THURSDAY, FEBRUARY 22, 2024
RESEARCH, INNOVATION & STRATEGIC PARTNERSHIPS COMMITTEE MEETING

Lewis Von Thaer, chair
Reginald A. Wilkinson
Juan Jose Perez
Brad Kastan
George Skestos
Taylor A. Schwein
Phillip Popovich
Hiroyuki Fujita (ex officio)

Location: Sanders Grand Lounge, Longaberger Alumni House
2200 Olentangy River Rd, Columbus, Ohio 43210

Time: 1:00 – 2:30 pm

Public Session

ITEMS FOR DISCUSSION

1. Committee Chair’s Remarks – Mr. Lou Von Thaer 1:00-1:05pm

2. Quarterly Highlights for Research, Innovation and Knowledge including a conversation with 2023 Nobel Prize Laureate in Physics, Dr. Pierre Agostini – Dr. Peter Mohler, Dr. Pierre Agostini (via zoom) and Dr. Lou DiMauro 1:05-1:20pm

3. Ohio State’s Research and Development Expenditures Highlights – Dr. Peter Mohler 1:20-1:25pm

ITEM FOR ACTION

4. Approval of November 2023 Committee Meeting Minutes – Mr. Lou Von Thaer 1:25-1:30pm

Executive Session

1:30 – 2:30 pm
Research, Innovation and Knowledge – Quarterly Highlights

February 2024
A conversation with Nobel Laureate Pierre Agostini and Prof. Lou DiMauro
Faculty recognized for excellence by national academies

New Inductees in the National Academy of Engineers

Umit Ozkan, PhD, Distinguished University Professor
College of Engineering

Antonio Conejo, PhD, Professor
College of Engineering

Michael Tweedle, PhD, Professor Emeritus
College of Medicine

Krystof Bankiewicz, MD, PhD, Professor
College of Medicine

New Inductees in the National Academy of Inventors

The Ohio State University
First in US: Ohio State, state of Ohio launch multi-generational behavioral health study

SOAR (State of Ohio Adversity and Resilience) is a research initiative that includes a series of pivotal first-of-its-kind studies to uncover the root causes and risk factors of mental illness including addiction.

Catalyzed by an initial $20 million from the state of Ohio, these studies will examine the biological, psychological and social factors that put Ohioans at risk and will inform and guide new strategies for prevention, recovery and resilience.
First in US: Advanced spectrometer installed at Ohio State

Ohio State is now home to the first 1.2 Gz nuclear magnetic resonance spectrometer in the US.
Equipment will be used by researchers at Ohio State and across the globe to advance life science and materials research. One example of research includes examining the structure of biological molecules, with the goal of advancing the understanding of diseases, such as cancer, viral infections and Alzheimer’s.
Funding for the spectrometer comes from the National Science Foundation.
Ohio State researchers engaged in National Science Foundation Engines project

Great Lakes ReNEW will develop and commercialize new ways to extract valuable minerals and toxic forever chemicals from wastewater.

The six-state consortium, led by a Chicago-based nonprofit, spans research institutions, industry, investors, government and nonprofit organizations with a shared goal of developing and commercializing better “selective separation” technologies.

Prof. John Lenhart, College of Engineering, leads this work at Ohio State.
In January, Starlab Space, a joint venture of Voyager Space and Airbus, announced that it had selected SpaceX’s Starship to launch the new station on a single flight. Starlab is set to succeed the International Space Station when the ISS retires in 2030.

The Starlab Ground Location is part of the George Washington Carver Science Park being developed by Ohio State and Voyager. It will serve as the earthbound location for the orbiting observatory, where students, researchers and scientists will prepare experiments on the ground before launching them into space.

Photo courtesy of Voyager Space
Ohio State medical startup announces new fundraise

Stroke is the fourth leading cause of death in the United States. Basking Biosciences, co-founded by Ohio State Wexner Medical Center’s Shahid Nimjee, is developing drug therapies to treat certain types of strokes and provide better outcomes for patients. The company announced last month that it had closed on an additional $55 million financing.

Basking will utilize the funds to accelerate clinical development of certain drug therapies that have had positive Phase 1 results.
Ohio State Startup: Koloma News

Ohio State’s 2023 Innovator of the Year, Tom Darrah, co-founded Koloma, a geologic hydrogen company.

Koloma announced a $245 million Series B fundraise earlier this month. This amount is on top of a $90+ million Series A fundraise announced last year.

Ohio State has retained the company for Ohio as Koloma is opening an office and lab space in the Energy Advancement and Innovation Center in the heart of the innovation district.
...And more exciting progress coming soon

Energy Advancement and Innovation Center Opening

Student Entrepreneurs’ Center Opening

First Cohort Starts
Research Expenditures Report

Peter Mohler
Executive Vice President
Ohio State R&D expenditures
Fiscal years 1986 - 2022

Source: NSF HERD Annual Expenditures.
NSF research expenditure rankings for FY22
Total expenditures across all institutions

Johns Hopkins
U. California, San Francisco
U. Pennsylvania
U. Michigan, Ann Arbor
U. Washington, Seattle
U. California, Los Angeles
U. California, San Diego
U. Wisconsin-Madison
Duke
Stanford
Ohio State
U. North Carolina, Chapel Hill
Harvard
Cornell
New York U.

Dec 05, 2023
Ohio State ranks 11th in national ranking of research universities
New report ranks university 6th in US for industry-sponsored research
HERD Survey: Ranking trends

Year over year

Source: NSF HERD Annual Expenditures.
SUMMARY OF ACTIONS TAKEN

November 16, 2023 – Research, Innovation & Strategic Partnerships Committee

Members Present:

Lewis Von Thaer
Reginald A. Wilkinson
Juan Jose Perez
Bradley R. Kastan
George A. Skestos
Taylor A. Schwein
Phillip Popovich
Hiroyuki Fujita (ex officio)

Members Present via Zoom: N/A

Members Absent: N/A

The Research, Innovation & Strategic Partnerships Committee of The Ohio State University Board of Trustees convened on Thursday, November 16, 2023, in person at the Longaberger Alumni House on the Columbus campus. Committee Chair Lewis Von Thaer called the meeting to order at 1:00 p.m.

PUBLIC SESSION

Items for Discussion

1. Committee Chair’s Remarks: Mr. Von Thaer kicked off the meeting by welcoming Trustees Brad Kastan and George Skestos to the committee.

2. Quarterly Highlights for Research, Innovation and Knowledge: Dr. Peter Mohler highlighted a first at Ohio State; Dr. Pierre Agostini, professor emeritus of physics, was announced in October as one of three Nobel prize winners in physics. Ohio State is supporting Professor Agostini and an Ohio State delegation for the December 10 Nobel Ceremony. National and international media interest also continues, and we are actively engaged in promoting this accomplishment as this is a huge moment for Ohio State, our community, the state of Ohio and the field of physics.

Dr. Mohler also shared a few more significant accomplishments in research and innovation. The National Institutes of Health recently renewed its grant to support the Center for Clinical and Translational Science with a seven-year, $37.9 million Clinical and Translational Science award which supports collaborative research by Ohio State, Ohio State Wexner Medical Center and Nationwide Children’s Hospital. Dr. Julie Johnson, from the University of Florida and graduate of Ohio State, has been recruited to be director of the Center for Clinical and Translational Science.

Ohio State continues to be recognized for research excellence in artificial intelligence. Tonya Berger-Wolf, director of the Translational Data Analytics Institute was awarded funding from the National Science Foundation to launch the AI and Biodiversity Change Global Climate Center at Ohio State. The center brings together ecologists and computer scientists from six universities in the United States and Canada, with partners in the UK, Europe and Australia to develop new AI-enabled, data-supported approaches.

Ohio State also announced the creation of a new battery cell research and development center with support from Honda, Schaeffler Americas, JobsOhio and Ohio’s Congressional delegation. Slated to open in April 2025, the lab will accelerate the domestic development of battery cell materials and manufacturing technologies while providing an experiential learning setting for advanced battery technology workforce development. With $22 million in commitments to date, this
The Ohio State University project will include the renovation of a 25,000 square-foot facility in Ohio State’s innovation district into a dedicated battery cell research, production and education support space.

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

3. Advancing University Technology Commercialization Efforts: Dr. Mohler introduced Mr. Kevin Taylor, senior associate vice president for technology commercialization, who shared an update on advancing the university’s technology and commercialization efforts, which included an overview of Fiscal Year 2022 results and additional process improvements the team is undertaking. Dr. Tom Darrah, professor in the School of Earth Science, provided an overview of his work with the technology commercialization team and his research, which led him to co-found Koloma, a hydrogen/clean energy startup. Koloma was recently highlighted in Forbes following its exit from stealth mode.

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

**Item for Action**

4. Approval of Minutes: No changes were requested to the August 17, 2023, 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 Mr. Skestos that the committee recess into executive session to consider business-sensitive trade secrets required to be kept confidential by federal and state statutes and to consult with legal counsel regarding pending or imminent litigation.

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, Dr. Wilkinson, Mr. Perez, Mr. Kastan, Mr. Skestos, Ms. Schwein, Dr. Popovich, Dr. Fujita.

The committee entered executive session at 1:19 p.m., and the meeting adjourned at 2:15 p.m.