

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

June 21, 2019

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

Trustees present: Dianne Byrum, Joel Ferguson, Melanie Foster, Dan Kelly, Brian Mosallam, Brianna Scott, Nancy Schlichting, and Kelly Tebay.

University officers present: Acting President Udpa, Associate Provost Terry Curry, Executive Vice President Wilbur, Secretary Barr, Acting Vice President and General Counsel Quinn, Vice Presidents Bales, Bollman, Byelich, Gore, Guerrant, Haas, Heil, Hsu, Maybank, McCurdy, and Swain. Faculty liaisons present: Laura McCabe, Greg Swain, Mark Waddell, and Gwen Wittenbaum. Student liaisons present: Meagan Abel, Mario Kakos, and Rashaun Sanders.

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

1. On a motion by Trustee Kelly, supported by Trustee Scott, the **BOARD VOTED to approve** the amended agenda.
2. On a motion by Trustee Kelly, supported by Trustee Foster, the **BOARD VOTED to approve** the minutes of the April 12, 2019 Board of Trustees meeting.
3. Public Participation on Issues Germane to the Agenda
 - a. David Ware
 - b. Valerie von Frank
 - c. Lisa Hutchins
 - d. Lana Horning
 - e. Brian Conway
4. President's Report

Acting President Udpa provided the following report to the Board.

A. New President

The selection of a new president is a milestone in the life of a university. On May 28, 2019 the Board selected Dr. Samuel L. Stanley Jr., who currently leads Stony Brook University in New York, as MSU's 21st president. He will officially begin on August 1, 2019.

I look forward to working with Dr. Stanley and have great confidence in his ability to lead Michigan State to new levels of accomplishment. He was the right choice for MSU, and I believe he will serve this institution very well in the years to come.

B. Commencements

Another milestone worth noting is the graduation of nearly 8,000 students last month. Preparing Spartans for their careers and lives is without doubt a most important mission and a great service to society. So, it is fitting that we congratulate not only our graduates, but also the community of dedicated faculty and staff who make it possible. I can tell you that there are few things more satisfying than working with students and watching them grow as scholars and as people.

C. Campus Survey Concludes

I want to thank the campus community members who participated in the recent survey of perceptions and knowledge associated with relationship violence and sexual misconduct. The survey was launched in March and was accessed by more than 15,000 MSU students, staff and faculty.

We expect to be able to release survey results this fall. This should give us a more detailed picture of our culture and perceptions associated with sexual assault. I am sure Dr. Stanley will utilize this information to inform our university's work going forward.

D. Sustainability Award

MSU's efforts toward a more environmentally sustainable campus were acknowledged recently with a Gold Rating from the Association for the Advancement of Sustainability in Higher Education. The assessment system is used by more than 800 schools in 30 countries. This was MSU's third triennial report, and the first time we achieved the gold rating. This speaks well for the growing success of MSU's sustainability efforts.

E. GRRRC Site Lease

Not long ago we marked another important milestone in the development of the Grand Rapids Research Center site. A new agreement will allow a private partnership to build a medical innovation building there to foster collaboration and complement the work of our research center. Through these projects, we hope to create exciting synergies between academic medicine, health care delivery systems and private enterprise.

F. Tuition Freeze

With a new academic year coming up shortly, I am very happy to remind us all that it will come with no increase in tuition or fee rates for undergraduate students. As you'll recall, that is part of the two-year budget the Board of Trustees adopted last year. The university also is stepping up with another increase in our contribution to student financial aid, which will rise by 7.1 percent next year, on top of the 4.5 percent increase in the current year's budget.

G. Gratitude

As I noted earlier, this is my last Board meeting as acting president and presiding officer. I want to take a moment to thank the many people who wished me well and who have assisted me as I undertook this difficult assignment. Thanks are due my colleagues, in this building and around campus, who offered their good wishes and support. Special thanks to Provost June Youatt and other executive leaders, who stepped up while I was in the hospital and recuperating after my fall last month.

And, in closing, I want to thank the Board of Trustees for their confidence in my capacity to lead the university at a critical point in our history. In my time as acting president, I was able to express my personal commitment to healing and to publicly apologize to survivors on behalf of the university.

As I've said, there is more work to do and I remain committed to doing all I can to foster a campus culture focused on safety and respect. A campus culture where we work together to prevent all forms of sexual assault, support survivors and make the changes necessary to ensure their experience is not repeated.

And finally, I wish to thank my wonderful spouse, colleague and collaborator, Dr. Lalita Udpa, for her many years of support and counsel.

With that, I conclude my report to the board and offer my continued support as we work to advance healing and make a positive difference every day in the lives of our students, our communities, our state and the world.

5. Gift, Grant and Contract Report

Vice President Hsu presented the Gifts, Grants, and Contracts Report for the period March 13, 2019 through May 17, 2019. The report is a compilation of 512 Gifts, Grants and Contracts plus 97 Consignment/Non-Cash Gifts, with a total value of \$108,785,239.

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

THE BOARD VOTED to approve the recommendation.

Vice President Hsu introduced Arjun Krishnan, Department of Computational Mathematics, who gave the Board a presentation entitled “Data, Algorithms, and Computing for Studying Complex Diseases” (Appendix A)

6. Personnel Actions

Associate Provost Curry presented the following personnel actions.

Henebry, Geoffrey, AY- Professor, Department of Geography, Environment, and Spatial Sciences, with Tenure, effective August 16, 2019.

Latham, Kiersten, AN, Associate Professor, Department of Art, Art History, and Design, with Tenure, effective, August 1, 2019.

Stanley Jr., Samuel, AN - Professor, Department of Medicine, with Tenure, effective August 1, 2019.

Associate Provost Curry presented the following candidates for the designation of University Distinguished Professor, effective June 21, 2019:

Ann Austin, Department of Educational Administration, College of Education

Christoph Benning, Department of Biochemistry & Molecular Biology, College of Natural Science

Robin Buell, Department of Plant Biology, College of Natural Science

Christina Chan, Department of Chemical Engineering & Materials Science, College of Engineering

Carl Davidson, Department of Economics, College of Social Science

Megan Donahue, Department of Physics and Astronomy, College of Natural Science

Robert Hausinger, Department of Microbiology & Molecular Genetics, College of Natural Science

Robert Pennock, Lyman Briggs College

Scott Swinton, Department of Agricultural, Food and Resource Economics,
College of Agriculture and Natural Resources

Lalita Udpa, Department of Electrical & Computer Engineering, College of
Engineering

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

THE BOARD VOTED to approve the recommendations.

7. Committee on Budget and Finance

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

A. 2019-20 Budgets for MSU AgBioResearch, MSU Extension, and
Intercollegiate Athletics

It was recommended that the Board of Trustees approve 2019-20 budget
totals for MSU AgBioResearch, Michigan State University Extension, and
Intercollegiate Athletics.

BE IT RESOLVED, that the Administration is directed to implement the
2019-20 MSU AgBioResearch, Michigan State University Extension, and
Intercollegiate Athletics budgets in accordance with the totals established
in Attachment A and the overall 2019-20 Budget Development Guidelines
approved by the Board of Trustees in June 2018.

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

THE BOARD VOTED to approve the recommendation.

B. Fund Functioning as an Endowment—Michelle LeBlanc Endowed
Theriogenology Fund

It was recommended that the Board of Trustees establish a fund functioning
as an endowment to provide support for theriogenology residents in the
College of Veterinary Medicine.

BE IT RESOLVED, that the Board of Trustees of Michigan State University
hereby establishes a fund functioning as an endowment entitled "Michelle
LeBlanc Endowed Theriogenology Fund."

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

THE BOARD VOTED to approve the recommendation.

C. Project Approval—Authorization to Proceed—Munn Ice Arena - Expansion

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

BE IT RESOLVED, that the Board of Trustees of Michigan State University hereby authorizes the Administration to proceed with the project entitled "Munn Ice Arena - Expansion," with a project budget of \$18,800,000.

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

THE BOARD VOTED to approve the recommendation.

D. Project Approval—Authorization to Proceed—T.B. Simon Power Plant – Plant Modernization - RICE

It was recommended that the Board of Trustees authorize the Administration to proceed with the next phase of power generation for campus, including the installation of new reciprocating internal combustion engines ("RICE").

BE IT RESOLVED, that the Board of Trustees of Michigan State University hereby authorizes the Administration to proceed with the project entitled "T.B. Simon Power Plant - Plant Modernization - RICE," with a project budget of \$47,000,000.

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

THE BOARD VOTED to approve the recommendation.

E. Project Approval—Authorization to Proceed—STEM Teaching and Learning Facility and Shaw Lane Power Plant Adaptive Re-use (*budget adjustment*)

It was recommended that the Board of Trustees authorize the Administration to increase the budget for the Science, Technology, Engineering, and Mathematics (STEM) Teaching and Learning Facility to formally recognize the inclusion of two large classrooms and the increased costs primarily associated with more extensive abatement and demolition

at the Shaw Lane Power Plant. In addition, the construction market reflects increasing competition for labor and materials.

BE IT RESOLVED, that the Board of Trustees of Michigan State University hereby authorizes the Administration to increase the budget for the project entitled "STEM Teaching and Learning Facility and Shaw Lane Power Plant Adaptive Re-use," to \$106,700,000 and \$3,400,000 project contingency, for a total budget of no more than \$110,100,000.

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

THE BOARD VOTED to approve the recommendation.

8. Academic Affairs Committee

Trustee Byrum presented the Trustee Academic Affairs Committee Report and the following recommendations and resolutions.

A. Revisions to Policy 04-17-07 (Emeritus Title)

It was recommended that the Board of Trustees approve revisions to Policy 04-17-07 (Emeritus Title).

BE IT RESOLVED, that the Board of Trustees of Michigan State University hereby approves revisions to the Emeritus Title Policy (04-17-07), as shown in Attachment A. (Appendix B)

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

THE BOARD VOTED to approve the recommendation.

B. Revisions to Policy 04-17-05 (Consensual Amorous or Sexual Relationships)

It was recommended that the Board of Trustees approve revisions to Policy 04-17-05 (Consensual Amorous or Sexual Relationships).

BE IT RESOLVED, that the Board of Trustees of Michigan State University hereby restates Policy 04-17-05 (Consensual Amorous or Sexual Relationships) in its entirety, as shown in Attachment A. (Appendix C)

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

THE BOARD VOTED to approve the recommendation.

C. Amendment to Section 4.4.1 of the Bylaws for Academic Governance

It was recommended that the Board of Trustees approve an amendment to Section 4.4.1 of the Bylaws for Academic Governance to provide the Honors College with Representation on the University Committee on Undergraduate Education.

BE IT RESOLVED, that the Board of Trustees of Michigan State University hereby approves an amendment to Section 4.4.1 of the Bylaws for Academic Governance to provide the Honors College with Representation on the University Committee on Undergraduate Education, as shown in Attachment A. (Appendix D)

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

THE BOARD VOTED to approve the recommendation.

9. Audit, Risk and Compliance Committee

Trustee Kelly presented the Trustee Audit, Risk and Compliance Committee Report and the following recommendations and resolutions.

A. Approval of contract terms

It was recommended that the Board of Trustees approve a contract between Michigan State University and Dr. Peter C. Alegi, an MSU faculty member.

BE IT RESOLVED, that the Board of Trustees of Michigan State University hereby approves a publishing contract with Dr. Peter C. Alegi consistent with earlier public notice given at a Board meeting and with a "Publishing Contract Term Sheet" presented to the Board for inclusion in its minutes. (Appendix E)

It was recommended that the Board of Trustees approve a contract between Michigan State University and *Fraunhofer USA, Inc.*, a company in which MSU faculty member Dr. Thomas Schuelke holds an interest.

BE IT RESOLVED, that the Board of Trustees of Michigan State University hereby approves a sponsored research agreement with *Fraunhofer USA, 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)

It was recommended that the Board of Trustees approve a contract between Michigan State University and *Fraunhofer USA, Inc.*, a company in which MSU faculty member Dr. Thomas Schuelke holds an interest.

BE IT RESOLVED, that the Board of Trustees of Michigan State University hereby approves a sponsored research agreement with *Fraunhofer USA, 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 G)

It was recommended that the Board of Trustees approve a contract between Michigan State University and *Fraunhofer USA, Inc.*, a company in which MSU faculty member Dr. Thomas Schuelke holds an interest.

BE IT RESOLVED, that the Board of Trustees of Michigan State University hereby approves a sponsored research agreement with *Fraunhofer USA, 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 H)

It was recommended that the Board of Trustees approve a contract between Michigan State University and *Fraunhofer USA, Inc.*, a company in which MSU faculty member Dr. Thomas Schuelke holds an interest.

BE IT RESOLVED, that the Board of Trustees of Michigan State University hereby approves a sponsored research agreement with *Fraunhofer USA, 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 I)

It was recommended that that the Board of Trustees approve a contract between Michigan State University and Dr. Kenneth W. Harrow, an MSU faculty member.

BE IT RESOLVED, that the Board of Trustees of Michigan State University hereby approves a publishing contract with Dr. Kenneth W. Harrow consistent with earlier public notice given at a Board meeting and with a "Publishing Contract Term Sheet" presented to the Board for inclusion in its minutes. (Appendix J)

It was recommended that the Board of Trustees approve a contract between Michigan State University and *Jetfire Power Systems, LLC*, a company in which MSU faculty member Dr. Harold Schock holds a financial interest.

BE IT RESOLVED, that the Board of Trustees of Michigan State University hereby approves an option agreement with *Jetfire Power Systems, 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 K)

It was recommended that the Board of Trustees approve a contract between Michigan State University and the *National Pesticide Safety and Education Center*, a center in which MSU employee Mr. Tom Smith holds an interest.

BE IT RESOLVED, that the Board of Trustees of Michigan State University hereby approves a service agreement with the *National Pesticide Safety and Education Center* consistent with earlier public notice given at a Board meeting and with a "Service Agreement Term Sheet" presented to the Board for inclusion in its minutes. (Appendix L)

Trustee Kelly **moved to approve** the recommendations, with support from Trustee Scott.

THE BOARD VOTED to approve the recommendations.

B. Notice of Intent to Negotiate Contracts

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 Mr. Burton Bargerstock, regarding a publication by the MSU Press. Mr. Bargerstock is Director of the National Collaborative for the Study of University Engagement. As negotiations progress, detailed information about proposed contracts with Mr. Burton Bargerstock will be provided to the Board for its review in accordance with State law.

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 *Cove Diamond, LLC*, a Michigan limited liability company. Dr. Timothy Grotjohn, Professor in the Department of Electrical and Computer Engineering and members of his family, have, or have options to buy, an interest in the company. As negotiations progress, detailed information about proposed contracts with *Cove Diamond, LLC* will be provided to the Board for its review in accordance with State law.

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 *Pavesoft, LLC* a Michigan limited liability company. Dr. Muhammed Kutay, Associate Professor in the Department of Civil and Environmental Engineering, and members of his family, have, or have options to buy, an interest in the company. As negotiations progress,

detailed information about proposed contracts with *Pavesoft, LLC* will be provided to the Board for its review in accordance with State law.

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 Dr. Miles McNall, regarding a publication by the MSU Press. Dr. McNall is Director of the Community Evaluation and Research Collaborative. As negotiations progress, detailed information about proposed contracts with Dr. Miles McNall will be provided to the Board for its review in accordance with State law.

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 Dr. Lynn Scott, regarding a publication by the MSU Press. Dr. Scott is an Assistant Professor in the Residential College in the Arts and Humanities. As negotiations progress, detailed information about proposed contracts with Dr. Lynn Scott will be provided to the Board for its review in accordance with State law.

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 Dr. Laurie Van Egeren, regarding a publication by the MSU Press. Dr. Van Egeren is Associate Provost for University Outreach & Engagement. As negotiations progress, detailed information about proposed contracts with Dr. Laurie Van Egeren will be provided to the Board for its review in accordance with State law.

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 *Syncrobal BioSciences*, a Michigan company. Dr. Christopher Waters, Associate Professor in the Department of Microbiology and Molecular Genetics, and members of his family, have, or have options to buy, an interest in the company. As negotiations progress, detailed information about proposed contracts with *Syncrobal BioSciences* will be provided to the Board for its review in accordance with State law.

C. Nassar Independent Review

Trustee Kelly asked Trustee Mosallam to present the following recommendation on behalf of the Committee on Audit, Risk and Compliance.

It was recommended that the Board authorize an independent public report on the Larry Nassar matter with the intent to negotiate a contract with McDermott Will & Emery having such terms, conditions, and scope as may be acceptable to the Board.

BE IT RESOLVED, that the Board of Trustees of Michigan State University hereby authorizes an independent public report on the Larry Nassar matter with the intent to negotiate a contract with McDermott Will & Emery having such terms, conditions, and scope as may be acceptable to the Board.

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

THE BOARD VOTED to approve the recommendation.

10. Student Life and Culture Committee

Trustee Scott presented the Trustee Student Life and Culture Committee Report.

The Committee received an update on the new Counseling and Mental Health Services Fund. Additionally, the Committee discussed diversity, equity, and inclusion initiatives, including the Council on Racial and Ethnic Minorities and the proposed establishment of a multicultural center. Committee members also reviewed proposed amendments to the Firearms and Weapons Ordinance.

11. Chairperson's Report and Trustee Comments

Trustee Byrum stated Michigan State will expand Michigan's resident and freshman fee rate freeze to all undergraduate students this year. She stated this reflects the Board's concern of access and affordability while maintaining and increasing the quality of an MSU education. Trustee Byrum said that the Board is budgeting almost one million additional dollars to student financial aid this coming year. She stated the new tuition rate structure will encourage full class schedules and possibly allow undergraduates to sample different classes without additional cost. She stated the financial leeway to do exploration can add value to the student experience.

Trustee Byrum also stated MSU is in the process of establishing the new Counseling and Mental Health Services Fund to support counseling and mental health services for survivors. The fund administrator selected is New Directions Behavior Health. The new fund will be accessible starting September 1, 2019. She said that additional details are expected to be released in August. She noted that in the meantime, survivors are asked to submit claims to the intermediate fund, Commonwealth Mediation and Conciliation. She stated information on how to submit a claim can be found on the Our Commitment website.

Trustee Byrum noted that this is Dr. Udpa's last meeting he will preside over as acting president. Trustee Byrum thanked Dr. Udpa for his contributions and dedication to MSU. She said that Dr. Udpa's leadership extends beyond his role

as acting president and that his care of the university and its people, his principled, firm leadership, and fundamental decency are manifested in everything he does. She stated he is an able administrator, an internationally recognized scholar and inspirational mentor. In addition, he and his wife Lalita have established several generous endowments over the years. The Board officially thanked Dr. Udpa with a resolution in his honor (Appendix M).

Trustee Ferguson thanked Dr. Udpa for his work in this position and in his selfless career of improving MSU.

Trustee Kelly thanked Dr. Udpa for his leadership. Trustee Kelly stated the Board took a step in the right direction by authorizing an independent and public report of the Nassar scandal. Trustee Kelly acknowledged Trustee Mosallam for his work towards an independent report.

Trustee Mosallam thanked Dr. Udpa for his leadership, compassion, and care. He said that the Board authorizing an independent and public report of the Nassar scandal is a step in the right direction towards healing. He thanked his fellow board members for their work and support. Trustee Mosallam thanked survivors Rachael Denhollander, Sarah Klein, and Sterling Riethman for working with the Board on the independent investigation. Trustee Mosallam stated that he will work tirelessly to make MSU a safer campus.

Trustee Schlichting thanked Dr. Udpa for his leadership, compassion, and caring for people.

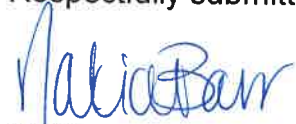
Trustee Scott thanked Dr. Udpa for his leadership. She also thanked Dr. Lalita Udpa for allowing her husband to take this position.

Trustee Tebay thanked Dr. Udpa for his leadership.

12. Request to Adjourn

On a motion by Trustee Kelly, supported by Trustee Mosallam, **THE BOARD VOTED to adjourn** at 9:16 a.m.

Respectfully submitted,



Nakia Barr
Secretary of the Board of Trustees

Data, Algorithms, & Computing for Studying Complex Diseases

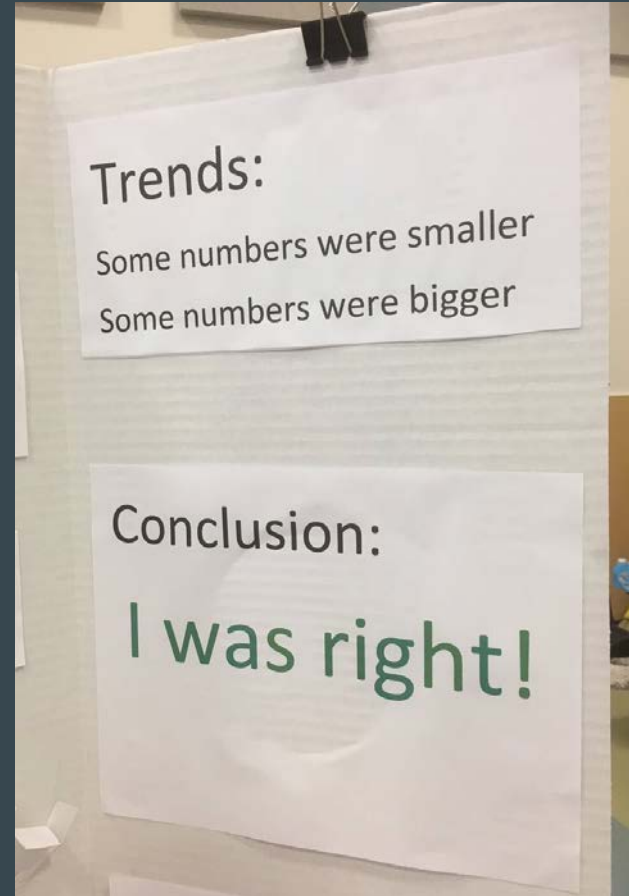


Arjun Krishnan

Computational Math, Science & Engineering
Biochemistry & Molecular Biology

The first principle is that you must not fool yourself, and you are the easiest person to fool.

– Richard Feynman



1993

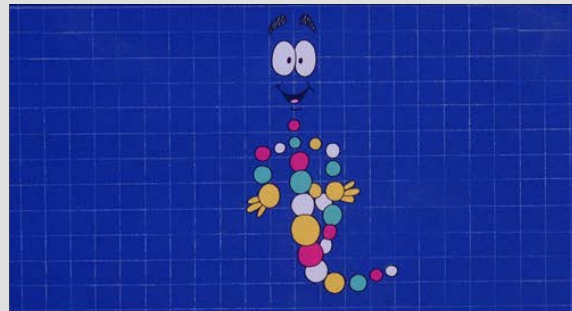
I was 9 years old

A STEVEN SPIELBERG FILM



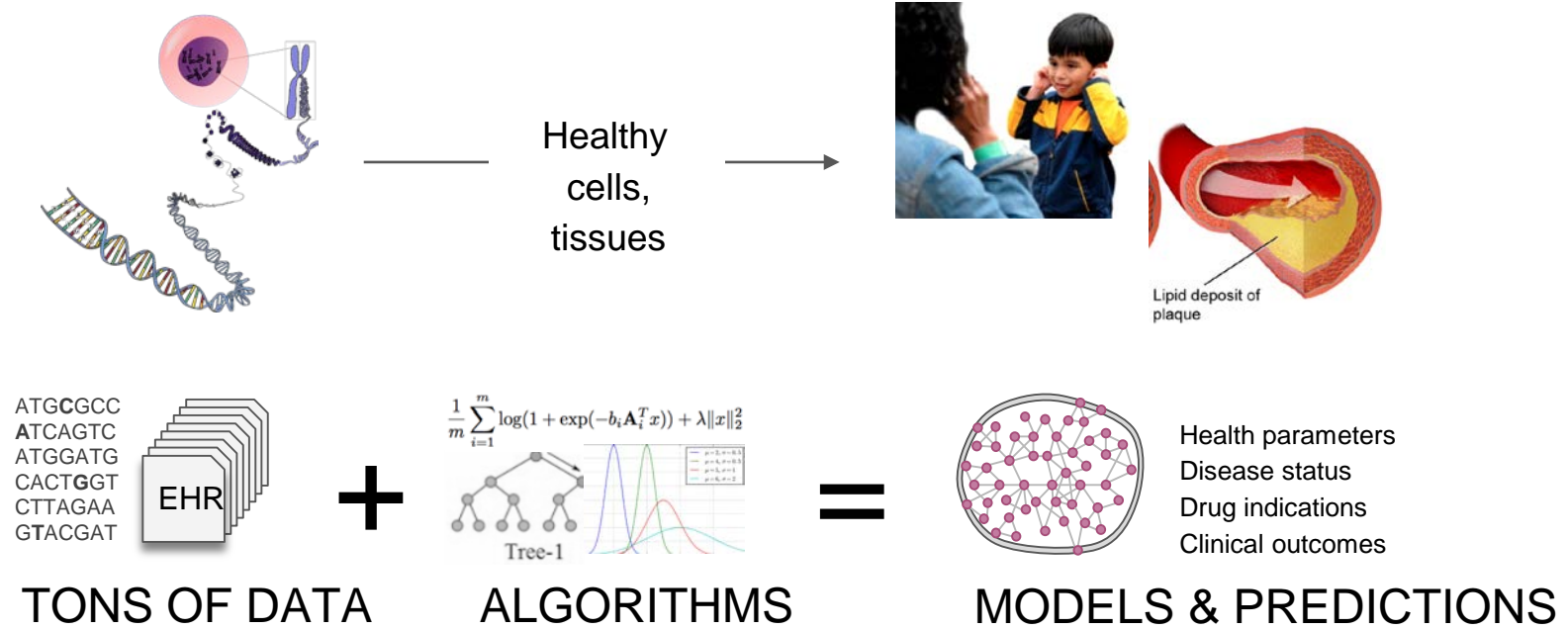
An Adventure
65 Million Years In The Making.

UNIVERSAL PICTURES PRESENTS AN AMBLIN ENTERTAINMENT PRODUCTION SAM NEILL LAURA DERN JEFF GOLDBLUM
AND RICHARD ATTENBOROUGH "JURASSIC PARK" BOB PECK MARTIN FERRELL B.D. WING SAMUEL L. JACKSON WAYNE KNIGHT
JOSEPH MAZZELLO ARIANA RICHARDS DIRECTED BY STEVEN SPIELBERG PRODUCED BY STEVEN SPIELBERG AND PHIL TIPPETT
SPECIAL THANKS TO MICHAEL LANTIERI EXECUTIVE PRODUCERS JOHN WILLIAMS FILM EDITOR MICHAEL KAHN EXECUTIVE PRODUCERS BOB PECK AND CARRIE
BASED ON THE NOVEL BY MICHAEL CRICHTON SCREENPLAY BY MICHAEL CRICHTON AND DAVID KOEPP PRODUCED BY KATHLEEN KENNEDY AND GERALD R. MOLEN
A UNIVERSAL PICTURE



Individual's genetic/molecular data → health and disease

Common diseases— e.g., autism, hypertension, & diabetes are **complex**

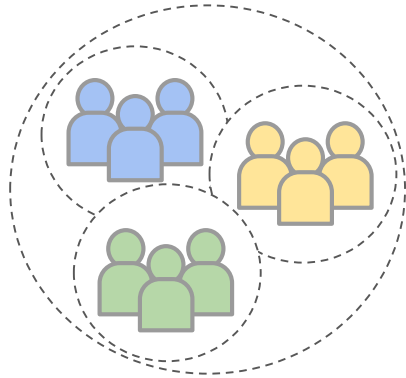


Collaboration: Biology, Computer Science, Statistics, Engineering, & Mathematics

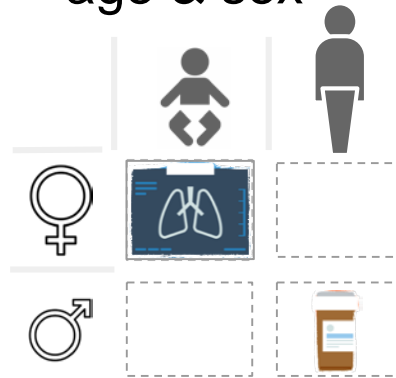
Individual's genetic/molecular data → health and disease

Common diseases – e.g., autism, hypertension, & diabetes – are **complex**

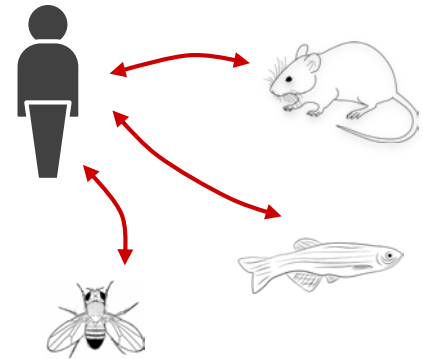
1 Not single well-defined conditions



2 Vary significantly by age & sex



3 Unclear about best animal models



Autism spectrum disorder, neurodevelopmental disability affecting 1 in 68 children



Genes play a major role, but the **genetic landscape is unclear**.

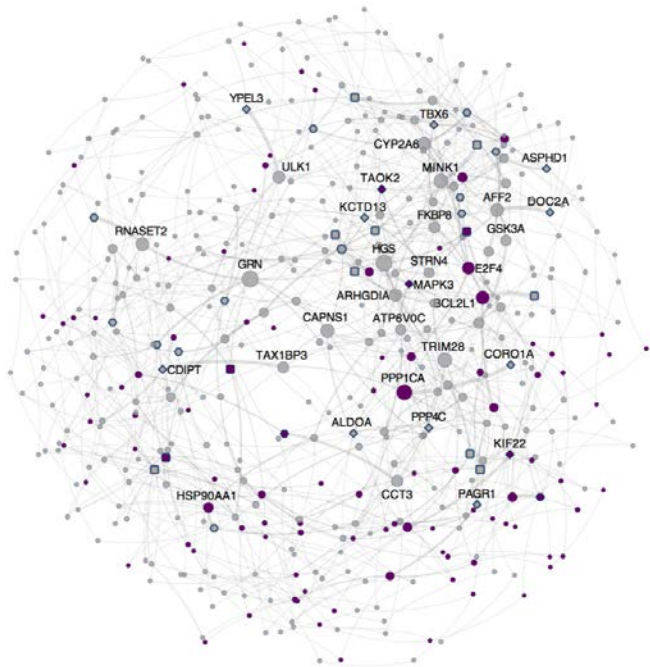
Diagnosis is usually made in the 3rd year of life.

If diagnosed early → intensive behavioral therapy.

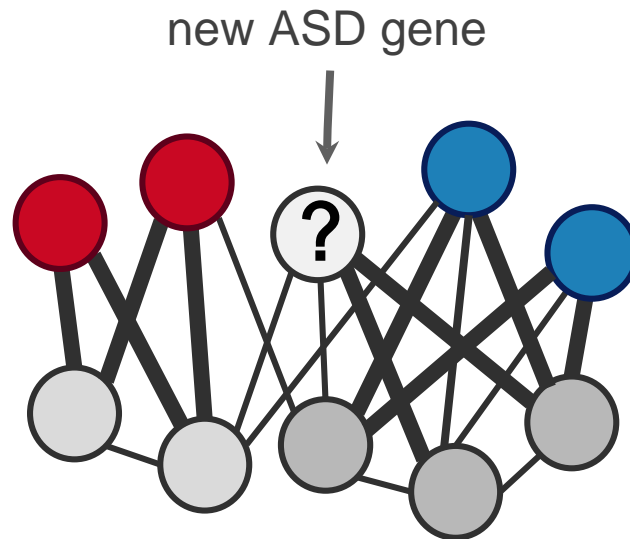
Which genes among the 30,000 genes in our genome might play a role in ASD?

Can an algorithm help find autism genes?

Social network of genes

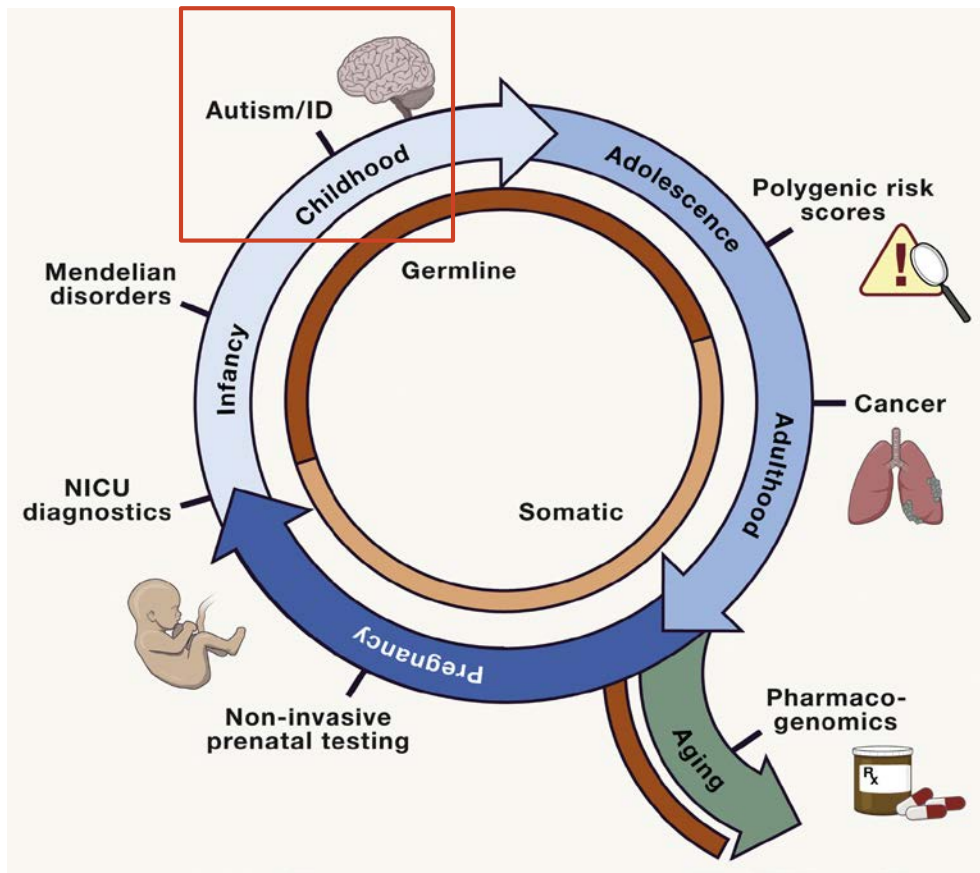


Machine learning **algorithm**



Hundreds of new ASD genes → Potential for **early genetic diagnosis**

Computational genomics throughout the human life cycle



autism

adolescent eating disorders

gastrointestinal disorders

abnormal pregnancy

coronary artery disease

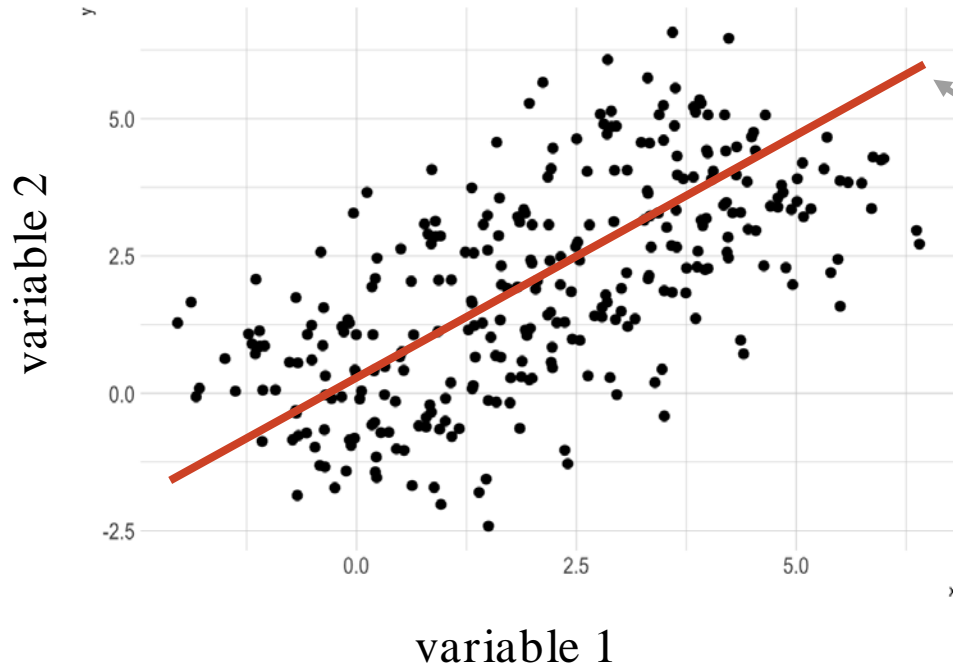
cardiomyopathies

MSU (Integrative Biology, Large Animal
Clinical Sci, Neuroscience, OBGYN, Pediatrics &
Human Dev, Psychology, Translational Medicine
PSU, OHSU, NYU, Princeton

All models are wrong
but some are useful.

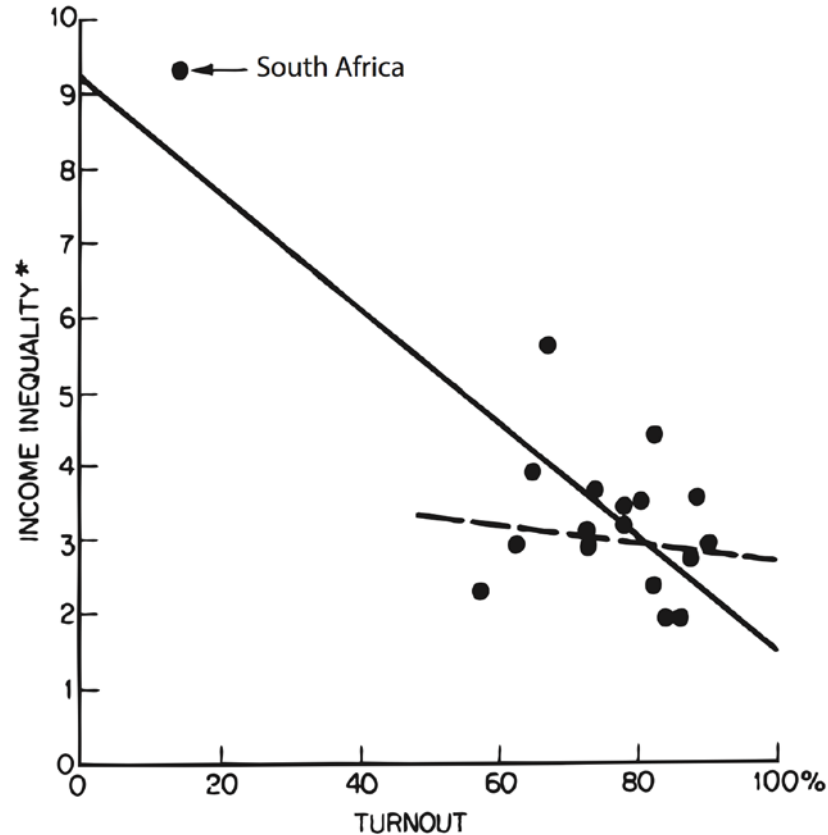
– George Box

Models will capture any pattern in the data



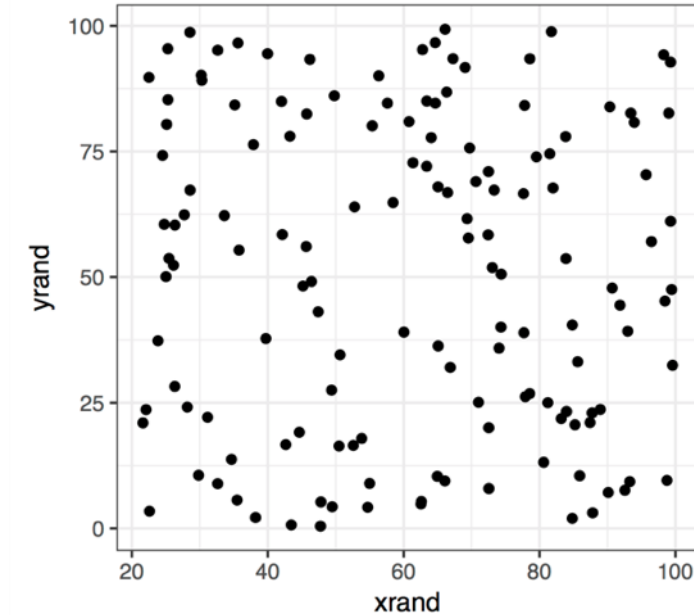
A **model** that describes a linear relationship between *variable_1* & *variable_2*

Models can be tricked by extreme & hidden data

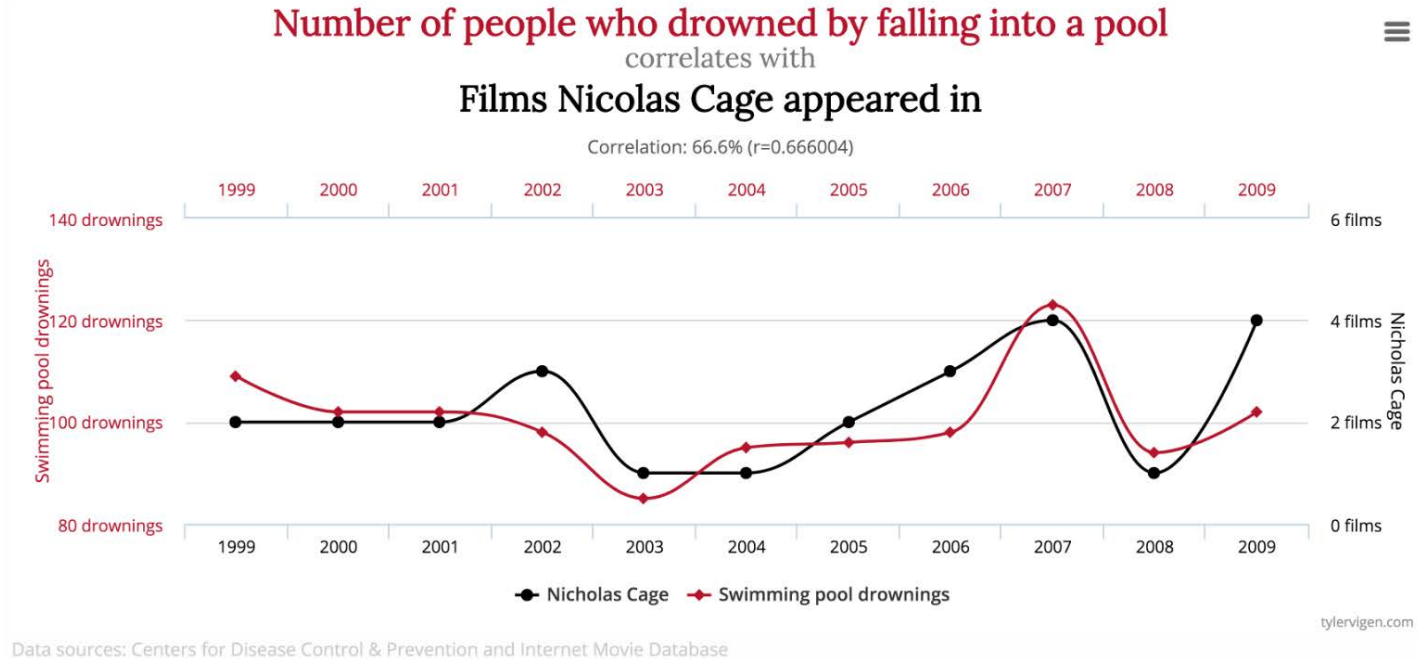


Models miss patterns they are not developed for

Correlation nearly zero



Models can easily find patterns in big data

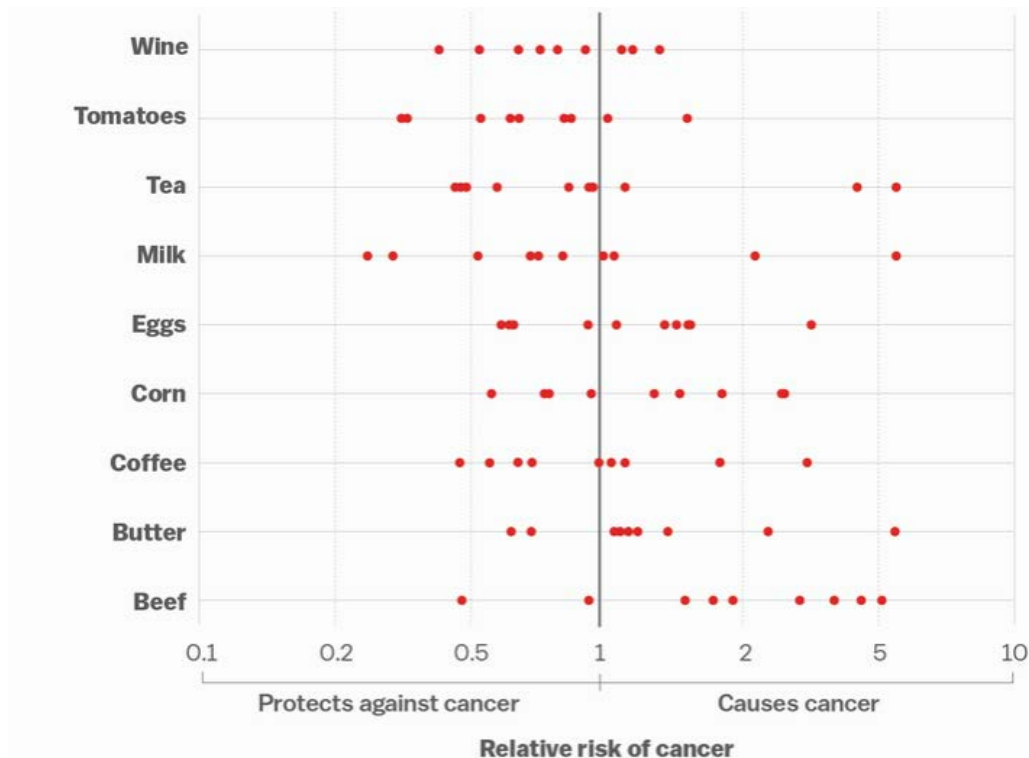


Checkout <https://www.google.com/trends/correlate>

Consuming the results of statistical / ML models

Everything we eat both causes & prevents cancer

● = One medical study



SOURCE: Schoenfeld and Ioannidis, *American Journal of Clinical Nutrition*

Vox

Consuming the results of statistical / ML models



The problem with your coffee



Hot Drinks a Probable Cancer Cause, Says WHO
time.com

4/9/17, 6:15 AM



How coffee can help you live longer



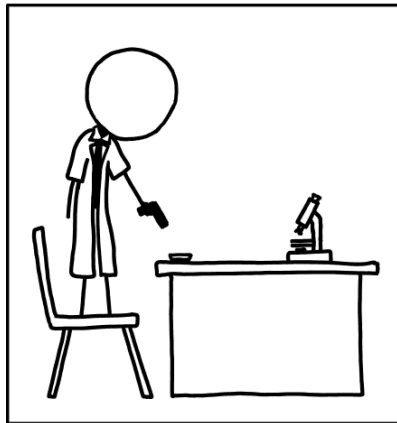
How Coffee Can Help You Live Longer
New findings add to growing evidence that co...
time.com

4/9/17, 6:45 AM

Consuming the results of statistical / ML models

WHEN YOU SEE A CLAIM THAT A COMMON DRUG OR VITAMIN "KILLS CANCER CELLS IN A PETRI DISH,"

KEEP IN MIND:



SO DOES A HANDGUN.

OF MICE AND MEN A new Twitter account is outing shoddy reporting in science stories

By Ephrat Levi · April 14, 2019



justsaysinmice @justsaysinmice · Apr 12
IN MICE



Exercise during pregnancy protects children from obesity, study finds

Exercising during pregnancy can protect children from obesity later in life, a study has found. Previous studies have already demonstrated that exercis...

[independent.co.uk](https://www.independent.co.uk)

Scientist: "My findings are meaningless if taken out of context."

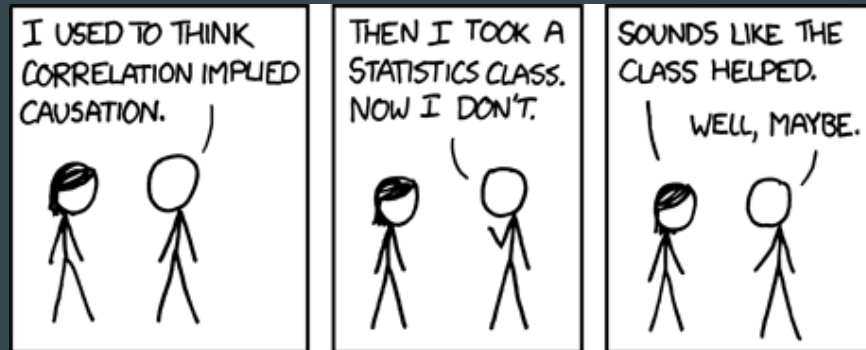
Media: "Scientist claims findings are meaningless."

Gaps, Missteps, & Errors in Statistical Data Analysis

A short course on essential concepts for rigorous practice & critical interpretation of data analysis.

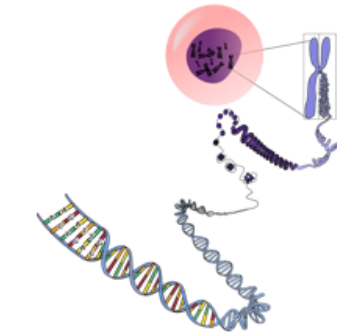
Every November

Open to students, postdocs, scientific staff, faculty

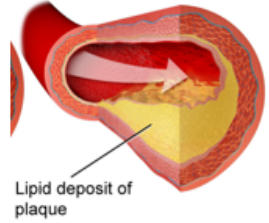


Individual's genetic/molecular data → health and disease

Common diseases— e.g., autism, hypertension, & diabetes are **complex**



Healthy cells, tissues



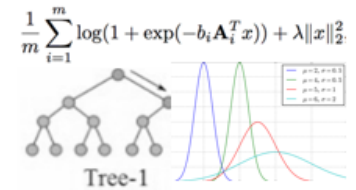
Lipid deposit of plaque

ATGCGCC
ATCAGTC
ATGGATG
CACTGGT
CTTAGAA
GTACGAT

EHR

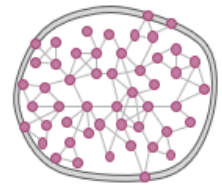
TONS OF DATA

+



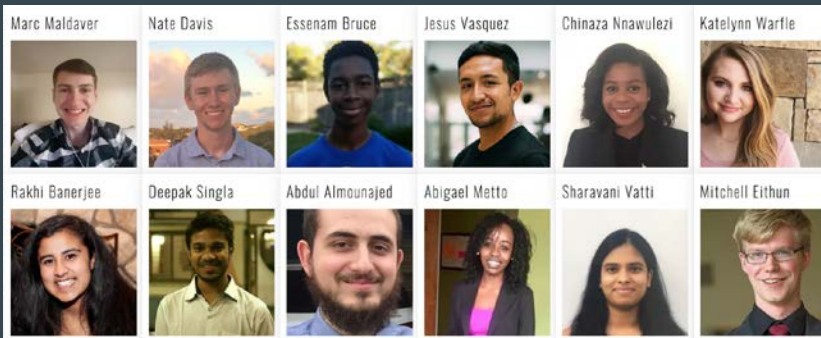
ALGORITHMS

=



MODELS & PREDICTIONS

- Health parameters
- Disease status
- Drug indications
- Clinical outcomes



Computational
Math, Science
& Engineering



Biochemistry
& Molecular
Biology



R35GM128765



 arjun@msu.edu

 thekrishnanlab.org

 @compbiologist

EMERITUS TITLE

04-17-07

Members of the faculty, academic staff and administrative staff who leave the University with official retirement status and in good standing¹ are granted certain privileges and the "emeritus" title. For faculty members with the rank of professor, associate professor or assistant professor, the "emeritus" designation is appended to the rank held at the time of retirement, e.g., professor emeritus. For academic staff the title would be librarian emeritus, etc. For administrators whose administrative appointment requires approval by the Board of Trustees ~~and for all executive managers~~, the emeritus designation, upon approval by the Provost and the President, is appended only to the most senior administrative title held at Michigan State University, which may be held at or prior to the time of retirement, e.g., dean emeritus. The emeritus designation is not normally awarded for administrative titles held on an "acting" basis.

Faculty, academic staff, and administrative staff who end their employment at the University after a substantial period of distinguished service short of the years of service needed for retirement eligibility, may be granted emeritus status upon the recommendation of the Provost to the President, after the Provost consults with the University Committee for Faculty Affairs.

Faculty with the emeritus designation are entitled to attend Academic Senate meetings with voice but without vote; to march in academic processions such as commencement; ~~to receive the MSU News-Bulletin;~~ to avail themselves of the libraries; to have continued access to an MSU e-mail account; to receive, on application, a faculty vehicle permit; to represent the University, on appointment, at academic ceremonies of other institutions; and, in general, to take part in the social and ceremonial functions of the University.

Emeritus status may be revoked upon the recommendation of the Provost to the President, after approval by the University Committee for Faculty Affairs in those exceptional cases in which behavior occurring or discovered after being awarded emeritus status is deemed to be substantially inconsistent with the behavior expected of Michigan State University faculty, academic staff, and administrative staff.

Enacted: 5/18/50

Amended: 4/5/91, 6/21/19

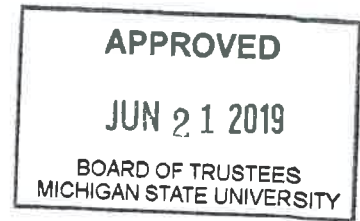
¹ "Good Standing" is assumed unless one ends employment while suspended or during dismissal proceedings.

**MICHIGAN STATE
UNIVERSITY**

June 21, 2019

MEMORANDUM

To: Committee on Academic Affairs
From: June Pierce Youatt
Executive Vice President and Provost
Subject: Revisions to Policy 04-17-07 (Emeritus Title)



RECOMMENDATION

The Trustee Committee on Academic Affairs recommends that the Board of Trustees approve revisions to the Policy 04-17-07 (Emeritus Title).

RESOLUTION

BE IT RESOLVED, that the Board of Trustees of Michigan State University hereby approves revisions to the Emeritus Title Policy (04-17-07), as shown in Attachment A.

BACKGROUND

The "emeritus" title is an honorific award made at retirement, and grants certain privileges. The University Committee on Faculty Affairs (UCFA) considered whether or not the title and privileges should be extended to additional individuals under certain circumstances and if there were circumstances under which the honorific title should be revoked.

The UCFA has reviewed and approved two proposed revisions to the Emeritus Title Policy. The first allows for the "emeritus" title to be conferred upon faculty, academic, and administrative staff who end their employment at MSU after a substantial period of distinguished service short of the years of service needed for retirement eligibility, upon recommendation of the Provost to the President, after consultation with the UCFA. The second change allows for the revocation of emeritus status in those exceptional cases in which behavior occurring or discovered after being awarded emeritus status is deemed to be substantially inconsistent with the behavior expected of MSU faculty, academic staff, and administrative staff. The UCFA must approve a revocation recommendation from the Provost and President.

Upon a careful review of the policy, the revisions were initiated by the UCFA and approved by the University Council at its meeting on March 26, 2019.

cc: Board of Trustees, S. Udpa, K. Wilbur, N. Barr, B. Quinn, M. Zeig, G. Hoppenstand, T. Curry



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CONSENSUAL AMOROUS OR SEXUAL RELATIONSHIPS WITH STUDENTS¹

04-17-05

I. Introduction

Michigan State University's mission includes "providing outstanding undergraduate, graduate, and professional education to promising, qualified students in order to prepare them to contribute fully to society as globally engaged citizen leaders." The student, as a member of the academic community, has both rights and duties. Within that community, the student's most essential right is the right to learn. The University has a duty to provide for the student those privileges, opportunities, and protections which best promote the learning process in all its aspects.²

The relationship between an instructor³ and a student plays an important role in accomplishing this mission. Certain responsibilities bestowed upon instructors have long been codified in the Faculty Rights and Responsibilities policy:

The teacher has the responsibility to encourage the pursuit of learning by students by manifesting the best academic standards of the discipline or profession. To accord students respect as individuals, the teacher shall seek to establish a relationship of mutual trust and to establish an appropriate role as an intellectual guide, counselor and mentor, both in and out of the classroom.

The establishment and maintenance of the proper relationship between instructor and student are fundamental to the University's function, and require both the instructor and student to recognize the rights and responsibilities which derive from it. The relationship between instructor and student as individuals should be founded on mutual respect, trust and understanding, together with shared dedication to the educational process.⁴

Instructors carry a responsibility to students, colleagues, the scholarly community, and the public to perform their duties in a professional, respectful, and collegial manner⁵, and must do so with a commitment to honoring the highest ethical standards. They are regarded as guardians of the

¹ This policy replaces the previous policy, "Conflict of interest in Educational Responsibilities Resulting from Consensual Amorous or Sexual Relationships" approved by the Board of Trustees on November 8, 1996.

² Adapted from Article 1 of the Spartan Life Student Handbook.

³ The term, "instructor," as used in this document, applies to faculty, academic staff, and graduate teaching assistants who have educational responsibilities for students.

⁴ Adapted from Article 2 of the Spartan Life Student Handbook.

⁵ These responsibilities are fully articulated in the Faculty Rights and Responsibilities policy:

<https://hr.msu.edu/policies-procedures/faculty-academic-staff/faculty-handbook/faculty-rights.html>

University, charged with preserving in it the privilege of teaching students which society has entrusted to their care.

To achieve and maintain an environment in which a student's rights can be fully realized requires an academic community that values and honors the principles of inclusivity, civility, respect, and professionalism. The University is committed to creating a safe learning environment free of conflicts in achieving its educational mission.

It is therefore recognized by Michigan State University that consensual amorous and sexual relationships between instructors and students are counterintuitive to these rights and responsibilities, to the environment desired, and in upholding the mission of the University. Such personal relations undermine the integrity of the instructor and student relationship. There is an inherent power differential between instructors and students making consensual amorous and sexual relationships between instructors and students fundamentally unequal.

II. Purpose

The purpose of this policy is to ensure that Michigan State University's learning environment reflects our moral and ethical responsibility to manage the power differential that exists when there are consensual amorous and sexual relationships between instructors and students.

III. Applicability

This Policy applies to faculty, academic staff, and graduate teaching assistants.

IV. Definitions

- A. Consensual amorous or sexual relationships: Relationships of a romantic, dating, and/or sexual nature entered into with consent of both parties. These relationships may or may not involve physical contact, and can include digital relationships via text, social media, etc. This definition also covers past relationships.
- B. Educational responsibility: The power or authority to evaluate, influence, provide, or control aspects related to a student's education or professional development. Covered activities include, but are not limited to, teaching, grading, mentoring, advising, evaluating research or other academic activity, serving on a student's dissertation committee, participating in decisions or recommendations regarding funding or other resources, clinical supervision, and recommending for admissions, employment fellowships, or awards.

V. Policy

- A. Undergraduate Students

An amorous or sexual relationship between an undergraduate student and a faculty member, academic staff member, or a graduate teaching assistant may impair or undermine the ongoing trust needed for effective teaching, learning and professional development. Because of the faculty or academic staff member's authority or power over the student, inherently conflicting interests and perceptions of unfair advantage arise when a faculty, academic staff member, or graduate teaching assistant assumes or maintains educational responsibility for a student with whom the faculty or academic staff member has or is engaged in amorous or sexual relations.

Such consensual amorous or sexual relationships, even absent any educational responsibility, may lead to unanticipated conflicts of interest since an instructor's influence and power may extend beyond the classroom or department. Due to the institutional power differential in instructor and undergraduate student relationships, there is the inherent risk of coercion and the perception by others of exploitation.

It is, therefore, the policy of Michigan State University that any amorous or sexual relationships between an undergraduate student enrolled at the University and a faculty member, academic staff member, or graduate teaching assistant is prohibited, as follows:

1. For faculty and academic staff members, this prohibition covers all relationships, regardless of whether the faculty or academic staff member has educational responsibility over the undergraduate student. Where relationships predate the enrollment of the undergraduate student at Michigan State University, the faculty or academic staff member must immediately disclose the amorous or sexual relationship to the relevant unit administrator. The unit administrator shall promptly consult with the dean/director and the Associate Provost and Associate Vice President for Academic Human Resources, who will review the circumstances surrounding each relationship on a case-by-case basis. If permitted, a management plan will be developed. This plan must be evaluated annually between the unit administrator and the faculty or academic staff member.
2. For graduate teaching assistants, this prohibition only applies with respect to undergraduate students over whom they have educational responsibility. Thus, graduate teaching assistants must not begin a relationship with undergraduate students for whom they have educational responsibility. When such amorous or sexual relationships predate the assumption of educational responsibility for the undergraduate student, the graduate teaching assistant shall immediately disclose the amorous or sexual relationship to the relevant unit administrator, who shall promptly arrange other oversight for the student.

B. Graduate Students and Graduate Professional Students (hereafter referred to collectively as graduate students)

A power differential also exists in relationships between a graduate student and a faculty or academic staff member.

It is therefore the policy that faculty and academic staff are prohibited from engaging in a consensual amorous or sexual relationship with a graduate student over whom there is educational responsibility.

Where the relationship predates the faculty or academic staff member's assumption of educational responsibility for the graduate student, the faculty or academic staff member shall immediately disclose the amorous or sexual relationship to the relevant unit administrator.

The relevant unit administrator, in consultation with the dean and Academic Human Resources, shall promptly arrange other oversight for the student.

1. The oversight plan must be evaluated annually between the unit administrator and the faculty or academic staff member.

C. Lifelong students and other learners

The University provides education to lifelong students and others who are not classified as undergraduate, graduate, or graduate professional students.

It is, therefore, the policy of Michigan State University that a faculty, academic staff member, or graduate teaching assistant who currently has educational responsibility for a lifelong student or other non-undergraduate or non-graduate student at the University may not begin a relationship with that student when they have educational responsibilities over the student.

A faculty, academic staff member or graduate teaching assistant shall immediately disclose the amorous or sexual relationship to the relevant unit administrator where the relationship predates their assistant's assumption of educational responsibility for the student. The relevant unit administrator shall promptly arrange other oversight for the student in consultation with the dean and Academic Human Resources. Such oversight is to be evaluated annually.

D. Post-Doctoral Fellows (i.e. Research Associates)

Consensual amorous or sexual relationships between faculty and academic staff and post-doctoral fellows (i.e. research associates) over whom there is educational responsibility are prohibited. Where such a relationship predates the assumption of

educational responsibility, the faculty or academic staff member shall immediately disclose the relationship with the relevant unit administrator, who shall develop an oversight plan in consultation with the dean and Academic Human Resources, to be evaluated annually.

VI. Exceptions to this Policy

No exceptions will be made in circumstances where the instructor has educational oversight for the student. In other words, an instructor may not, under any circumstances, be in a relationship with a student for whom they have educational responsibility. However, the University recognizes that rare, unique, and/or unusual circumstances may warrant evaluation of an exception to the prohibition of undergraduate student relationships with a faculty or academic staff member (e.g., a faculty member's spouse/partner enrolls as an undergraduate student). It is the responsibility of the faculty or academic staff member to initiate an exception request as soon as possible. Approval will be automatically granted in the scenario where a faculty member's spouse/partner enrolls as an undergraduate student.

These requests will be evaluated by the unit administrator, in consultation with the dean and the Associate Provost and Associate Vice President for Academic Human Resources, on a case-by-case basis. Any exceptions granted must be evaluated annually.

VII. Implementation of Policy

This policy was implemented on ____ . Existing relationships that are now prohibited under this policy (i.e., undergraduate student and faculty and academic staff member relationships) and relationships subject to the new disclosure requirements of this policy must be disclosed to the relevant unit administrator within thirty (30) days of the effective date of this policy. The unit administrator shall promptly consult with the dean/director and the Associate Provost and Associate Vice President for Academic Human Resources, who will review the circumstances surrounding each relationship on a case-by-case basis. If permitted, a management plan will be developed.

VIII. Record-Keeping

The unit administrator (e.g. department chairperson, school director, dean of a non-departmentally organized college) must retain records related to the disclosed conflict, management plans, and alternative arrangements made for educational oversight for the student. Documents must be maintained according to University retention policies.

IX. Violations

Failure to comply with this policy will be considered a violation of policy and is subject to appropriate disciplinary action up to and including termination.

X. Relation to Other Policies

This policy is not intended to replace or circumvent other established University policies such as the Conflict of Interest in Employment Policy and the Relationship Violence and Sexual Misconduct Policy.

Enacted 11/8/96

Amended: 6/21/19

An amorous or sexual relationship between a student and a faculty member, a graduate teaching assistant or another University employee who has educational responsibility for that student may impair or undermine the ongoing trust needed for effective teaching, learning and professional development. Because of the faculty member, graduate assistant or other employee's authority or power over the student, inherently conflicting interests and perceptions of unfair advantage arise when a faculty member, graduate teaching assistant or other employee assumes or maintains educational responsibility for a student with whom the faculty member, graduate teaching assistant or other employee has engaged in amorous or sexual relations.

It is, therefore, the policy of Michigan State University that each faculty member, graduate teaching assistant and other University employee who has educational responsibilities for students shall not assume or maintain educational responsibility for a student with whom the faculty member, graduate teaching assistant or other employee has engaged in amorous or sexual relations, even if such relations were consensual. Whether such amorous or sexual relationships predate the assumption of educational responsibility for the student, or arise out of the educational relationship, the faculty member, graduate teaching assistant or other employee shall immediately disclose the amorous or sexual relationship to the relevant unit administrator, who shall promptly arrange other oversight for the student.

In unusual circumstances, the achievement of the affected student's academic requirements may necessitate continued oversight of the affected student by the faculty member, graduate teaching assistant or other University employee who has engaged in amorous or sexual relations with that student. In such circumstances the unit administrator shall, therefore, have authority, after consulting the affected student, to permit the continued oversight of the affected student by the faculty member, graduate teaching assistant or other University employee, provided that the faculty member, graduate teaching assistant or other University employee shall not grade or otherwise evaluate, or participate in the grading or other evaluation of, the work of the affected student, and that the alternative arrangements for grading or evaluating the affected student's work treat the student comparably to other students.

Enacted: 11/8/96

APPENDIX D

Attachment 3A

4.3. UNIVERSITY COMMITTEE ON ACADEMIC GOVERNANCE

4.3.1. The University Committee on Academic Governance (UCAG) shall include a faculty member from each college, and a faculty member from the non-college faculty. Eligibility to serve on UCAG is limited to faculty members who have previously served on a University-level Standing Committee or the Faculty Senate. Three undergraduate student members of ASMSU, two graduate student members from COGS, the Provost, and the Secretary for Academic Governance shall be ex-officio members of UCAG.

4.3.1.1. The UCAG shall report to the University Council.

4.3.1.2. The chairperson of the UCAG shall be a member of The Steering Committee, and thus of the Faculty Senate and the University Council.

4.3.2. The UCAG shall nominate to the University Council individuals who may be appointed to University-level Advisory-Consultative Committees, and other committees as may be requested by the University Council.

4.3.2.1. Only the faculty members of the UCAG shall nominate faculty to the committees listed in 4.3.2.

4.3.2.2. ASMSU shall appoint undergraduate students to fill the vacant undergraduate student positions on the committees of 4.3.2 in accordance with the procedures outlined in ASMSU's bylaws. COGS shall appoint graduate and professional students to fill the vacant graduate student positions on the committees of 4.3.2 in accordance with the procedures outlined in COGS bylaws.

4.3.2.3. The Secretary for Academic Governance shall provide staff assistance to UCAG in developing nominations.

4.3.3. The UCAG shall conduct a continuing review of the Bylaws and shall be responsible for recommending amendments in these Bylaws to the University Council.

4.3.4. The UCAG shall interpret these Bylaws subject to review by the University Council.

4.3.5. The UCAG shall review college bylaws for consistency with these Bylaws. It shall review each college's bylaws at least once every five years.

4.3.6. The UCAG shall review unit appeals in cases of conflict between units and consider appeals of reviews of department or school bylaws by college committees.

4.3.7. Decisions of the UCAG on college and department bylaws are subject to review by the University Council.

4.3.8. The UCAG shall provide guidelines for elections or appointment to committees, boards, and panels affiliated with the University Council. The UCAG will review challenged elections, and recommend appropriate action to the University Council.

4.4. UNIVERSITY COMMITTEE ON UNDERGRADUATE EDUCATION

4.4.1. The membership of the University Committee on Undergraduate Education (UCUE) shall include a faculty member from each college, including a faculty member from the Honors College who is not

**MICHIGAN STATE
UNIVERSITY**

June 21, 2019

MEMORANDUM



To: Committee on Academic Affairs
From: June Pierce Youatt
Executive Vice President and Provost
(Signature)
Subject: Amendment to Section 4.4.1 of the Bylaws for Academic Governance

RECOMMENDATION

The Trustee Committee on Academic Affairs recommends that the Board of Trustees approve an amendment to Section 4.4.1 of the Bylaws for Academic Governance to provide the Honors College with Representation on the University Committee on Undergraduate Education.

RESOLUTION

BE IT RESOLVED, that the Board of Trustees of Michigan State University hereby approves an amendment to Section 4.4.1 of the Bylaws for Academic Governance to provide the Honors College with Representation on the University Committee on Undergraduate Education, as shown in Attachment A.



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BACKGROUND

The University Committee on Undergraduate Education (UCUE) shares responsibility with the Dean of Undergraduate Studies to consult with the Provost on academic programs, curriculum policies, evaluation of instruction, academic advising, grading policies and admissions. Pursuant to Section 4.4.1 of the Bylaws for Academic Governance, membership of this standing committee is comprised of representatives from each of the undergraduate degree granting colleges. While many of the issues debated in UCUE affect (or may be affected by) the Honors College, there was no designated representation of the Honors College. This change provides for that representation.

Upon a careful review of the Bylaws, this revision was initiated by the University Committee on Academic Governance and approved by the University Council at its meeting on November 20, 2018.

In accordance with Section 8.3.2.1 of the Bylaws for Academic Governance, the Acting President has reviewed the changes, concurs with the proposed revisions, and now requests action by the Board of Trustees.

cc: Board of Trustees, S. Udpa, K. Wilbur, N. Barr, B. Quinn, M. Zeig, G. Hoppenstand, T. Curry

currently serving as a committee member on another University Standing Committee and a faculty member from the non-college faculty. UCUE shall also have four undergraduate student members, of whom one must be the Vice President of Academic Affairs of ASMSU, and two graduate student members from COGS. The Provost shall be a member with voice, but no vote.

4.4.1.1. The UCUE shall report to the University Council (3.2.5).

4.4.1.2. Each year the UCUE shall appoint one of its faculty members to serve as an ex-officio member on the Athletic Council.

4.4.2. The chairperson of the UCUE will serve on The Steering Committee and thus on the University Council and the Faculty Senate.

4.4.3. The UCUE shall exercise the faculty's delegated authority on grading policy for undergraduate students and the use of grades and grade point averages for undergraduate admissions and for advancement in or graduation from undergraduate academic programs.

4.4.4. The UCUE shall review all changes in undergraduate academic programs proposed by academic units and recommend their approval or rejection to the University Committee on Curriculum.

4.4.5. The UCUE shall have shared responsibility with the Dean of Undergraduate Studies to consult with the Provost on the establishment, moratorium, discontinuance, or merger of undergraduate academic programs; on policies pertaining to curriculum revision, methods of instruction, evaluation of instruction, and advising and counseling for undergraduate students and programs; and on other policies pertaining to undergraduate education. On issues of the establishment, moratorium, discontinuance, and merger of undergraduate academic programs, the University Council and the Faculty Senate will be informed of the UCUE's consultation with the Provost.

4.4.6. The UCUE shall have shared responsibility with the Dean of Undergraduate Studies to consult with the Provost on policy pertaining to admissions and retention, financial aid, and the use and distribution of educational and research resources for undergraduate students and programs.

4.4.7. The UCUE shall advise and consult with the Dean of Undergraduate Studies and the Provost and make recommendations to the University Council on all other matters of academic policy affecting undergraduate students.

4.4.8. The UCUE shall coordinate its activities with those of other committees, as appropriate.

PUBLISHING CONTRACT TERM SHEET

Party: Dr. Peter C. Alegi

Project Description: Renewal of a contract for the editing of a book series entitled *African History and Culture*

Term: Two years

Agreement: Dr. Alegi will receive two free copies of each published work, and additional copies at a 40% discount from the retails price.

Services Provided: By MSU to Dr. Alegi: Publication of book series
By Dr. Alegi to MSU: Editing the book manuscripts

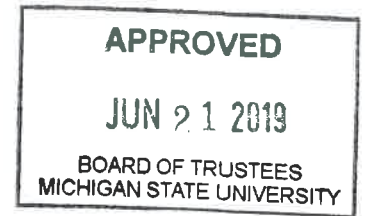
**Use of University Facilities/
Personnel:** Not Applicable

Organization Type: Dr. Alegi is contracting as an individual.

Personnel Interest: This contract will be directly between Dr. Alegi, a Professor in the Department of History, and MSU.


MICHIGAN STATE
UNIVERSITY

June 21, 2019



MEMORANDUM

To: Committee on Audit, Risk and Compliance

From: June Pierce Youatt 
Executive Vice President and Provost

Subject: Approval of Contract Terms: Publishing Contract for Dr. Peter C. Alegi

RECOMMENDATION

The Trustee Committee on Audit, Risk and Compliance recommends that the Board of Trustees approve a contract between Michigan State University and Dr. Peter C. Alegi, an MSU faculty member.

RESOLUTION

BE IT RESOLVED, that the Board of Trustees of Michigan State University hereby approves a publishing contract with Dr. Peter C. Alegi consistent with earlier public notice given at a Board meeting and with a "Publishing Contract Term Sheet" now presented to the Board for inclusion in its minutes.

BACKGROUND

In compliance with State law, public notice of the University's intent to negotiate contracts with Dr. Peter C. Alegi was given at the Board of Trustees meeting on December 18, 2015 and approval of the resulting contract was given at a meeting on June 21, 2017. The terms of a publishing contract renewal are now presented for Board approval.

Dr. Peter C. Alegi is a Professor in the Department of History.

The attached "Publishing Contract Term Sheet" summarizes the agreement that MSU has negotiated with Dr. Peter Alegi.

cc: Board of Trustees, S. Udpa, N. Barr, M. Zeig, S. Hsu, B. Mattes,
K. Wilbur, B. Quinn, C. Berg



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SPONSORED RESEARCH AGREEMENT TERM SHEET

Party: Fraunhofer USA, Inc.

Agreement: Subcontract under Plasmability's US Army contract (MSU reference number RC108803) for Vertical Growth Technique for Diamond Substrate

Term: May 1, 2018 to April 30, 2020

Payment Terms: \$124,999 for services provided

Services Provided:
By MSU to Fraunhofer USA, Inc.: None contemplated under the agreement

By Fraunhofer USA, Inc. to MSU: Develop a process for polishing diamond substrates

Use of University Facilities/ Personnel: Center for Coatings and Diamond Technologies within the College of Engineering; collaborators include Dr. Timothy Grotjohn, Dr. Tim Hogan, and Dr. Thomas Shuelke

Organization Type: Rhode Island nonprofit corporation

Personnel Interest: Dr. Thomas Schuelke, a Professor in the Department of Electrical and Computer Engineering, is President of Fraunhofer USA, Inc.


MICHIGAN STATE
UNIVERSITY

June 21, 2019



MEMORANDUM

To: Committee on Audit, Risk and Compliance

From: June Pierce Youatt 
Executive Vice President and Provost

Subject: Approval of Contract Terms: *Fraunhofer USA, Inc. #1*

RECOMMENDATION

The Trustee Committee on Audit, Risk and Compliance recommends that the Board of Trustees approve a contract between Michigan State University and *Fraunhofer USA, Inc.*, a company in which MSU faculty member Dr. Thomas Schuelke holds an interest.

RESOLUTION

BE IT RESOLVED, that the Board of Trustees of Michigan State University hereby approves a sponsored research agreement with *Fraunhofer USA, Inc.* consistent with earlier public notice given at a Board meeting and with a "Sponsored Research Agreement Term Sheet" now presented to the Board for inclusion in its minutes.

BACKGROUND

In compliance with State law, public notice of the University's intent to negotiate contracts with *Fraunhofer USA, Inc.*, a Rhode Island nonprofit corporation, was given at the Board of Trustees meeting on April 12, 2019. The terms of a sponsored research agreement are presented for Board approval.

Dr. Thomas Schuelke, a Professor in the Department of Electrical and Computer Engineering, is President of *Fraunhofer USA, Inc.*

The attached "Sponsored Research Agreement Term Sheet" summarizes the agreement that MSU has negotiated with *Fraunhofer USA, Inc.*

cc: Board of Trustees, S. Udpa, N. Barr, M. Zeig, S. Hsu, B. Mattes, K. Wilbur, B. Quinn, C. Berg



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SPONSORED RESEARCH AGREEMENT TERM SHEET

Party: Fraunhofer USA, Inc.

Agreement: Subcontract under Kyma Technologies, Inc.'s Small Business Innovation Research program (MSU reference number RC109059) for Development of Large Area Mosaic Single Crystal Diamond Substrates

Term: May 10, 2018 to May 9, 2019

Payment Terms: \$99,911 for services provided

Services Provided:
By MSU to Fraunhofer USA, Inc.: None contemplated under the agreement

By Fraunhofer USA, Inc. to MSU: Laser cut and polish diamond substrates in preparation for diamond deposition

Use of University Facilities/ Personnel: Center for Coatings and Diamond Technologies within the College of Engineering; collaborators include Dr. Timothy Grotjohn, Dr. Tim Hogan, and Dr. Thomas Shuelke

Organization Type: Rhode Island nonprofit corporation

Personnel Interest: Dr. Thomas Schuelke, a Professor in the Department of Electrical and Computer Engineering, is President of Fraunhofer USA, Inc.


MICHIGAN STATE
UNIVERSITY

June 21, 2019



MEMORANDUM

To: Committee on Audit, Risk and Compliance

From: June Pierce Youatt 
Executive Vice President and Provost

Subject: Approval of Contract Terms: *Fraunhofer USA, Inc. #2*

RECOMMENDATION

The Trustee Committee on Audit, Risk and Compliance recommends that the Board of Trustees approve a contract between Michigan State University and *Fraunhofer USA, Inc.*, a company in which MSU faculty member Dr. Thomas Schuelke holds an interest.

RESOLUTION

BE IT RESOLVED, that the Board of Trustees of Michigan State University hereby approves a sponsored research agreement with *Fraunhofer USA, Inc.* consistent with earlier public notice given at a Board meeting and with a "Sponsored Research Agreement Term Sheet" now presented to the Board for inclusion in its minutes.



**OFFICE OF THE
PROVOST**

Michigan State University
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East Lansing, Michigan 48824

Phone: 517-355-6550
Fax: 517-355-9601
provost.msu.edu

BACKGROUND

In compliance with State law, public notice of the University's intent to negotiate contracts with *Fraunhofer USA, Inc.*, a Rhode Island nonprofit corporation, was given at the Board of Trustees meeting on April 12, 2019. The terms of a sponsored research agreement are presented for Board approval.

Dr. Thomas Schuelke, a Professor in the Department of Electrical and Computer Engineering, is President of *Fraunhofer USA, Inc.*

The attached "Sponsored Research Agreement Term Sheet" summarizes the agreement that MSU has negotiated with *Fraunhofer USA, Inc.*

cc: Board of Trustees, S. Udpa, N. Barr, M. Zeig, S. Hsu, B. Mattes,
K. Wilbur, B. Quinn, C. Berg

SPONSORED RESEARCH AGREEMENT TERM SHEET

Party: Fraunhofer USA, Inc.

Agreement: Subcontract under Department of Energy contract (MSU reference number RC108668) for Boride-Carbon Hybrid Technology to Produce Ultra-Wear and Corrosion Resistant Surfaces for Applications in Harsh Conditions

Term: May 16, 2018 to November 15, 2019

Payment Terms: MSU is providing is \$275,648 and Fraunhofer will cost share \$101,767 for a total of \$377,415 for services provided

Services Provided:

By MSU to Fraunhofer USA, Inc.: None contemplated under the agreement

By Fraunhofer USA, Inc. to MSU: Identify performance benefits of wear and corrosion of boride-carbon hybrid technology

Use of University Facilities/ Personnel: Center for Coatings and Diamond Technologies within the College of Engineering; collaborators include Dr. Timothy Grotjohn, Dr. Qi Fan, and Dr. Thomas Shuelke

Organization Type: Rhode Island nonprofit corporation

Personnel Interest: Dr. Thomas Schuelke, a Professor in the Department of Electrical and Computer Engineering, is President of Fraunhofer USA, Inc.


MICHIGAN STATE
UNIVERSITY

June 21, 2019



MEMORANDUM

To: Committee on Audit, Risk and Compliance

From: June Pierce Youatt 
Executive Vice President and Provost

Subject: Approval of Contract Terms: *Fraunhofer USA, Inc. #3*

RECOMMENDATION

The Trustee Committee on Audit, Risk and Compliance recommends that the Board of Trustees approve a contract between Michigan State University and *Fraunhofer USA, Inc.*, a company in which MSU faculty member Dr. Thomas Schuelke holds an interest.

RESOLUTION

BE IT RESOLVED, that the Board of Trustees of Michigan State University hereby approves a sponsored research agreement with *Fraunhofer USA, Inc.* consistent with earlier public notice given at a Board meeting and with a "Sponsored Research Agreement Term Sheet" now presented to the Board for inclusion in its minutes.



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BACKGROUND

In compliance with State law, public notice of the University's intent to negotiate contracts with *Fraunhofer USA, Inc.*, a Rhode Island nonprofit corporation, was given at the Board of Trustees meeting on April 12, 2019. The terms of a sponsored research agreement are presented for Board approval.

Dr. Thomas Schuelke, a Professor in the Department of Electrical and Computer Engineering, is President of *Fraunhofer USA, Inc.*

The attached "Sponsored Research Agreement Term Sheet" summarizes the agreement that MSU has negotiated with *Fraunhofer USA, Inc.*

cc: Board of Trustees, S. Udpa, N. Barr, M. Zeig, S. Hsu, B. Mattes,
K. Wilbur, B. Quinn, C. Berg

SPONSORED RESEARCH AGREEMENT TERM SHEET

Party: Fraunhofer USA, Inc.

Agreement: Subcontract under Michigan Economic Development Corporation (MSU reference number RC108920) for Development of Scalable Linear Ion Sources for Thin Film Processing

Term: August 1, 2018 to July 31, 2019

Payment Terms: \$10,000 for services provided

Services Provided:
By MSU to Fraunhofer USA, Inc.: None contemplated under the agreement

By Fraunhofer USA, Inc. to MSU: develop single beam ion source technology

Use of University Facilities/ Personnel: Center for Coatings and Diamond Technologies within the College of Engineering; collaborators include Dr. Qi Fan and Dr. Thomas Shuelke

Organization Type: Rhode Island nonprofit corporation

Personnel Interest: Dr. Thomas Schuelke, a Professor in the Department of Electrical and Computer Engineering, is President of Fraunhofer USA, Inc.

MICHIGAN STATE
UNIVERSITY

June 21, 2019



MEMORANDUM

To: Committee on Audit, Risk and Compliance
From: June Pierce Youatt *June Pierce Youatt*
Executive Vice President and Provost
Subject: Approval of Contract Terms: *Fraunhofer USA, Inc. #4*

RECOMMENDATION

The Trustee Committee on Audit, Risk and Compliance recommends that the Board of Trustees approve a contract between Michigan State University and *Fraunhofer USA, Inc.*, a company in which MSU faculty member Dr. Thomas Schuelke holds an interest.

RESOLUTION

BE IT RESOLVED, that the Board of Trustees of Michigan State University hereby approves a sponsored research agreement with *Fraunhofer USA, Inc.* consistent with earlier public notice given at a Board meeting and with a "Sponsored Research Agreement Term Sheet" now presented to the Board for inclusion in its minutes.



**OFFICE OF THE
PROVOST**

BACKGROUND

In compliance with State law, public notice of the University's intent to negotiate contracts with *Fraunhofer USA, Inc.*, a Rhode Island nonprofit corporation, was given at the Board of Trustees meeting on April 12, 2019. The terms of a sponsored research agreement are presented for Board approval.

Dr. Thomas Schuelke, a Professor in the Department of Electrical and Computer Engineering, is President of *Fraunhofer USA, Inc.*

The attached "Sponsored Research Agreement Term Sheet" summarizes the agreement that MSU has negotiated with *Fraunhofer USA, Inc.*

cc: Board of Trustees, S. Udpa, N. Barr, M. Zeig, S. Hsu, B. Mattes,
K. Wilbur, B. Quinn, C. Berg

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PUBLISHING CONTRACT TERM SHEET

Party: Dr. Kenneth W. Harrow

Project Description: Renewal of a contract for the co-editing of a book series entitled *African Humanities and the Arts*

Term: Two years

Agreement: Dr. Harrow will receive two free copies of each published work, and additional copies at a 40% discount from the retails price.

Services Provided: By MSU to Dr. Harrow: Publication of book series
By Dr. Harrow to MSU: co-editing the book manuscripts

**Use of University Facilities/
Personnel:** Not Applicable

Organization Type: Dr. Harrow is contracting as an individual.

Personnel Interest: This contract will be directly between Dr. Harrow, a Professor in the Department of English, and MSU.


MICHIGAN STATE
UNIVERSITY

June 21, 2019



MEMORANDUM

To: Committee on Audit, Risk and Compliance

From: June Pierce Youatt 
Executive Vice President and Provost

Subject: Approval of Contract Terms: Publishing Contract for Dr. Kenneth W. Harrow

RECOMMENDATION

The Trustee Committee on Audit, Risk and Compliance recommends that the Board of Trustees approve a contract between Michigan State University and Dr. Kenneth W. Harrow, an MSU faculty member.

RESOLUTION

BE IT RESOLVED, that the Board of Trustees of Michigan State University hereby approves a publishing contract with Dr. Kenneth W. Harrow consistent with earlier public notice given at a Board meeting and with a "Publishing Contract Term Sheet" now presented to the Board for inclusion in its minutes.

BACKGROUND

In compliance with State law, public notice of the University's intent to negotiate contracts with Dr. Kenneth W. Harrow was given at the Board of Trustees meeting on December 18, 2015 and approval of the resulting contact was given at a meeting on June 21, 2017. The terms of a publishing contract renewal are now presented for Board approval.

Dr. Kenneth W. Harrow is a Professor in the Department of English.

The attached "Publishing Contract Term Sheet" summarizes the agreement that MSU has negotiated with Dr. Kenneth W. Harrow.

cc: Board of Trustees, S. Udpa, N. Barr, M. Zeig, S. Hsu, B. Mattes, K. Wilbur, B. Quinn, C. Berg



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OPTION AGREEMENT TERM SHEET

Party:	Jetfire Power Systems, Inc.
Agreement:	Option for exclusive license in all fields
Technology:	<p>MSU technology disclosure TEC2013-0003 and TEC2016-0119 entitled "Turbulent Jet Ignition Internal Combustion Engine" (US Patent 10,161,296); TEC2018-0010 "Diesel Engine with Tubulent Jet Ignition" (PCT/US2018/043879)</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:	Six months from the effective date, an additional six months with payment of an additional fee
Potential Commercial Application:	Enhanced combustion in an internal combustion engine using pre-chamber
Payment Terms:	Up-front payment of \$500 to MSU, \$500 to extend the option for an additional six months
Services Provided:	<p>By MSU to Jetfire Power Systems, Inc.: None contemplated under the agreement</p> <p>By Jetfire Power Systems, Inc. to MSU: None contemplated under the agreement</p>
Organization Type:	Michigan corporation
Personnel Interest:	Dr. Harold Schock, Professor in the Department of Mechanical Engineering and members of his family, own or have options to buy an ownership interest of more than 1% of the company.

MICHIGAN STATE
UNIVERSITY

June 21, 2019



MEMORANDUM

To: Committee on Audit, Risk and Compliance

From: June Pierce Youatt *June Pierce Youatt*
Executive Vice President and Provost

Subject: Approval of Contract Terms: *Jetfire Power Systems, Inc.*

RECOMMENDATION

The Trustee Committee on Audit, Risk and Compliance recommends that the Board of Trustees approve a contract between Michigan State University and *Jetfire Power Systems, LLC*, a company in which MSU faculty member Dr. Harold Schock holds a financial interest.

RESOLUTION

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



**OFFICE OF THE
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BACKGROUND

In compliance with State law, public notice of the University's intent to negotiate contracts with *Jetfire Power Systems, Inc.*, a Michigan corporation, was given at the Board of Trustees meeting on April 12, 2019. The terms of an option agreement are now presented for Board approval.

Dr. Harold Schock, Professor in the Department of Mechanical, and members of his family own or have options to buy an ownership interest of more than 1% of the company.

The attached "Option Agreement Term Sheet" summarizes the agreement that MSU has negotiated with *Jetfire Power Systems, Inc.*

cc: Board of Trustees, S. Udpa, N. Barr, M. Zeig, S. Hsu, B. Mattes, K. Wilbur, B. Quinn, C. Berg

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SERVICE AGREEMENT TERM SHEET

Party:	National Pesticide Safety and Education Center ("NPSEC")
Agreement:	MSU will provide Executive Director services to the NPSEC.
Term:	February 1, 2019 to January 31, 2020
Payment Terms:	\$146,412.65 to MSU in fees for service
Services Provided:	<p>By MSU to NPSEC: Provide Executive Director services including, but not limited to: (1) oversight, establishment and operation of the governance structure for the NPSEC; (2) development, implementation and management of a business plan and budget; (3) marketing and communication services offered by NPSEC; (4) maintenance of quality control and efficiencies for NPSEC products and services; and (5) oversight of fiscal activities, budget management and financial practices</p> <p>By NPSEC to MSU: None contemplated under the agreement</p>
Use of University Facilities/Personnel:	Efforts of Mr. Tom Smith
Organization Type:	Michigan nonprofit corporation
Personnel Interest:	Mr. Tom Smith is the Associate Director of MSU's Institute of Agricultural Technology and is the Executive Director of the National Pesticide Safety and Education Center.

MICHIGAN STATE
UNIVERSITY

June 21, 2019



MEMORANDUM

To: Committee on Audit, Risk and Compliance
From: June Pierce Youatt *June Pierce Youatt*
Executive Vice President and Provost
Subject: Approval of Contract Terms: *National Pesticide Safety and Education Center*

RECOMMENDATION

The Trustee Committee on Audit, Risk and Compliance recommends that the Board of Trustees approve a contract between Michigan State University and the *National Pesticide Safety and Education Center*, a center in which MSU employee Mr. Tom Smith holds an interest.

RESOLUTION

BE IT RESOLVED, that the Board of Trustees of Michigan State University hereby approves a service agreement with the *National Pesticide Safety and Education Center* consistent with earlier public notice given at a Board meeting and with a "Service Agreement Term Sheet" now presented to the Board for inclusion in its minutes.

BACKGROUND

In compliance with State law, public notice of the University's intent to negotiate contracts with the *National Pesticide Safety and Education Center*, a Michigan nonprofit corporation, was given at the Board of Trustees meeting on April 12, 2019. The terms of a service agreement are now presented for Board approval.

Mr. Tom Smith, Associate Director of MSU's Institute of Agricultural Technology has an interest in the center.

The attached "Service Agreement Term Sheet" summarizes the agreement that MSU has negotiated with the *National Pesticide Safety and Education Center*.

cc: Board of Trustees, S. Udpa, N. Barr, M. Zeig, S. Hsu, B. Mattes, K. Wilbur, B. Quinn, C. Berg



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APPENDIX M

RESOLUTION HONORING SATISH UDPA
Michigan State University
June 21, 2019


The Michigan State University Board of Trustees today extends its sincere gratitude to MSU Acting President Dr. Satish Udpa for his compassionate leadership, his steadying influence and his unwavering commitment to this university, its people and its mission.

Executive Vice President for Administration Udpa was appointed acting president Jan. 17, 2019 and immediately began leading the university toward a fuller spirit of reconciliation and healing. His words conveyed the university community's concern for sexual assault survivors and its resolve to ensure a safer and more respectful environment for all. At the same time, Acting President Udpa has remained a strong advocate for the institution's continued excellence in its missions of education, research and outreach.

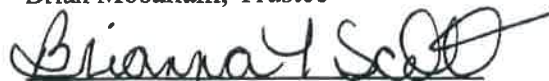
Acting President Udpa came to MSU in 2001, serving as chairperson of the Department of Electrical and Computer Engineering and then dean of the College of Engineering before his appointment as executive vice president for administration. Prior to joining MSU, he was the Whitney Professor of Electrical and Computer Engineering at Iowa State University. He earlier served on the faculty at Colorado State University, where he earned his doctorate in electrical engineering.

For his firm and kind leadership, his commitment to healing and his steadfast support for all members of the campus community, the Michigan State University Board of Trustees offers its heartfelt thanks to Acting President Satish Udpa.


Dianne Byrum, Chairperson

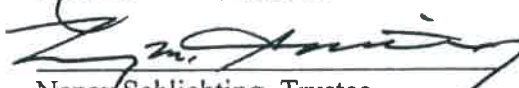

Joel I. Ferguson, Trustee


Brian Mosallam, Trustee


Brianna T. Scott, Trustee


Dan Kelly, Vice Chairperson


Melanie Foster, Trustee


Nancy Schlichting, Trustee


Kelly Tebay, Trustee