan State University hereby approves changing the name of Cook Hall to Cook-Seevers Hall.

C. Committee on Audit, Risk and Compliance (items i, ii, and iii)

i. Committee on Audit, Risk, and Compliance Charter

It was recommended that the Board of Trustees ratify the Committee on Audit, Risk, and Compliance charter for fulfilling its responsibilities with respect to matters relating to risk and compliance at the University and providing oversight for University risk management in order to drive accountability across entire community.

BE IT RESOLVED, that the Board of Trustees ratifies the Committee on Audit, Risk, and Compliance charter for fulfilling its responsibilities with respect to matters relating to risk and compliance at the University and providing oversight for University risk management in order to drive accountability across entire community.

ii. Approval of Contract Terms

a. *Cultural Intelligence Center, LLC*

It was recommended that the Board of Trustees approve a contract between Michigan State University and *Cultural*

Intelligence Center, LLC, a company in which MSU faculty member Dr. Linnea Van Dyne holds a financial interest.

BE IT RESOLVED, that the Board of Trustees of Michigan State University hereby approves a service agreement with *Cultural Intelligence, LLC*, consistent with earlier public notice given at a Board meeting and with a "Services Agreement Term Sheet" presented to the Board for inclusion in its minutes. (Appendix B)

b. *FibrosIX, LLC*

It was recommended that the Board of Trustees approve a contract between Michigan State University and *FibrosIX, LLC*, a company in which MSU faculty member Dr. Richard R. Neubig holds a financial interest.

BE IT RESOLVED, that the Board of Trustees of Michigan State University hereby approves a service agreement with *FibrosIX, LLC*, consistent with earlier public notice given at a Board meeting and with a "Services Agreement Term Sheet" presented to the Board for inclusion in its minutes. (Appendix C)

c. *Scion Plasma, LLC*

It was recommended that the Board of Trustees approve a contract between Michigan State University and *Scion Plasma, LLC*, a company in which MSU faculty member Dr. Qi Hua Fan holds a financial interest.

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

d. *Shape Scientific, Inc.*

It was recommended that the Board of Trustees approve a contract between Michigan State University and *Shape Scientific, Inc.* a company in which MSU faculty members Dr.

Erik Shapiro and Dr. Shatadru Chakavarty hold a financial interest.

BE IT RESOLVED, that the Board of Trustees of Michigan State University hereby approves an option agreement with *Shape Scientific, Inc.* consistent with earlier public notice given at a Board meeting and with an "Option Agreement Term Sheet" presented to the Board for inclusion in its minutes. (Appendix E)

e. Talapo Therapeutics, Inc.

It was recommended that the Board of Trustees approve a contact between Michigan State University and *Talapo Therapeutics, Inc.*, a company in which faculty member Dr. Erik Martinez Hackert holds a financial interest.

BE IT RESOLVED, that the Board of Trustees of Michigan State University hereby approves a sponsored research agreement with *Talapo Therapeutics, Inc.*, consistent with earlier public notice given at a Board meeting and with a "Sponsored Research Agreement Term Sheet" presented to the Board for Inclusion in its minutes. (Appendix F)

iii. Notice of Intent to Negotiate Contracts

a. *Orasis Systems, Inc.*

Pursuant to State law, the Chair of the Trustee Committee on Audit, Risk and Compliance is requested to give public notice of the University's intent to negotiate contracts with *Orasis Systems, Inc.*, a Michigan corporation. Dr. Jeffrey Nanzer, Assistant Professor in the Department of Electrical and Computer Engineering, and Dr. John Papapolymerou, Chairperson and Professor in the Department of Electrical and Computer Engineering, and members of their families, have, or have options to buy, an interest in the company.

b. *Protective Environmental Coatings, LLC*

Pursuant to State law, the Chair of the Trustee Committee on Audit, Risk and Compliance is requested to give public notice of the University's intent to negotiate contracts with *Protective Environmental Coatings, LLC*, a Michigan limited liability company. Dr. Protective Muhammad Environmental

Rabnawaz, Coatings, Assistant LLC, Professor in the School of Packaging and members of his family, have, or have options to buy, an interest in the company.

D. Committee on Student Life and Culture

i. Committee on Student Life and Culture Charter

It was recommended that the Board of Trustees ratify the Committee on Student Life and Culture Charter for fulfilling its responsibilities with respect to matters relating to student life and culture at the University, including physical, emotional, and mental health and on and off campus safety.

BE IT RESOLVED, that the Board of Trustees ratifies the Committee on Student Life and Culture Charter for fulfilling its responsibilities with respect to matters relating to student life and culture at the University, including physical, emotional, and mental health and on and off campus safety.

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

THE BOARD VOTED to approve the resolutions.

9. Budget and Finance Committee

Trustee Foster presented the following Trustee Committee on Budget and Finance Report and recommendations.

A. Authorization to Plan- Hidden Lake Gardens – Observation Tower and Tree Canopy Walk

It was recommended that the Board of Trustees authorize the Administration to plan for construction of an observation tower and tree canopy walk.

BE IT RESOLVED, that the Board of Trustees of Michigan State University hereby authorizes the Administration to plan for the project entitled "Hidden Lake Gardens - Observation Tower and Tree Canopy Walk."

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

THE BOARD VOTED to approve the resolution.

B. Authorization to Plan- Munn Ice Arena - Expansion

It was recommended that the Board of Trustees authorize the Administration to plan for an addition to Munn Ice Arena.

BE IT RESOLVED, that the Board of Trustees of Michigan State University hereby authorizes the Administration to plan for the project entitled "Munn Ice Arena - Expansion."

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

THE BOARD VOTED to approve the resolution.

C. Authorization to Plan: Old College Field – Install Field Lighting

It was recommended that the Board of Trustees authorize the Administration to plan for new lighting at the intercollegiate softball and baseball stadiums.

BE IT RESOLVED, that the Board of Trustees of Michigan State University hereby authorizes the Administration to plan for the project entitled "Old College Field - Install Field Lighting."

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

THE BOARD VOTED to approve the resolution.

10. Academic Affairs Committee

Trustee Kelly presented the following Trustee Committee on Academic Affairs Report and recommendations.

A. Approval of Indemnification Policy Revisions

It was recommended that the Board of Trustees approve revisions to the Indemnification Policy.

BE IT RESOLVED, that the Board of Trustees of Michigan State University hereby approves revisions to the Indemnification Policy as presented in Attachment A; and be it further

RESOLVED, that the Board of Trustees authorize the President to make any conforming changes to other University policies that are necessary as a result of this Board action. (Appendix G)

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

THE BOARD VOTED to approve the resolution.

B. Formation of MSU HealthTeam Corporation

It was recommended that the Board of Trustees approve the formation of a new non-profit, tax-exempt corporation, with Michigan State University as the sole member of the corporation, to be the professional practice plan of the University.

BE IT RESOLVED that the Board of Trustees authorizes the formation of a new non-profit, tax exempt corporation, with Michigan State University as the sole member of the corporation, to be the professional practice plan of the University; and

BE IT FURTHER RESOLVED that the MSU HealthTeam will transfer to the new corporation its cash on hand, equipment, and other assets; and

BE IT FINALLY RESOLVED that the Chief Executive Officer of the MSU HealthTeam and the Associate Provost and Assistant Vice President for Health Affairs are hereby authorized to take those steps necessary to form the new corporation and to commence its operations.

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

THE BOARD VOTED to approve the resolution.

11. Audit, Risk and Compliance Committee

Trustee Lyons presented the following Trustee Committee on Audit, Risk and Compliance report.

The Committee received an overview of the Internal Audit Office functions, a review of that office's audit plan for this fiscal year, and Internal Audit Director, Marilyn Tarrant, reviewed the areas of risk for the University and audit focuses for this fiscal year.

Committee members also received information about the athletic department's compliance with NCAA rules. Athletic Director Bill Beekman continues to expect an athletic program with a strong compliance environment. The athletics compliance unit is led by Senior Associate Athletic Director Jennifer Smith. Her position not only reports to the Athletic Director, but is further strengthened by the compliance unit's ability to report directly to the Office of the General Counsel and the Chief Compliance Officer. The athletic compliance unit leads with a strong proactive and educational approach.

Committee members also received information from Chief Compliance Officer, Nick Wittner regarding the Office of Enterprise Risk Management, Ethics, and Compliance's action plan and principle risk assessment areas.

12. Student Life and Culture Committee

Trustee Mosallam introduced Provost Youatt to present the Launch of the Academic Year, which included the Preliminary Enrollment Report. (Appendix H)

13. Trustee Comments

Trustee Breslin congratulated Nakia Barr as Secretary of the Board of Trustees. He also thanked Trustee Byrum and Trustee Foster for their work on the Presidential Search Committee and applauded the orientation and move-in efforts.

Trustee Foster stated that the presidential search committee is a diverse committee and noted Dr. Teresa Sullivan's involvement as the search consultant. She provided information on the upcoming presidential search input sessions.

Trustee Mosallam congratulated Nakia Barr on her appointment. He discussed his goals of institutional reforms to improve MSU and stated that he wants to meet with survivors.

Trustee Kelly congratulated Vice President Gore and his team on the move in efforts.

Trustee Perles stated that the meeting was successful.

14. Request to Adjourn

On a motion by Trustee Kelly, supported by Trustee Breslin,
THE BOARD VOTED to adjourn at 9:30 a.m.

Respectfully submitted,

A handwritten signature in blue ink, appearing to read "Nakia Barr", written over a light blue horizontal line.

Nakia Barr

Secretary of the Board of Trustees

RESEARCH PRESENTATION

TO THE MSU BOARD OF TRUSTEES

AUGUST 31, 2018

INGO BRAASCH
DEPARTMENT OF INTEGRATIVE
BIOLOGY

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

Ingo Braasch Introduction August 31, 2018

Our research presenter today is Assistant Professor, Ingo Braasch, from the Department of Integrative Biology, in the College of Natural Science.

Dr. Braasch is originally from Germany where he studied Biology and received his PhD from the University of Wurzburg in Bavaria. He then worked as an Alexander von Humboldt and Volkswagen Foundation postdoctoral fellow at the University of Oregon in Eugene, before joining the MSU faculty in 2016.

His research focuses on investigating the genomic basis of developmental processes and their relation to the evolution of vertebrate animals, as well as human biology and disease using different fish species as model organisms. Since arrival at MSU, he has established two fish research facilities on campus. Dr. Braasch's contributions to multiple genome sequencing projects have been instrumental to understand the evolution of fish genomes and how they compare to our own, human genome. He led the international consortium for the analysis of the garfish genome, published in 2016 in *Nature Genetics*, and his lab is currently leading the efforts to develop the gar, in combination with zebrafish, into a new model system for biomedical research.

Dr. Braasch's research has been published in more than 50 publications (including *Nature*, *Nature Genetics*, *PNAs*, etc.) and is supported by the National Institutes of Health (NIH).

Please welcome, Dr. Ingo Braasch.

Of Fish and Men: What fish can tell us about the genetic basis of our evolution, development, and diseases

Ingo Braasch

Assistant Professor

Department of Integrative Biology

braasch@msu.edu

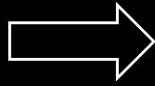


Department of Integrative Biology

Why fish are important for Integrative Biology

Molecules

Genome



Morphology



Biodiversity

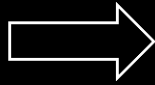
Ecosystems



Why fish are important for Integrative Biology

Molecules

Genome

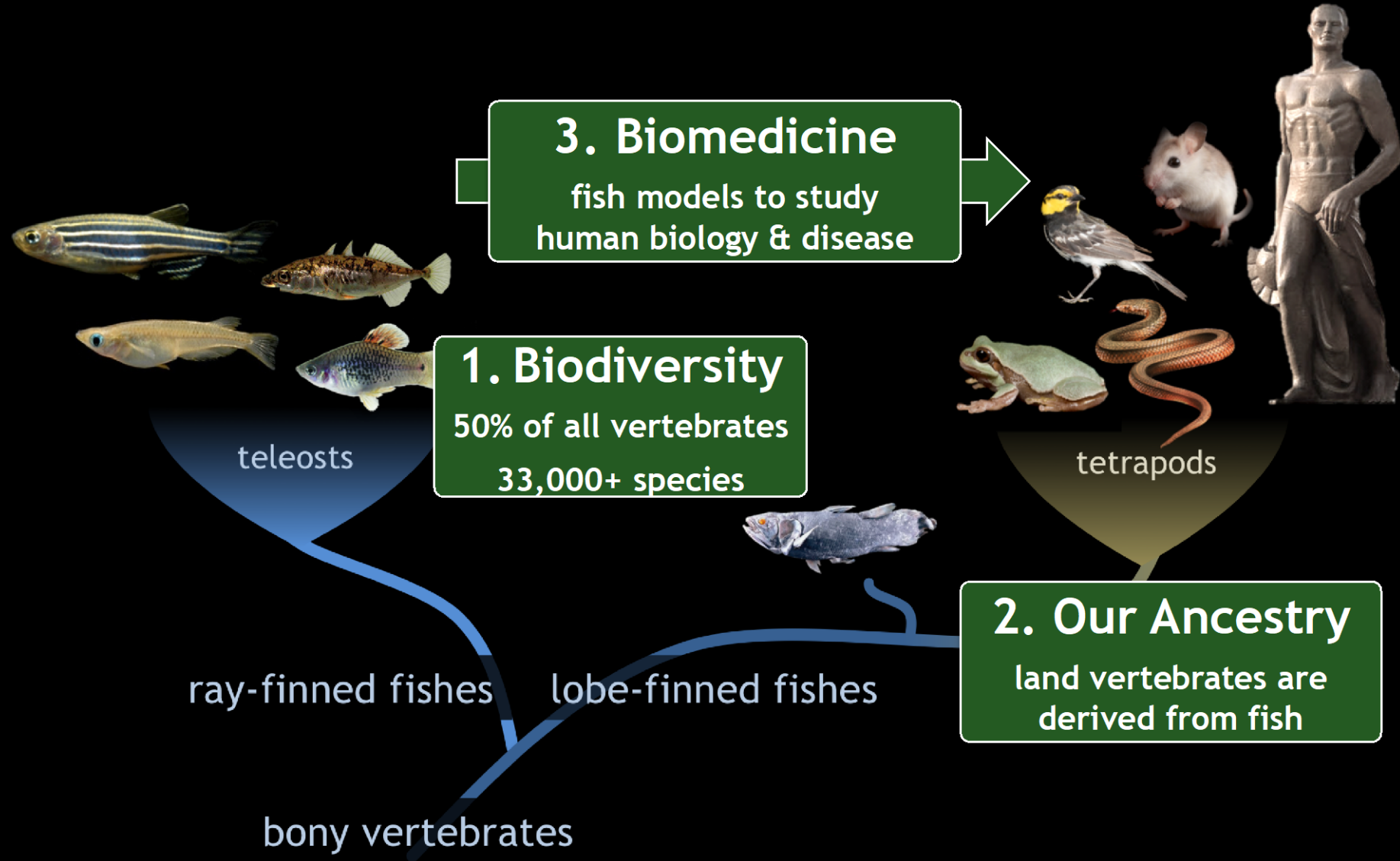


Morphology



Biodiversity

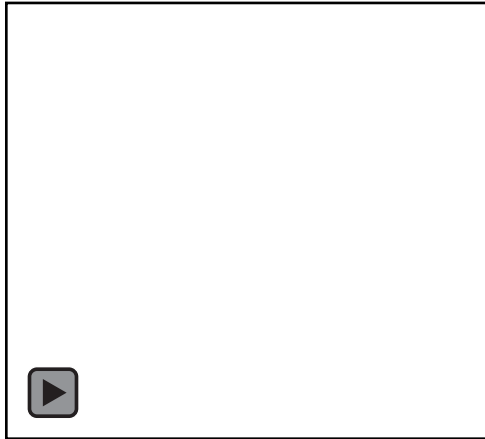
Ecosystems



Biomedical Fish Models for Human Disease Research



Zebrafish



Karlstrom & Kane 1996

cleft palate



Eberhart et al. 2008

Platyfish: genetics of melanoma



Schartl et al. 2013

zebrafish embryo

human embryo



19 hours



28 days

Zebrafish Research in the MSU Integrative Biology Department

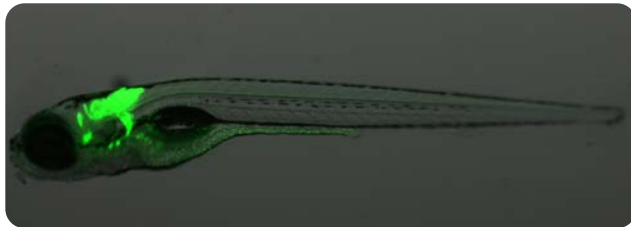


Evo-Devo-Geno
[Braasch Lab]



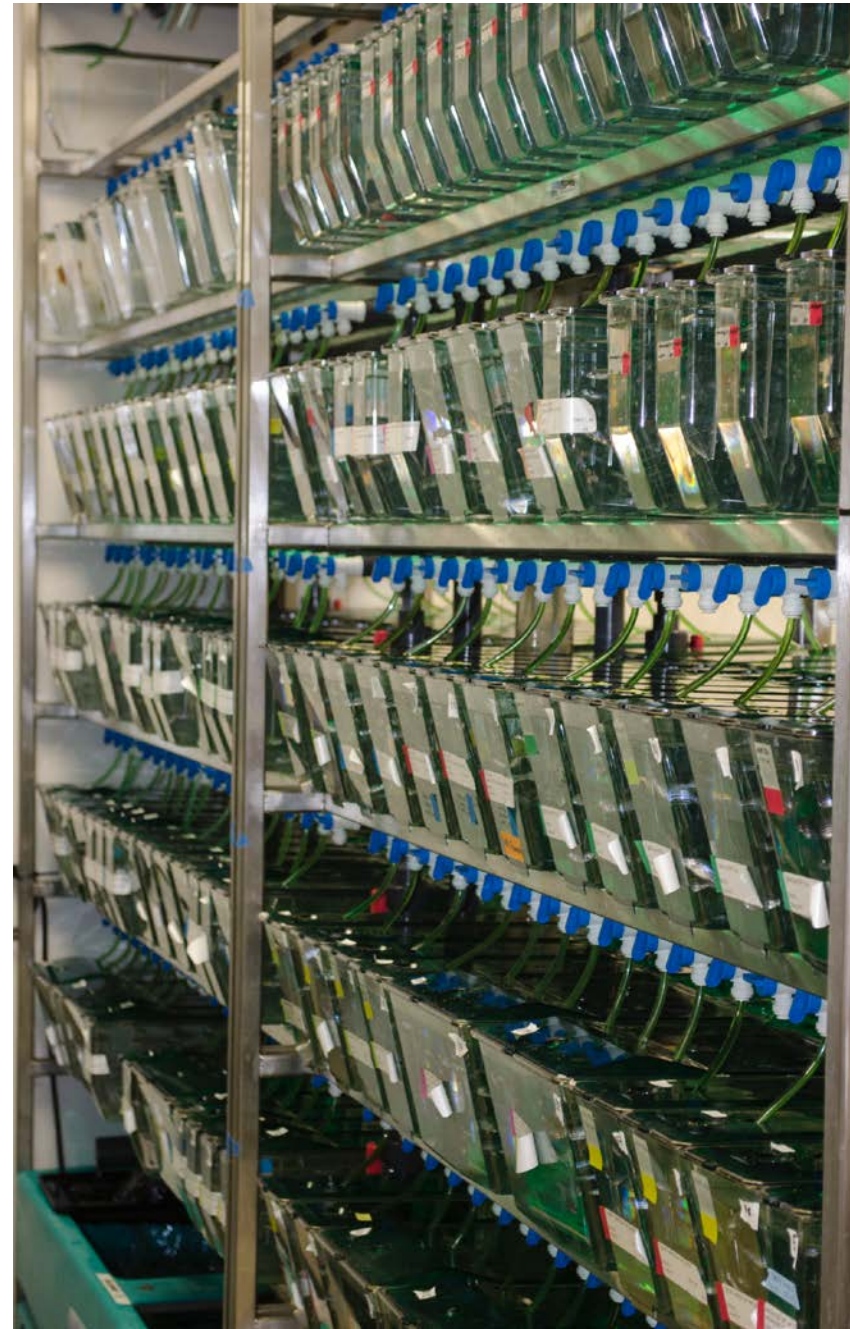
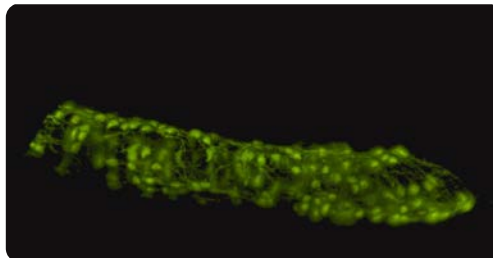
Neuro-Development
[Ganz Lab]

- state-of-the-art zebrafish facility
[capacity ~10,000 fish]
- gene function analyses
- fish models of human disease
- genome editing [CRISPR]
- transgenics
- high-resolution imaging



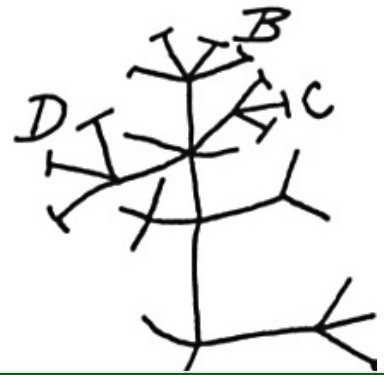
[Ganz Lab]

GO GREEN



EVOlution

- Ancestral genome reconstruction
- Gene family histories [duplication/loss]
- Fish-human relationships



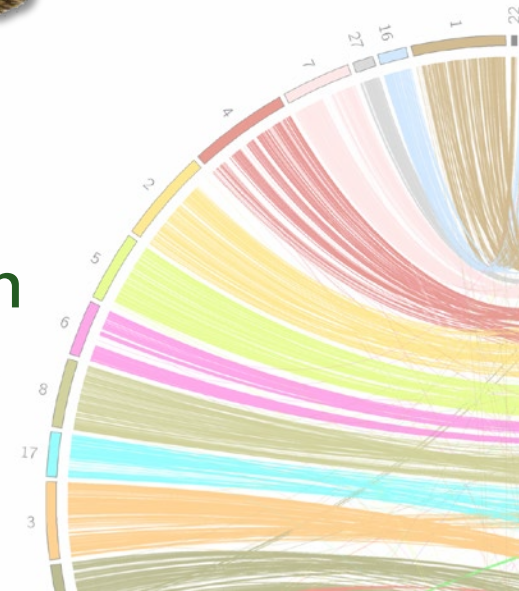
DEVelOpment

- Morphological innovations
- Gene functions [CRISPR genome editing]
- Gene regulation analyses

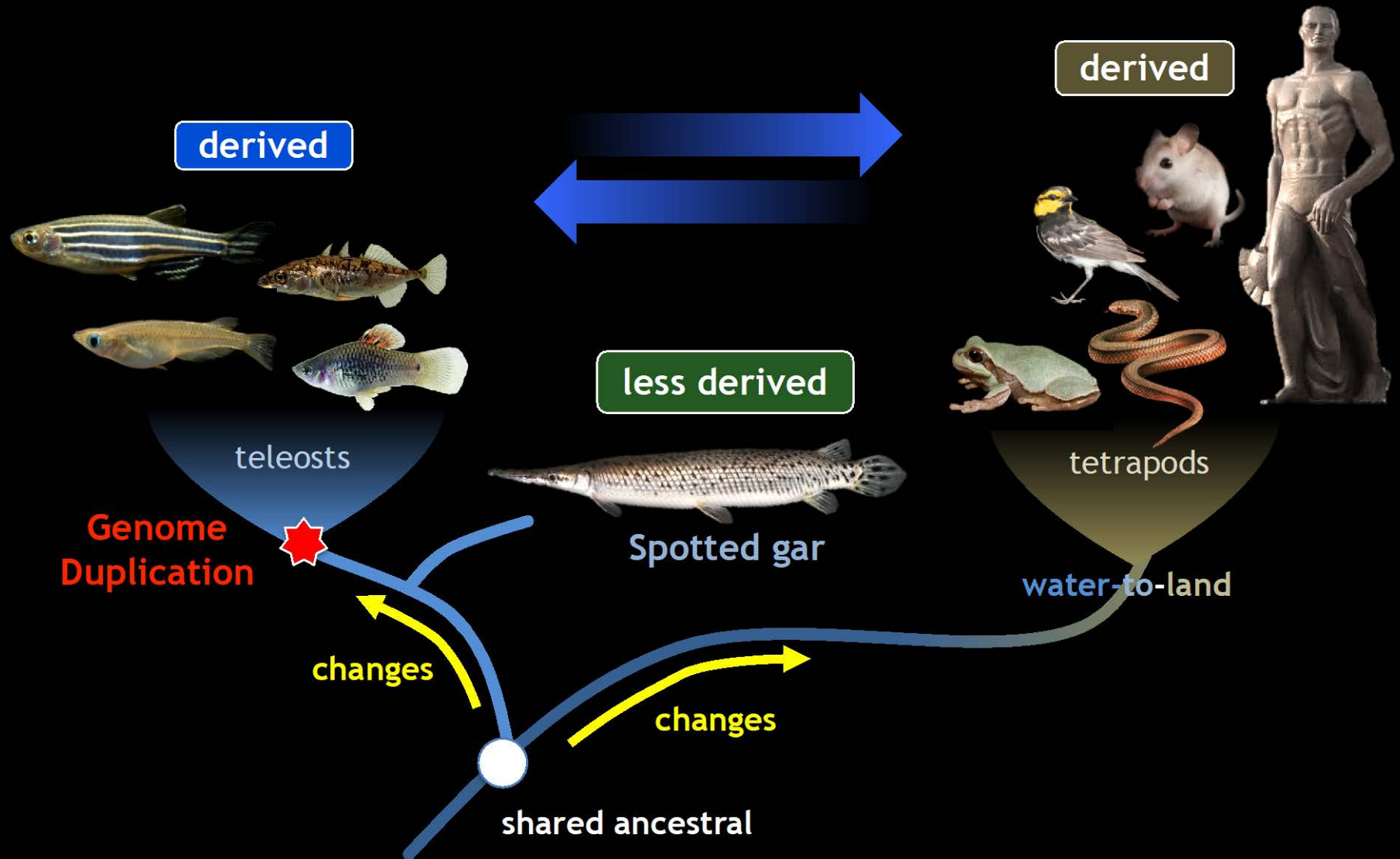


GENOtics

- Genome sequencing, analysis, comparison
- Genome structure [chromosome] analyses
- Gene activities [transcript-/epigenomics]



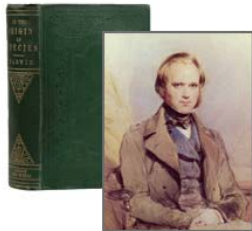
Evolutionary change matters...



Gar: a new model to study vertebrate biology



Spotted gar



“living fossil”

Charles Darwin,
Origin of Species (1859)

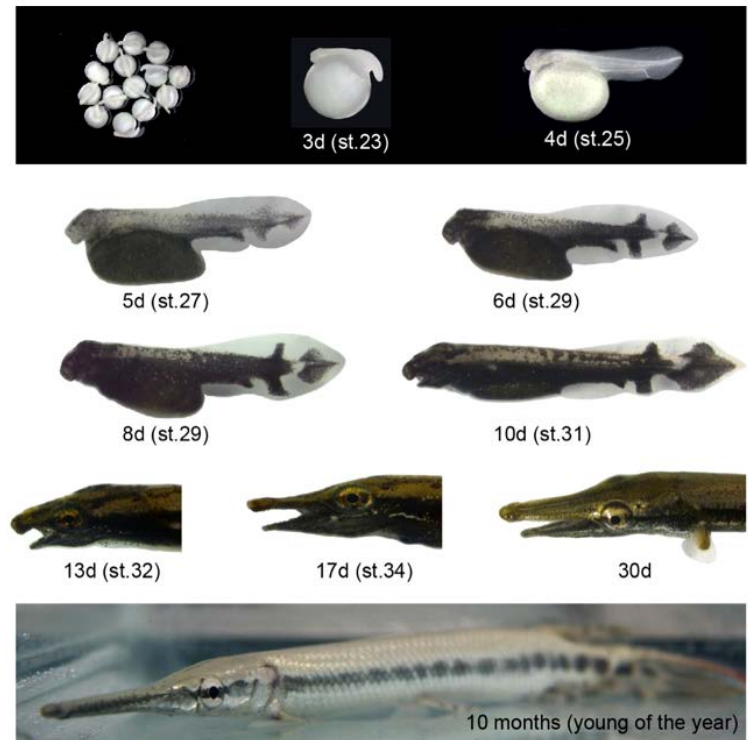
gar genome sequence

The spotted gar genome illuminates vertebrate evolution and facilitates human-teleost comparisons

NATURE GENETICS VOLUME 48 | NUMBER 4 | APRIL 2016

Braasch et al. 2016

Spotted gar development



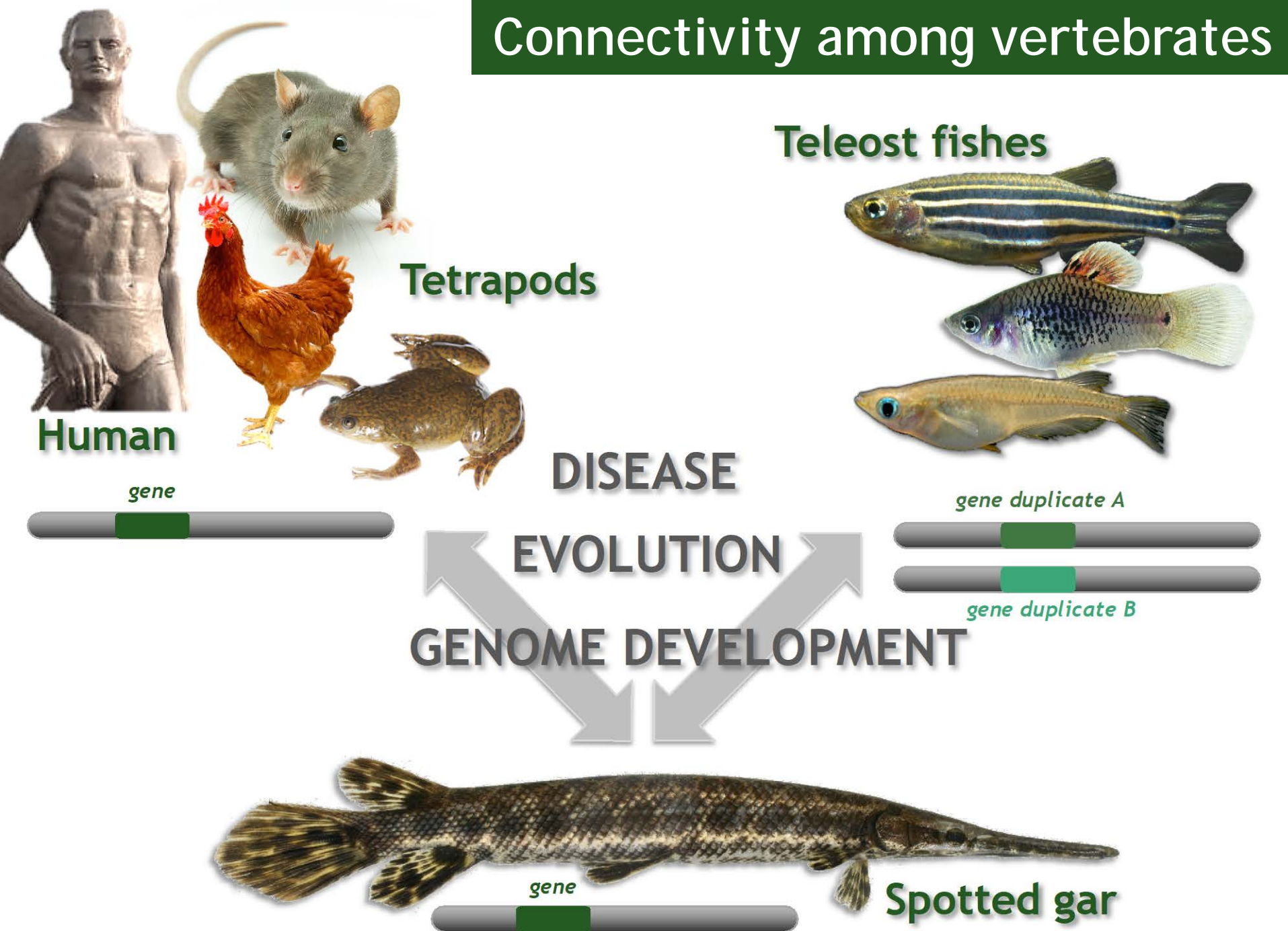
10 months (young of the year)

Braasch et al. 2015



Michigan State Gar Facility

Connectivity among vertebrates



Acknowledgements



Fish Facility

Carrie Kozel (Manager)
Helen Rueckert
Nora Straquadine (UG)
Kennedy Cogswell (UG)
Taylor Lawrence (UG)
Halley Taddonio (UG)
Rachael Teodorescu (UG)
Jake Wier (UG)
Sarah Minamyer (UG)



Braasch Lab

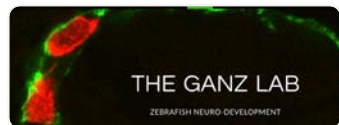
Andrew Thompson
Solomon David

Brett Racicot

Fiona Brewer (UG)
Madison Kraus (UG)
Nick Stants (UG)

Granger Hanks (UG)

Molly McCarthy (HS Intern)
Carleigh Robinson (HS Intern)



Ganz Lab

Julia Ganz
Ann Davidson

Collaborators

Postlethwait Lab (U Oregon)
Ferrara Lab (Nicholls State)

Gar Genome Consortium

GenoFish Consortium
BROAD Institute

Funding



Department of Integrative Biology

SERVICE AGREEMENT TERM SHEET

Party: Cultural Intelligence Center, LLC

Agreement: Professional services contract for orientation, training, assessment, and feedback services for MSU leaders and students related to international travel and diversity and inclusiveness on campus

Term: September 1, 2018 to July 31, 2021

Payment Terms: Cultural Intelligence Center LLC to provide assessments, feedback, reports, training sessions, discussion kits, audits and certifications according to the attached fee schedule.

Services Provided: By MSU to Cultural Intelligence Center, LLC: venue, use of audio/visual equipment, any catering deemed appropriate by MSU

By Cultural Intelligence Center, LLC to MSU: training, research-based and validated assessment, discussion facilitation kits, audits, and feedback related to international travel, cultural intelligence, and diversity and inclusiveness; certification program

Organization Type: Michigan limited liability company

Personnel Interest: Dr. Linnea Van Dyne, a Professor in the Department of Management, and members of her family own, or have options to buy an ownership interest of, more than 1% of the company.

*Cultural Intelligence Center, LLC is the only provider of the described services to include research-based, validated assessment with in-depth and individualized reports. MSU Purchasing has compared these services to other similar consulting services and determined the rates to be reasonable.

SERVICE AGREEMENT TERM SHEET

Party: FibrosIX, LLC

Agreement: Testing services by MSU for preclinical work regarding the prevention of chemotherapy-induced lung fibrosis. This work is related to Small Business Innovation Research ("SBIR") entitled, "Efficacy of CCG-257081 in Bleomycin-Induced Lung Fibrosis in Mice." The related intellectual property is held jointly by MSU and The University of Michigan.

Term: September 1, 2018 – August 31, 2019

Potential Commercial Application: Human Therapeutics

Payment Terms: \$56,416 in fees for service

Services Provided: By MSU to FibrosIX, LLC: Mice testing
By FibrosIX, LLC to MSU: None contemplated under the agreement

Use of University Facilities/ Personnel: Work is to performed at MSU's Life Sciences Building B142 and animal vivarium by, or supervised by, Dr. Teresa Krieger-Burke and/or Dr. Marc Bailie

Organization Type: Michigan limited liability company

Personnel Interest: Dr. Richard R. Neubig, Professor and Chair of the Department of Pharmacology and Toxicology, 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:	Scion Plasma, LLC
Agreement:	Option for exclusive license in all fields
Technology:	MSU technology disclosure TEC2018-0035 entitled "Single Beam Plasma Sources" and corresponding patent applications including US62/687,357 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.
Term:	One year from the effective date, an additional one year with payment of an additional fee
Potential Commercial Application:	Plasma deposition of materials such as Indium Tin Oxide (ITO) useful for coating glass and other material
Application:	
Payment Terms:	Up-front payment of \$1,000 to MSU, \$2,000 to extend the option for an additional year
Services Provided:	By MSU to Scion Plasma, LLC: None contemplated under the agreement By Scion Plasma, LLC to MSU: None contemplated under the agreement
Organization Type:	Michigan limited liability company
Personnel Interest:	Dr. Qi Hua Fan, Associate Professor in the Department of Electrical and Computer Engineering and members of his family, own or have options to buy an ownership interest of more than 1% of the company.

APPENDIX E

OPTION AGREEMENT TERM SHEET

Party:	Shape Scientific, Inc.
Agreement:	Option for exclusive license in all fields
Technology:	<p>MSU technology disclosure TEC2016-0094 entitled "Quantifying Cell Number in MRI" and corresponding patent applications in the family of US15/620,545; and MSU technology disclosure TEC2019-0010 entitled "Affinity Magnetic Particles for Imaging Cells by Magnetic Resonance Imaging and Magnetic Particle Imaging"</p> <p>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.</p>
Term:	One year from the effective date the option, term extendable for an additional year for a fee
Potential Commercial Application:	MRI labeling for monitoring in vivo cell therapy
Payment Terms:	Up-front payment of \$1,000 to MSU for the first year, \$2,000 if extended to an additional year
Services Provided:	<p>By MSU to Shape Scientific, Inc.: None contemplated under the agreement</p> <p>By Shape Scientific, Inc. to MSU: None contemplated under the agreement</p>
Organization Type:	Michigan corporation
Personnel Interest:	Dr. Erik Shapiro, Associate Professor in the Department of Radiology and Dr. Shatadru Chakravarty, Research Associate in the Department of Radiology, and members of their families own or have options to buy an ownership interest of more than 1% of the company.

SPONSORED RESEARCH AGREEMENT TERM SHEET

Party:	Talapo Therapeutics, Inc.
Term:	Extended to two years from effective date of the agreement. Original agreement term was one year from the effective date of the agreement
Related Technology:	MSU Invention Disclosure No. TEC2015-0018, "Cryptic Peptide Derivatives and Uses Thereof"
Potential Commercial Application:	Therapeutic for human disorders such as osteoporosis and obesity
Payment Terms:	\$100,000 payable in four quarterly installments with the first installment due upon commencement of the project
Services Provided:	By MSU to Talapo Therapeutics, Inc.: efficacy test of compound in animal obesity model By Talapo Therapeutics, Inc. to MSU: None contemplated under this agreement
Use of University Facilities/Personnel:	Testing to be completed under the supervision and in the laboratory of Dr. Eric Martinez Hackert
Organization Type:	Delaware corporation
Personnel Interest:	Dr. Eric Martinez Hackert, an Assistant Professor in the Department of Biochemistry, and members of his family own or have options to buy an ownership interest of more than 1% of the company.

INDEMNIFICATION

02-17-01

Michigan State University will support its trustees, officers, faculty, and staff when acting in the good faith performance of assigned duties on behalf of the University. This policy also applies to students while engaged in approved academic programs and volunteers who are performing services in good faith for the University with prior written approval of the appropriate University official. Authority for decisions about the application or revocation of indemnification rests with the President, except when such decisions involve indemnification of the President or individual Trustees. In such situations, decisions about the application or revocation of indemnification rests with the Board of Trustees.

The University will defend, save harmless, and indemnify such persons against any suit or proceeding, wherever brought, premised upon the fact that he or she is or was a member of the Board or an officer, employee, student, or volunteer of the University. The indemnity extends to expenses including attorney fees, judgments, fines, and amounts paid in settlement, actually and reasonably incurred, and with respect to any criminal action or proceeding where such person had no reasonable cause to believe that his or her conduct was unlawful. The University shall have sole authority over litigation and settlement strategies and decisions for any suit or proceeding for which the University is providing legal defense, representation and indemnification to the person. In proceedings in which both the University and an employee are parties, the University shall have the sole discretion to determine when a conflict of interest exists between the University and the employee such that separate representation of the employee shall be provided by the University.

As a condition of indemnification, the trustee, officer, employee, student, or volunteer is required to cooperate fully on a continuous basis with the legal counsel selected by the University, as well as the University Attorney, and the Office of Insurance and Risk Management. Persons may, at their own expense, retain their own legal counsel rather than avail themselves of this policy. In such a situation, the University will not indemnify the person for any settlement, judgment, or expense incurred. This policy does not apply to a person's involvement in internal University proceedings. The University reserves the right to revoke its initial decisions to defend and indemnify a person based upon information received subsequent to that decision.

Enacted: 3/15/74

Amended: 1/21/77, 9/2/83, 2/3/84, 8/31/18

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Enacted: 3/15/74

Amended: 1/21/77, 9/2/83, 2/3/84, 8/31/18

Launch of the Academic Year 2018

MSU Board of Trustees Meeting

August 31, 2018

Preliminary Enrollment

- First-time undergraduate enrollments are expected to approximate 8,400 students, MSU's largest class to date.
- New transfer enrollment is approximately 1,600.
- Combined entering class and transfer enrollment total, inclusive of summer admits, is estimated to be 10,050 students, comprised of approximately 79.6% Michigan residents.
- There are approximately 1,700 new graduate students at the master's and doctoral levels.
- The GPA profile for the full range of incoming freshmen reflects that they are better prepared than last year's incoming cohort.
- We extended 430 invitations to this year's New Faculty and Academic Staff Orientation.

2018 data is preliminary

MICHIGAN STATE
UNIVERSITY

Incoming Class Highlights

- Largest Class 8,400 Students
- Best Prepared 3.77 Median GPA
- Most Diverse 2,040 Students of Color
 26.3% of the domestic class
- More Honors Students 725 new, 8.6% of the class

2018 data is preliminary

MICHIGAN STATE
UNIVERSITY

Summary...

- 39,450 Undergraduates
- 10,850 Graduates and Professional
- 50,300 Total

Students From...

- All 83 Counties
- All 50 States
- 140 Countries

2018 data is preliminary

Thomas Jeitschko

***Associate Provost for Graduate Education and Dean of the
Graduate School***



SPARTANS WILL.

Move-In 2018

**On Sunday
morning
alone, we
moved in
over 3,500
Spartans.**



MICHIGAN STATE UNIVERSITY

**Overall, we welcomed
9,600 students home in
just three days.**



MICHIGAN STATE UNIVERSITY

**And served
over 48,900*
meals to
them and
their families.**



*Not including Combo-X-Change

MICHIGAN STATE UNIVERSITY

MSU Move-in Process 2018



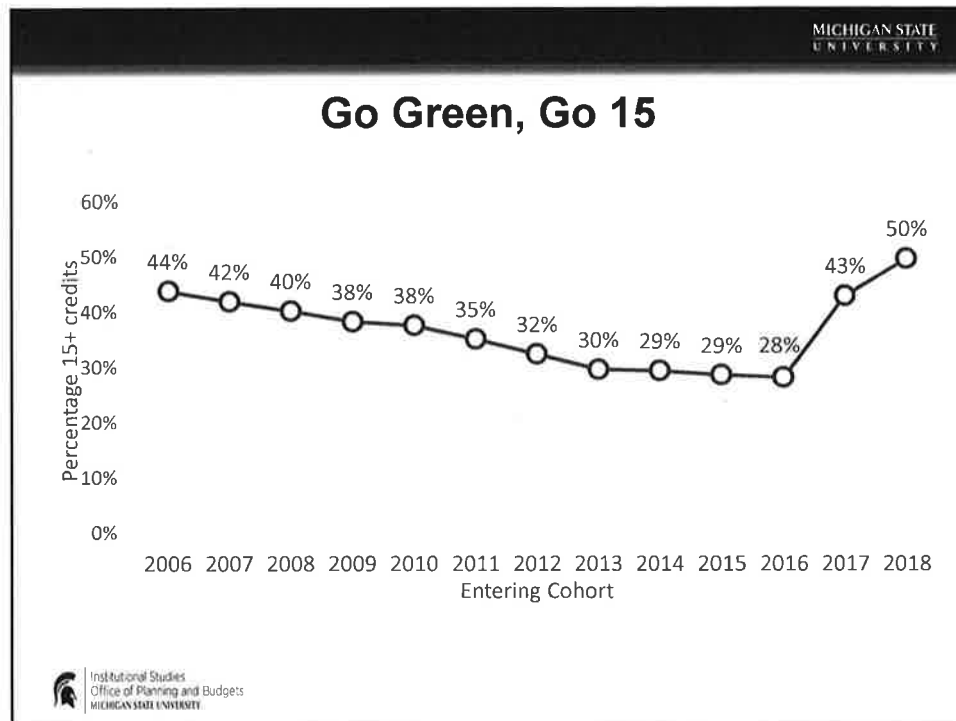
MICHIGAN STATE UNIVERSITY

Mark Largent

*Interim Associate Provost for Undergraduate Education and
Interim Dean of Undergraduate Studies*

Undergraduate Student Learning and Success at MSU

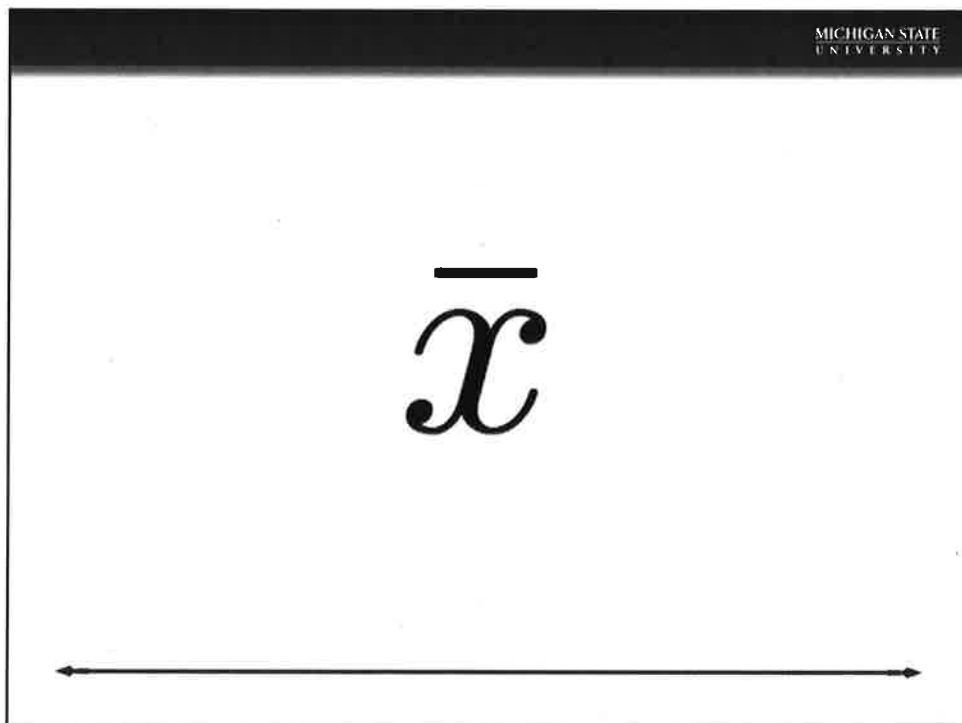
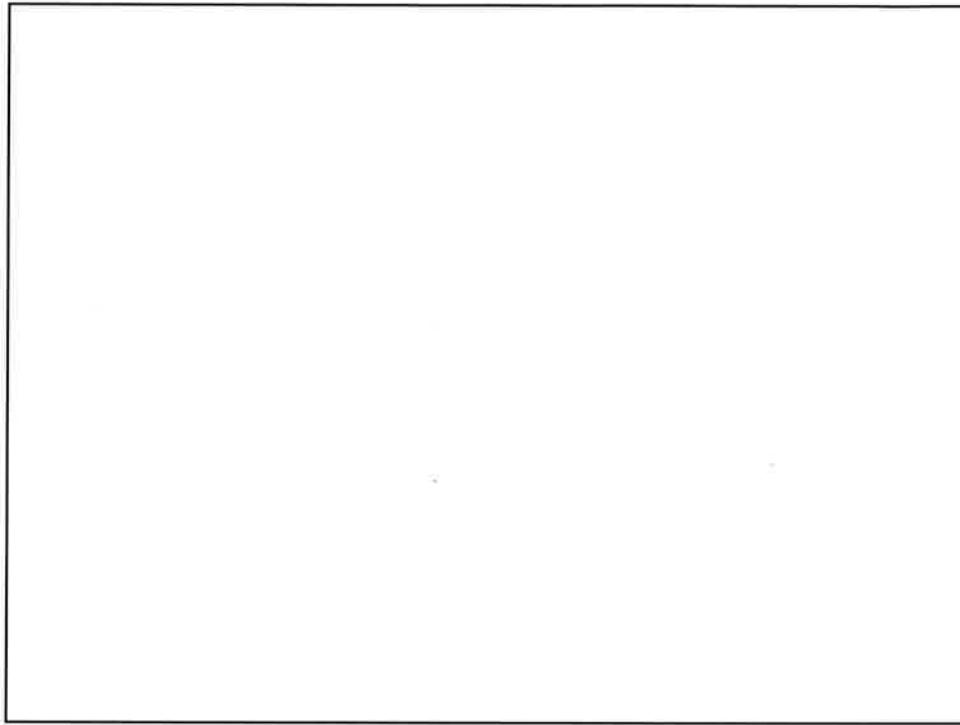
- Go Green, Go 15
- Course and Curricular Reforms
- Summer Bridge Programs
- Quick Action to Add Seats to Meet Demand



MICHIGAN STATE
UNIVERSITY

Undergraduate Student Learning and Success at MSU

- Reform of Gateway Mathematics
- Expansion of MSU's Counseling & Psychiatric Services
- Increased Staffing in MSU's Resource Center for Persons with Disabilities
- Introduction of Exploratory Majors



Daniel Adu-Djan

In high school, academic success carried me to a twenty student recruitment team that consisted of students who prepared for a National Science and Mathematics Competition. I joined this team in my second year, and we championed the national competition (Ghana) in 2017.



Katie Lauro

I've worked on a research project for the past four years relating to plastic trash pollution in the ocean in Southern California where I'm from. I have won three different awards at science fairs for it.



Andrew McDonald

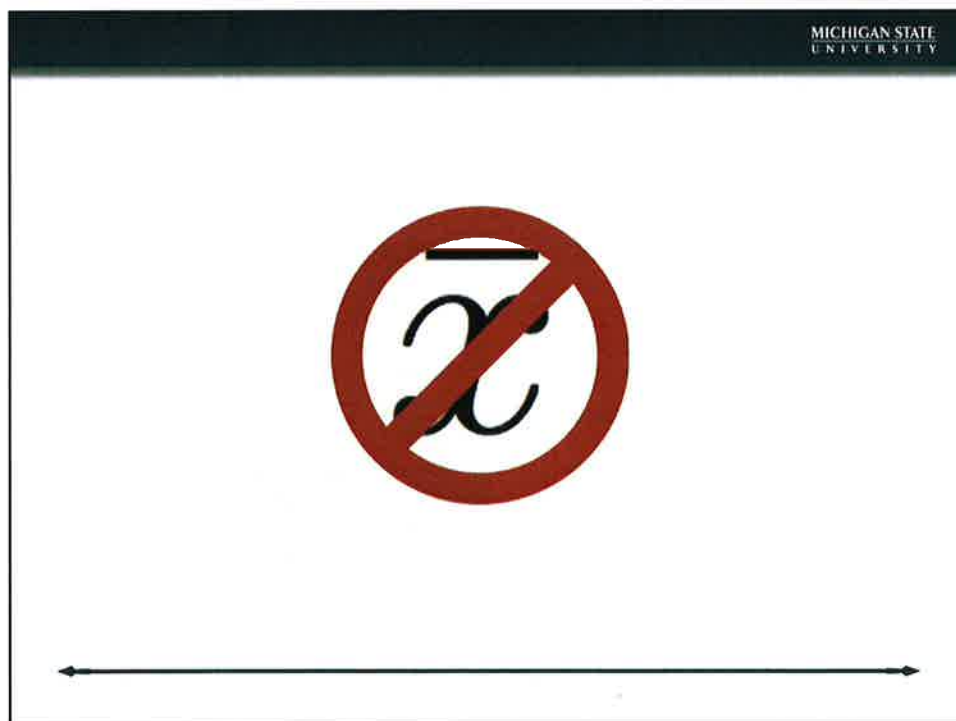
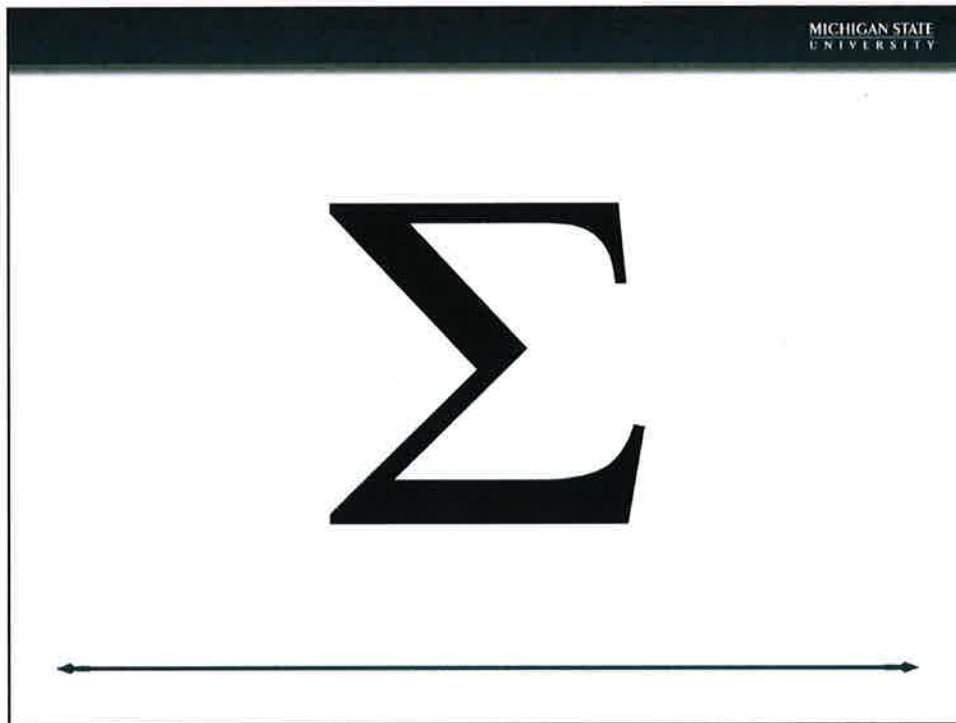
I compete in the sport of curling, and won a bronze medal at the 2018 U18 Junior National Curling Championships in Bemidji, Minnesota this past season! Here is a photo of me and my team with our medals; I'm the one furthest to the right.



Allyssah Lanza

I've taught myself to play 8 different musical instruments.





Rachel Coleman

Sofia Rabiela

Luke Sittard

