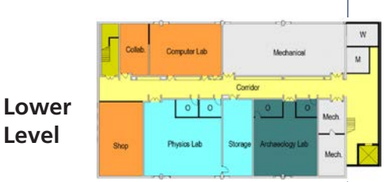
Known employers of Pitt-Greensburg Natural Sciences Alumni

Adult & Pediatric Specialist
Ansaldo STS USA Inc.
Antech Ltd.
Banfield Pet Hospital
Bettis Atomic Laboratory
Blood Transfusion Institute
CCL Technologies
Central Blood Bank
ChemADVISOR
Children's Hospital
ELLI
Environmental Lab Services
Excela Health
Family Behavioral Resources
Forbes Regional Hospital
Google
Harbour Senior Living
Institute for Transfusion Medicine
Intertek
Kennametal Inc.
Key Bellevilles Inc.
Konica Minolta
Lab Support
Lancaster Laboratories
Latrobe Brewing Co.
Lennon, Smith, Souleret Engineering, Inc. (LSSE)
Liberty Mutual
Lonza Inc.
Magee Women's Hospital
Magnablend Inc.
Max Environmental
Medix Scientific
Mellon Trust
Microbac
Neuber Environmental Services Inc.
Novum Pharmaceutical Research Services of Pittsburgh
Pace Analytical Services
PPG Industries
Psychology Software Tools Inc.
Quest Diagnostics
Raike Financial
RxTox
Scribe America
Service Master Rapid Response
South Hills Health System
U.S. Army Communications and Defense Dept.
U.S. Geological Survey
U.S. Steel Corporation
University of Pittsburgh
University of Pittsburgh Biotech and Engineering Center
UPMC
UPMC Presbyterian
UPMC Sports Medicine
WBI Investments
Westinghouse Process Control
Westmoreland County Community College
Wilshire Associates Inc.

Naming Opportunities

LIFE SCIENCES Building Construction and Smith Hall Renovation

Naming opportunities are payable over five years.



New Life Science Building
Atrium
Nursing and Health Science Community
Biology and Biochemistry Community
Chemistry Community
Observatory
Nursing Clinical Skills and Simulation Lab (1)
Active Classrooms (1/2)
Physics Community
General Labs (10)
- Analytic Lab
- Biochemistry Lab
- General Lab
- Kinethesiology Lab
- Microbiology Lab
- Anatomy & Physiology Lab
- Environmental & Ecology Lab
- Organic/Inorganic Lab
- Advanced Chemistry

Computer Labs (1/1)
Microscopy Digital Imaging Lab (1)
Simulation Suite (1)
Archaeology Community
Endowment
Greenhouse (1)
General Classrooms (8)
Student Lounge (1)
Student Capstone Labs (5)
Instrumentation Lab (1)
Conference Room (1)
Research Labs (1/1)
Tissue Culture Lab (1)

NMR/Instrumentation Lab (1)
Cold Room Lab (1)
Small Group Conference Room (1)
Exam Room (1)
Faculty Offices (23)
Medicine Room (1)
Nurses Station (1)

Department Legend
- Archaeology
- Biochemistry
- Biology
- Chemistry
- Health Science
- Nursing
- Physics
- Building Support
- Circulation
- Circulation (V)
- Existing Space
- Shared

Architect's rendering of the campus footprint with new building in place.

18.4% **Projected job growth in SW PA region in healthcare & social assistance (2012-2022)**

PA Department of Labor & Industry's Center for Workforce Information and Analysis

By 2020, **an additional 250,000** public health workers are needed to dodge a **workforce shortage.**

Medscape (2/7/17)

The primary driving force in this looming crisis is the aging of the Baby Boomer generation: **Today, there are more Americans over the age of 65 than at any other time in U.S. history.** Between 2010 and 2030, the population of senior citizens will increase by 75 percent to 69 million, meaning **one in five Americans will be a senior citizen;** in 2050, an estimated 88.5 million people in the U.S. will be aged 65 and older.

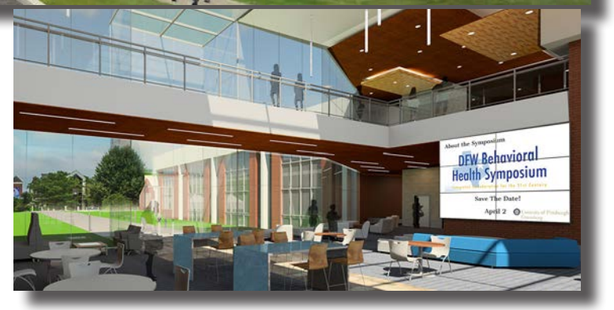
"The US is running out of nurses," *The Atlantic*, February 3, 2016

More than 290,000 Baby Boomers in Pittsburgh's tristate region are eligible to retire in the next decade. **This will result in a significant shortage of skilled employees across many sectors including IT, business and finance, healthcare and life sciences, energy, and advanced manufacturing.** Also in this timeframe, economic growth is expected to create 50,000 new positions, adding up to nearly 340,000 open jobs. **This gap is already exacerbated by a continuously shrinking pipeline of would-be workers emerging from our education system.**

"STEM still stands out, There's no time to spare in preparing workers in the Pittsburgh region for next-generation jobs," *Pittsburgh Post Gazette,* May, 2016…based on the report from the Allegheny Conference on Community Development (The Inflection Point: Supply, Demand and the Future of Work in the Pittsburgh Region)

PITT-GREENSBURG STEM GRADUATES

meeting the workforce needs of the future



Architect's rendering (top) of the new state-of-the-art Life Sciences Building. Inset: Glass atrium connecting the new and the old science facilities.

Why a new Life Sciences Building? Why Now?

"In summary, while the 'bones' of the structure are sound, Smith Hall does not meet the University of Pittsburgh's standards for a modern science facility."

p.24, Planning Study: Nursing, Health Science, Biochemistry, & Science Facilities, 4/3/17, Final Draft

Pitt-Greensburg is at a tipping point. Our future annual enrollment in the STEM* majors is conservatively projected to increase by a <u>minimum</u> of 20% over the next five years.

*science, technology, engineering, and mathematics

- It is vital that Pitt-Greensburg remain at the cutting edge of classroom and building design through the continuous improvement of facilities.
- State-of-the-art facilities are needed if students and faculty are to perform at the highest level.
- At present, nearly 50% of students attending Pitt-Greensburg major in the Natural Sciences, continuing a 10-year trend of rising interest in the sciences.
- Enrollment in the areas of Applied Mathematics, Information Technology, Pre-Engineering, and Pre-Medical Careers has grown 38% in the last three years.
- The number of Natural Science courses taken by our students has increased significantly over the last 10 years.
- There is a dire need to expand and renovate our sciences facilities to ensure the quality of our academic science- and health-related programming and to guarantee that our students are prepared for the world they will encounter after graduation.
- We have no separate lab space for analytical, instrumental, or physical chemistry. Labs for these courses are scheduled in time slots when the general or organic lab is free or in B-13 Smith Hall, which is not a lab space. It is a classroom with tables.
- More significantly, we have no dedicated lab space for students working on senior projects or for faculty research. Chemistry majors use the chemistry stockroom as their research space. Space available for general chemistry labs is limited and most lab sections are too crowded.
- It is anticipated that by the fall of 2019, the existing science facilities will not accommodate anticipated increases in student enrollment from the new science- and health-related programming.
- Smith Hall houses the most popular of our three divisions: the Natural Sciences. Originally built in 1976, the classrooms and science labs contain outdated furniture, fixtures, and equipment.
- Bringing the existing facilities up to a level on par with peer institutions would require several additional labs—all with adequate storage and prep spaces and modest research lab space for faculty and students.

COMMUNITY BENEFITS

GREENSBURG, WESTMORELAND COUNTY, SOUTHWESTERN PENNSYLVANIA

The addition of a new state-of-the-art Life Sciences Building to the campus has broader implications for Westmoreland County and the region.

The addition of an undergraduate satellite nursing program at Pitt-Greensburg brings the Pitt School of Nursing program to Westmoreland County. This allows more students to be enrolled and to graduate from this program, which is consistently rated among the top 10 nursing programs in the United States. Nurses will graduate with BSN degrees and potentially be employed at healthcare facilities in our region.

As Pitt-Greensburg builds its healthcare and health sciences programs, more students can choose to enroll and graduate, creating a supply of trained, qualified workers to help combat the looming shortage of healthcare workers.

The region's aging population will be cared for by highly qualified individuals.

New income will be brought to and retained in the region.

Current nursing standards recommend the following nurse-to-patient ratios:

Intensive Care Unit:	Telemetry/Progressive Care Unit:	Medical/Surgical Unit:
1 nurse for every 2 patients	1 nurse for every 4 to 5 patients	1 nurse for every 5 to 6 patients

The ratio of patients to nurses will drastically increase over the next decade if the predicted shortage of nurses becomes a reality.

By 2030, an estimated 29% of the population in Pennsylvania will be 65 years of age or older, placing it 4th in the nation in the percentage of residents age 65 and older, further influencing both supply and demand for healthcare.

This rapid growth to the senior citizen population is already influencing both the supply and demand for healthcare workers, in particular for nursing, OTA, and PTA occupations.

STEM MAJORS

Applied Mathematics
Biochemistry
Biological Science
Chemistry
Information Technology
Natural Science Area Concentration
Nursing
Physics
Psychology

MINORS

Actuarial Science
Chemistry
Computer Science
Psychology
Statistics

PittGreensburg

- Working to fuel the economic rebirth of Westmoreland County via the "meds and eds" model successfully used by Pittsburgh.
- Helping the region, in which we are located, to advance is central to our mission as a state-assisted university.
- Playing a key role in advancing the economic progress in western Pennsylvania by developing signature academic programs at the intersection of student interest and emerging occupational opportunities and thus equip students to fill jobs so that the students and jobs remain in the region.
- Connecting the best of the big and small school environments as part of the University of Pittsburgh network of schools—the resources of one of the nation's most prestigious research institutions mixed with the individualized experiences of a small liberal arts college.
- Responding to emerging employment opportunities and changing student interest, Pitt-Greensburg is making a concentrated effort to meet the educational needs of the community by adding new majors and minors to its program selections. A biochemistry major, a full baccalaureate nursing (BSN) program, and a track in healthcare management for business majors have recently been added.

Why should you care about your nurse's degree or the nurse-to-patient ratio?

Higher nurse staffing levels are associated with fewer deaths, lower failure-to-rescue incidents, lower rates of infection, and shorter hospital stays.

Medical Care, April 2011

Surgical patients have a "substantial survival advantage" if treated in hospitals with higher proportions of nurses educated at the baccalaureate or higher degree level. In hospitals, a 10% increase in the proportion of nurses holding BSN degrees decreased the risk of patient death and failure to rescue by 5%.

Journal of the American Medical Association (JAMA), September 24, 2003