MSU Research and Innovation Update

Douglas A. Gage, Vice President
Faculty Senate Meeting - November 15, 2022
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 social 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

Source: NSF HERD 2020
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
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!
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:

- Investments in Growth
- Efficient Systems and Support
- Culture of Collaboration
- Empowered People
- Communication
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 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
Thank You!

• Questions?