THE PENNSYLVANIA STATE UNIVERSITY BOARD OF TRUSTEES

MINUTES OF MEETING VOLUME 332

November 12, 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, November 12, 2021.

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

Present by invitation were Emeriti Trustees Clemens, Cotner, Eckel, Han, Henning, and Tribeck; constituent representatives Boas, Egolf, Hardin, Jeter, Lynch, Mangel, Romig, Sczcygiel, Seymour, Sturges, and Viramgama; and staff members Austin, Barbour, Bundy, Büsges, Dunham, Gaudelius, Goffe, Guadagnino, Harvey, Huston, Jones, Lokman, Massini, Sitzabee, Thorndike, Weiss, and Whitehurst.

Chair Schuyler opened the meeting by acknowledging President Barron was joining via Zoom because he was quarantining for five days until he could be tested for COVID-19 after having close contact with someone who later tested positive for COVID-19. He was asymptomatic, fully vaccinated and had his booster shot, but was taking the step out of an abundance of caution.

Chair Schuyler noted the fall semester had a full schedule of in-person campus instruction and activities, including Penn State Homecoming, and he recognized soon-to-be graduates who will participate in fall commencement. He noted events taking place this week during Military Appreciation Week at Penn State, and the Military Appreciation tailgate and the Seats for Servicemembers Program to be held during the football game against Rutgers. Chair Schuyler recognized and thanked veterans and those currently serving in the armed forces who were in attendance. He stated Penn State recently held its 45th annual Renaissance Fund celebration honoring Eric and Molly Barron, with the event raising a record of more than \$3.6 million for endowed scholarships to benefit students with financial need, and a generous gift from the Barrons to establish the Eric and Molly Barron Student Food Security Endowment. He also announced Penn State's research enterprise totaled \$993.1 million in research expenditures for the 2020-2021 fiscal year.

Jacob Reynolds, president of the Penn State Student Philanthropy Network, was introduced by Chair Schuyler. He spoke about the 2022 Class Gift Campaign and the selection of the UHS/UPUA Student Wellness Fund as the 2022 class gift.

Chair Schuyler noted that two celebrations were held last month for the 2020 and 2021 honorees of the Distinguished Alumni, Honorary Alumni, and Philanthropist of the Year Awards.

A brief update on the national search for Penn State's 19th President was provided by Chair Schuyler. He stated the initial canvas produced more than 400 individuals for consideration for this role. The search committee has narrowed the list through a series of process steps and will work with the full board to finalize the process and ultimately select the next president of Penn State.

Chair Schuyler welcomed Emeriti Trustees in attendance: Clemens, Cotner, Eckel, Han, Henning, and Tribeck and he recognized Shelly Zeigler-Byers, administrative support assistant, for her 10 years of service and model of collegiality in the Board office and her dedication to the University for a total of 19 years, as she retires on December 30, 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 Rakowich and Wolf, constituting a quorum.

Chair, Vice Chair and Officer Elections

Chair Schuyler asked Frank Guadagnino, in his role as Secretary of the Board, to conduct the Chair, Vice Chair and Officer Elections. With 28 voting trustees physically present, and six attending by telephone, 18 votes were needed to elect officers. On October 9, 2021, Trustee Potts, Chair of the Committee on Governance and Long-Range Planning, provided all Trustees with the process and timeline for electing candidates for the offices of Chair and Vice Chair of the Board. Trustee Schuyler announced his candidacy for Chair of the Board; and Trustee Kleppinger announced his candidacy for Vice Chair of the Board. Candidates submitted biographical sketches and vision statements which were distributed to all members of the Board.

Mr. Guadagnino stated that the remaining officers of the Board also required election. Incumbent officers included: Secretary Frank T. Guadagnino; Associate Secretary Shannon S. Harvey; Assistant Secretary Heather B. Wilson; Assistant Secretary Kim I. Wright; Treasurer Sara F. Thorndike; Assistant Treasurer Kimberly J. Fisher; Assistant Treasurer Michele M. Spangler; and Assistant Treasurer Susan J. Wiedemer. In addition to the incumbents, Angelita K. Jonson was on the ballot for consideration for Assistant Secretary.

Trustees were provided with voting instructions. Results of the election would be announced later in the meeting. Paper ballots were distributed and Trustees participating via Zoom were called to relay their vote. Kelly Austin, interim vice president for Commonwealth Campuses and Lawrence Lokman, vice president for Strategic Communications served as tellers for the election.

Action Items

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

- A. Approval of *Minutes* from September 17, 2021 Meeting. A motion to approve Agenda Item A was seconded and approved by the Board.
- B. Authorization to Confer Degrees. A motion to approve Agenda Item B was seconded and approved by the Board.

RESOLVED, That the Board of Trustees authorize the President of the University, or designee, to confer degrees at the end of the 2022 Spring Semester, Summer Session, and Fall Semester upon those students who have completed at those times the necessary requirements

C. Proposed Date of Election of Trustees by Delegates from Agricultural Societies, by the Alumni, for Business and Industry, and At-Large. A motion to approve Agenda Item C was seconded and approved by the Board.

RESOLVED, That the Board of Trustees approve May 5, 2022 as the date for the delegate election of Agricultural Trustees, and for counting of the ballots in the Alumni Trustee election; and approve May 6, 2022 as the date for the election of Business and Industry, and At-Large Trustees.

D. Selection of Recipients of the 2022 Distinguished Alumni Award

Chair Schuyler stated that the Board received recommended nominees from the Distinguished Alumni Award Screening Committee to consider for the 2022 recipients. Votes were cast by written ballot and telephone relay, which were tallied by appointed tellers, Kelly Austin and Lawrence Lokman, and reported to Board Secretary Frank Guadagnino, with the results to be provided to Chair Schuyler and President Barron to notify each honoree.

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

President's Report and Discussion

Dr. Barron delivered a report titled *The Ingenious Power of Partnership: Invent Penn State.* During his presentation, Dr. Barron introduced four guest presenters: Sydney Gibbard, a third-year student majoring in biomedical engineering and pre-medicine and founder of Girls Code the World; Leo Girlando, a senior majoring in finance and Chinese and president of Happy Valley VC and the Global China Connection Penn State Chapter; Hunter Swisher, founder of Phospholutions; and Joe Kitonga, founder of Vitable Health.

For companion slides, reference [Appendix I].

The meeting is available in its entirety at https://www.youtube.com/watch?v=QTHMQAB-Cw8

Report on Chair, Vice Chair and Officer Elections

Chair Schuyler called on Frank Guadagnino to report on the Chair, Vice Chair and Officer Elections. Guadagnino reported each of the candidates for election had been elected unanimously.

Closing Remarks/Announcements

Chair Schuyler stated that he and Vice Chair Kleppinger are honored to be re-elected and thanked fellow trustees for their ongoing dedicated service to Penn State, noting many accomplishments made together during the past year and the work planned for the next cycle.

There being no other business, the public meeting was adjourned at 2:35 p.m.

Respectfully submitted,

Frank T. Guadagnino Secretary, Board of Trustees

The Ingenious Power of Partnership

Invent PENNSTATE

A Discussion with the Board of Trustees November 12, 2021



2015: Identified Missed Opportunities and a Powerful Need

- 1. Based on Penn State's dominant research profile, we were underperforming in getting IP to the marketplace.
- 2. Penn State lacked the programming to support entrepreneurial students and alumni; they had to figure it out on their own.
- 3. Need to advance land-grant service to society mission by promoting economic development.



In Response, We Founded Invent Penn State

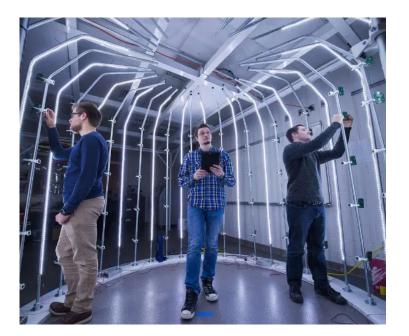
- Created to "de-risk" business, help entrepreneurs hit the ground running, and increase their chances of success.
- Designed to do this from end-to-end by:
 - 1. Expanding educational opportunities;
 - 2. Creating a path to get ideas into the market through programs, including competitions;
 - 3. Recognizing faculty for entrepreneurial research;
 - 4. Giving community members access to assistance and support;
 - 5. Creating visibility for IP in locations outside of typical tech hubs;
 - 6. Developing the partnerships to make investment possible.



Expanding Educational Opportunities









Entrepreneurship Education Is Available Across Majors and Campuses

- Penn State has the most accessible entrepreneurship program in the world, with minors, bachelor's degree options, World Campus courses, and Commonwealth Campus Fellows programs.
- Over the last decade, 19,000 students from 169 majors have enrolled in at least one course offered in the Intercollege Minor in Entrepreneurship and Innovation.





Corporate Innovation and Entrepreneurship (CIENT) Alumni Are the 2nd Highest Paid Graduates of Smeal

- CIENT was launched in 2015; Has grown 120% since 2018.
- Average full-time salary was ahead of all business majors except Actuarial Science.
- Program graduates are getting noticed by employers for their problem-solving skills, adaptability, and business acumen.



Top Hiring Companies: Internships and Full-Time



Example: Girls Code the World

- Girls Code the World is a nonprofit that provides resources, role models, and opportunities for girls ages 8 to 12 by offering STEM educational programming sessions and mentorship.
- Founder Sydney Gibbard is a third-year student majoring in biomedical engineering and pre-medicine.



Please welcome Sydney Gibbard.





About Me

Name: Sydney Gibbard Year: Junior Major: Biomedical Engineering



Girls Code the World

is a nonprofit organization that provides opportunities, resources, and role models for young girls aged 8-12 primarily from socio-economically disadvantaged or minority communities in STEM-related fields through educational programs and extended mentorships.

Timeline

Started running programs in 2018 funded by outside donors. Moved to college and struggled to find time and donors.

Participated in HVLB's Summer Founders Program. Won Invent Penn State's Inc. U Competition.



BY THE NUMBERS

- More than \$40,000 raised from donors including Johnson & Johnson, Drexel University, Invent Penn State, National Science Foundation, and more
- 100+ girls served through educational programs or mentorships
- In the second student interns who have worked for us
- Over 25 different lesson plans spanning coding, biology, chemistry, engineering, technology, and more



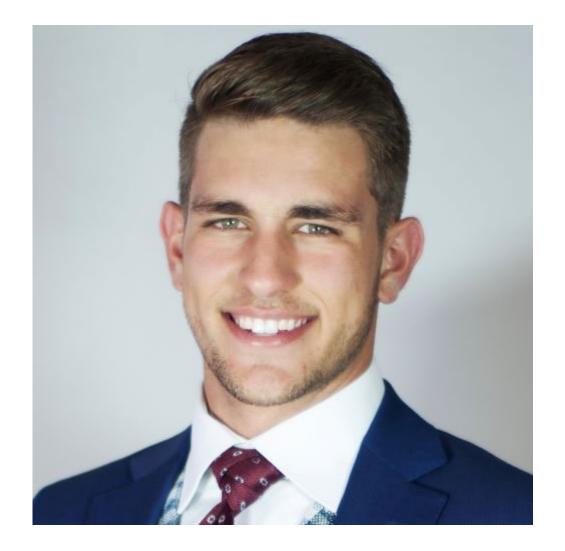
Support from Invent Penn State



Example: Happy Valley VC

- Leo Girlando is president of Happy Valley VC and the Global China Connection Penn State Chapter, among other activities.
- One of the founding members of the inaugural blueStart Festival hosted in October 2021.
- Leo hails from Italy, Venezuela, and most recently, Panama; he will graduate in 2022 with majors in finance and Chinese.

Please welcome Leo Girlando.





Creating a Path to Get Ideas Into the Market through Competitions





University-wide Event Held Every Spring

- Began in 2012 as a College of IST event.
- In 2021, Startup Week was fully virtual due to the pandemic and included 85 online events with 8 colleges and campuses hosting events.
- It featured 122 entrepreneurs, speakers, moderators and judges, and 8 pitch competitions.
- It will return to an in-person event April 4-8, 2022.





Selected Annual Student Competitions

Competition	Prizes
Ag Springboard Competition	\$10,000
Arts Business Idea Competition	\$10,000
HackPSU	Swag and Prizes
Happy Valley Pitch Competition	\$9,000
IdeaMakers Challenge	Fully paid trip to attend a conference or startup company mentoring session.
Inc.U Competition	\$30K in prizes and appear on "The Investment"
Mont Alto Lion Tank	\$2,500
Nittany Al Challenge	\$50,000
Start.Me.Up. Mini-Challenge	\$900
The Creating Shared Value Challenge	Prizes
"What's Your Big Idea?" Challenge	\$500









Happy Valley Capital



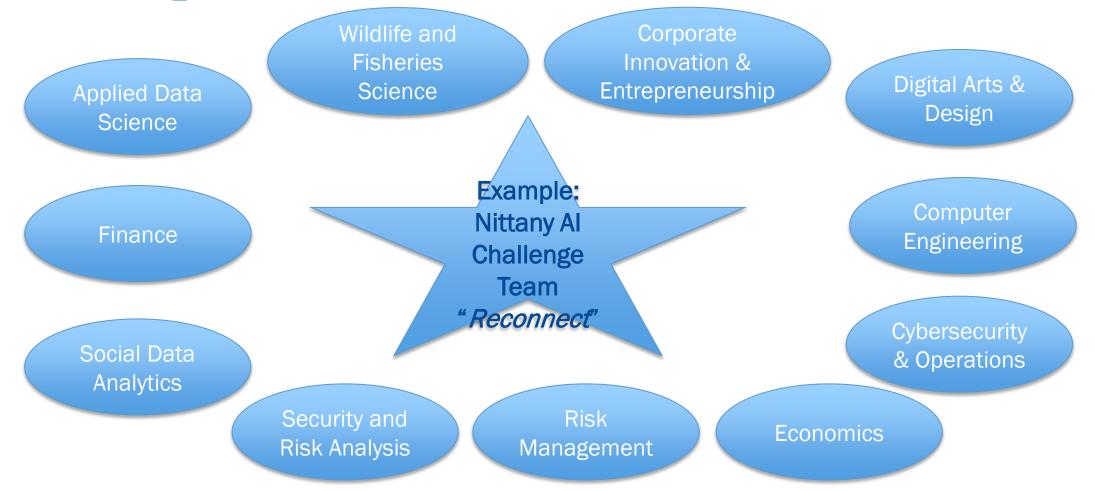
Real Clients. Real Work. Real World Experience.







Interdisciplinary Student Teams Cross Colleges and Campuses



Reconnect is an app that leverages AI and screen data to help users foster a healthy life-tech balance.



Penn State Is the Top Global Entrepreneurship Network University Partner

- Global Entrepreneurship Week was first held at University Park in 2009, and today involves 35 university partners—colleges, campuses, and units (including 14 LaunchBoxes).
- Involves 18 community and economic development partners.
- Held this past week, and included 56 live, hybrid and virtual sessions.

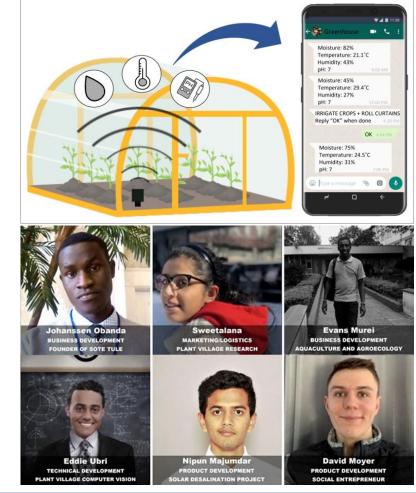






Penn State Earns 2nd Place in International Entrepreneurship Competition

- The PSU-led team claimed second out of 348 teams from 9 countries in the Creating Shared Value Challenge.
- The team pitched an idea for a sensor that would help small-scale greenhouse farmers in developing countries.
- Idea originated in Penn State Humanitarian Engineering and Social Entrepreneurship program with support from ENTI minor, Happy Valley LaunchBox, Happy Valley VC, and Penn State Small Business Development Center.





The Center for Penn State Student Entrepreneurship Earned 1st Place Among 250 International Programs

- Honored by the Global Consortium of Entrepreneurship Centers for "Exceptional Activities in Entrepreneurship Across Disciplines."
- Multidisciplinary faculty team provides easier access to entrepreneurship learning.





Recognizing Faculty for Entrepreneurial Research









Invent Penn State Navigators Help Penn State Innovators

- Supports faculty with online navigators that connect startups, researchers, and industry partners to resources, IP, and each other.
 - <u>Resource Navigator</u>: searchable inventory of entrepreneurship resources across Pennsylvania, grouped by region.
 - <u>IP Navigator</u>: searchable database of top emerging Penn State IP available for licensing.
 - <u>Startup Navigator</u>: searchable database of Penn State legacy and new startups.



Invent Penn State "Inventor of the Year"

- Jim Adair, professor of materials science and engineering, biomedical engineering and pharmacology was named Inventor of the Year and previously received the Faculty Scholar Medal for Entrepreneurship and Innovation.
- His research has led to \$5.1M in grants for cancer research, 23 invention disclosures, and 17 U.S. patents.





Invent Penn State Faculty Scholar Medal

- A new scholarly category for entrepreneurship, tech transfer, and economic development was added to the Faculty Scholar Medal awards, which were established by the Board of Trustees in 1980.
- In 2021, John Mauro, professor of materials science and engineering, was recognized in the entrepreneurship category.





Giving Community Members Access to Assistance and Support









Today, 96% of Pennsylvanians have a LaunchBox or Innovation Hub Within 30 Miles of Home or Work

- 4,976 entrepreneurs assisted
- 13,151 faculty, staff, students engaged
- 218 new PA companies
- 464 new startup program graduates
- 486 internships and 302 jobs created
- Over \$2M estimated in-kind support
- Close to \$24M in external funds leveraged





New Innovation Hub Is the First Penn State Construction Project in Downtown State College

- New home of the Happy Valley LaunchBox powered by PNC Bank.
- As part of State College's innovation district, it has symbolic and practical value.
- Makes interdisciplinary entrepreneurship and innovation more accessible to the community.
- Penn State alumni Jack and Dossy White have pledged a gift of \$1M to name the Jack White Family Directorship for the Happy Valley LaunchBox.





Commonwealth Campus LaunchBoxes Meet Local Needs

- Example: Hazleton LaunchBox Supported by Pasco L. Schiavo, Esq., is located in a predominantly Latinx community, and offers bilingual programming that includes accelerator programs, idea design and test labs, and business skills improvement.
- Has assisted more than 500 local entrepreneurs and hosted 48 community events.





Penn State Law's Entrepreneur Assistance Clinic Helps Small Businesses

- 2,005 pro bono legal clients engaged
- 900 new company formations
- 25,904 hours of legal service provided
- 542 community office hour sessions delivered
- Legal services support underserved small
 Pennsylvania businesses





Startup Leadership Network Is Driving Economic Impact

- Executive matching program for Penn Stateaffiliated startups has coordinated over 300 mentoring sessions since fall 2018 for a total of 26 ventures.
- These ventures have created or maintained 127 jobs.
- Guided by a 12-member council of Penn State alumni.



Matt Rhodes, Founding and Managing Director, 1855 Capital and Dr. Linda W. Schaffer, Director, Foresite Capital Management, judging the 2019 Tech Tournament at the 2019 Invent Penn State Venture & IP Conference



Creating Visibility for IP in Locations Outside of Typical Tech Hubs



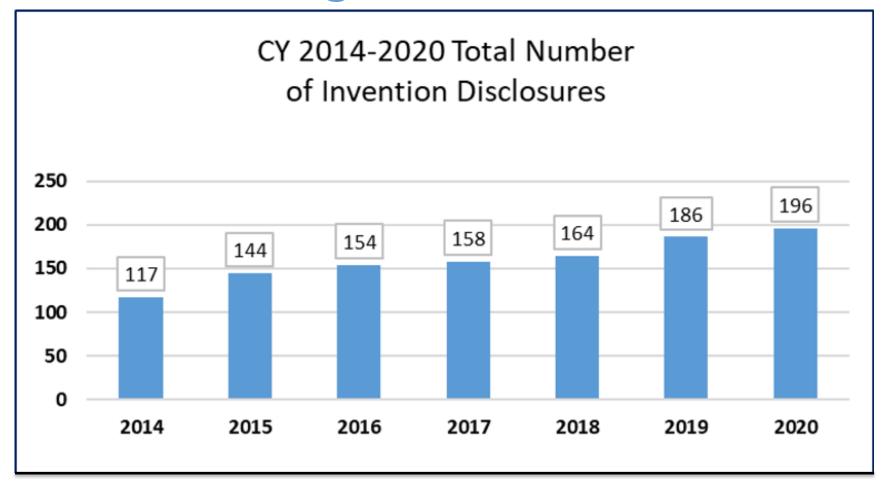


Invent Penn State Venture & IP Conference Is Among the Largest Tech Startup Conferences in the Mid-Atlantic

- Fifth conference will be held April 28-29, 2022.
- Attracts over 800 attendees including 70+ startup ventures and 40+ investment firms from across the country.
- Conference highlights innovations from high-growth and emerging markets including IT, Energy, Advanced Manufacturing, Biotechnology, Healthcare, among others.



Penn State Invention Disclosures Are Trending Toward an All-time High





Invent Penn State Program Graduates Have Raised Over \$27M in Venture Capital

Many success stories—

- Early ideas are supported through entrepreneurial education;
- Competitions help students get their ideas out;
- Ideas take the next step with assistance: LaunchBoxes, boot camps, Summer Founders Program that includes scholarships, legal assistance, and mentoring;
- Events create visibility for IP;
- Ben Franklin Tech Partners, 1855 Capital, and others provide the funding to take products to the marketplace.



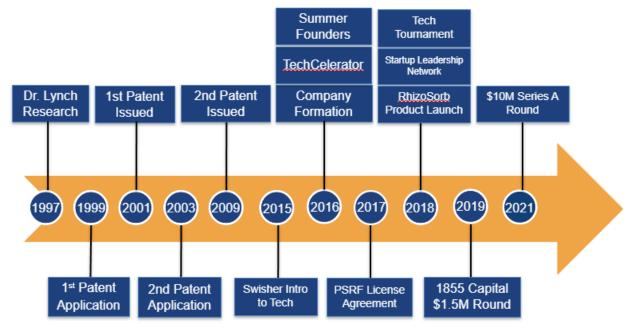
Example: Phospholutions

- Five years ago, Hunter Swisher discussed his new startup at a Board of Trustees meeting.
- The core technology for his business was licensed from Penn State's patent office while he was an undergraduate.
- Company has grown to 20 employees, and recently raised \$10.3M in venture capital funding to support the development of RhizoSorb® soil-enhancing technology.

Please welcome Hunter Swisher.



A Penn State Startup Success Timeline



Ben Franklin Tech Partners and 1855 Capital were both early investors.

Example: Vitable Health

- Recently received \$7.1M in funding from First Round Capital, angel investors, and others; previously received \$1.6M from SoftBank's SB Opportunity Fund.
- Vitable Health provides a primary care plan for employers of hourly workers through virtual and in-home visits.
- Since March, the in-person and virtual visits have increased threefold; in 2021, revenue and lives covered increased tenfold.
- It has 20 full-time employees and works with a network of about 100 nurses and advanced nurse practitioners.



Please welcome the founder Joe Kitonga, who is joining us from Philadelphia.



ConidioTec Supports 73 Jobs and Generates Nearly \$2M in Economic Impact

- Five years ago, Nina Jenkins attended the Board meeting to discuss her startup company.
- Today, their product is available in all 50 states and Canada and has completed more than 100,000 bed bug treatments.
- Efforts have been supported by Ben Franklin Tech Partners, 1855 Capital, the Small Business Development Center, Happy Valley LaunchBox powered by PNC Bank, and CBICC.





Developing the Partnerships to Make Investment Possible







Ben Franklin

powered by PNC Bank





Penn State Was Selected to Advance Research Commercialization Across the Region

- Penn State was awarded \$1.5M as one of eight universities in the Mid-Atlantic NSF I-Corps Hub, led by University of Maryland.
- The funding will expand entrepreneurial training for faculty and students to generate economic value.
- Penn State faculty member Jess Menold will lead the research focused on hundreds of companies.







A Greater Penn State Priority

- Economic Prosperity, which includes Invent Penn State, is a sub-theme of the Impact the World campaign priority.
- To date, it has raised \$116.6M of the \$129M goal.

A GREATER PENN STATE F O R 2 1 <u>S T</u> C E N T U R Y EXCELLENCE







As Invent Penn State celebrates its fifth anniversary, Penn State has:

- 1. A strong record of getting IP to the marketplace.
- 2. Developed end-to-end programming to support entrepreneurial students, faculty, alumni, and community members.
- 3. Advanced our land-grant service to society mission by promoting economic development.

