

# MSU Research and Innovation Update

Douglas A. Gage, Vice President

Faculty Senate Meeting - November 15, 2022



Research and Innovation  
MICHIGAN STATE UNIVERSITY

# Facilitating Research and Scholarship – #1 Goal

## Areas of Responsibility

- Compliance and Regulatory Affairs
- Sponsored Programs, Contracts and Grants Administration
- Grant Facilitation (editing services, etc.)
- Technology Transfer
- Limited submission applications
- Internal Grants
- Campus Centers, Institutes, and Facilities

## Our Charge

- Implement MSU 2030, DEI, and RVSM Strategic Plan Objectives
- Support college research priorities
- Coordinate and support larger research initiatives (cross-college, central administration, external institutions)
- Work with other units to provide faculty with opportunities, honorifics

## Recent Changes/Enhancements

- Recruitment of experts in key areas of OR&I
- Proactively soliciting nominations for institutionally limited proposals
- Increased support for arts and humanities
- Improving processes and increasing support for matching funds
- Seed funding for team development around proposals
- Streamlining overall processes and procedures; faster turnaround times
- Working with University Communications to highlight our faculty and drive reputational activities

# Meet Our New Team Members



Krista Campeau, J.D.  
Director of Export Control and  
Trade Sanctions  
export@msu.edu



Charles "Lee" Cox, Ph.D.  
Research Integrity Officer  
rio@msu.edu



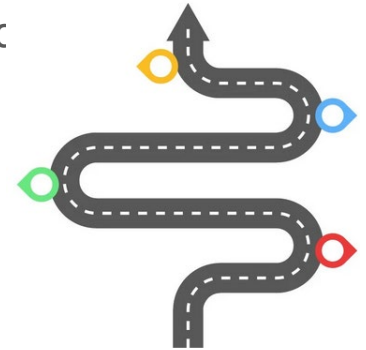
Jessica Swartz, J.D.  
Director of Conflict Disclosure  
Management  
cdm@msu.edu



Irving Vega, Ph.D.  
Department of Translational Neuroscience  
Academic Leadership Fellow 2023  
vegaie@msu.edu

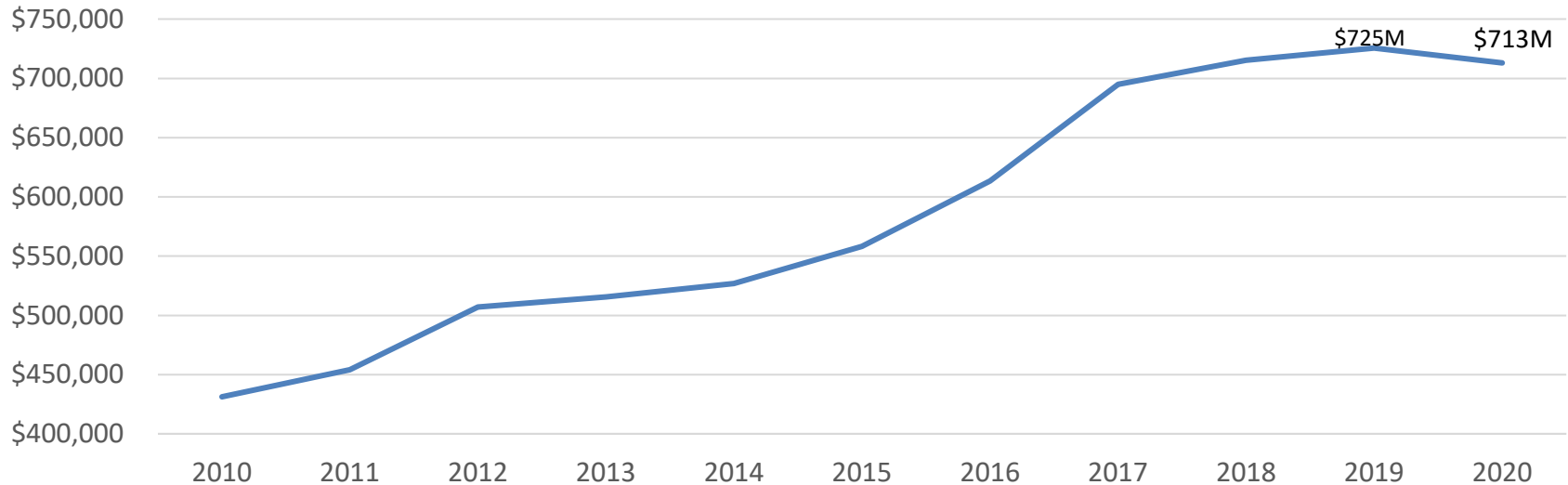
# MSU 2030 Strategic Plan – our roadmap

- Aggressive goals around research productivity
- Sets the stage for new research initiatives
- More investment around those major initiatives and faculty hiring
- Drives the new master plan for space, infrastructure improvements, etc.
- DEI integral to these efforts
- Places more emphasis on interdisciplinary research that integrates soc science, law, humanities, etc.
- Integrates research with the MSU Arts Initiative
- Faculty [workgroup](#) providing input on research implementation



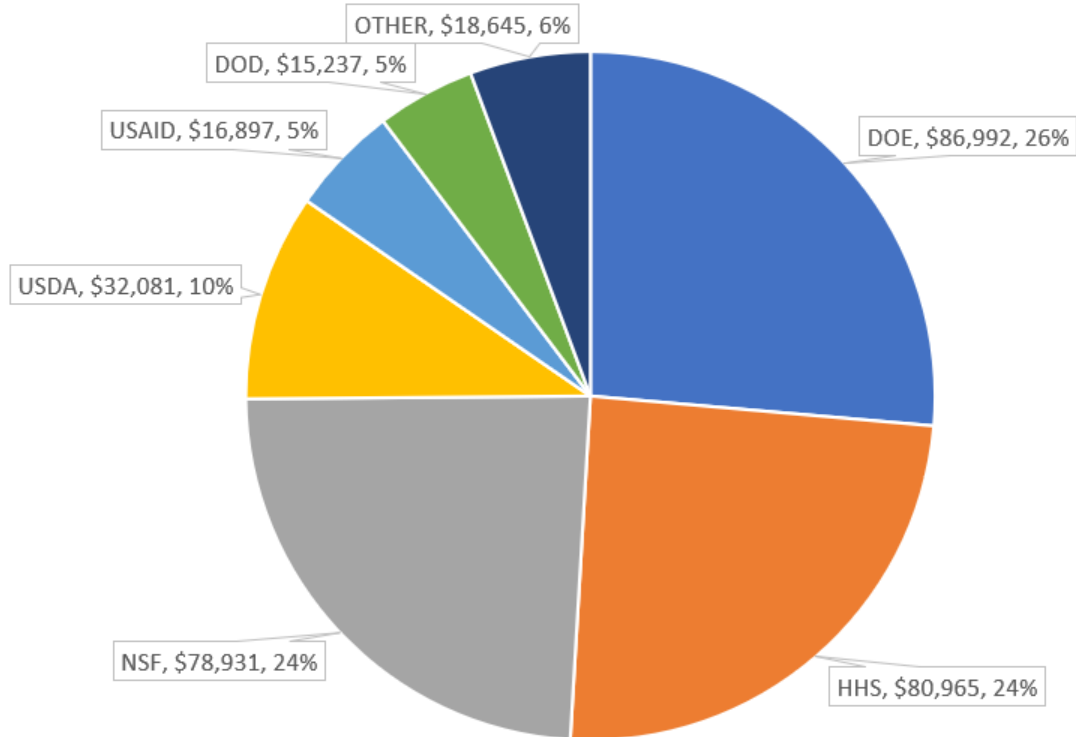
## R&D Growth at MSU, 10 Year Trend – how do we get to \$1B?

MSU R&D Expenditures (thousands)



Source: 2020 NSF HERD Data

## Federal Expenditures by Agency in Thousands



# Pathways to Success - \$1B by 2030

## Strategic Plan - Implementation of Major Research Initiatives

- Interdisciplinary research projects around specific themes
- New and expanding external partnerships (exp. Henry Ford Health)
- Key faculty hires (Global Impact Initiative continued)
- Facilities to attract new research and faculty
- Expanded funding from federal agencies where we see opportunity
- Major center grants and training grants
- Expand international research and outreach (College of Education USAID)
- Continued MSU investment – recognizing that internal funds have contributed toward HERD



New Global Impact  
Scholar Sue Rhee will  
join MSU in 2023



## Supporting Broader Scholarship Across Disciplines

- Grant dollars are important, but in fields where they are not as available, the reputation of our faculty and programs matter.
- We will support grant submissions, just as we do for STEM faculty
- The new (larger) Humanities and Arts Research Program (HARP) award has been introduced (\$100k)
- Individual Fellowships, Foundation, Academic Societies and Federal Program recognition are all important to the University
- Actively expanding relationships with Foundations that support the Arts and Humanities

Grammy winning professor of jazz trombone, Michael Dease, recently named 2023 Ellis Marsalis, Jr. Educator of the Year



# Large Research Initiatives: the necessity of interdisciplinary approaches

- Climate Change - an all-hands, strategically coordinated effort!
- Basic Plant Science and Agriculture – Plant Excellence IV
- Water Science
- FRIB, take advantage of a unique resource
  - Nuclear physics, cryogenics, imaging, interventional radiology, materials testing
- Health disparities, Public Health (Flint, Detroit, rural)
- Growth in Biomedical research – Henry Ford partnership, Grand Rapids research affiliations and more
- Data science applied across disciplines
- Future of transportation, mobility



## Transparency in Financial Support Mechanisms

- Major grant applications (multi-investigator, multi-\$M/yr)  
Matching funds *framework to support administrative and other unfunded costs*
- Training grants (NIH T32, R25, NSF NRT and others)  
Additional Fellowship positions, programmatic support and PI support (*revised matching program coming soon*)
- University Centers and Institutes  
Oversight and review

## New Investments

- Global Impact Initiative (continued)
- Reviewing possible increases/expansion of internal funding programs
- Research Infrastructure
  - Greenhouse complex (State support)
  - Dairy research complex (State support)
  - Radiopharmacy Lab
  - Mobility
  - Imaging
- Proposed new research buildings – Engineering and Digital Innovation, and Plant and Environmental Sciences are approved to plan



## Diversity, Equity and Inclusion

- Expansion of postdoc to faculty programs (CSS and EEB) to other areas
- Continued support for R25 grants; expand similar programs to increase diversity in graduate programs
- Global Impact Initiative recruitment
- Actively engaged in incorporating DEI considerations into all OR&I processes and funding mechanisms
- Faculty advisory groups and liaisons to OR&I
- Continued support of the Diversity Research Network
- Current AVP search



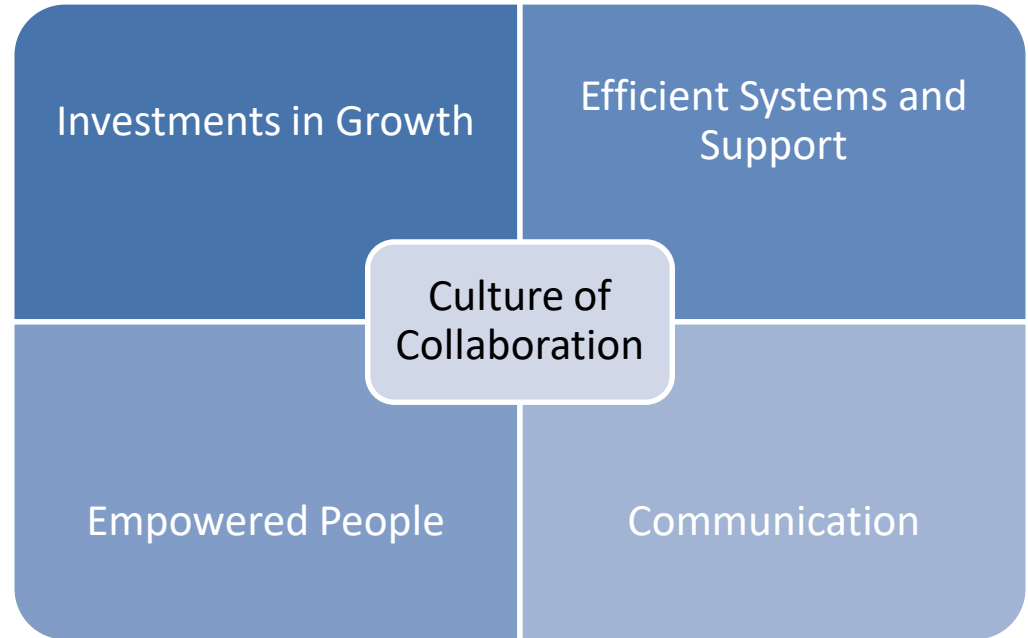
## Blended Approach to Growth

- The Strategic Plan research faculty [workgroup](#) is advising on additional approaches and providing input on barriers to growth
- Support of increased faculty engagement in grant submissions
- Recognizing the obstacles faculty face and providing support
- Reviewing procedures and streamlining processes
- Three examples:
  - Development of ‘communities of support’ exp. Training Grants
  - Leverage faculty grant writing experts to mentor early career faculty – the first team of 3 faculty will be joining OR&I next semester
  - New Tetrad interdisciplinary seed funding program coming soon!

## OR&I's Strategic Operations Plan

Supports the overall strategic plan by developing capacity for growth and enhancing excellence in the research enterprise.

The OR&I operations plan identifies 5 pillars important for success



## Upcoming Events

- December 8 – Training Grant Summit
- January 19 – New Faculty Research Orientation and Resource Fair (this will focus on new faculty from the last 3 years)
- Grants writing workshops in 2023 include
  - Write Winning Grants seminars
  - Agency specific grant writing sessions
  - And more...
  - Visit our [event calendar](#)
  - [Join our email list](#) to receive notices



## Contact Us – we're here to help!

- College Associate Deans for Research - continued attendance at weekly CORD meetings
- Appointments  
[vprappts@msu.edu](mailto:vprappts@msu.edu) or call 517-355-0306
- Key staff members to contact:  
Laura McCabe, Twila Reighley, Charley Hasemann,  
and Doug Buhler. New AVP coming soon! Meet the [OR&I leadership team](#).
- Website [research.msu.edu](https://research.msu.edu)

## Thank You!

- Questions?