WEDNESDAY, MARCH 19, 2025 RESEARCH, INNOVATION AND STRATEGIC PARTNERSHIPS COMMITTEE MEETING

| | | Reginald A. Wilkinson, vice chair Juan Jose Perez Bradley R. Kastan Joshua H.B. Kerner Phillip Popovich John W. Zeiger (<i>ex officio</i>) | |
|---------------|------------------------------------|---|----------------------|
| Locat | | adership Room, Longaberger Alumni House ntangy River Road, Columbus, OH 43210 | Time: 2:30-4:00 p.m. |
| <u>Public</u> | <u>c Session</u> | ITEMS FOR DISCUSSION | 2:30-3:10 p.m. |
| 1. | Ohio State's Ro Dr. Peter Mohle | esearch and Development Expenditures Highlights for FY2024 – | 2:30-2:50 p.m. |
| 2. | Keenan Center | r for Entrepreneurship: Boosting Student Engagement in al Activities – Ms. Cheryl Turnbull, Mr. Jonah Mikesell | 2:50-3:05 p.m. |
| | | ITEM FOR ACTION | |
| 3. | Approval of De | ecember 2024 Committee Meeting Minutes – Dr. Reginald Wilkinson | 3:05-3:10 p.m. |
| <u>Exect</u> | <u>utive Session</u> | | 3:10-4:00 p.m. |
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The Ohio State University Annual Research Report

Research and Development Expenditures Highlights for FY2024



Ohio State partners with OpenAI



Open AI launched NextGenAI, a first-of-its-kind consortium with 15 leading research institutions dedicated to using AI to accelerate research breakthroughs and transform education.

Founding partners include: Caltech, Duke University, University of Georgia, Harvard University, Howard University, Massachusetts Institute of Technology, University of Oxford, Paris Institute of Political Studies (Sciences Po), and Boston Children's Hospital.

Through this partnership, we will continue to **leverage AI to accelerate advancements** in digital health, advanced therapeutics, manufacturing, energy, mobility, and agriculture, while also allowing educators to use AI to create advanced learning models.

Ohio State sets R&D expenditures record for FY23

\$1.449 Billion



Ohio State Total HERD R&D Expenditures

Fiscal years 1986 - 2023



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ENTERPRISE FOR RESEARCH, INNOVATION AND KNOWLEDGE

NSF HERD Survey Rankings – FY23

Total R&D expenditures across all institutions

| Johns Hopkins | 3,801 | ,585 |
|---------------------------------|-----------|------|
| U. California, San Francisco | 2,046,539 | |
| U. Pennsylvania | 1,953,617 | |
| U. Michigan, Ann Arbor | 1,925,875 | |
| U. Washington, Seattle | 1,734,091 | |
| U. Wisconsin-Madison | 1,731,949 | |
| U. California, Los Angeles | 1,721,665 | |
| U. California, San Diego | 1,705,410 | |
| U. North Carolina, Chapel Hill | 1,549,617 | |
| Stanford | 1,537,846 | |
| Duke | 1,507,996 | |
| New York U. | 1,457,424 | |
| Cornell | 1,451,971 | |
| Ohio State | 1,449,188 | |
| Harvard | 1,435,218 | |
| Georgia Institute of Technology | 1,405,080 | |
| U. Pittsburgh, Pittsburgh | 1,398,078 | |
| U. Maryland | 1,385,302 | |
| Columbia | 1,341,952 | |



ENTERPRISE FOR RESEARCH, INNOVATION AND KNOWLEDGE

Tim and Kathleen Keenan Center for Entrepreneurship

Cheryl Turnbull, Senior Director, Keenan Center for Entrepreneurship



The hub for Ohio State's student entrepreneurship community

The Tim & Kathleen Keenan Center for Entrepreneurship's mission is to inspire, engage and empower student entrepreneurs in their endeavors to change the world. The center does this by providing educational and experiential learning activities, supporting curiosity and exploration, and building connections and community.

604

Unique Students Served (162 students involved in 2 or more programs)

46%

Year/Year Increase in Students Served with Programming 11

Colleges Engaged

Data from July – Dec 2024



Empowering student entrepreneurs – from idea to launch







New Student Entrepreneurs' Center





Community Living Learning Experiences Entrepreneurship and Innovation Scholars





250+ First Year Applicants

- 72 First Year Students Accepted (Capped)
- 23 Academic Programs Represented



Idea LaunchpadOSU

A student-run startup weekend that ignites ideation and fosters team building to support new business creation

Welcomed **100** participants to LaunchpadOSU 2024 (capped)

- 71% YOY growth in student applications
- 9 colleges represented





Explore Wheeler and Wolstein Internship Programs

- Scholarship funding for undergraduate and graduate students for summer internships with startup companies and small businesses
- Students benefit from experiential learning, industry insights, and networking opportunities
- >\$118,000 student scholarships in FY25

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KEENAN CENTER FOR ENTREPRENEURSHIP



Students gained practical work experience through the Wheeler and Wolstein Internship Program. Photo: The Ohio State University

Aug 15, 2024

Ohio State students gain work experience through summer internships

Wheeler and Wolstein program connects students with central Ohio firms



oournea.1@osu.edu

Students in a variety of majors gained practical work experience this summer by participating in the <u>Wheeler and Wolstein</u> Internship Program. The students made presentations highlighting the projects they worked on at central Ohio companies during an Aug. 9 event at The Ohio State University's Student Entrepreneurs' Center, home of the Keenan Center for Entrepreneurship.

The program provides scholarship funding to undergraduate and graduate students in internships with startup companies and small businesses. Students are matched with organizations offering project-based internships throughout Ohio State's summer term (May-August).



"This is an exciting program for us because it gives students an opportunity for real world work experiences and to do some fun things," said Cheryl Turnbull, senior director of Ohio State's Keenan Center for Entrepreneurship, a campus-wide hub for the development of student entrepreneurs and part of Ohio State's Enterprise for Research, Innovation and Knowledge.

The Wheeler and Wolstein Internship Program is funded by contributions from the late Tom Wheeler, an industrial engineer and Ohio State alumnus, and the Bert and Iris Wolstein Foundation.

Students shared what they learned through the internship program.

"The dollars that they give go 100% to allowing students to have an internship that our startup

companies and small businesses don't have to pay for," Turnbull said. "It's a win-win for our companies and for our students. Students get a great experience, and the companies have access to this awesome talent."

Build Best of Student Startups (BOSS)

Supports student entrepreneurs with interactive workshops, culminating in a business pitch competition

Ventures Supported

89 71 40 FY23 FY24 FY25





Joan & Chester Luby Microgrant \$100,000

Enabled the expansion of BOSS programming and increase in prize amounts for our students. This past year we were able to include two new BOSS programs aimed at space ventures and student-athletes.



Build NSF I-Corps

Immersive entrepreneurial training program designed to prepare researchers to focus beyond the university laboratory and explore market opportunities.





Build **Boost Camp**

A semester-long program that encourages the development of sustainable businesses while building on existing customer validation work.



50 Teams

For-credit option available

Eligible toward the newly launched **Entrepreneurship**

Launch President's Buckeye Accelerator

\$50,000 awarded to six student ventures along with a structured process and deep mentorship to help students launch their business







Tim and Kathleen Keenan

The Keenan family's support has been pivotal to the center's achievements. Tim Keenan is a frequent visitor to campus and plays an active role in championing both the center and our students.







Student Entrepreneur Jonah Mikesell



PHOENIX BATTERY CO.



Follow on LinkedIn

Thank you!

Let's stay connected – **#BuiltByBuckeyes**

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SUMMARY OF ACTONS TAKEN

December 17, 2024 – Research, Innovation & Strategic Partnerships Committee Meeting

Members Present:

Lewis Von Thaer Reginald A. Wilkinson Juan Jose Perez Bradley R. Kastan John W. Zeiger (ex officio)

Members Present via Zoom:

Joshua H.B. Kerner, Phillip Popovich

Members Absent: N/A

PUBLIC SESSION

The Research, Innovation and Strategic Partnerships Committee of The Ohio State University Board of Trustees convened on Tuesday, December 17, 2024, virtually and in person at Longaberger Alumni House on the Columbus campus. Committee Chair Lewis Von Thaer called the meeting to order at 1:26 p.m.

Items for Discussion:

 <u>Quarterly Highlights for Research, Innovation and Knowledge</u>: Executive vice president for the Enterprise for Research, Innovation and Knowledge Peter Mohler opened the committee meeting by highlighting research and innovation highlights from the last quarter. These included updates on the innovation district, a new partnership with the City of Columbus and Rev1 to further build out space for software innovators, and the National Science Foundation-supported National Extreme Ultrafast Science Facility, or NeXUS, which is a resource for scientists across the United States.

(See Attachment X for background information, page XX)

2. <u>Ohio State Innovation Highlights</u>: Dr. Mohler then transitioned to presentations from two Ohio State researchers with significant accomplishments in the innovation space.

Dr. Kotaro Nakanishi, professor in the College of Arts and Sciences' Department of Chemistry and Biochemistry, discussed his research in RNAi-based medicine. These groundbreaking treatments are designed to deactivate specific genes associated with diseases, effectively halting the production of harmful proteins. While this technology can be applied to treat a broad set of diseases and conditions, an early focus is Argonaute syndrome. Dr. Nakanishi is also co-founder of the startup City Therapeutics, which launched in October with \$135 million in financing.

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Then, Dr. Anil Parwani, chair of the Department of Pathology in the College of Medicine, discussed his transformative research focused on digital pathology for cancer diagnostics. This tool translates tissue samples into digital images that can then be analyzed with the help of machine learning to produce automated diagnoses for patients from across the globe. Ohio State is a national leader in this area.

(See Attachment X for background information, page XX)

Item for Action:

3. <u>Approval of August 2024 Committee Meeting Minutes</u>: No changes were requested to the August 22, 2024, 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. Kastan 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 move into executive session with the following members present and voting: Mr. Von Thaer, Dr. Wilkinson, Mr. Perez, Mr. Kastan, Mr. Kerner, Dr. Popovich and Mr. Zeiger.

The committee entered executive session at 2:03 p.m., and the meeting adjourned at 3:01 p.m.