

**THE PENNSYLVANIA STATE UNIVERSITY  
BOARD OF TRUSTEES**

**MINUTES OF MEETING  
VOLUME 331**

**September 17, 2021**

A meeting of the Board of Trustees was held in Dean's Hall of The Penn Stater Hotel and Conference Center, State College, PA, in person and via video conference, at 1:00 p.m. on Friday, September 17, 2021.

The following Trustees were present: Schuyler (chairman), Kleppinger (vice chairman), Amorós, Barron, Black, Brown, Cairns, Casey, Dambly, Dandrea, Davis, de Levie, Dietrich, Doran, Fenza, Harpster, Hartzler, Hoffman, Houston, Lubrano, Oldsey, Ortega, Paterno, Pope, Potts, Rakowich, Rapp, Redding, Rowland, Schneider, and Wagman. The Governor's non-voting representative, Mr. Shipley, was in attendance.

Present by invitation were Emeriti Trustees Eckel and Jubelirer; Faculty Senate representatives Egolf, Mangel, Phillips, and Sczcygiel; constituent representatives Lynch, Romig and Sturges; student representatives Akbar, Boas, Franklin, Jeter, Rodriguez and Viramgama; ALC Chair Hardin; and staff members Austin, Barbour, Bieschke, Bundy, Dunham, Gaudelius, Goffe, Guadagnino, Harvey, Holleran, Huston, Jones, Lokman, Moore, Sims, Sitzabee, Ortiz, Thorndike, Weiss, Whitehurst, and Wilson.

Chair Schuyler opened the meeting with a moment of silence in memory of Karli Short, daughter of Trustee Brandon Short, who was tragically killed this past week.

Chair Schuyler noted several recent events including the in-person summer commencement ceremonies and in-person Convocation ceremonies both held at the Bryce Jordan Center, the "You Are Welcome Here" initiative in downtown State College, and special events at Penn State to mark the 20<sup>th</sup> anniversary of 9/11. He also stated that Penn State received the 2021 Ryan, Moser, Reilly Excellence in Community Engagement Institutional Leadership Award, which honors exemplary leadership in advancing the field of community-engaged scholarship.

Chair Schuyler provided a brief update on the national search for Penn State's 19<sup>th</sup> President, on the workings of the Presidential Recruitment and Selection Committee. He stated there is currently an outstanding pool of candidates that is diverse and promising, and the Committee will begin the contacting candidates and conducting in-depth interviews during this time-intensive and confidential phase of the search.

Chair Schuyler welcomed three special guests who joined in President Barron's discussion about the impact of Research and Innovation: Dr. Joan Redwing, professor of Materials Science and Engineering and Electrical Engineering, and director of the National Science Foundation 2D Crystal Consortium Materials Innovation Platform; Kriston Ramdass, an aerospace engineering master's student who recently received the prestigious Aviation Week Network's 20 Twenties Award; and Laura Guay, a senior majoring in Biobehavioral Health and French, with a minor in Global Health. Chair Schuyler also welcome new Academic Leadership council chair, Dr. Marie Hardin, Dean of the Bellisario School of Communications; new Administrative Fellows: Carrie Jackson, professor of German and linguistics in the College of the Liberal Arts, who will spend her year with executive vice president and provost, Nick Jones; Erica Smithwick, distinguished professor of geography; associate director of the Institutes of Energy, and the Environment; and director of both the Ecology Institute and the Center for Landscape Dynamics who will spend her year with our senior vice president for research, Lora Weiss; and Kristin Sykes, assistant director of administrative and financial services with the Office of Physical Plant, who will spend her year with vice president for development and alumni relations, Rich Bundy. Chair Schuyler recognized Retired Vice Admiral James Houck who was named dean of Penn State Law in University Park and the School of International Affairs, effective August 1, 2021.

Chair Schuyler noted that the Board met in executive session earlier in the day to discuss various privileged matters and called the meeting to order.

Shannon Harvey, Associate Secretary of the Board, reported all Trustees were present except for Trustees Detwiler, Dunn, Pegula, Short, and Wolf, constituting a quorum.

**Action Items**

Chair Schuyler noted that there were thirteen Action Items for consideration before the Board.

- A. Approval of *Minutes* from July 15, 2021 Meeting. A motion to approve Action Item A was seconded and approved by the Board.
- B. Proposed Election of Directors of The Corporation for Penn State

A motion to approve the following resolution was seconded and approved by the Board.

RESOLVED, That the following persons be elected to the Board of Directors of The Corporation for Penn State:

Eric J. Barron	Nicholas P. Jones
Kathleen L. Casey	David M. Kleppinger
Mark H. Dambly	William F. Oldsey
Frank T. Guadagnino	Matthew W. Schuyler
M. Abraham Harpster	Sara F. Thorndike
Randolph B. Houston Jr.	

- C. Proposed Appointment of Non-University Employees to the Penn State Investment Council

The Committee on Finance, Business and Capital Planning recommended that the Board of Trustees approve resolution C and Sara Thorndike, Senior Vice President of Finance and Business/Treasurer provided supporting remarks and context for this item. A motion to approve the following resolution was seconded and approved by the Board.

RESOLVED, That Blake Gall, Edward R. Hintz, Jr. and Joseph B. Markovich, non-University employees, be appointed to the Penn State Investment Council for a terms\ending in 2024.

- D. Proposed Approval of Long-Term Investment Pool Spending Rate Change

The Committee on Finance, Business and Capital Planning recommended that the Board of Trustees approve resolution D and Sara Thorndike provided supporting remarks and context for this item. A motion to approve the following resolution was seconded and approved by the Board.

RESOLVED, That the University adopt a Long-Term Investment Pool annual spending rate of 5% calculated using a 5-year average market value beginning with fiscal 2022-2023 year.

- E. Consideration of Request for Fiscal Year 2022-23 Appropriations for Operations

The Committee on Finance, Business and Capital Planning recommended that the Board of Trustees approve resolution E and President Barron provided supporting remarks and context for this item. A motion to approve the following resolution was seconded and approved by the Board.

RESOLVED, That the Officers of the University are authorized to submit to the Legislature, appropriate departments, and offices of the Commonwealth of Pennsylvania, a State Appropriation Request for fiscal year 2022-2023 in the amount of \$358,200,000.

- F. Proposed Real Estate Divestiture of 5042 Yale Drive, Penn State Behrend

The Committee on Finance, Business and Capital Planning recommended that the Board of Trustees approve resolution F and Sara Thorndike provided supporting remarks and context for this item. A motion to approve the following resolutions was seconded and approved by the Board.

RESOLVED, That the Board of Trustees approves the sale of 0.458 acres with building located at 5042 Yale Drive, Harborcreek Township, Erie County, to Sergey G. Kovalevich in the amount of \$107,000.

FURTHER BE IT RESOLVED, That the Officers of the University are authorized and directed to take such steps as are necessary to make effective this resolution.

G. Proposed Real Estate Divestiture of 5588 Jordan Road, Penn State Behrend

The Committee on Finance, Business and Capital Planning recommended that the Board of Trustees approve resolution G and Sara Thorndike provided supporting remarks and context for this item. A motion to approve the following resolutions was seconded and approved by the Board.

RESOLVED, That the Board of Trustees approves the sale of 1.98 acres with building located at 5588 Jordan Road, Harborcreek Township, Erie County, to Valeriy and Svetlana Moshkivskiy in the amount of \$167,500.

FURTHER BE IT RESOLVED, That the Officers of the University are authorized and directed to take such steps as are necessary to make effective this resolution.

H. Proposed Real Estate Divestiture of 5516 Jordan Road, Penn State Behrend

The Committee on Finance, Business and Capital Planning did not approve resolution H at yesterday's committee meeting and it is therefore removed for consideration.

RESOLVED, That the Board of Trustees approves the sale of 0.4591 acres with building located at 5516 Jordan Road, Harborcreek Township, Erie County, to Fdk Rentals & Remodeling LLC in the amount of \$102,000.

FURTHER BE IT RESOLVED, That the Officers of the University are authorized and directed to take such steps as are necessary to make effective this resolution.

I. Proposed Approval of Graduate Apartment Rates, University Park

The Committee on Finance, Business and Capital Planning recommended that the Board of Trustees approve resolution I and Sara Thorndike provided supporting remarks and context for this item. A motion to approve the following resolution was seconded and approved by the Board in a roll call vote (31-1). Trustee Pope voted against the motion.

RESOLVED, That the monthly lease rates for graduate apartments at University Park for 2022-2023 reflect a 0% increase but such rates shall exclude a parking permit.

J. Proposed Naming of the Knowledge Center to be the "Samuel P. Black III and Sumi James-Black Knowledge Center"

President Barron recommended that the Board of Trustees approve a resolution that the Knowledge Center at Penn State Behrend be renamed the Samuel P. Black III and Sumi James-Black Knowledge Center. A motion to approve the following resolution was seconded and approved by the board.

RESOLVED, That the Knowledge Center at Penn State Behrend be named "Samuel P. Black III and Sumi James-Black Knowledge Center."

K. Election of At-Large Membership to the Executive Committee

The Committee on Governance and Long-Range Planning recommended that the Board of Trustees approve resolution K. A motion to approve the following resolution was seconded and approved by the Board.

RESOLVED, That J. Alex Hartzler be elected as an at-large member to the Executive Committee of the Board of Trustees, effective immediately.

L. Proposed Approval of Granting of Trustee Emeritus Status

The Committee on Governance and Long-Range Planning recommended that the Board of Trustees approve the granting of trustee emeritus status to Donald Cotner, David Han, George Henning, and Robert Tribeck. A motion to approve Cotner to trustee emeritus status was seconded and approved by the Board in a roll vote (29-1 and one abstention). Trustee Lubrano voted against the motion and Trustee Amorós abstained. A motion to approve Han to trustee emeritus status was seconded and approved by the Board in a roll vote (24-1 and six abstentions). Trustee Lubrano voted against the motion and Trustees Amorós, Brown, de Levie, Paterno, Pope, and Rowland abstained. A motion to approve Henning to trustee emeritus status was seconded and approved by the Board in a roll vote (30-1). Trustee Lubrano voted against the motion. A motion to approve Tribeck to trustee emeritus status was seconded and approved by the Board in a roll vote (30-1). Trustee Lubrano voted against the motion. Emeritus status was automatically conferred on Ira Lubert given his role as past Board chair.

M. Presidential Compensation

The Subcommittee on Compensation recommended that the Board of Trustees approve resolution M and Kathy Casey, Chair, provided supporting remarks and context for this item. A motion to approve the following resolutions was seconded and approved by the Board.

WHEREAS, The Subcommittee on Compensation has reviewed the Presidential performance goals and objectives as well as market and equity considerations; and

WHEREAS, The Subcommittee on Compensation recommends annually to the Board of Trustees consideration of salary adjustments to the President's salary based upon the President's performance in light of established goals and objectives;

THEREFORE BE IT RESOLVED, That the Board of Trustees approves the salary terms for Eric J. Barron as recommended by the Subcommittee on Compensation and presented to the Board of Trustees in executive session.

Chair Schuler introduced Paul Clifford, Chief Executive Officer and Secretary/Treasurer of the Penn State Alumni Association for an informational update. Clifford provided updates on current statistics, programs, events, and noted the Penn State Alumni Association's new Strategic Plan on available in full on the PSAA website.

Chair Schuyler introduced Dr. Barron for the President's Report and Discussion.

**President's Report and Discussion**

Dr. Barron delivered a report titled *The Transformative Impact of Research*. During his presentation, Dr. Barron introduced three guest presenters: Joan Redwing, professor of materials science and engineering and electrical engineering; Kriston Ramdass, a graduate student earning his master's degree in aerospace engineering; and Laura Guay, a senior majoring in Biobehavioral Health and French, with a minor in Global Health.

For companion slides, reference [Appendix I].

Board of Trustees  
9/17/2021

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The meeting is available in its entirety at <https://youtu.be/9DVIFwrlHPY>

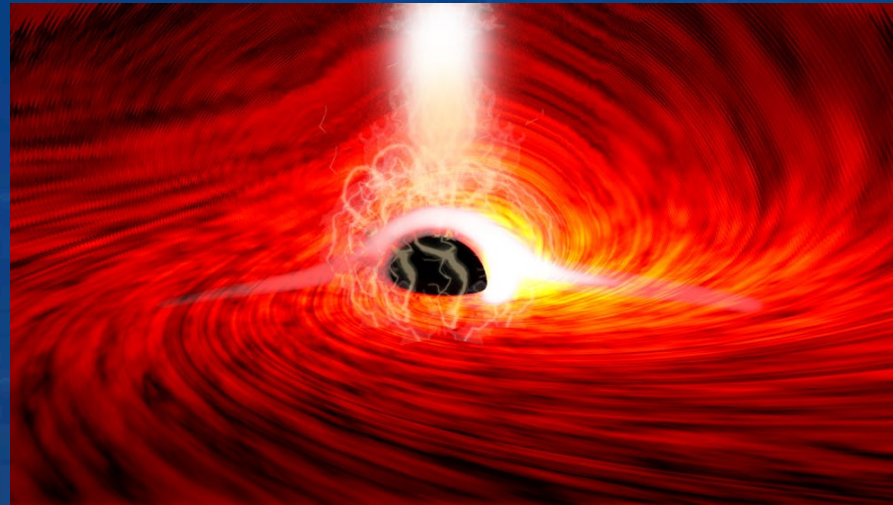
**Closing Remarks/Announcements**

There being no other business, the public meeting was adjourned at 2:44 p.m.

Respectfully submitted,

Frank T. Guadagnino  
Secretary, Board of Trustees

# The Transformative Impact of Research



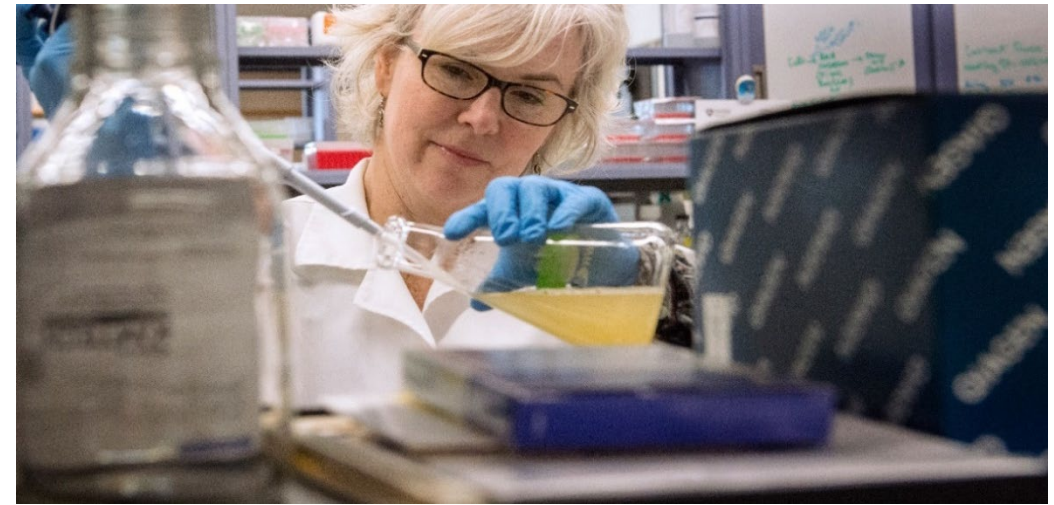
A Discussion with the Board of Trustees  
September 17, 2021



PennState

# Penn State's \$1.01B Research Enterprise

- Drives progress impacting all aspects of society locally and worldwide.
- Inspires and attracts innovators with diverse perspectives and talent.
- Crucial for standing among AAU, Big Ten, and other world-class institutions.
- Has transformative impact: fundamental discovery, innovative applications, knowledge creation, sustainable implementation, economic development, and national security.



# Penn State Research Impacts

- State and Local Economies
- Knowledge and Discovery
- Students and Workforce





# Impact on the State and Local Economies



# Penn State is the Top Public University in PA for Industry-Sponsored Research

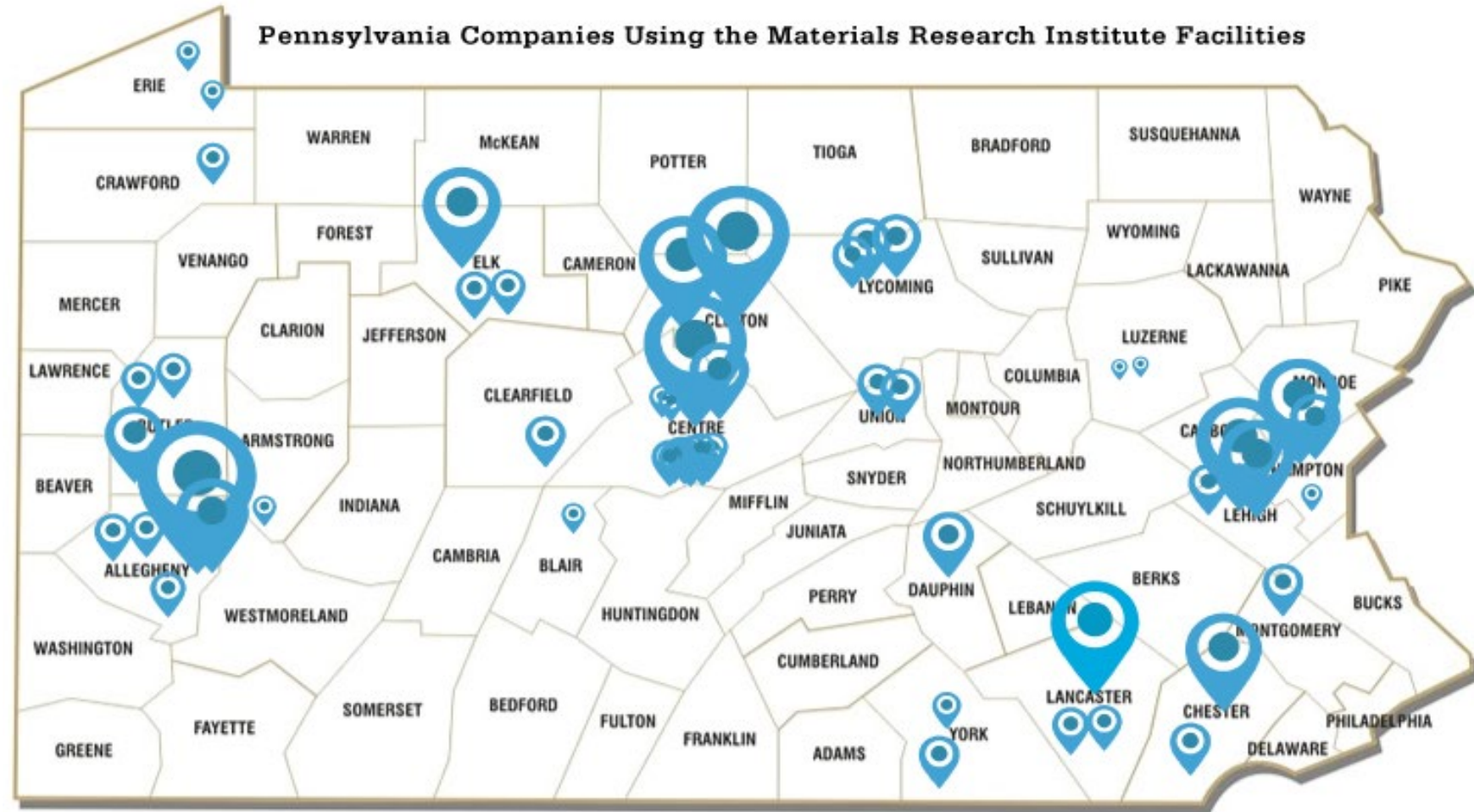
- Penn State conducts more industry-sponsored research than any other PA public college or university.
- Received more than \$20M per year for the past five years from industries sponsoring our research.
- About 200 companies sponsor projects every year.



# 100 PA Companies Conduct Research with Penn State

Penn State serves as a:

- Critical and strategic partner.
- Collaborator in specialized, high-end facilities.
- Source of economic impact by reducing expenses and creating jobs.



**PennState**

# Penn State Technology Transfer Statistics (2020)



- Indirectly supported more than 2,500 jobs.
- Generated nearly \$200M in economic impact since 2015.

Source: Science Coalition, Sparking Economic Growth Report, 2021



# Example: Industry Sponsored Research – Volvo

- Penn State is Volvo’s first and only Academic Preferred Partner (APP) for Research in the US; one of two designated U.S. university APPs for talent.
- Just renewed a second 5-year Master Research Agreement.
- Volvo has only two on-site university research park locations: Penn State and Sweden.
- Sponsored research focuses on: hydrogen fuel and production; batteries, charging stations, and infrastructure; and digitization, AI, and machine learning.



*“The Penn State–Volvo partnership is delivering prosperity through transport and infrastructure solutions.”*

– Chris Smith, VP, Quality & Customer Satisfaction NA, Volvo Group Trucks Technology

# Example: Industry Sponsored Research, Leading the Financial Sector with Solutions at Scale

- NASDAQ, JP Morgan, and Wells Fargo are sponsoring research.
- Harnessing big data to support equitable entrepreneurship with a cohort of over 30,000 entrepreneurs.
- Tailoring solutions to support female and minority entrepreneurs.
- Penn State is leading cohort including Stanford, Harvard, Duke, Pitt, and Yale.



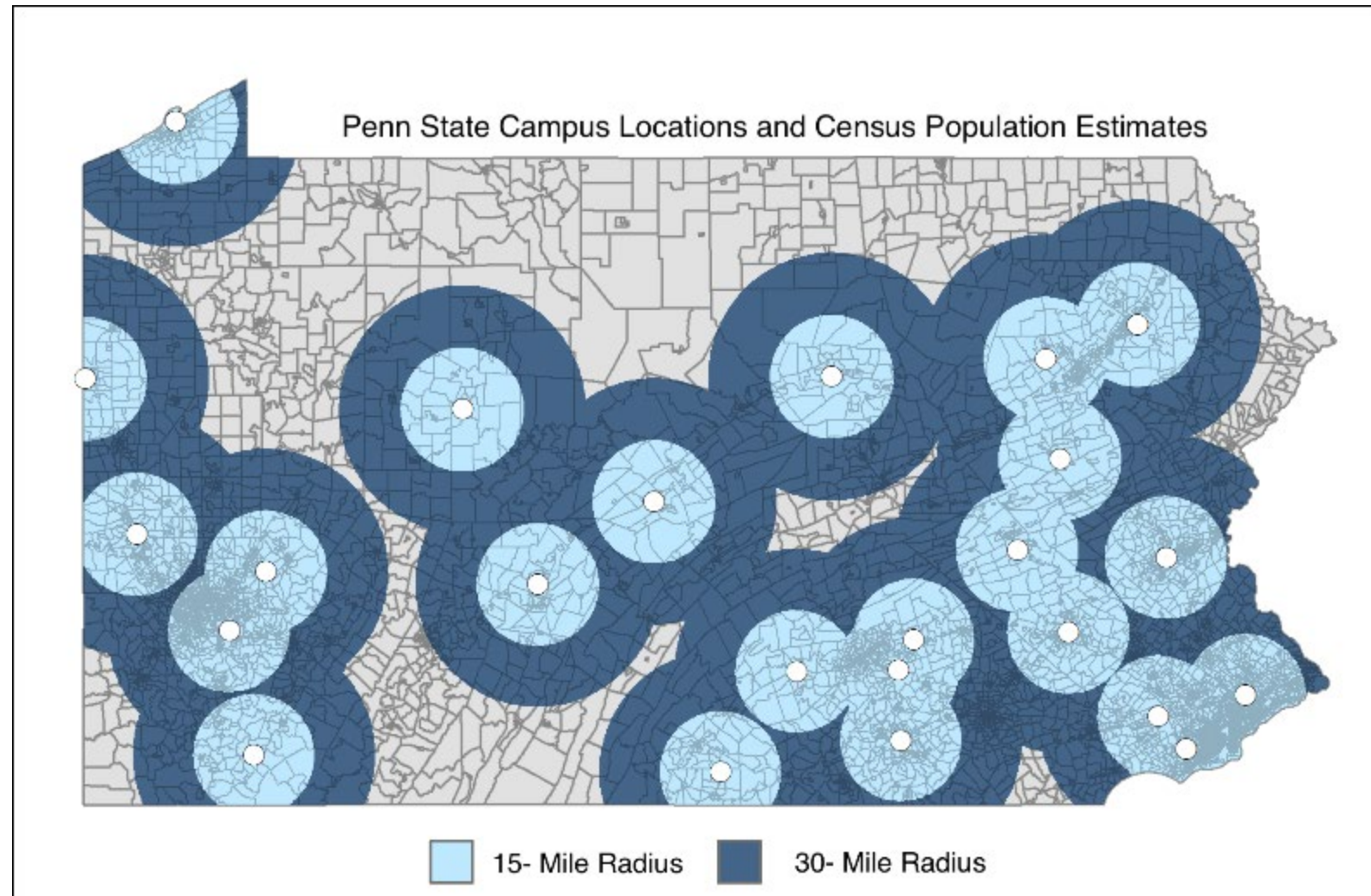
Co-PIs: Max Crowley, Associate Professor HHD  
Meg Small, Assistant Research Professor, HHD



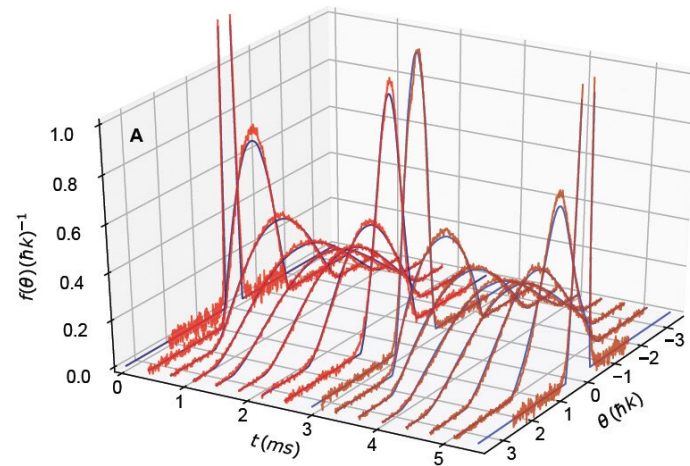
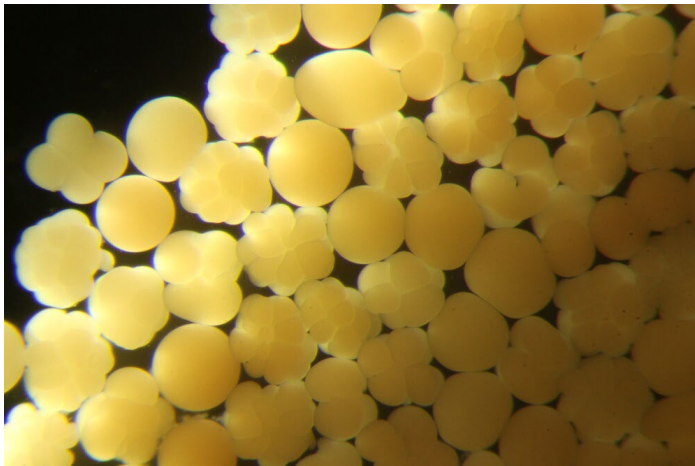
PennState

# Commonwealth Campuses Serve as Regional Research Hubs

- 75.2% of PA residents live within a 15-mile radius of a campus.
- 95.6% of PA residents live within a 30-mile radius of a campus.
- Campuses disseminate research; magnets for collaboration.



# Impact on Knowledge and Discovery





# Most Disciplines Ranked in U.S. Top 10 for Research

- Retained top position (tied) of having the most disciplines (16) ranked in top 10 nationally for research expenditures.
- Consistently ranks near the top in annual spending on science and engineering research.
- 110+ faculty members in the National Academies: Engineering, Science, and Medicine; American Academy of Arts and Sciences; and American Association for the Advancement of Science.



Vertical Lift Research Center



# Alignment with National Research Priorities Results in a Record \$633M in Federal Funding

National Priorities include:	
Fundamental Research	National Security
Artificial Intelligence	Health and Wellness
Quantum Information Science (QIS)	Biotechnology
Advanced Manufacturing	STEM Racial Equity
5G	Major Research Facilities
Climate Science	



# 2D Crystal Consortium is Nationally Renowned; Receiving 1 of only 4 Awards in U.S.

- National Science Foundation renewed funding for Penn State's Two-Dimensional Crystal Consortium (2DCC).
- \$20.1M over 5 years, an increase of 13% above the initial award in 2016.
- Led by Joan Redwing, professor of materials science and engineering and electrical engineering.



*"2DCC has established itself as a premier facility for the synthesis of wafer-scale 2D films and bulk crystals with unique quantum properties."*

*-Joan Redwing*



# The IceCube Neutrino Observatory is the Largest Particle Detector on the Planet

- Detects high energy neutrinos from astrophysical sources.
- Buried deep in the Antarctic ice cap at the South Pole.
- Consists of more than 5,000 photosensors in a volume that would hold roughly 1,000 Beaver Stadiums.
- At the forefront of the new field of high-energy neutrino astrophysics.



# Example: Fighting the Opioid Crisis

- Glenn Sterner, Penn State Abington, is the lead in PA for a three-state project, with Iowa and New York, funded by the National Institute of Justice.
- Developing local ability to impact community safety and address substance use issues.
- Data driven, intelligence-led investigations to disrupt opioid and other drug-related markets.



Glenn Sterner  
Assistant Professor, Criminal Justice  
Penn State Abington



# Impact on Students and the Workforce



# Penn State Awarded the Most Undergraduate Degrees in STEM fields in the U.S.

- In 2019-20, Penn State awarded nearly 6,500 degrees, over 50% more than UC Berkeley, Texas A&M, Arizona State and Purdue.
- Penn State is one of only four universities to appear in both the STEM and business top 20s.

*“It’s encouraging to see that STEM degree productivity is greatest at exactly those universities that by virtue of their faculty, facilities, and funding have well-established capacity and reputations for excellence in engineering and science.”*

*-Michael T. Nietzel, President Emeritus of Missouri State University*

Source: Forbes

# Research Prepares Undergraduate Students for Leadership and Career Success

- Over the past 5 years, undergraduate students participated in nearly 13,000 research course experiences; many more conducted research without earning credits.
- Summer Founders provided 5 teams annually with a \$15,000 grant to work full-time on their startup, social good or nonprofit idea.
- Erickson Discovery Grants (\$3,500 each) have supported 1,000+ undergraduate research experiences since the program's inception.
- The Student Engagement Network has funded over 1,200 experiences with over \$1.0M in grants since 2017.
- No. 5 (tied with MIT) by corporate recruiters for preparing students for success after graduation.





# Research Funding Supports Students

- 73% of graduate student research stipends were funded by externally sponsored research in FY2020-21.
- External grants and contracts provided \$65.9M in grad student stipend support in FY2020-21.
- Penn State currently has 10 NIH T32 Training Grants totaling \$2.8M annually.
- Interdisciplinary Institutes provide ongoing support: For example, Huck annually provides up to 8 fellowships, travel awards, customized graduate student professional development, and training grants.

Source: Research Accounting the University Budget Office

# Example: Partnership for Research and Education in Materials (PREM)

- The National Science Foundation has named Penn State the lead partner to Florida International University and North Carolina Central University.
- Designed to increase diversity and inclusion in materials research.
- Center for Nanoscale Science leading one of the PREM efforts.



# Introducing Kriston Ramdass

- Ramdass completed his undergraduate degree at Penn State; will earn his master's degree in aerospace engineering this fall.
- Interned at Moog Space and Defense, where he contributed to NASA's Orion Spacecraft Crew Module.
- Also interned at Boeing Company and SpaceX.
- Selected from 533 nominations to receive Aviation Week Network's 20 Twenties Award.



# Introducing Laura Guay

- Senior majoring in Biobehavioral Health and French, with a minor in Global Health.
- Conducted research in Senegal and with the U.S. Embassy in the Democratic Republic of the Congo.
- Research focuses on how increased social connections are correlated with positive health outcomes.
- Working with UNESCO's Social and Human Services Sector Youth Team.



# Summary

- \$1.01 Billion Research Enterprise; awarded a record \$633 million in federal funding.
- Most disciplines ranked in the U.S. Top 10 for Research.
- Penn State is the top public university in PA for industry-sponsored research; 100 PA companies conduct research with Penn State.
- Penn State Tech Transfer indirectly supported more than 2,500 jobs and generated nearly \$200 million in economic impact since 2015.



# Summary Continued

- 73% of graduate student research stipends were funded by externally sponsored research in FY2020-21.
- External grants and contracts provided \$65.9 million in grad student stipend support in FY2020-21.
- Penn State awarded the most undergraduate degrees (6,473) in STEM fields in the U.S.
- 95.6% of PA residents live near Commonwealth Campuses, which serve as research hubs and magnets for collaboration.

