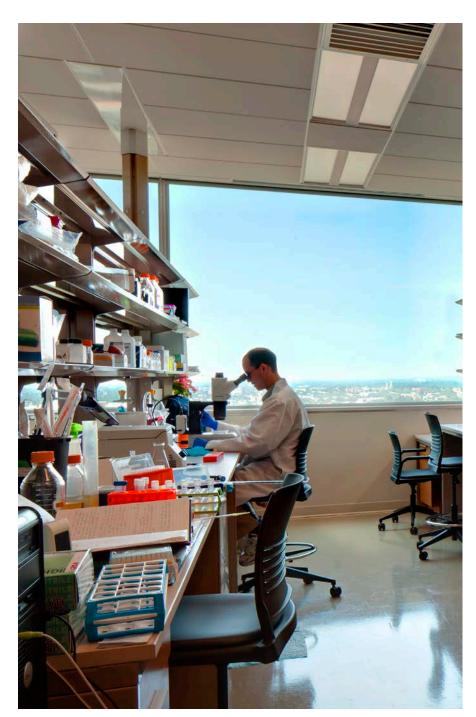
Research & Clinical Care

Penn Connects 3.0 builds on the physical proximity of research facilities on the core campus and on recent investments in innovation space, proposing several transformative projects to advance interdisciplinary research across health science, business, and technology.

These projects are designed to enhance the collaborative process and exchange of ideas, and further drive the future of Penn's leading research and innovation.



Smilow Center for Translational Research

1. Energy Science and Technology Building

PROJECTS BY THEME

- 2. 3600 Civic Center Boulevard, Phase 1
- 3. Stemmler Hall
- 4. Pennovation Works Lab Building
- 5. Tangen Hall
- 6. Evans Main Clinic and Schattner Addition
- 7. Penn Medicine Pavilion
- 8. Ryan Trauma Center
- 9. Richards Building, A + B Towers

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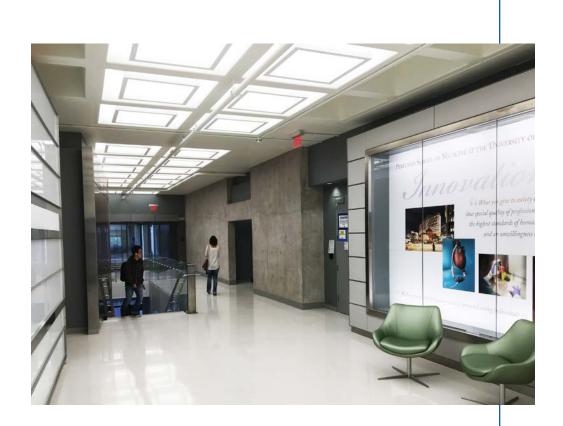
ENERGY SCIENCE AND TECHNOLOGY BUILDING

This new lab building, along the Walnut Street Corridor, will welcome those entering campus from the east and provide a pedestrian pathway connecting Walnut Street and Shoemaker Green. The Penn Arts and Sciences and Penn Engineering facility will connect physical scientists and engineers, with a focus on energy research. The design intention is to have a high performance building envelope wrapping five floors of modular lab units. Each lab module will have direct adjacency and visual connection to supporting office spaces.

3600 CIVIC CENTER BOULEVARD, PHASE 1

The building's first phase of construction will result in a ten-story office building for Penn Medicine's administrative functions, including information technology and human resources, as well as the Investigative Drug Services Pharmacy and a major expansion of Penn Medicine's Bio Bank Freezer Farm capacity to meet needs over the next decade. The building will also house a childcare center for employees.

SIZE 300,000 GSF COST \$174 MILLION



STEMMLER HALL

This project will transform Stemmler Hall's research laboratories and support facilities into modern, highly efficient spaces. The multi-phased approach will replace all infrastructure systems while completely transforming the building into open and efficient wet-bench research laboratory space with corresponding office and collaborative meeting spaces. A doubleheight entry vestibule, new communicating stair, and seated lounge opens the building to Hamilton Walk, creating a welcoming entry to this Perelman School of Medicine facility. This project was jointly funded by the School and the Century Bond program.

SIZE 250,000 GSF COST \$123 MILLION

3

PENNOVATION WORKS LAB BUILDING

Building on the success of the Pennovation Center, the Pennovation Works Lab Building will renovate the existing four-story Building 227 with 50% wet lab, 40% office/ flex space, and 10% amenities including a shared conference room, break room, and kitchenette. The entry will be relocated for increased visibility, the central corridor will be realigned to allow for larger laboratories, and glazed walls will allow for office to lab visibility and daylight penetration.



SIZE 69,000 GSF COST \$30 MILLION

4

TANGEN HALL

Tangen Hall, led by Penn Wharton Entrepreneurship, at 40th and Ludlow Streets will foster student entrepreneurship and provide co-working spaces for students to collaborate and incubator spaces for start up companies, coupled with faculty and mentor shared offices. The maker lab will support "tech" ideas and innovation. A retail store and test kitchen will provide space for student-led retail and food ventures. A colloquium hall will house guest speakers, events, conferences, and receptions. The building will also house classrooms and workshops for seminars and group study, lockers, and administrative space.

SIZE 60.000 GSF COST \$46 MILLION





PHOTO CREDITS TO HALKIN MASON PHOTOGRAPHY

EVANS MAIN CLINIC AND SCHATTNER ADDITION

The first component of this School of Dental Medicine project is the renovation of the flagship main clinic on the second floor of the Evans Building. The project includes a new layout of clinical chairs to increase efficiency, lighting, enhanced access to radiological services, and new energy efficient windows. This project completes the renovation of all clinical areas of the 100-year old Evans Building. The second component of this project is the creation of a two-story addition to the west of the Schattner Building entrance hall that will serve as a pavilion for school-wide events, and provide a separation of school and patient care activities, and create a new waiting room for the Main Clinic. The project will also improve landscaping and the exterior courtyard adjacent to the new addition.

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SIZE 12,200 GSF (RENO); 8,050 GSF (NEW) **COST** \$21 MILLION

NEW CONSTRUCTION RENOVATION OPEN SPACE



The Penn Medicine Pavilion is an innovative hospital facility that will provide 500 private patient rooms, forty seven operating suites, a relocated emergency department, and patient and staff amenity spaces. The Pavilion will enhance patient, staff, and service connectivity with a tunnel to HUP and a bridge connecting to the Perelman Center for Advanced Medicine, as well as a 700-space patient parking facility. An adaptable room concept will be employed, with patient rooms equipped to flex between an intensive care unit set-up, if needed, and a standard room as patients recover, or as the patient population and caregiving needs change in the coming years. In-room technology will strengthen communication between patients, families, and care teams.



PENN MEDICINE PAVILION

SIZE 1.5M GSF COST \$1.5 BILLION

SIZE 12,500 GSF COST \$2 MILLION

RYAN TRAUMA CENTER

8

The School of Veterinary Medicine will renovate the first floor of Ryan Hospital for a state-of-the-art Trauma Center combining Emergency Services and Critical Care/ICU. This renovation will provide a greatly needed expansion and upgrade of Emergency Services and ICU treatment areas. Their adjacency allows for shared clinical support and teaching resources. The renovations will be phased to maintain full hospital operations. A new waiting room, radiology suite and prep rooms, and business office are also part of the project.



RICHARDS BUILDING, A+B TOWERS

A National Historic Landmark, the Richards Medical Research Laboratory by Louis I. Kahn, is composed of three laboratory towers and a central service tower. The Perelman School of Medicine, with partial funding by the Century Bond program, renovated the C + D Towers in *Penn Connects* Phase 2, and the remaining A + B Towers will be completed in Phase 3. The project balances respect for Kahn's original vision of the spatial quality of the interiors, while creating efficient floor layouts, and an energy efficient building. Partitions are set off the structural grid to right-size offices, enabling open office layout and plentiful daylight at the center of each floor. The original concrete truss construction is fully exposed and accommodates all new mechanical and electrical systems, respecting the original design intent. Glazing performance is enhanced utilizing the original frame details, and the installation of chilled beams is in visual harmony with the building aesthetic.

SIZE 64,000 GSF COST \$33 MILLION

9

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