

# Research, Innovation and Knowledge - Year in Review

Grace Wang

Executive Vice President

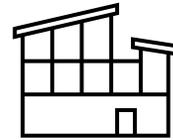


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# Strategic Priorities for the Enterprise



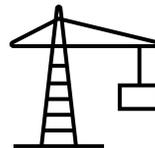
Enable Curiosity-Driven Discoveries and Creative Expression



Build Large-Scale, Interdisciplinary Research and Innovation Centers



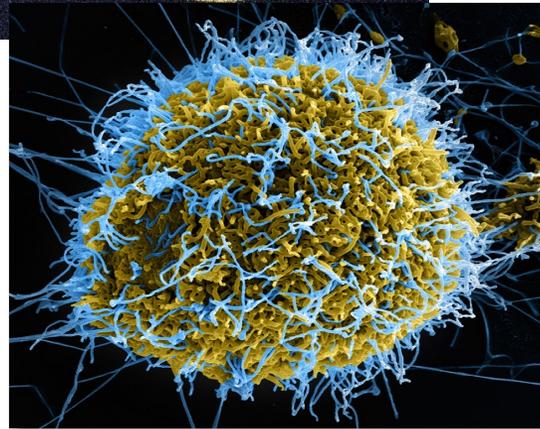
Nurture Innovation and Entrepreneurship



Design and Develop Carmenton



# Changing the world through impactful research



# Inspiring the world through creative inquiry



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# Strong Focus on Supporting Faculty

43

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## President's Research Excellence

Projects Awarded To-Date

## **BiG Collaborations**

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Building Innovative Interdisciplinary Groups and Collaborations

Engage faculty and cultivate collaborations across disciplines in exploring innovative research questions that can only be examined when diverse talents are brought together

# Technology Commercialization Milestones

**363**

**Total Invention  
Disclosures Filed**

Fiscal Year 2022

**331**

**U.S. Patents  
Filed**

Fiscal Year 2022

**1,743**

**Contracts  
Executed**

Fiscal Year 2022

# Entrepreneurship Milestones

**95**

**Operational Ohio  
State Startups**

End of Fiscal Year 2022

**\$1.01 B**

**Total Private Capital  
Raised**

Since 2010

**11**

**New Startups  
Launched**

Fiscal Year 2022

# **Growing Large-Scale, Interdisciplinary Efforts in Strategic Areas**



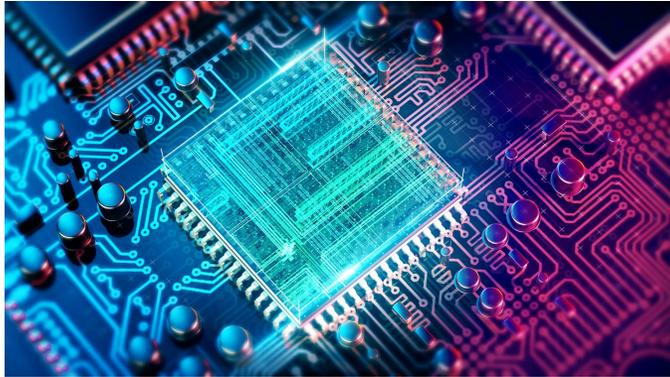


# Advanced Computing and Communication



THE OHIO STATE UNIVERSITY

ENTERPRISE FOR RESEARCH, INNOVATION  
AND KNOWLEDGE



**Center for Quantum Information  
Science and Engineering  
Established**



**\$15 million NSF Grant for  
Ohio State Imageomics  
Institute**

**\$20 million NSF Grant for AI Institute  
for Intelligent Cyberinfrastructure  
with Computational Learning in the  
Environment (ICICLE)**

**\$20 million NSF Grant for AI  
Institute for Future Edge Networks  
and Distributed Intelligence  
(AI-EDGE)**



# Smart and Sustainable Systems





**Up to \$52 Million from NSF to Enable Hybrid Autonomous Manufacturing**



**\$26.5 Million Funding from FTA for Bus Testing Facilities**



**\$18 Million Funding for Watershed Project in Northwest Ohio**



**\$4.2 Million U.S. DOE Grant to Transform the Way Communities Use Energy**



# Life Science Frontiers



**THE OHIO STATE UNIVERSITY**  
ENTERPRISE FOR RESEARCH, INNOVATION  
AND KNOWLEDGE

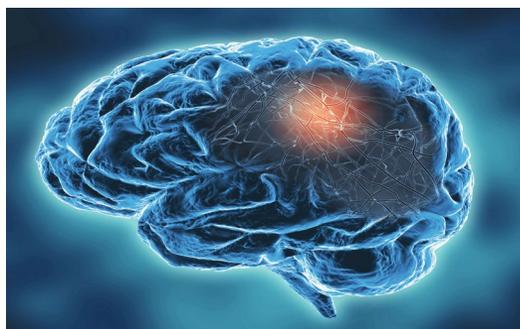


**\$17 Million NIH grant to establish  
Center for Maternal and Pediatric  
Drug Research**



**Gene  
Therapy  
Institute**

**\$14.6 Million NIH award to  
accelerate gene therapy research  
for rare disorder**



**NeuroTech Institute powered by  
Battelle-Ohio State Partnership**



**Funded by NASA, Ohio State is lead  
academic partner to develop low-earth  
orbit space station and Ag/Bio  
research pipeline**

# Building Strategic Partnerships

Ohio State has been chosen as the research home for Starlab's George Washington Carver Science Park Terrestrial Analog Facility.



# Building Strategic Partnerships

The AgTech Innovation Hub will enable new solutions that help the agricultural ecosystem while better understanding, managing and mitigating climate risk.



# Building Strategic Partnerships

The Center for Advanced Semiconductor Fabrication Research and Education will develop comprehensive experiential learning frameworks for students while advancing the fabrication and development of leading-edge device technologies.



# Building Strategic Partnerships

## Midwest Semiconductor Network

The Ohio State University  
Case Western Reserve University  
Kent State University  
Miami University  
Michigan State University  
Ohio University  
Purdue University  
University of Chicago  
University of Cincinnati  
University of Dayton

University of Michigan  
University of Notre Dame  
University of Toledo  
Wright State University  
Youngstown State University  
Columbus State Community College  
Illinois Institute of Technology  
Ivy Tech Community College  
Lorain County Community College  
Sinclair Community College



# Carmenton

Historic partnership with the City of Columbus to develop the innovation district

STEAMM Rising partnership with Columbus City School District and Columbus State Community College

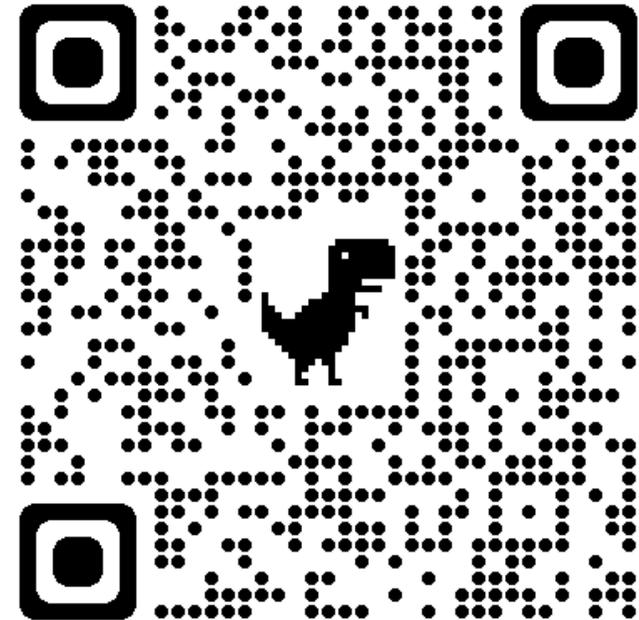


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# ERIK Multi-Year Strategic Plan

## Ambition Statement:

Ohio State will achieve transformative impact of its research, innovation and knowledge to advance our society, further serve our community and drive economic prosperity and vitality.



Please click QR Code  
to learn more.

**Be the absolute model of a 21<sup>st</sup> century land grant university**

**Ohio State will achieve transformative impact of its research, innovation and knowledge to advance our society, further serve our community and drive economic prosperity and vitality**

## OUTCOMES

Inspire a culture of research, innovation and knowledge excellence, fueled by a model of diversity, equity, inclusion and accessibility

Be globally renowned for discoveries, knowledge generation and creative expression

Lead development of impactful solutions to critical societal and community challenges through partnerships, innovation and entrepreneurship

Create and sustain dynamic infrastructure and capabilities that drive discoveries

Continuously increase operational excellence to enable shared and individual success

## CORE INTERNAL OBJECTIVES

### Talent, culture, diversity, equity and inclusion

### Research and creative expression excellence

### Partnerships, commercialization, and societal and economic growth

### Digital and physical infrastructure and capabilities

### Operational efficiency and accountability

CT1. Invest in the recruitment, retention and professional development of world-class faculty and staff to support ERIK's growth goals

CR1. Drive national prominence in current and emerging opportunity areas through building large-scale, interdisciplinary research initiatives

CP1. Build strategic partnerships to realize the impact of Ohio State research and drive economic growth

CI1. Invest in and integrate digital, cyber and physical tools/infrastructure to enhance and accelerate effectiveness, productivity and impact

CO1. Advance operational excellence to enable growth, efficiency, risk-management and accountability

CT2. Develop an organization that is representative of our community, and a culture that is committed to inclusion, equity, diversity and access

CR2. Define, measure and demonstrate research impact

CP2. Build and grow a best-in-class commercialization and entrepreneurship capability

CI2. Support research excellence and effectiveness through robust core and shared resources

CO2. Drive accountability and empowerment for decision making and outcomes

## INSTITUTIONAL CAPACITY - COLLABORATION WITH UNIVERSITY PARTNERS TO ENABLE ERIK SUCCESS

IC1. Recruit and retain diverse research faculty and staff in partnerships with Colleges and Centers to realize growth ambition

IC2. Align shared service functions and invest in staff to support growth and excellence in research and creative expression

IC3. Build a vibrant innovation district

IC4. Enhance interoperability of administrative and research platforms

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# ERIK Multi-Year Strategic Plan

If you have any questions or comments, please contact:

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Associate Vice President, Operations

Enterprise for Research, Innovation and Knowledge