

**WEDNESDAY, NOVEMBER 17, 2021**  
**RESEARCH, INNOVATION & STRATEGIC PARTNERSHIPS COMMITTEE MEETING**

Lewis Von Thaer  
Erin P. Hoeflinger  
Alexander R. Fischer  
Hiroyuki Fujita  
Reginald A. Wilkinson  
Carly G. Sobol  
Gary R. Heminger (*ex officio*)

Location: Livestream link available on [trustees.osu.edu](https://trustees.osu.edu)

Time: 1:30-3:00pm

**Public Session**

*ITEMS FOR DISCUSSION*

- |   |             |
|---|-------------|
| 1. <i>Committee Chair's Remarks – Mr. Lou Von Thaer</i>                             | 1:30-1:35pm |
| 2. <i>Enterprise For Research, Innovation and Knowledge Report – Dr. Grace Wang</i> | 1:35-1:50pm |

*ITEMS FOR ACTION*

- |  |             |
|--|-------------|
| 3. Approval of August 2021 Committee Meeting Minutes – Mr. Lou Von Thaer | 1:50-1:55pm |
|--|-------------|

**Executive Session**

1:55-3:00pm





# **ENTERPRISE FOR RESEARCH, INNOVATION AND KNOWLEDGE REPORT**

**Grace Wang**  
**Executive Vice President**

November 17, 2021



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# STRATEGIC PRIORITIES FOR ENTERPRISE

- Enable Curiosity-Driven Discoveries and Creative Expression
- Build Large-Scale, Interdisciplinary Research and Innovation Centers
- Design and Develop the Innovation District
- Nurture Innovation and Entrepreneurship



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# ENABLE CURIOSITY-DRIVEN DISCOVERIES AND CREATIVE EXPRESSION



# A New Way To Solve The 'Hardest Of The Hard' Computer Problems



Daniel Gauthier etc.  
Professor of Physics  
College of Arts and Sciences

This research is supported by the  
U.S. Air Force, the Army Research  
Office and the Defense Advanced  
Research Projects Agency.



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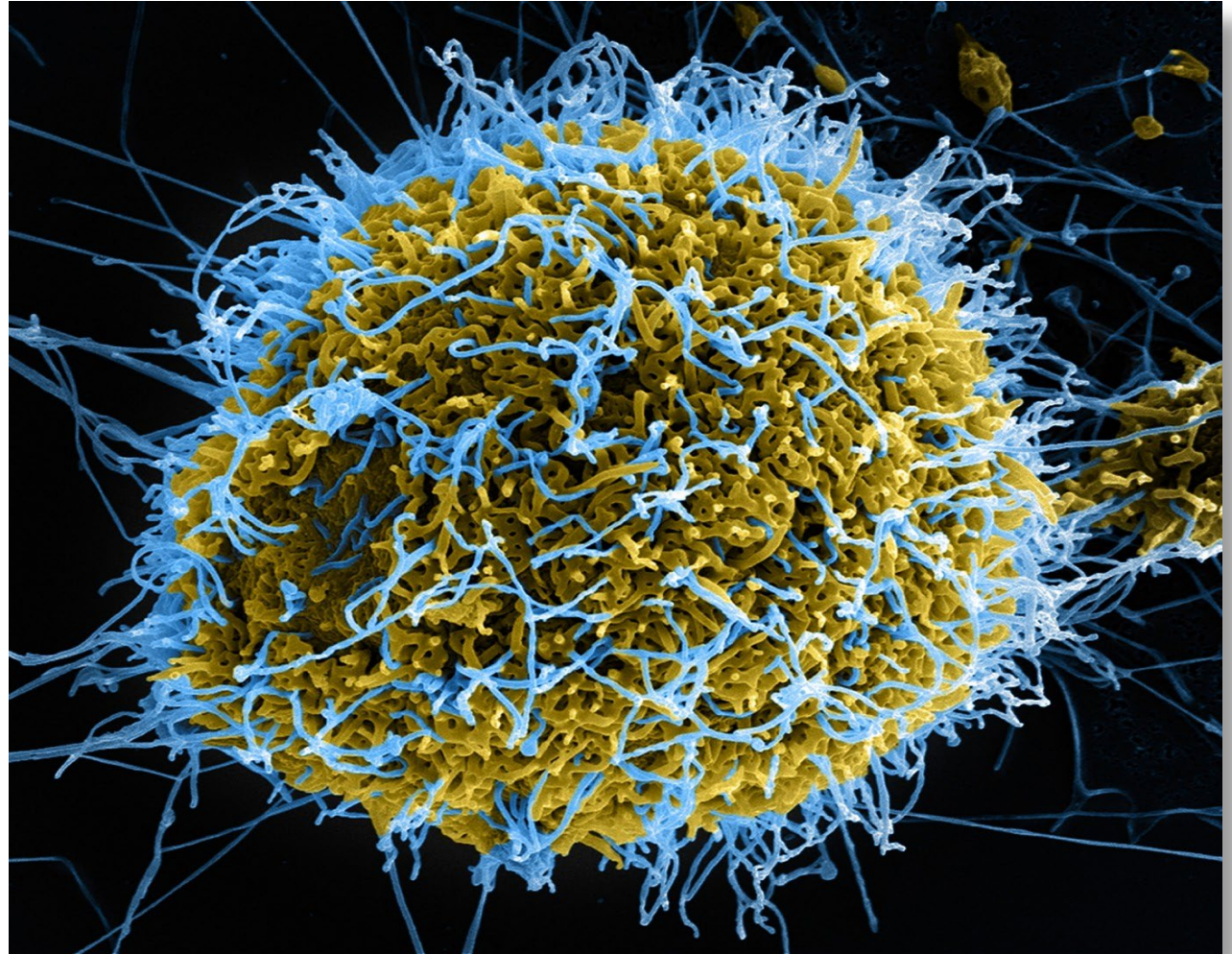


# Proteins that Outwit Emerging and Re-Emerging Viruses

Shan-Lu Liu etc.

Professor of Virology  
College of Veterinary Medicine

This work is supported by the  
National Institutes of Health and the  
National Cancer Institute (NCI).



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# Policy Research Indicated that Officials Leading Hurricane Response Need 'Risk Literacy'

Noah Dormady etc.

Associate Professor

John Glenn College of Public Affairs

This work is funded by the National Science Foundation.



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FACULTY RECOGNITION

# Wondwossen Gebreyes

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**National Academy of Medicine Inductee**

Professor and Executive Director of Global One Health initiative, College of Veterinary Medicine



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# BUILD LARGE-SCALE, INTERDISCIPLINARY RESEARCH AND INNOVATION CENTERS



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# President's Research Excellence Program

## 7

Interdisciplinary teams awarded Catalyst funds to pursue large-scale, high-impact research that addresses emerging or existing challenges of national and international societal importance



- **Food-Nutrition-Microbiome-Health**
- **Self-Powered Energy Storage**
- **Quantum Technology**
- **Point-of-Care Manufacturing**
- **Non-Invasive Therapeutic Tool**
- **Social Equity**
- **Environmental Equity & Security**





# \$15 Million NSF Grant Launches Ohio State Imageomics Institute



Tanya Berger-Wolf etc.  
Professor, Computer Science and Engineering



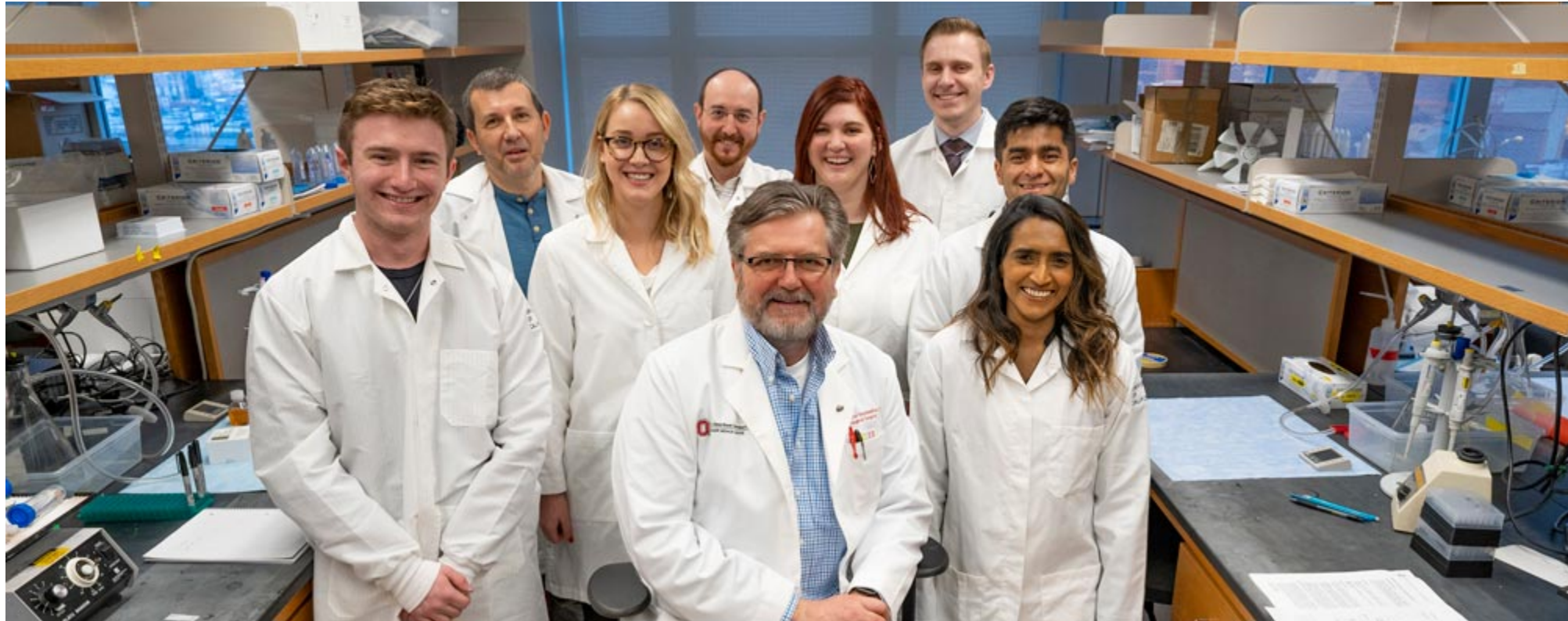
# \$4.2M U.S. DOE Grant to Ohio State to Transform the Way Communities Use Energy



Led by Professor of Practice and College of Engineering Associate Dean of Facilities Michael Hagenberger, Assistant Professor Jordan Clark in Engineering, and ENGIE Technology Architect Mark Brown.



# \$14.6 Million NIH Award Will Accelerate Gene Therapy Research for Rare Disorder



**Krystof Bankiewicz etc.**  
Professor of Neurological Surgery



# Traumatic Brain Injury Research Bolstered by \$16 Million in Federal Funding



**Jennifer Bogner**  
Professor  
Physical Medicine and Rehabilitation



**Cynthia Beaulieu**  
Associate Professor  
Physical Medicine and Rehabilitation





# \$17M Grant Establishes New Center for Maternal and Pediatric Drug Research



**Lang Li etc.**  
Professor  
Department of Biomedical Informatics



# Ohio State to Lead \$18 Million Pilot Watershed Project in Northwest Ohio



Shallow Run watershed in Hardin County, Ohio

Jay Martin, etc.

Professor

Department of Food, Agricultural and  
Biological Engineering

This research is funded by the USDA and  
State of Ohio.



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# DESIGN AND DEVELOP THE INNOVATION DISTRICT



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# STEAMM RISING COLUMBUS PARTNERSHIP

STEAMM: Science, Technology, Engineering, Arts, Mathematics and Medicine

To collectively develop STEAMM talent in the city of Columbus and ensure that talent thrives in the university's Innovation District and elsewhere.



From left to right: Dr. Beth Hume, Dr. Don Pope-Davis, President David Harrison, Dr. Talisa Dixon, President Kristina M. Johnson, Mayor Andrew Ginther, Dr. Grace Wang. East High School, September 23, 2021



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# NURTURE INNOVATION AND ENTREPRENEURSHIP



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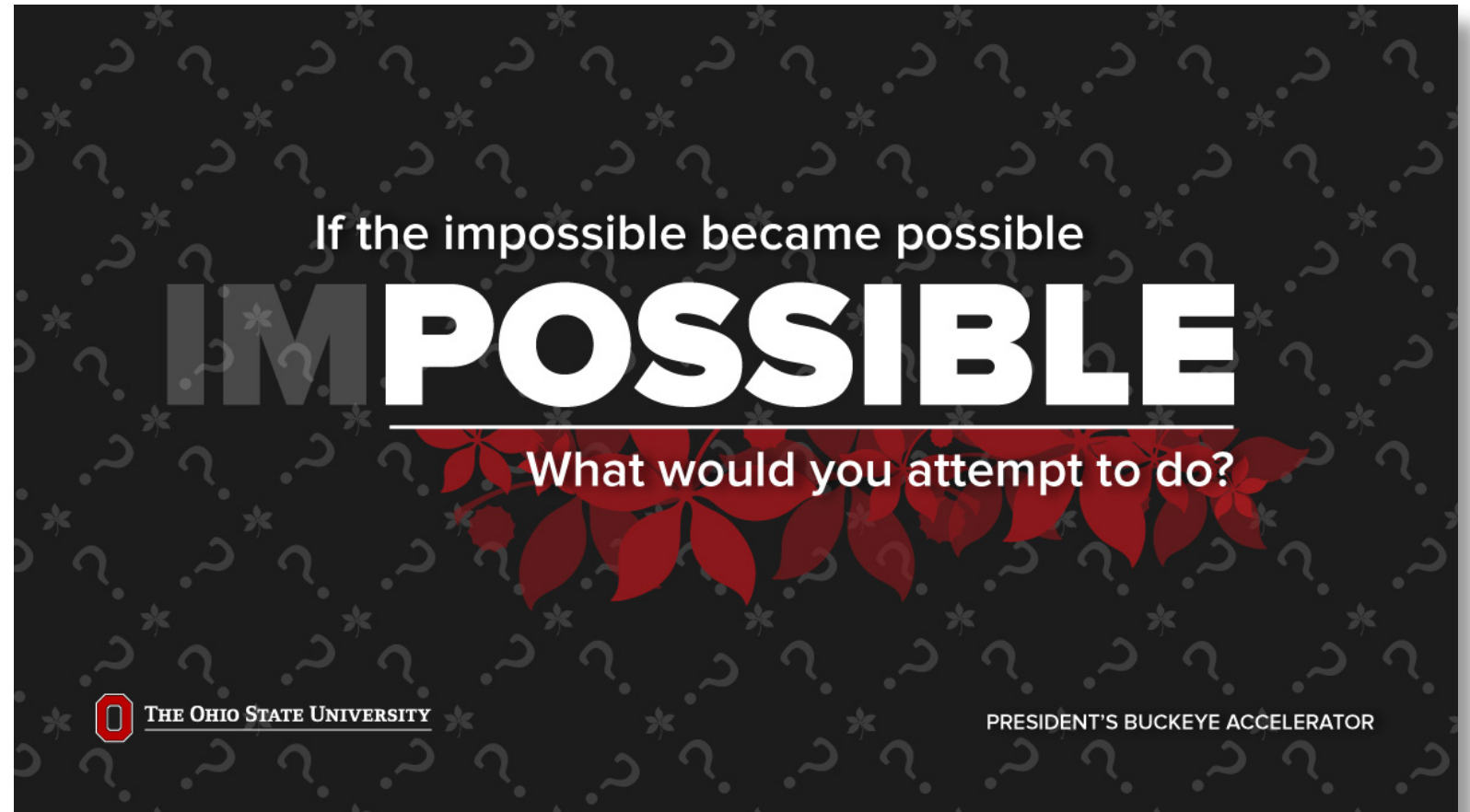
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# LAUNCHED PRESIDENT'S BUCKEYE ACCELERATOR

-- To support Ohio State student entrepreneurs

- Entrepreneurship skill building
- Mentorship
- Team building
- Funding with a structured process



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# Treatment Developed At Ohio State Granted FDA Fast Track Designation



- In 2019, Recursion signed a **global licensing agreement** with Ohio State to develop a first of its kind oral therapeutic to treat Neurofibromatosis Type 2.
- In 2021, the U.S. Food and Drug Administration granted Recursion **Fast Track designation** for the investigation of the potential therapeutic to treat an unmet medical need.

Inventors: Ching-Shih Chen, Samuel Kulp, Yu-Chou Tseng, Christopher Coss, Flavia Picchiori, Craig Hofmeister, Tanios Bekaii-Saab, Guido Marcucci, and Denis Guttridge



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# Novel Technology that can Capture at Least 95% of the CO<sub>2</sub> Emitted from Coal Combustion Power Plants



- **Babcock & Wilcox licensed a chemical looping process** and oxygen carrier particle used for decarbonization and the production of hydrogen, steam and/or syngas.
- An economical way to convert fossil fuels and biomass into useful products **without emitting carbon dioxide into the atmosphere.**
- **Represents 30+ years of research by Professor Liang-Shih Fan** in Chemical and Biomolecular Engineering.



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# STRATEGIC PRIORITIES FOR ENTERPRISE

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**SUMMARY OF ACTIONS TAKEN**

*August 18, 2021 – Research, Innovation & Strategic Partnerships Committee*

**Members Present:**

Lewis Von Thaeer  
Erin P. Hoeflinger

Alexander R. Fischer  
Hiroyuki Fujita

Reginald A. Wilkinson  
Gary R. Heminger (ex officio)

**Members Present via Zoom:**

Carly G. Sobol

**Members Absent:**

N/A

**PUBLIC SESSION**

The Research, Innovation & Strategic Partnerships Committee of The Ohio State University Board of Trustees convened on Wednesday, August 18, 2021, in person at Longaberger Alumni House on the Columbus campus and virtually via Zoom. Committee Chair Lewis Von Thaeer called the meeting to order at 1:30 p.m.

***Items for Discussion***

1. **Committee Chair's Remarks:** Mr. Von Thaeer kicked off the meeting by highlighting some of the important partnerships that would be talked about later in the meeting.
2. **Update on President's Research Excellence Program:** Dr. Grace Wang, EVP of the Enterprise for Research, Innovation and Knowledge, and Dr. Dorota Grejner-Brzezinska, interim VP for Knowledge Enterprise, discussed the President's Research Excellence (PRE) program, which provides seed support for cross- and interdisciplinary research. President Johnson announced this program at her inaugural State of the University Address; it was launched in March 2021. The program's goals include growing research and the innovation enterprise, increasing research eminence, attracting more externally sponsored research funding and addressing large, complex societal challenges. There are two components of the PRE program – Catalyst (up to \$200,000 for large teams focusing on large-scale, high-impact research) and Accelerator (up to \$50,000 for small teams doing curiosity-drive, novel research). As of this meeting, 70 Accelerator applications had been received, 19 projects had been awarded for a total of \$947,000. The 2021 Catalyst grant applications were in progress and 50 concept papers had been submitted representing all 15 academic colleges. Awardees were slated to be selected in October 2021.

(See Attachment X for background information, page number XX)

3. **Research and Innovation Highlights for Fiscal Year 2021:** Dr. Wang provided a year-in-review for research and innovation at Ohio State. Strategic priorities for the previous fiscal year included enabling curiosity-driven discoveries and creative expression; building large-scale, interdisciplinary research and innovation centers; designing and developing the Innovation District; and nurturing innovation and entrepreneurship. Dr. Wang highlighted the work that had been done toward advancing each of these priorities. She also discussed priorities for FY22.

(See Attachment X for background information, page number XX)





***Items for Action***

4. Approval of May 2021 Committee Meeting Minutes: No changes were requested to the May 19, 2021, meeting minutes; therefore, a formal vote was not required, and the minutes were considered approved.

**EXECUTIVE SESSION**

It was moved by Mr. Von Thaer, and seconded by Mrs. Hoeflinger, that the committee recess into executive session to consider business-sensitive trade secrets required to be kept confidential by federal and state statutes.

A roll call vote was taken, and the committee voted to go into executive session with the following members present and voting: Mr. Von Thaer, Mrs. Hoeflinger, Mr. Fischer, Dr. Fujita, Dr. Wilkinson and Mr. Heminger. Ms. Sobol was unable to vote via Zoom.

The committee entered executive session at 2:22 p.m. and the meeting adjourned at 2:58 p.m.

DRAFT