1:30-1:35pm

RESEARCH, INNOVATION & STRATEGIC PARTNERSHIPS COMMITTEE MEETING

Lewis Von Thaer
Erin P. Hoeflinger
Cheryl L. Krueger
Alexander R. Fischer
Hiroyuki Fujita
Reginald A. Wilkinson
Anand Shah
Gary R. Heminger (*ex officio*)

Livestream: https://livestream.com/wosu/osubotmay2021 Time: 1:30-3:00pm

Public Session

1. Committee Chair's Remarks – Mr. Lou Von Thaer

ITEMS FOR DISCUSSION

Executive Session 2:30- 3:00pm

INTERDISCIPLINARY RESEARCH FACILITY



ANALYTICS AND STRATEGY

Building Theme: life sciences and biotechnology

Convergent Research Themes:

Acute and Chronic Respiratory Disease

Alzheimer's Disease Research

Cancer Immuno-Microbiomics

Cancer Science and Engineering

Community-Engaged Research

Environmental and Climate Determinants of Health

Foods for Health and Metabolic Disease

Gene & Cell Based Therapies

Heart Failure Arrhythmia and Fibrillation

Immune Monitoring and Discovery

Immuno-oncology

Immunogenomics & Immuno-Informatics

Implementation Sciences and Analytics

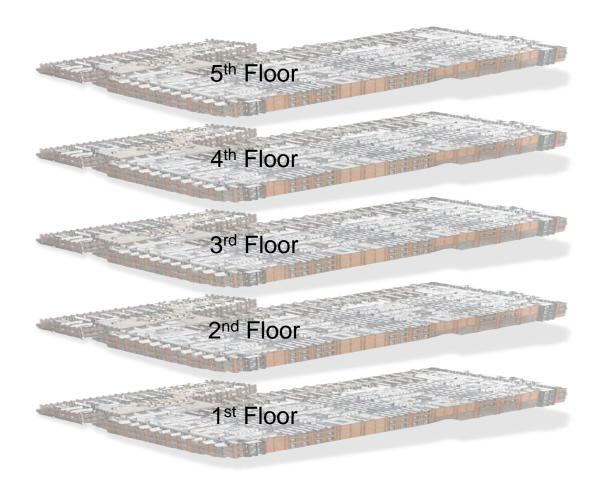
Microbiome Science and Immunology

Neurotherapeutics

Quantum Computing

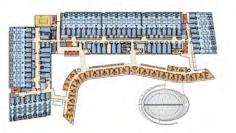
Systems Biology and Disease Modeling

18 IRF Research Neighborhoods





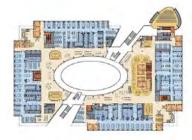
DESIGN AND BENCHMARKING



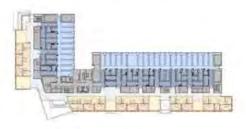
University of Michigan BSRB Atrium 56,000 gsf Typical Lab Floor



University of Texas at Austin EERC Laminated 40,000 gsf Typical Lab Floor



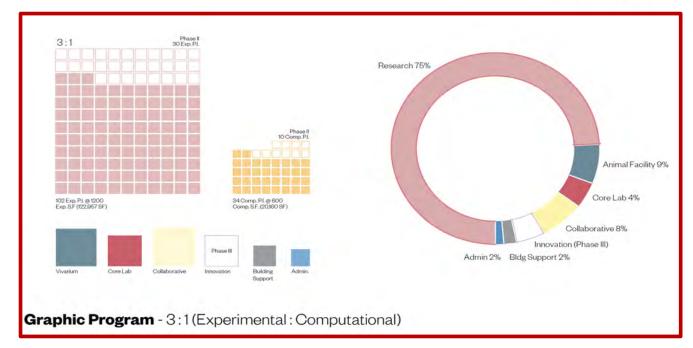
Stanford University ChEM- H/SNI Neighborhood 50,000 gsf Typical Lab Floor



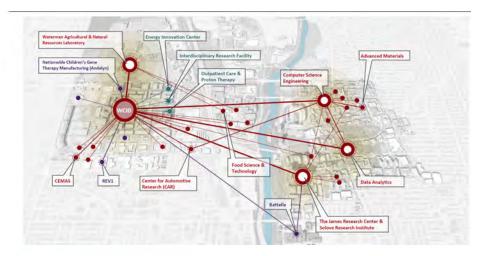
Harvard FAS Northwest Science Building 63,000 gsf Typical Lab Floor



UCSF Genentech Hall 68,000 gsf Typical Lab Floor



SITING TO ALIGN WITH OHIO STATE'S STRATEGY







IRF RESEARCH SPACE BY THE NUMBERS

305,000

Square feet facility

\$100M

In new annual extramural funding capacity

18

Convergent neighborhoods housing 140 Pls

10

New core labs

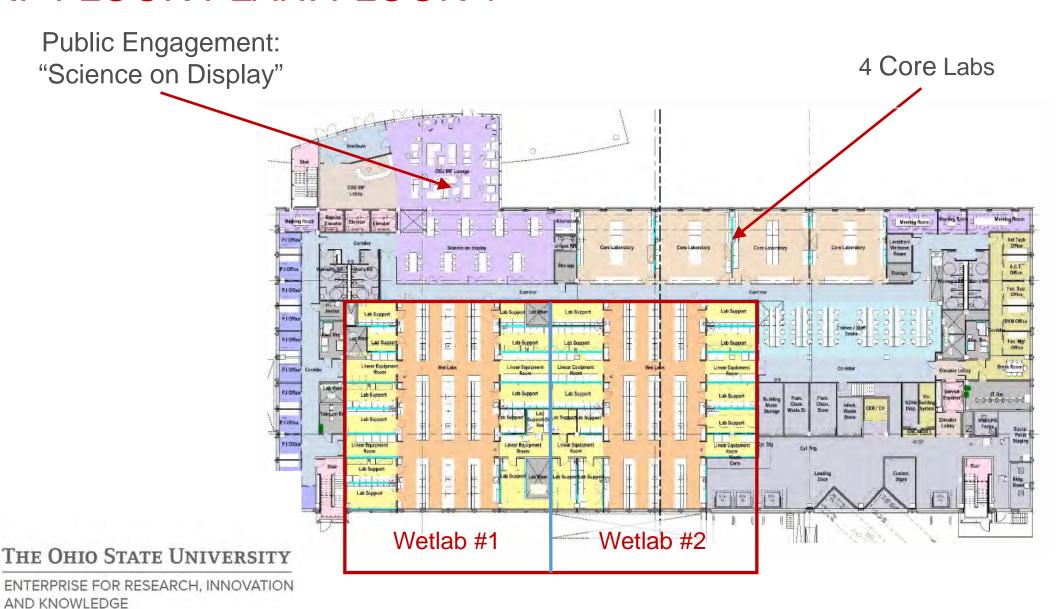
12,000

Cage vivarium

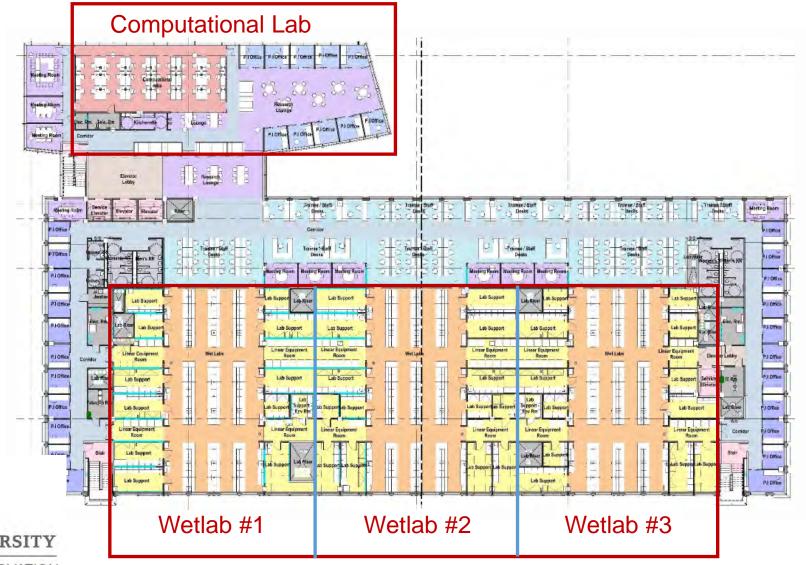
May 2023

Scheduled opening

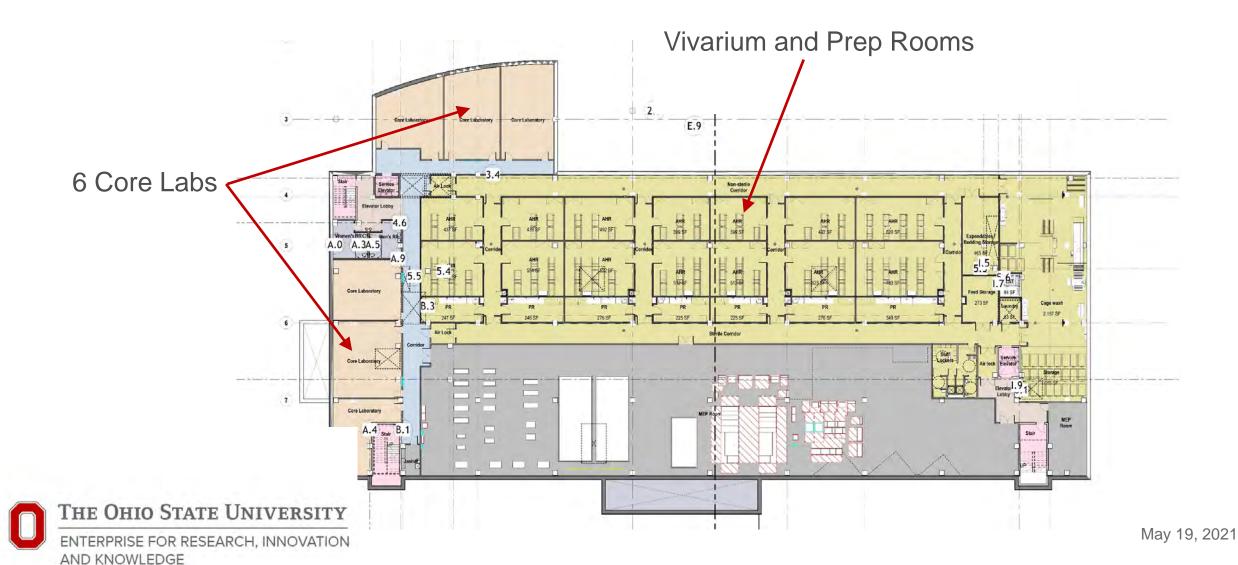
IRF FLOOR PLAN: FLOOR 1



IRF FLOOR PLAN: FLOORS 2-5



IRF FLOOR PLAN: BASEMENT



PHILANTHROPY - \$50M TARGET



To date, \$51.5 million has been raised with additional commitments in the works.

CONSTRUCTION PROGRESS



NEXT STEPS

May-Aug 2021 Evolve and prioritize plans based on: • Alignment with Ohio State's interdisciplinary research strategic thrusts Alignment with colleges' interdisciplinary Converge on space research priorities commitments **MAY 2021 AUG 2021 MAY 2023 SUMMER 2021** May-Aug 2021 Submit proposals and secure external funding Move in! Identify and plan for core instrumentation spaces



Board of Trustees

210 Bricker Hall 190 North Oval Mall Columbus, OH 43210-1388

> Phone (614) 292-6359 Fax (614) 292-5903 trustees.osu.edu

SUMMARY OF ACTIONS TAKEN

February 24, 2021 - Research, Innovation & Strategic Partnerships Committee

Voting Members Present by Zoom Virtual Meeting:

Lewis Von Thaer Alexander R. Fischer Anand Shah

Erin P. Hoeflinger Hiroyuki Fujita Gary R. Heminger (ex officio)

Cheryl L. Krueger Reginald A. Wilkinson

Members Absent:

N/A

PUBLIC SESSION

The Research, Innovation & Strategic Partnerships Committee of The Ohio State University Board of Trustees convened on Wednesday, February 24, 2021, virtually over Zoom. Committee Chair Lewis Von Thaer called the meeting to order at 1:00 p.m.

Items for Discussion

- 1. <u>Committee Chair's Remarks</u>: Mr. Von Thaer kicked off this inaugural meeting of the new Research, Innovation & Strategic Partnerships Committee with a brief welcome to the committee members. He also thanked Erin Hoeflinger for agreeing to serve as the committee's vice chair.
- 2. <u>Discussion of the Research, Innovation & Strategic Partnerships Committee Charter</u>: Mr. Von Thaer shared the draft committee charter for review, noting that this committee will focus on providing oversight for five primary areas (1) the research enterprise; (2) corporate partnerships; (3) innovation and technology commercialization; (4) entrepreneurships and university-enabled startups; and (5) relevant policies. There were no questions on the charter, which will be brought forward for approval at the next meeting in May 2021.

(See Appendix X for background information, page XX)

3. Research, Innovation and Knowledge Enterprise Overview: Dr. Grace Wang, Executive Vice President, gave the committee an overview of Ohio State's new Enterprise for Research, Innovation and Knowledge. She began by sharing her thoughts on the innovation and research ecosystem that exists at Ohio State, and how the interconnected exchange of talent, the flow of technology, expertise and ideas, the identification of funding sources and partnerships, and the ability to move technologies into the marketplace all work together to ensure that this ecosystem is a living, breathing system with room for growth. To help this ecosystem grow, the new office that Dr. Wang is leading will integrate the offices of research, technology commercialization, corporate partnerships, and entrepreneurship and startups as well as the Innovation District.

(See Appendix X for background information, page XX)



Items for Discussion (continued)

4. Ohio State Research Strengths, Key Opportunities and Highlights: Dr. Morley Stone, Senior Vice President for Research, shared that in FY20, the university reached \$968.3 million in total annual research expenditures, ranked in the top five for industry-sponsored research (with \$150.2 million) among all universities and had approximately 3 million square feet of space assigned to organized research. In terms of research strengths, Ohio State has been very strong in its volume of publication output and the university's standing is above average in federal and non-federal R&D expenditures. However, there are key opportunities for growth. Dr. Stone and Dr. Wang touched on the need to strategically recruit thought leaders amongst the faculty who can help drive impactful research in key growth areas.

Dr. Wang shared that the goal is to look at how Ohio State can utilize its research and innovation ecosystem to address societal challenges while also building large-scale research institutes. She cited a handful of specific societal challenges, including world population growth and aging, as well as fundamental human needs (e.g., energy, water, food, health), that the university will want to address through research. Driving factors for improving these areas include advanced computing, worldwide connectivity and life science breakthroughs. Dr. Stone highlighted two researchers at Ohio State – Dr. Darren Drewry and PhD candidate Devin Swiner – who personify the future of research at Ohio State.

(See Appendix X for background information, page XX)

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, Ms. Krueger, Mr. Fischer, Dr. Fujita, Dr. Wilkinson, Mr. Shah and Mr. Heminger.

The committee entered executive session at 1:41 p.m. and the meeting adjourned at 2:13 p.m.

APPROVAL OF THE RESEARCH, INNOVATION AND STRATEGIC PARTNERSHIPS COMMITTEE CHARTER

Synopsis: Approval of the Research, Innovation and Strategic Partnerships Committee charter is proposed.

WHEREAS the Board of Trustees may adopt individual committee charters, consistent with committee descriptions, that set forth further information and definition regarding the committee's charge, committee composition, or the delegated authority and responsibilities of each committee; and

WHEREAS the delineation and description of each committee function will enable the board to be more effective in the execution of its duties and responsibilities; and

WHEREAS the Board of Trustees created its Research, Innovation and Strategic Partnerships Committee effective February 25, 2021; and

WHEREAS section 3335-1-02(C)(1)(f) of the *Bylaws of The Ohio State University Board of Trustees* sets forth the description of the Board of Trustees' Research, Innovation and Strategic Partnerships Committee; and

WHEREAS the Research, Innovation and Strategic Partnerships Committee has developed a proposed charter, consistent with that description, that reflects its status as a standing committee of the Board of Trustees, and that charter has been fully reviewed by the committee; and

WHEREAS the Research, Innovation and Strategic Partnerships Committee shall be governed by the rules set forth in this Research, Innovation and Strategic Partnerships Committee charter:

NOW THEREFORE

BE IT RESOLVED, That the Board of Trustees hereby approves the attached Research, Innovation and Strategic Partnerships Committee charter.



Research, Innovation and Strategic Partnerships Committee Charter

Updated February 4, 2021

Purpose of Committee

The Research, Innovation and Strategic Partnerships Committee is a standing committee of The Ohio State University Board of Trustees established to consider and provide strategic guidance and oversight regarding matters pertaining to: (1) the research enterprise; (2) corporate partnerships; (3) innovation and technology commercialization; (4) entrepreneurships and university-enabled startups; and (5) relevant policies.

Committee Authority and Responsibilities

In furtherance of its purpose set forth above, the committee shall have the following authority and responsibilities:

- Provide strategic oversight and guidance on the sustainable growth of research and creative expression, corporate partnerships, technology commercialization, as well as entrepreneurial activities.
- Support the advancement of The Ohio State University to be among Top 10 public research universities in terms of annual research and development expenditures.
- Support strategic hiring, retention and planning of faculty and/or staff researchers to increase the university's research and innovation capacity and capability while maximizing societal impact.
- Support policies and programs to incentivize faculty participation in large-scale, interdisciplinary research, industry-sponsored research, technology commercialization and entrepreneurial activities.
- Provide strategic oversight and guidance to make The Ohio State University a national leader in diversity, equity and inclusion across the research and innovation enterprise.
- Provide strategic guidance and oversight, in conjunction with other board committees, for the overall plan and development of the university's Innovation District.
- Review and evaluate the effectiveness of the research and innovation enterprise including but not limited to annual research and development expenditures, scholarly activities such as publications and creative expression, outcomes of technology commercialization, startup activities and corporate partnerships.
- Provide strategic guidance and oversight on large-scale ventures and contracts that require Board of Trustees' review or approval.

Committee Meetings

The committee generally shall meet in conjunction with the regularly scheduled meetings of the full University Board of Trustees and at such other times and places as it deems necessary to carry out its responsibilities. A majority of the voting members of the committee shall be present in person at any meeting of the committee in order to constitute a quorum for the transaction of business at such meeting.

Committee Membership

All members of the committee, as well as the committee chair and vice chair, shall be appointed by the chair of the board. The chair and vice chair of the committee shall be trustees or charter trustees. Trustees, student trustees, charter trustees and non-trustee committee members shall all be voting members of the committee.

The committee shall consist of trustees appointed to the committee, including at least one student trustee, up to one member of the university faculty, and up to two additional non-trustee members,

with majority membership by trustees at all times. Each member of the committee shall serve for such term or terms as the chair of the board may determine or until his or her earlier resignation, removal or death.

Staff and Other Support

Primary staff support for the committee shall be provided by the Office of Research, Innovation and Knowledge Enterprise. Further, the committee shall obtain advice and assistance as needed from internal or external experts in science, engineering, technology, medicine, policy, law, finance, facility, research compliance, enterprise risk, intellectual property, venture capital, startups, business development, etc.

University Bylaws

The provisions of this charter are intended to comport with the bylaws of the university. To the extent that these provisions conflict, the university bylaws shall control.

EXPRESSION OF APPRECIATION

HONDA-OHIO STATE PARTNERSHIP

WHEREAS on October 12, 2000, Honda and The Ohio State University formalized the Honda-Ohio State Partnership by signing a memorandum of understanding; and

WHEREAS in 2015, Honda and Ohio State established a new memorandum of understanding reaffirming the partnership, creating a new joint leadership structure with dedicated co-directors for the partnership, and committing to the development of a new innovative business model for the Transportation Research Center to better support the future needs of Honda, Ohio State and the mobility industry; and

WHEREAS on April 1, 2021, Honda and Ohio State signed a new memorandum of understanding to continue advancing the Honda-Ohio State Partnership by building the vision for a world class partnership, expanding upon the collaborative relationship between Honda and Ohio State, and creating a future-looking strategic vision for this partnership; and

WHEREAS over the past two decades, this collaboration has brought numerous benefits to both institutions and has helped develop and breed innovation; and

WHEREAS the Honda-Ohio State Partnership is an example of how Ohio's industries, and specifically Honda, collaborate with Ohio State to build a better and brighter future; and

WHEREAS this partnership has created educational opportunities for Ohio State students and Honda associates, enabling them to learn and grow to prepare for widespread domestic and global advancement of the mobility industry:

NOW THEREFORE

BE IT RESOLVED, That the Board of Trustees hereby expresses its appreciation for and recognizes the 20th anniversary of the Honda-Ohio State Partnership and celebrates Honda's renewed commitment to Ohio State for the future.

HONDA-OHIO STATE PARTNERSHIP



20TH ANNIVERSARY OF HONDA-OHIO STATE PARTNERSHIP

Honda

Philanthropy – Research – Talent

A commitment to transportation research inspires a model of industry-university collaboration

20 YEARS OF IMPACT: HONDA - OHIO STATE PARTNERSHIP

Over the life of the partnership, Honda has provided more than \$28 million in research funding to Ohio State. Over the last five years alone, we have partnered on 235 research projects.





Honda has hired more than 80 Ohio State undergraduates in the last five years into full-time positions.