## The Vagelos Laboratory for Energy Science and Technology

A HOME FOR ENERGY SCIENCE AT PENN

The urgent need to revolutionize our thinking about energy can no longer be disputed. Scientific advances, combined with deep understanding of human interactions with the natural world, form the path to sustainable solutions to society's energy needs.



In recent years, Penn Arts & Sciences has worked to accelerate discovery in energy science through a number of initiatives including critical faculty hires, the establishment of the Vagelos Institute in Energy Science and Technology, and undergraduate research opportunities through the Vagelos Integrated Program in Energy Research (VIPER).

To establish a home for energy research that supports our commitment to this critical agenda, the University is undertaking construction of a 111,000-square-foot, state-of-the art laboratory space. The building is a central element of both the strategic plan of the School of Arts & Sciences and the University's plan for advancing research in energy and sustainability.

## A World-Class Facility

Designed by Behnisch Architekten, the Vagelos Laboratory for Energy Science and Technology (VLEST) will create a distinctive entrance to the Penn campus while providing highly functional, flexible, and efficient space to facilitate collaboration and discovery.

### A Gateway to Penn

Located at the intersection of 32nd and Walnut Streets, the Vagelos Laboratory for Energy Science and Technology is uniquely positioned to advance the University's vision for the Walnut Street corridor.

The building's juxtaposition with the Singh Center for Nanotechnology will create a striking new gateway to the Penn campus from Center City.

The Vagelos Laboratory for Energy Science and Technology will also improve campus connectivity. Adjacent to both Walnut Street and Shoemaker Green, this site will expand the campus's network of pedestrian pathways and greenspace that link to major circulation corridors.

## Launching Research Opportunities

The design of the Vagelos Laboratory for Energy Science and Technology will be an expression of its research-based focus. To best serve the multi-faceted, interdisciplinary work that will take place in the building, it will be constructed with a flexible infrastructure that can efficiently adapt to changes within the program.

The building will expand the capacity of the Schools of Arts & Sciences and Engineering by adding more than 62,000 square feet of research, administrative, and collaboration space to the campus. This fume-hood intensive program translates to a highly efficient floor plan containing modular lab units that are sized to support projected research staff.

The project also offers a unique opportunity to create a building that will act as an instrument of the very research it serves. Its design will pursue energy performance concepts that are aligned with the mission of advancing sustainability.

## **Collaboration by Design**

The state-of-the-art research spaces of the Vagelos Laboratory for Energy Science and Technology will be equipped to house faculty from a variety of disciplines whose work complements the building's focus on energy research.

Conceived along an open lab model, each module of the building will have direct adjacency and visual connection to supporting office spaces. The intent is to provide transparency between work spaces to foster collaboration among research teams.

The building's proximity to core teaching spaces for the physical sciences will be especially advantageous for VIPER students and other undergraduates who pursue research experiences in energy science.

## **Supporting an Urgent Priority**

An overwhelming scientific consensus exists that human activity is having an unintended negative impact on the global environment. The Vagelos Laboratory for Energy Science and Technology will accelerate the pace of scientific advances in sustainable energy at Penn, forging the path to urgently needed solutions.





The following is a partial list of opportunities at a range of levels to support this critical priority.

#### The VIPER/Vagelos Institute Suite • \$2 million

The Vagelos Institute for Energy Science and Technology will have a new home, facilitating the integration of world-class scientists from around campus to advance sustainable energy science and technology through interdisciplinary approaches and immersive cutting-edge research. Students in the Vagelos Integrated Program in Energy Research (VIPER) will also gather here, building connection and mentorship opportunities for these talented undergraduates.

#### Plaza Walkway • \$2 million West Façade Courtyard • \$2 million

The site plan for VLEST is designed with campus connectivity in mind. The Plaza Walkway will build a new entrance to campus, connecting Walnut Street to the Palestra. The West Façade Courtyard provides attractive greenspace linking VLEST and the David Rittenhouse Labs.

#### Common Lobby Space • \$1 million

Each module of VLEST includes features to encourage visual connection and foster collaboration among research teams. The main level Common Lobby Space will provide an open lounge area accessible to faculty, postdoctoral and graduate fellows, and students, with visible shared instrument labs. This lobby is the core of the building's collaborative and accessible design, featuring an open stair system connecting the modules above.

#### Discovery Spaces • \$500,000 to \$2 million

Including labs and cutting-edge equipment.

#### Shared Collaborative Spaces • \$100,000 to \$2 million

Including lounges and conference rooms.

#### Work Spaces • \$50,000 to \$250,000

Including faculty offices and write-up rooms for graduate student activities.

To learn more, please contact Deb Rhebergen, Vice Dean for Advancement, at 215-898-9942 or <u>drheberg@sas.upenn.edu</u>.



# Penn Arts & Sciences

UNIVERSITY of PENNSYLVANIA

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