

PENNOVATION WORKS

Where Ideas Go To Work



Conceptual rendering of aerial view



Proposed long-term capacity

An Emerging Culture of Innovation

The Pennovation Works is a unique blend of offices, labs, and production space developed by The University of Pennsylvania to bridge the intellectual and entrepreneurial initiatives for advancing knowledge and generating economic development. The master plan articulates a phased approach, with initial activity focused on site improvements and renovating existing buildings, beginning with the creation of the Pennovation Center.

The 23-acre property adjacent to Penn's campus accommodates Penn affiliates in state-of-the-art facilities, including researchers, entrepreneurs, and industry partners solving real world problems and translating inventiveness into viable ventures. By grouping facilities for innovation, technological development, and artistic production/exhibition, Penn envisions a multifaceted workshop for harnessing and commercializing the tremendous creative potential in the region.

The Pennovation Works is anchored by the Pennovation Center, a new business incubator that provides lab space and a hub for collaboration and the exchange of ideas for innovators from all disciplines.

This property is strategically situated in a valued location within the Lower Schuylkill Innovation District, and is envisioned to become a keystone securing University City, Center City, and the emerging Innovation District as three engines of Philadelphia's economy.



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Potential site parcelization

A Flexible Framework

Design goals

Connect

- University
- River/River Trails
- City/Neighborhoods
- “Innovation District”

Catalyze development

- Mixed-use Innovation
- Cultural Hub
- Events-based Spaces

Spirit of ground-up innovation

- Industrial Character
- Working Landscapes
- Flex-Loft Workspaces

Development principles

Entrepreneurship, creativity, and innovation

- University Research
- Technology Transfer
- Design/Arts Innovation

Foster collaborations and partnerships

- Institutions
- Corporations
- Research Entities

Offer responsive and flexible spaces

- University innovation and research needs/ambitions
- Real estate market demand

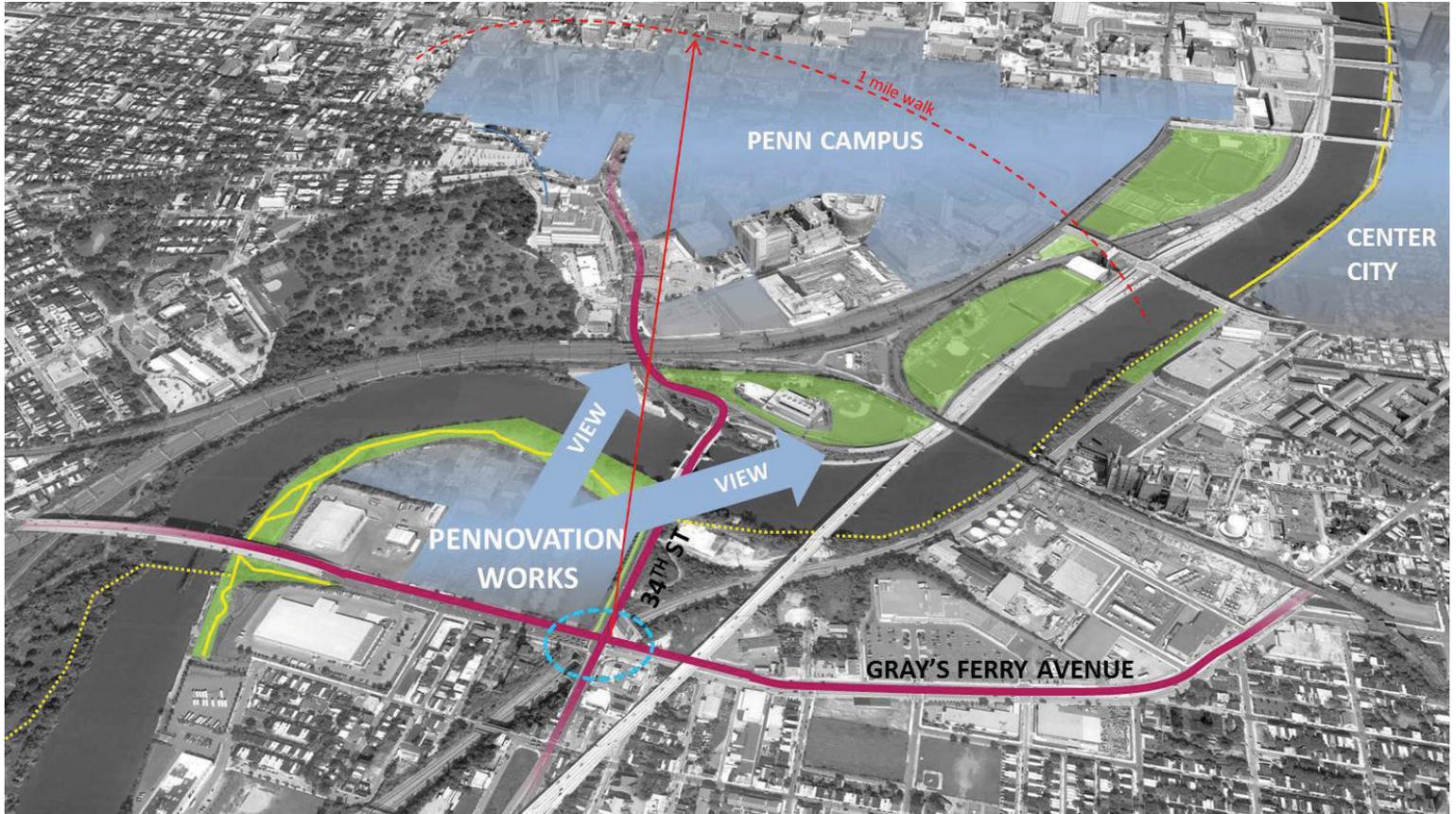


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Pennovation Works site in relationship to Penn campus and Center City Philadelphia



Revitalization plan for Philadelphia's Lower Schuylkill River

A Strategic Site

The Pennovation Works is a highly visible site that is well connected to the region, Center City, and University City. Recent investments in open space trails have connected the site to the Schuylkill River with dedicated public access and riverside amenities. Penn, the Philadelphia Industrial Development Corporation (PIDC), and the City, along with public agencies, are joining efforts to improve the pedestrian and traffic connections to the site, reposition properties in the surrounding areas, and create improved vehicular and pedestrian access to the neighborhood and University City.

The Pennovation Works framework plan aligns with PIDC's vision to revitalize the 500-acre Lower Schuylkill River district into a regional Innovation District.

Early implementation efforts are underway to establish a distinctive Innovation District Gateway at 34th and Grays Ferry Avenue. New investment and PIDC master planning will drive the transformation into a mixed-use area featuring cutting-edge innovation, the next generation of entrepreneurs, and expanded university-based research commercialization.

Businesses that are located at Pennovation Works are eligible to receive significant state and local tax benefits including abatement of Business Privilege Tax, Net Profit Tax and Real Estate Tax.

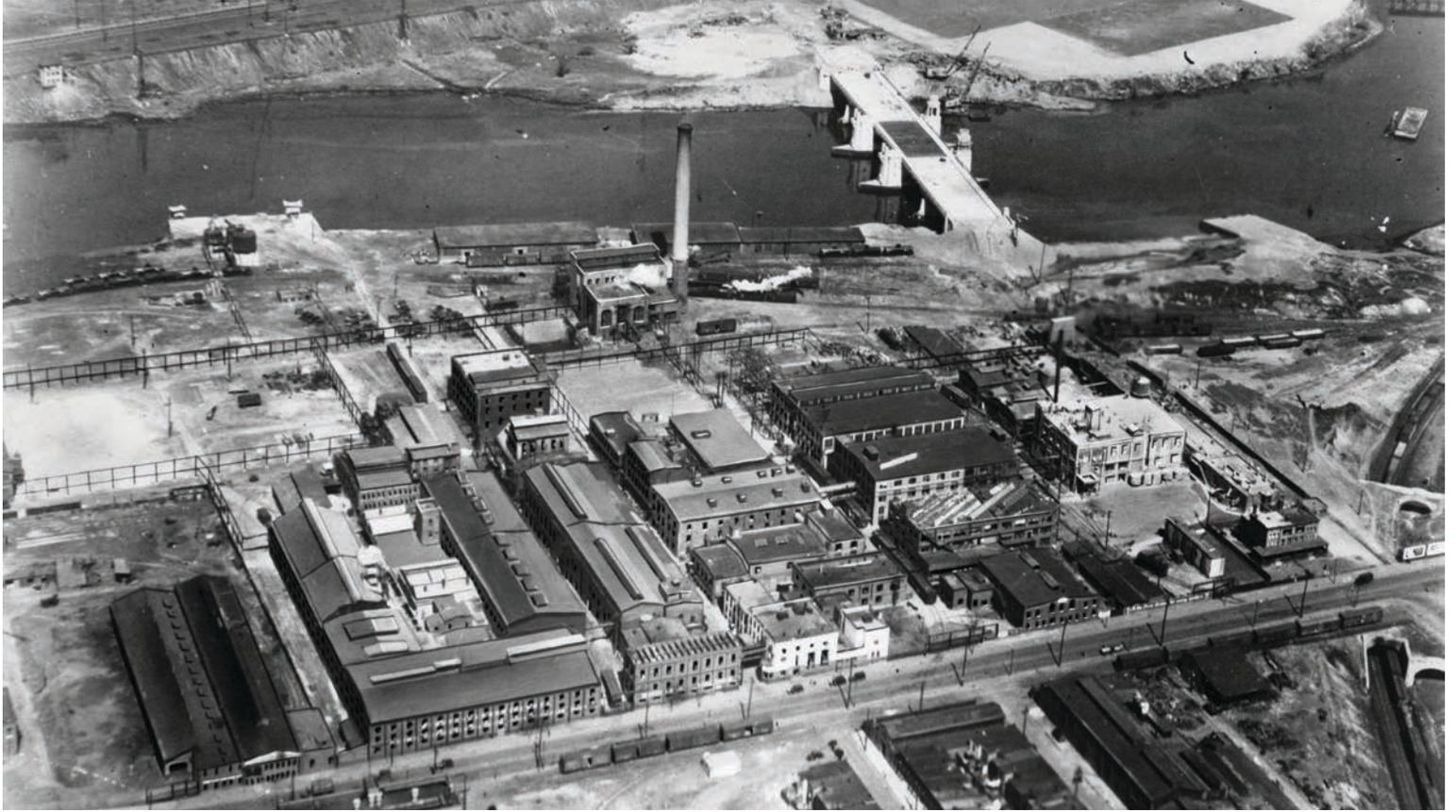


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Greys Ferry site, circa 1940 (Photo courtesy Allied Chemical and Dye Corporation Plant, Library Company of Philadelphia)



"Yard Scene: Acid Storage Tanks and Cars," Harrison Brs & Co, 1902 (Photo courtesy Kislak University of Pennsylvania Libraries Special Collections)

History of Innovation

The Pennovation Works is a 21st Century hub for innovation and industry. Beginning with the creation of the Pennovation Center - a building redesigned and adapted from a 20th Century paint factory - the Pennovation Works consists of facilities existing for the purpose of turning ideas into economic opportunities for the surrounding area and neighborhoods. Interestingly, when you take a look at the site's colorful history, you see that it's been an incubator for industry and innovation in the Philadelphia area for over 200 years.

History:

Beginning in 1690, the current Pennovation Works site was host to the Lower Ferry crossing of the Schuylkill River, which served as the Southern entrance to Philadelphia throughout the 18th century. In the mid 1700's, ferry operator George Gray began to develop the area surrounding the crossing, opening a tavern and designing a garden to attract patrons to the area, with waterfalls, grottoes, and greenhouses. Gray's Garden became important to the local horticultural movement, which featured gardens – including The Woodlands and Bartram's Gardens - and seed manufacturers on the west bank of the river.



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In 1838, the Philadelphia Wilmington and Baltimore Railroad replaced the heavily used Gray's Ferry crossing with a permanent railroad bridge, the Newkirk viaduct. With Baltimore and Philadelphia connected via railroad for the first time, industry began to thrive along the riverbank on what is now the Pennovation Works site. Factories sprung up in the location due to its access to the railroad as well as to the river. The site was also far enough from the city center that industry like chemical production and slaughterhouses could operate safely.

In 1865 Harrison Brothers and Co. was one of the largest and most productive chemical factories, employing over 400 workers at its 30-acre site. Harrison Brothers expanded the site to include facilities for their employees like a restaurant and athletic field, as well as their own power plant. Throughout the 1800s, Harrison Brothers were leaders in the development of chemical processes leading to ready-mix paint, and as house paint became readily available to the average citizen, they became one of the top color manufacturers in the United States.



Dupont Research Laboratories, 1957 (Photo Courtesy: City of Philadelphia Department of Records)

In 1917 the prominent E.I. DuPont & Nemours company purchased Harrison Brothers and Co. and the Grays Ferry site, and it became home to DuPont's new paint and finishes department. Throughout the second half of the 20th century, the site - and in particular the current Pennovation Center structure - was a facility for both production and chemical research, and was responsible for many innovations in the field. While manufacturing ceased there in the 1980s, DuPont continued with research there until 2009. In 2010 the University of Pennsylvania purchased the site and worked closely with the Environmental Protection Agency and the Department of Environmental Protection in order to clean up and protect the site and its surrounding areas. As the Schuylkill River has its revival with the Bartram's Mile and extension of the Trail, this industrial riverfront is again establishing itself as a place of connection and progress, where ideas go to work.

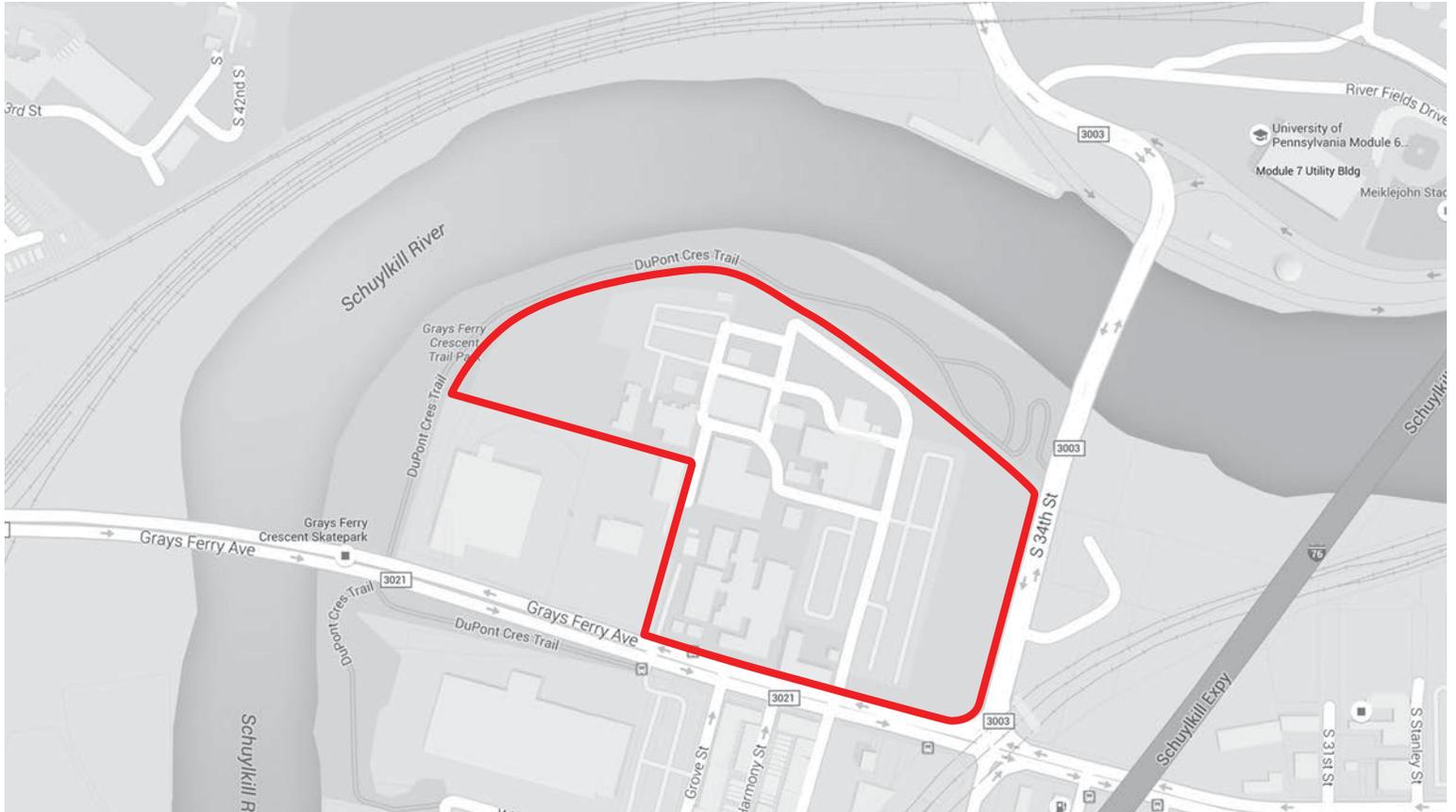
Today:

Officially opened in September 2016, the Pennovation Center is a 58,000sf business incubator and laboratory that aligns and integrates researchers, innovators, and entrepreneurs for the commercialization of research discoveries. Landscaping for the entire site includes storm water management techniques, increased connections between buildings, and access to Schuylkill River trails. As development of the site continues, Pennovation Works is aligning University-related research functions with private commercial enterprises seeking to operate in close proximity to the University and its neighboring institutions.



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Aerial map of Pennovation Works site with street names

Getting There

Pennovation Works is located at the intersection of 34th Street and Grays Ferry Avenue (3401 Grays Ferry Avenue).



Parking

Limited parking is available on the site.



Public Transportation

SEPTA bus routes 12 and 64 service the site.



Bike Share

Nearby Indego bike share stations are located at 3499 Civic Center Blvd., 246 S. 40th Street, and 598 S. 43rd Street.



Walking Escort Service

Penn offers a Walking Escort Service which can be requested by calling 215-898-WALK (9255)



Penn Transit

Penn Transit Services offers an on-demand transport service to Pennovation Works for all Penn Community members holding a valid Penn Card or Pennovation ID.

Call (215) 898-RIDE (7433) and select Option 3.



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25,000 sqft Office Building



Location of Office Building on site

Office Building

The Property is a multi-tenant office building situated on approximately 3.25 acres of land. A 3-story building, it consists of 24,000 rentable square feet. Originally built in 1937 and renovated by Penn in 2016-17, the Office Building includes a new elevator core, restrooms, and code-related improvements. The building is constructed with concrete slab-on grade, steel framing and concrete floors, new membrane roof, unpainted masonry brick exterior and concrete stem walls. Common area interior finishes consist of painted gypsum board walls, acoustical ceiling tiles and ceramic tile and carpet floors.

The Office Building is part of the Pennovation works campus together with the Pennovation Center which share a common secured access gate, and parking. It is currently partially leased to various start-up companies and Penn-related occupants.



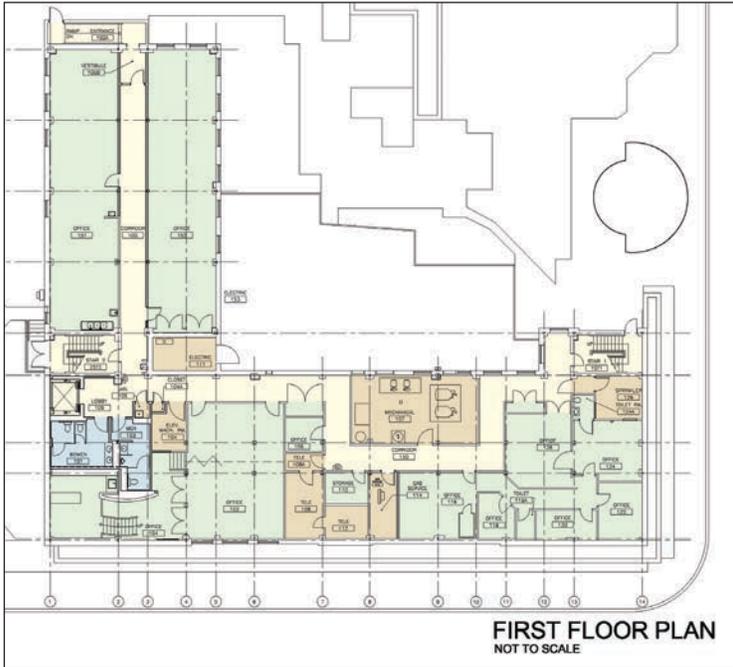
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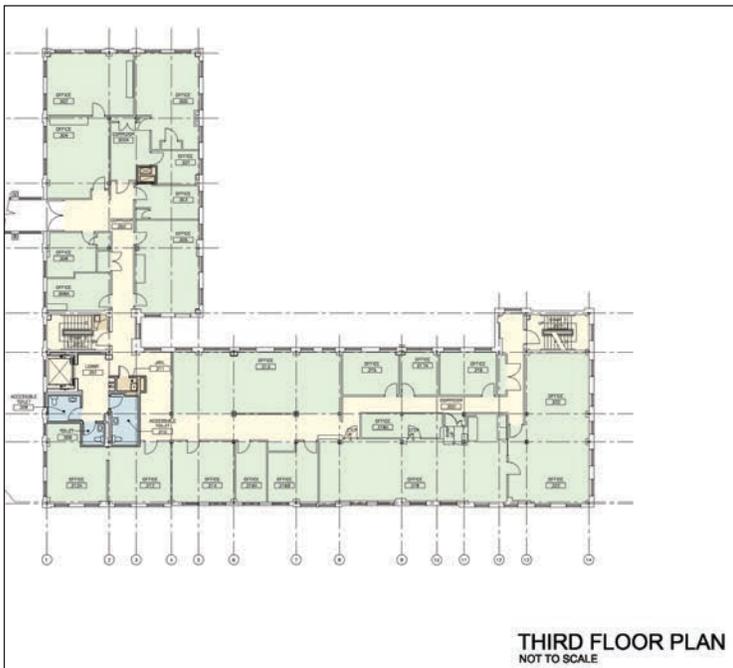
First Floor



Second Floor



Third Floor



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69,000 sqft Lab Building



Location of Lab Building on site

Lab Building

The Lab Building is an existing building at Pennovation Works that has been identified for re-use in the future because its configuration and layout support the identified new programs and uses for the Pennovation Works site.

The 69,000 square foot masonry building currently holds laboratory, office, and conference spaces. In the future, the wider north wing is proposed to house laboratory functions, while the narrower west wing will house office uses. The first floor is partially below grade. A public lobby and conference space will be located in the above-grade north end of the space, while storage and support spaces will fill the portions of the floor that are below grade.

Current laboratory spaces in the building are served by exterior ductwork, necessitated by relatively low floor-to-floor heights which limit interior duct work. As new work spaces are introduced in the building, it is likely that additional exterior ductwork will be needed.

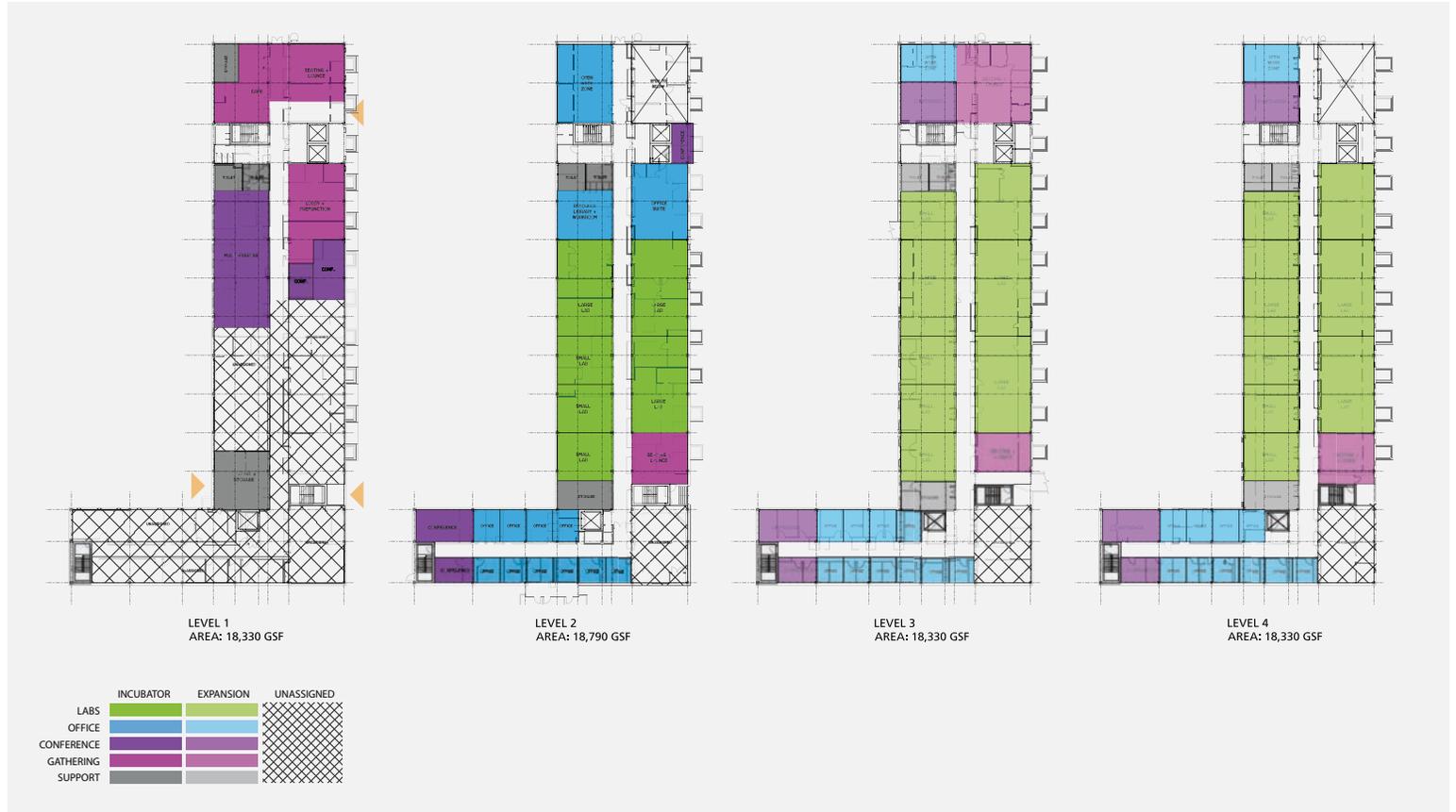


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Concept for building re-use



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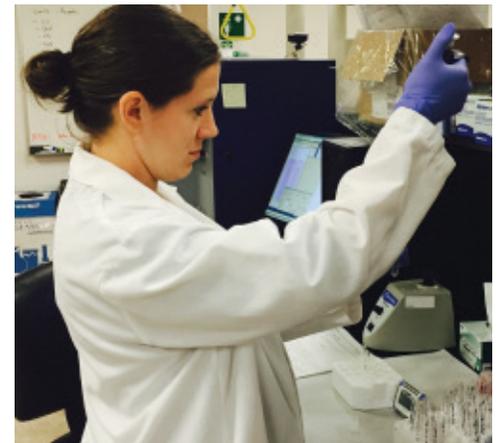
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Innovators

- Aerial Applications
- Allevi
- Amriton
- COSY
- Cytovas
- Free Library of Philadelphia
- Hershey Company
- iFlight/DJI
- IQinetics
- Limelight Bio
- Netronix
- Novapeutics
- PCI Ventures
- Penn Arts & Sciences BioGarden
- Penn Data Center
- Penn Dental Research Greenhouse
- Penn Design Studio
- Penn Engineering Research and Collaboration Hub
- Penn Transit Services
- Penn Vet Working Dog Center
- Public Safety Communications Back Up Center
- Qualcomm Research Philadelphia
- Red & Blue Ventures
- TriFreshca
- Verge Aero



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01. INVENTION

Faculty member desires to commercialize their research, approaches UPstart. Team explains the UPstart process. Faculty member signs the Company Formation Agreement.



02. COMPANY CREATION

Faculty member works with the UPstart team to choose a company name, sign the LLC Agreement, work through company formation applications and help develop initial marketing materials.



03. ENTREPRENEUR

The UPstart team identifies, interviews, and matches potential entrepreneurs to run the company. With the approval of the faculty member, entrepreneur signs the management agreement.



04. PARTNERS

UPstart engages partners to provide services to the new company, ranging from bank account setup to legal advice.



05. FUNDING

UPstart works with the company to pursue different forms of funding, including: corporate partnerships, SBIR/STTR government grants, angels and VC investment and funding from foundations.



06. SET UP OPERATIONS

When funding becomes available, UPstart helps the company acquire insurance, lease space, establish payroll, set up bookkeeping, and so forth to become a fully operational entity.



PCI Ventures

The Penn Center for Innovation's (PCI) mission is to empower ideas into becoming real world solutions that benefit society. As a one-stop-shop for all innovation and commercialization needs, PCI facilitates industry-sponsored research, corporate alliances, straight licensing, and new venture creation. Within PCI, the PCI Ventures team provides new company formation services for Penn's leading research and innovations. PCI Ventures actively seeks entrepreneurs and investors to lead companies and to provide funding for new ventures. PCI Ventures also provides a suite of products and services to incubate the development of early stage technology-based businesses.

UPstart, one of the services at PCI Ventures, is a virtual incubator that helps scientists and innovators to form and launch new companies based on selected inventions and innovative technologies. Since 2010, UPstart has worked with more than 150 faculty and staff members, bringing their discoveries to the commercial market. UPstart currently supports more than 60 companies, collectively obtaining more than \$100 million in funding. The UPstart portfolio includes companies in life sciences, medical devices, healthcare management, advanced materials, information technology, and robotics.

At Pennovation Works, PCI Ventures can be surrounded and inspired by the innovative companies sharing the space. By connecting local entrepreneurs, investors and partners with Penn inventors, UPstart adds a powerful platform for a larger entrepreneurial ecosystem in greater Philadelphia and beyond.

<http://pci.upenn.edu/pciventures/>



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Penn Engineering Research and Collaboration Hub (PERCH)

The third floor of the Pennovation Center will integrate computer science, and electrical, mechanical and systems engineering in a vibrant, collaborative research and development environment. Students, faculty, and staff from the School of Engineering and Applied Science will use this space designed to promote fundamental research and accelerate the lab-to-market technology transfer pipeline in robotics, internet of things and embedded systems.

On site adjacent to the Center is an instrumented, outdoor laboratory that enables the design and validation of high-performance outdoor aerial and ground robots in the safety of a netted enclosure.

grasp.upenn.edu

kodlab.seas.upenn.edu

modlabupenn.org

kumarrobotics.org

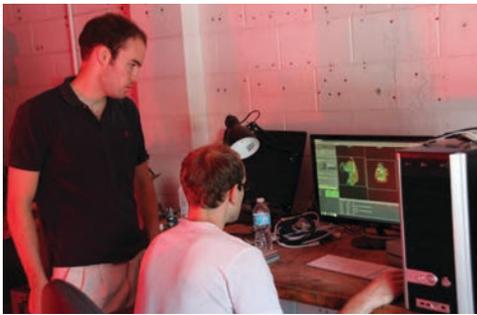
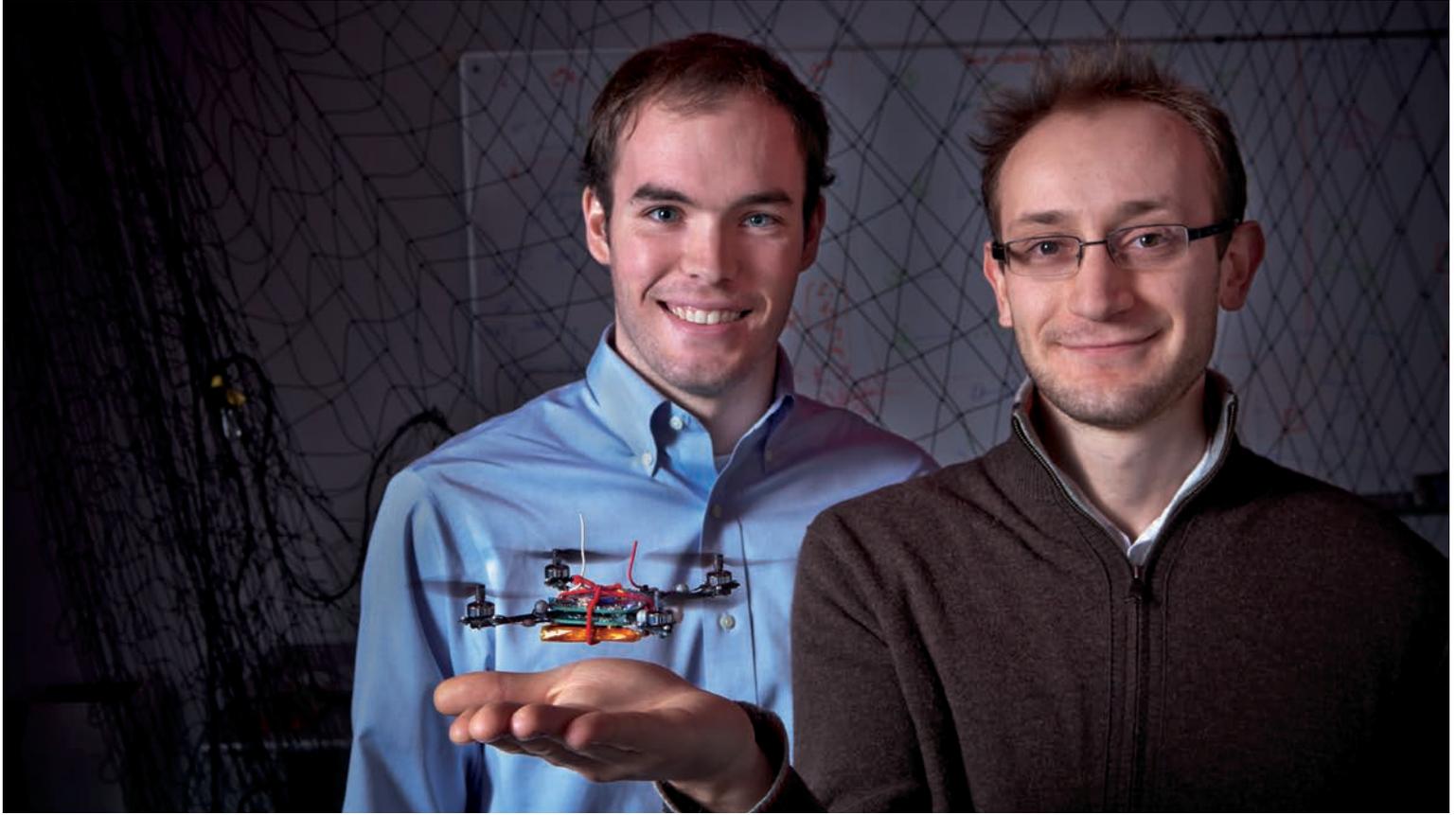


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Qualcomm Research Philadelphia

A division of the Fortune 100 company Qualcomm Technologies, Inc., Qualcomm Research Philadelphia was established in February 2015, along with the acquisition of KMeI Robotics. This growing team of researchers and engineers work on research, development, and commercialization of leading-edge technology for aerial vehicles and robotic systems. In addition to creating new capabilities, the team works closely with other organizations within Qualcomm to integrate Qualcomm's wide range of world-class technology into the robotics domain.

KMeI Robotics got noticed for their development of experimental robotics to find new research platforms for their quadrotors. The small robots get their name from the four different propellers that can spin at different speeds, enabling them to travel in any direction. The founding duo met while in a Penn Engineering graduate school program, and after obtaining their degrees, they moved only a short distance to build their ideas at Pennovation Works.

qualcomm.com/invention/research/locations/philadelphia



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Penn Dental Research Greenhouse

Driven by a desire to provide inexpensive medicine to people in remote areas, Dr. Henry Daniell at the Penn Dental Research Greenhouse wants to use plants in a new medicinal capacity. One of the biggest barriers in providing low-cost medical supplies to the developing world is the lack of refrigeration available on delivery routes. Vaccines contain pathogens, which must be refrigerated to prevent the organisms from reproducing and harming the people taking the medications.

Dr. Daniell seeks to use plants as shelf-stable incubators for the drugs. This would eliminate the need for costly or infeasible refrigeration. Additionally, plants are commonly consumed all over the world. Patients are unlikely to suffer allergic reactions from plant-based drugs, a common problem with synthetic drugs currently available.

In addition to Dr. Daniell's work, the greenhouse has been home to a collaborative project between Penn Dental and Novo Nordisk, a project sponsored by the University of Pennsylvania Perelman School of Medicine, and research funded by Bayer, a health care and pharmaceuticals company.



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Penn Vet Working Dog Center

The Penn Vet Working Dog Center, founded and directed by veterinarian Cynthia Otto, trains dogs to search and rescue, sniff out indicators of disease, and detect bioterrorism threats. Constant innovation in the dog's selection and training is important to their success, and that requires a diverse supply of space and thought leaders. At the Center, dogs enjoy Pennovation Works' green open space, warehouses, office areas, and other indoor spaces as they learn how to detect threats in a wide variety of contexts.

The Center doesn't just train the dogs. The team researches canine genetics, emergency medicine, reproduction, and behavior to select dogs that are predisposed to the rigorous training working dogs undergo. One of the reasons for this research is to expand the pool from which working dogs are selected.

Currently, most of the dogs come from breeders. However, many dogs in shelters need permanent homes, and it is the Center's hope that their research will help other organizations successfully identify shelter dogs that will excel at being working dogs.

The University of Pennsylvania's School of Veterinary Medicine actively supports the Center, contributing scientists, clinicians, and veterinary students.

<http://pennvetwdc.org>



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Netronix

Netronix offers purpose-built telemetry hardware that allows remote sensors to report directly to our data centers via various communication channels (HSPA/HSPA+, GPRS, etc.). Data is captured and securely stored by Netronix's servers and made available through Environet, an advanced hosted web-based application. Environet provides the end-user access to the data anytime, anywhere for real-time monitoring, analysis, and collaboration.

Netronix offers the most comprehensive turn-key solution on the market for monitoring remote 3rd party sensors - measuring everything from water quality and weather parameters to biochemical and nuclear parameters.

Netronix's solution is fully scalable and allows remote monitoring anytime, anywhere for smaller projects using a single station in the field or large operations using thousands of individual stations that report data to Netronix's data centers. The data is easily accessible from the web on your computer and mobile devices.

Netronix's solution offers much more than basic remote monitoring and is not simply an integration of 3rd party hardware and software. It is a solution (hardware and software) that has been developed in house and incorporates sophisticated methods to make data transactions more reliable than any other solution in the market. And remember, our hardware, cloud, and online application are all in-house and owned by Netronix, so your data both moves and is hosted with complete security.



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<http://netronixgroup.com>

Aerial Applications

Aerial Applications is a software company that takes images from drones and turns them into maps and 3D models to make them more useful. They are a Philadelphia-based company founded in March 2016.



Amriton LLC

Amriton LLC is developing low cost, regenerable and reusable water filters for water and pharmaceutical industries, with emphasis on water reuse application. Unlike some other water technologies, no waste is generated for disposal and no toxic by-products are produced in treated water.



Allevi Inc.

Allevi, Inc., believes that 3D tissues will have a huge impact on both pharmaceutical and clinical development worlds. Therefore, we make it easy for scientists to print and pattern cells around the world. Their platform Allevi 2 has been adopted by leading academic institution around the world to perform game-changing research.



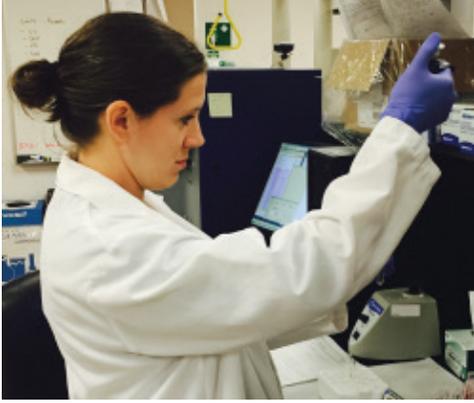
COSY

Cognitive Operational Systems, LLC (COSY) is a spinoff of Penn's GRASP Laboratory. The company focuses on leveraging University research for enabling industry solutions in computer vision, perception, and artificial intelligence. COSY's "beacon-free" technology provides indoor localization and turn-by-turn navigation in environments with no GPS — like indoors. This back-end technology can be used to enable augmented reality interfaces, audio-based navigation aids for the blind, and even mobile robots. The team is a graduate of the National Science Foundation's I-Corps program, a 6-week incubator for university spinoff companies utilizing research with National Science Foundation lineage. The company was founded by Jonas Cleveland and his then graduate advisor, Kostas Daniilidis.



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CytoVas

CytoVas, LLC is a diagnostic company focused on discovering novel markers for vascular disease. Using computational bioinformatics and high dimensional small particle detection through flow cytometry and eliminating subjectivity using proprietary computational approaches, the vascular health profile assay correlates novel markers to outcomes in diseases like cardiovascular disease (CVD), chronic kidney disease (CKD), peripheral artery disease (PAD), pulmonary arterial hypertension (PAH) and type 2 diabetes mellitus (T2D).



The Hershey Company

The Hershey Company is the inaugural corporate sponsor of the Pennovation Center. The global confectionary and snacking company based in Hershey, Pa. bases its Advanced Technology & Foresight Lab in the Center for exploring new frontiers and innovations in manufacturing, packaging, food production and consumer science.



iFlight/DJI

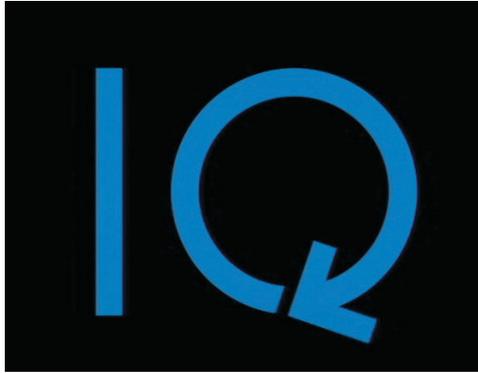
DJI products are redefining industries. Professionals in filmmaking, agriculture, search and rescue, energy infrastructure, and more trust DJI to bring new perspectives to their work and help them accomplish feats safer, faster, and with greater efficiency than ever before.



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IQinetics

Born out of the University of Pennsylvania's robotics lab, IQinetics is a tech startup that delivers the ultimate motor module and controller for versatility and performance. We first gained recognition in the robotics community for our Anticogging technology, and since, we have developed advanced motion control systems that allow our electric motors to achieve increased power and efficiency, as well as superior position and velocity control. Six years worth of development allows us to incorporate both public and proprietary algorithms to deliver the highest performance and reliability.



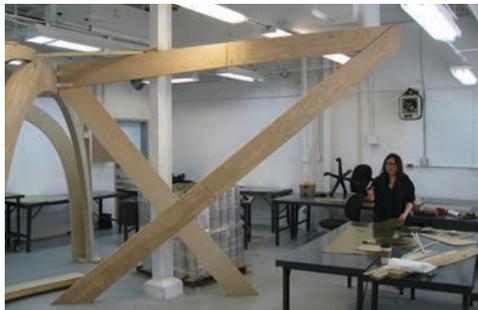
Limelight Bio

Limelight Bio, Inc. is an emerging biotech company developing novel gene therapies that greatly expand the utility of clinically-validated AAV vectors to enable the treatment of debilitating inherited diseases that cannot be addressed by current technologies; such as those caused by mutations in large genes and autosomal dominant inheritance patterns. Limelight was founded by experienced scientific leaders from the University of Pennsylvania and backed by Apple Tree Partners, a leading life science venture capital firm.



Novapeutics

Novapeutics is one of 50 companies that got its commercial start from the University of Pennsylvania's UPstart program. Their bold mission is to cure Type 2 Diabetes (T2D).



Penn Design Studio

Graduate architecture students use this studio space to design and construct through hands-on work, focused on acquiring knowledge through making. They have built direct collaborations with experts outside of the university as well, including industry, to develop their skills further.

Partnerships with industry in architectural education are essential, providing benefits to the commercial world and enabling young designers to expand their own research. Winka Dubbeldam, Professor and Chair of the Architecture Department, explained that "the students' explorations bring new discoveries, new ways of thinking to industry as well as provide visibility."



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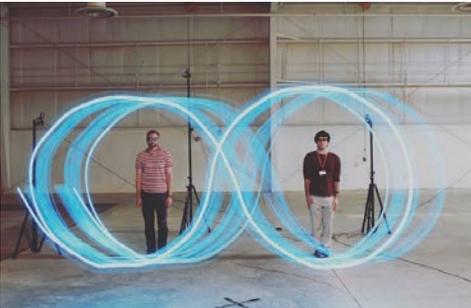
Red & Blue Ventures

Red & Blue Ventures is a privately owned and operated, seed and early stage venture capital fund that invests in companies from the University of Pennsylvania ecosystem. Red & Blue Ventures is wholly independent of and not affiliated with the University of Pennsylvania.



TriFreshca

TriFreshca is an urban farm relying on technology and creative hydroponic farming techniques to grow food sustainably for the local market.



Verge Aero

Verge Aero - the Drone Entertainment Company - is a group of highly creative and talented engineers provides events and venues with memorable power of live drone performances to attract and amaze audiences. Their state-of-the-art Drone Entertainment Platform is capable of automated and reliable control of dozens of drones simultaneously.



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Cira centre south: Evo, Cira Green, and FMC Tower (2014, 2016)



Fresh Grocer and 40th Street retail (1999)



The Radian (2008)

Real Estate Development

While Penn's heritage is reflected in its environs and architectural legacy on its 300 contiguous acres, it has over the last decade engaged in a real estate development strategy to strengthen its core campus, while thoughtfully supporting new development in the University City neighborhood. Penn's development strategy involves partnerships with the private market on planning and developing new projects in student housing, retail, office, and technology/medical space.

Completed projects in which Penn was a sponsor, ground lessor or partner include the \$51M acquisition and subsequent coordination of the \$700M public-private redevelopment of the 24-acre USPS property with "Cira South"; "Domus," the \$100M luxury apartment and mixed-use development at 34th and Chestnut Streets; "The Radian," a \$75M 500-bed student residential and mixed used development, and "The HUB," a 120-unit \$23M public private, developer-built apartment building at 40th & Chestnut Streets. Other current projects include the \$12M turnkey development of the 39th & Walnut Streets office building; Evo at Cira Centre South, a \$158M upscale housing tower at 30th & Chestnut Streets; and FMC Tower, a \$341M mixed-use development at 30th & Walnut Streets. Representative completed projects range from the \$75M Biotech Translational Research Laboratory ("TRL") for the School of Medicine, the \$14M WXP/World Cafe Live performance venue and sound stage, and the development of a \$24 M turnkey development of the former Divinity School site for the Penn Assisted Alexander K-8 School for the School District of Philadelphia.

The University development projects initiated and lead by FRES have been recognized by professional and trade organizations on numerous occasions. The University Urban Development Initiatives received the 2004 ULI Award for Excellence; the TRL project received a preservation award by the GPBCA; and the World Cafe Live project was the recipient of a Deal of the Year Award by the Philadelphia Business Journal (PBJ). The Domus mixed-use Residential project was awarded the PBJ Best Residential Deal for 2007.



Translational Research Laboratory (2004)



The HUB (2006)



The Left Bank (2001)



Domus (2007)



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PENNOVATION CENTER

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East and north facades



Illuminated east and north facades

About

The Pennovation Works is anchored by the Pennovation Center, a business incubator and laboratory that aligns and integrates researchers, innovators, and entrepreneurs for the commercialization of research discoveries. Intended to marry entrepreneurs with an expert workforce and scientifically advanced facilities, key features of the Pennovation Center are common creative spaces, including coworking areas, a cafe, and a venue for events and programs.

By creating an atmosphere for collaboration, creativity, and productivity for innovators from all disciplines, the Pennovation Center brings people together to foster interaction and the exchange of ideas. Interior spaces in the 58,000 sq. ft. building emphasize daylighting and retain an industrial character to develop social space with a “cool factor,” while an adjacent outdoor plaza focuses activity on the site and link surrounding buildings and open spaces to this new hub.

Landscaping for the entire site includes stormwater management techniques, increased connections between buildings, and access to Schuylkill River trails. Wayfinding and signage foster an identity for the site, and increase visibility of the site and the Center from the surrounding area.



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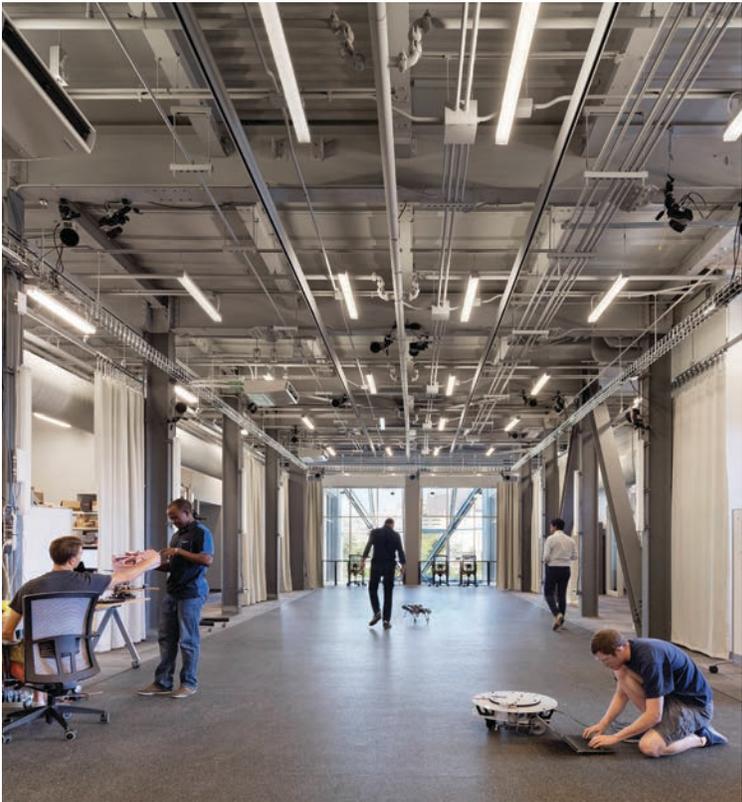
Pennovation Plaza



First floor central bleacher



2nd floor coworking space



3rd floor



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First floor social center

Fast Facts

- The Pennovation Center is the 58,000 sq. ft. innovation hub of the Pennovation Works.
- The Pennovation Center contains a full service business incubator, basic wet and dry laboratories, private office and collaborative workspaces for companies, entrepreneurs, inventors and their teams.
- The Pennovation Center is home to award winning companies in robotics, emerging medical technology, environmental monitoring, and early stage startups.
- There are multiple ways to become part of the Pennovation Center.
 - Penn Faculty and Students
 - Inventors and Entrepreneurs
 - Companies
 - Freelancers and Creatives
- PCI Ventures provides comprehensive incubation and commercialization services (formation, capital, management) for qualified Pennovation Center members.
- Benjamin's Desk @ Pennovation Center features five Startup Garages, four office suites, 200+ coworking desks and intentionally designed common areas for collaboration, meetings and events.
- Each month, the Pennovation Center hosts a variety of programs, trainings, lectures, events and meetups to bolster the growth of innovation and creativity in the region.
- The north facade, a crystalline web of glazed panels, was designed to symbolize the innovation and social energy of the Center pushing through the building and exploding into the world.
- Pennovation Center Startup Garages, inspired by the garages that spawned many disruptive companies in Silicon Valley, feature working roll up doors that open to the Pennovation Plaza.



PENNOVATION CENTER

Where Ideas Go To Work

Membership

Members are a solopreneurs, multi-person startups, freelancers and/or mobile professionals working, collaborating and engaging within the Pennovation Center.

The space features offices, lab benches, Startup Garages and coworking desks on two floors and flexible floor plans to fit any budget and workstyle.

Some memberships tiers include 24/7 access, allowing tenants to produce their best work during non-traditional hours.

Based on your membership level, Pennovation Center members have access to:

- High quality, ergonomic workstations and furniture
- Use of conference room & audio and video conferencing
- Use of the Pitch Bleacher, the Pennovation Plaza and other common areas
- Light Administrative support
- Mail and package delivery
- Basic office supplies
- Gourmet coffee & snacks
- Purified water
- Common kitchenette
- On-site café
- B&W/color networked printing, scanning, copying & faxing
- Use of small breakout & phone niches
- Use of PBX phone system for domestic calls
- Use of monitors and projectors for presentations
- Enterprise IT infrastructure with dedicated bandwidth

Pricing

The following flexible options are available depending on the stage of the concept, invention or company. At the Pennovation Center, members can experience the collaborative energy of open coworking spaces in the heart, create your inventions in our Startup Garages, conduct research in our state of the art labs, or write and produce your work from the quiet of a private office.

All Prices are monthly. 60 day notice required to cancel. Offices, Labs, Startup Garages and Resident Desks may require additional notice of cancellation.

PRIVATE OFFICES: \$1499-1999/MONTH

LAB BENCHES: \$999/MONTH

STARTUP GARAGES: \$1999/MONTH

Coworking Desks (price/month)

THE RESIDENT: \$399

- Dedicated Desk
- 24/7 Access
- 6 hours of conference room time per month
- Lobby signage
- Mail/Package delivery
- Lockable storage
- Preferred rates for special meetings and events

MOBILE PRO: \$199

- Non-Dedicated Desk
- M-F Access/10 days per month
- 2 hours of conference room time per month

THE COWORKER: \$299

- Non-Dedicated Desk
- M-F Access
- 4 hours of conference room time per month
- Lobby signage
- Mail/Package delivery
- Lockable storage
- Preferred rates for special meetings and events

MOBILE: \$99

- Non-Dedicated Desk
- M-F Access/5 days per month



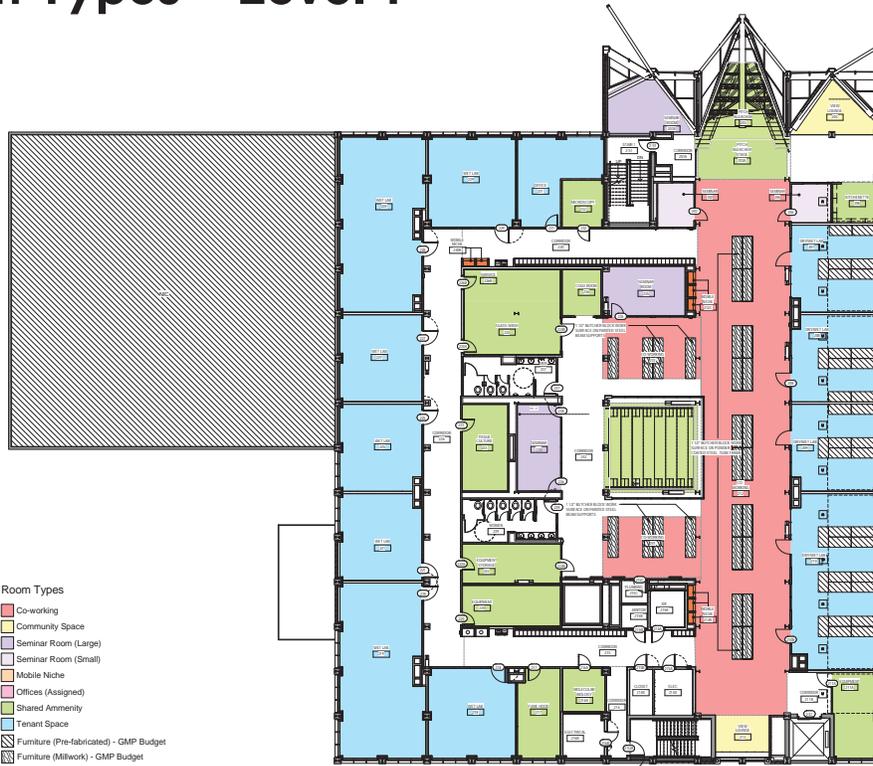
PENNOVATION CENTER

Where Ideas Go To Work

Room Type Diagram



Room Types – Level 1



Room Types – Level 2



Programs & Events

The Pennovation Center, through a collaboration with PCI Ventures and Benjamin's Desk, produces and hosts a robust series of programs, trainings, meetings, and events each month. Our signature events and programs are detailed below. All current event offerings from PCI and other Penn organizations in the Innovation & Entrepreneurship ecosystem can be found online at pci.upenn.edu/event-calendar/



Penn I-Corps Site Startup Accelerator Program

The Penn I-Corps Site is a business accelerator program funded by the National Science Foundation I-Corps program consisting of a 10-week workshop on Customer Development where participants are coached on designing and validating a business model, followed by a year-long mentoring period during which the teams are mentored to work on their ideas.

Thirty teams participate each year, and Teams are composed of three to five members who can be students, post-docs, professional Penn staff, faculty, or alumni. Upon completing the accelerator, all teams will have tested and developed their business models and will be well positioned to apply for further funding.

For more information, visit: pci.upenn.edu/icorps/



AppItUP

AppItUP collects app ideas from the Penn community with the goal of turning the best ideas into products. We partner with investors, software developers, and business leaders to make it happen. The AppItUP Challenge provides the opportunity for any Penn student, staff, or faculty member to submit their idea for a mobile app and have it turned into a reality by professional software developers for free. For the 2015 Challenge, Ben Franklin Technology Partners of Southeastern Pennsylvania (BFTP), one of the nation's most successful technology-based economic development programs, is going to offer an investment of \$50,000 to two finalists of its choice.

For more information, visit: appitupchallenge.com



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Startup Grind

Startup Grind is a global startup community designed to educate, inspire, and connect entrepreneurs. Powered by Google for Entrepreneurs, the organization hosts monthly events in more than 150 cities and 65 countries featuring successful local founders, innovators, educators and investors who share personal stories and lessons learned on the road to building great companies. Philadelphia chapter events are produced by Benjamin's Desk. Past guests have included Josh Kopelman of First Round Capital, Robert Moore of RJ Metrics, Bob Moul of Artisan and Gabriel Weinberg of DuckDuckGo.

Watch videos from all past events and see upcoming events at startupgrind.com/philadelphia/



Cofounders Lab

Cofounders Lab is a free, online matchmaking service that gives startup founders access to the largest group of entrepreneurs ever assembled. If you are looking for someone to join your venture or looking for a venture to join, this allows you to cast a much wider net in your search for talent. Cofounders Lab believes a strong team and a strong foundation is essential to having a chance of success. The Cofounders Lab has put in place a team-building platform to ensure the team will have complementary skills, compatible personalities, goals and values, and proprietary tools for a lasting partnership.

For more information, visit: www.cofounderslab.com/entrepreneurs-meetup-networking/philadelphia-pa



Bio-laboratory Incubator



The Pennovation Center has multiple shared labs and private customized leasable space options for tenants, including the Bio-laboratory Incubator, which features four shared labs (three 6-seat labs and one 12-seat lab). The Center leases lab benches, offices and desk space to small companies with approximately 1 to 12 employees, offering cost-effective memberships with numerous benefits.

Both coworking desk memberships and lab bench leases include common equipment access, instruments, amenities, and services at no additional charge.



- **Space**
 - Vibrant scientific entrepreneur ecosystem
 - Coworking space with 200 dedicated desks
 - Furnished lockable offices, cubicles and desks
 - Kitchen, break room, onsite Cafe operated by Heathland
 - Conference and meeting rooms
 - Beautiful skyline views
 - Located alongside Schuylkill Banks
- **Flexibility**
 - Flexible space and lease terms
 - Expand as you grow
- **Services**
 - Benches with fume hoods
 - Glass wash and sterilization centers
 - Centrifuges
 - Microscopy
 - Cell tissue culture and bioinstrumentation suites
 - Safety measures such as security systems, emergency eye wash, and air change stations





2nd floor coworking space featuring pitch bleacher

Benefits for Entrepreneurs

The Pennovation Center provides a suite of services for entrepreneurs seeking an environment to grow innovative ideas into viable companies. The Center enhances an entrepreneur's ability to develop relationships that are essential for scale and growth.

Specific benefits include:

- Professionally managed coworking space that is flexible and affordable
- Eligible for Keystone Innovation Zone (KIZ) tax credit benefits
- Centrally managed waste handling and common lab equipment maintenance and supply
- On-site locker storage for office/work-life essentials and supplies
- Common kitchenette and on-site café
- Site access to PCI Ventures start-up formation services
- Networking programs that build a sense of community among tenants, service providers, venture capitalists and corporate partners
- Access to extensive on-site programming, featuring topics and speakers that inform company formation and growth issues
- Close proximity to Penn faculty, students, and programs
- Easy access from the Schuylkill Banks to the River Trail for bicyclists and pedestrians
- Parking availability



PENNOVATION CENTER

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Benjamin's Desk is a diverse coworking community for mobile professionals, entrepreneurs, and startups



About Ben's Desk

The Pennovation Center is operated and staffed by the award-winning innovation management company, Benjamin's Desk. The Center staff includes a full time Managing Director, Community Manager, and Lab Manager, who ensure that our members and tenants have a world class experience each day and manage all meetings and special events.

Benjamin's Desk has been awarded entry into the League of Extraordinary Coworking Spaces and the exclusive Startup Federation and 'Best of Philly Coworking Space' by Philadelphia Magazine. Pennovation Center Members enjoy access to Benjamin's Desk network of spaces in the Philadelphia region and coworking spaces in New York City, Chicago, San Francisco, Los Angeles, and all over the world.

Visit BenjaminsDesk.com to learn more.



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