



What We Learned In The Program



Day 1



PANE

Pennsylvania Academy
of the Fine Arts







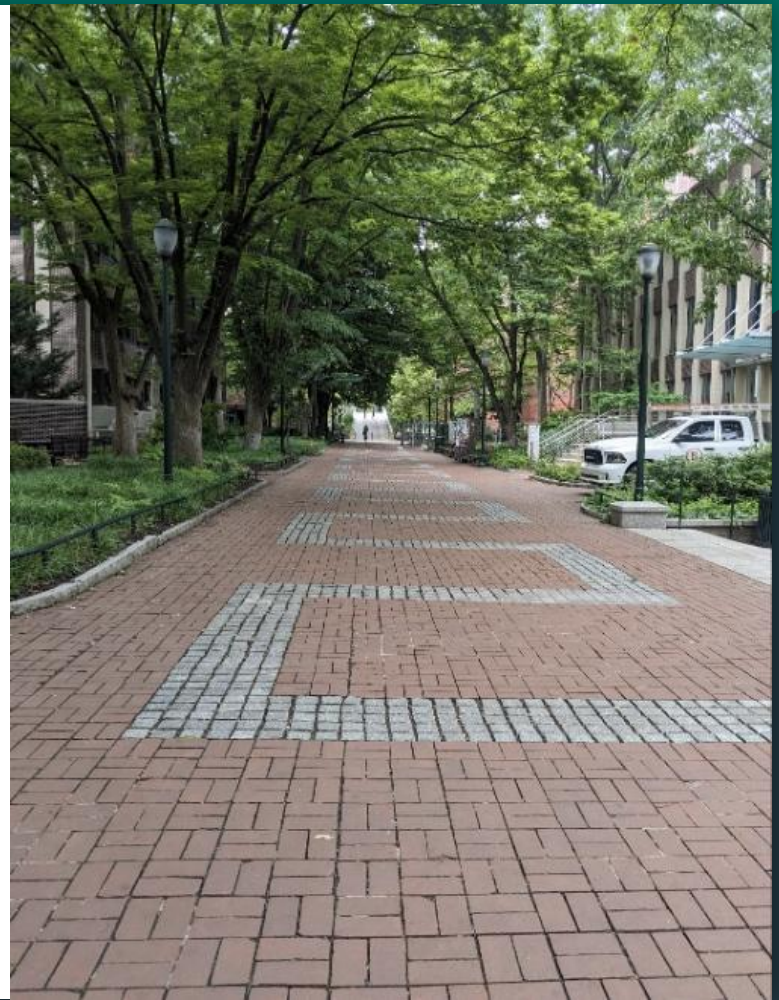




Day 2



- Ivy League university located in Philadelphia, Pennsylvania.
- Founded in 1740 by Benjamin Franklin.
- Comprises of 4 schools.
- Offers a wide range of academic programs across various disciplines.
- Emphasizes interdisciplinary studies and encourages collaboration.
- Known for its rigorous academic standards and research opportunities.
- Promotes a vibrant campus life with numerous clubs, organizations, and events.
- Offers extensive resources for student support and career development.
- Engages in community outreach and social impact initiatives.
- Boasts a distinguished faculty and a network of accomplished alumni.



College of Arts and Sciences

- Offers a liberal arts education with a focus on humanities, social sciences, and natural sciences.
- Provides a broad-based curriculum that encourages critical thinking and intellectual exploration.
- Supports interdisciplinary studies through various research centers and programs.
- Offers numerous majors and minors for students to customize their education.
- Promotes undergraduate research opportunities and scholarly engagement.
- Encourages experiential learning through internships, study abroad, and community service.
- Fosters a vibrant intellectual and creative community through seminars and events.
- Provides resources for career guidance and graduate school preparation.
- Offers mentorship opportunities and close interaction with faculty members.
- Prepares students for diverse career paths and graduate education.

Penn Engineering

- Renowned for its excellence in engineering education and research.
- Offers undergraduate and graduate programs across various engineering disciplines.
- Emphasizes hands-on learning and practical applications of engineering concepts.
- Engages in cutting-edge research and collaboration with industry partners.
- Promotes entrepreneurship and innovation through dedicated centers and programs.
- Provides opportunities for students to work on real-world projects and industry internships.
- Supports interdisciplinary studies and encourages collaboration with other schools.
- Boasts state-of-the-art facilities and research labs.
- Prepares students for successful careers in engineering and related fields.
- Offers a strong network of alumni working in industry and academia.

School of Nursing

- One of the top nursing schools in the United States.
- Offers undergraduate and graduate programs in nursing.
- Emphasizes evidence-based practice and interdisciplinary collaboration.
- Provides clinical experiences in renowned healthcare facilities.
- Offers specialized tracks, including nurse practitioner and nurse-midwifery programs.
- Engages in research to advance nursing science and improve patient care.
- Promotes leadership development and prepares nurses for advanced roles.
- Offers resources for career development and lifelong learning.
- Fosters a supportive and inclusive learning environment.
- Produces highly skilled and compassionate nursing professionals.

The Wharton School

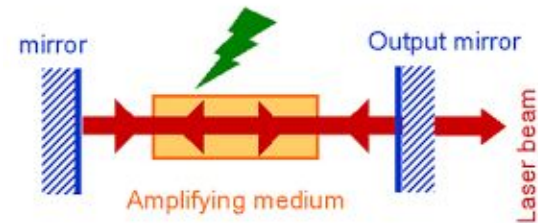
- Renowned for its excellence in business education.
- Offers undergraduate, MBA, and doctoral programs in business and management.
- Emphasizes a rigorous and comprehensive curriculum in core business disciplines.
- Provides opportunities for specialization in various business areas.
- Promotes experiential learning through real-world projects and internships.
- Engages in cutting-edge research and thought leadership in business.
- Offers extensive resources for career development and job placement.
- Fosters a global perspective through study abroad and international programs.
- Boasts a vast network of influential alumni in the business world.
- Prepares students for leadership roles in business and entrepreneurship.

Day 3 (Tuesday July 11)

- We arrived at **University of Maryland Eastern Shore (UMES)**.
- **Toured UMES** and learned its advantages
- We **began our program**, were told the objective: to show us **potential STEM opportunities in U.S. Agriculture**.
- **Took a 120 question safety quiz** (that almost everybody had trouble actually sending in)
- Met Dr. Cumming and **learned about UMES' Majors**
- Learned how **LASERS** (or as we discovered, “light amplification by stimulated emission of radiation”) work
- Arrived at Chincoteague Island, **toured an island of wild ponies with Dr. Volkis before swimming, enjoyed a sunset**



External energy source





Day 4 (Wednesday July 12)



- Teams worked in labs for most of the day at UMES
- Team Drink worked on the drinks (carrying the drinks to their correct places and making gummies)
- Team Gadget worked on modeling the glucometer in tinkercad
- The glucometer was used to measure the ripeness of the berries
- After working in the labs we went to look at what used to be a plantation
- We learned about why seashells were used
- We walked a small trail around a pond where we saw some frogs and a grasshopper



Day 5 (Thursday July 13)

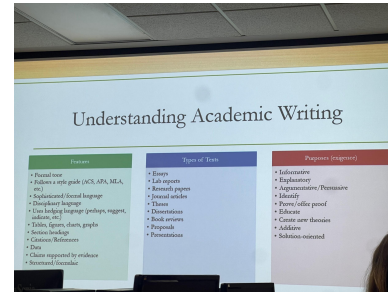
- We went to UMES plant farm
- Learned about different farming strategies
- Taste tested the berry drinks we were working on in the labs
- Went to a smaller farm to learn a bit more about some plants
- We had a tea workshop in what used to be a school
- We made our own teas and bring them with us
- We went to a small mall (the only interesting thing there is a movie theater)



Day 6 (Friday July 14)

Touring NASA

- We participated in a **writing workshop**, where we learned how to write **academic research papers**
- Learned about **NASA Social**, a program where social media enthusiasts can get press access to NASA sites
- Learned about Cygnus/Antares, a launch vehicle and spacecraft which resupply the International Space Station (ISS)
- Visited Wallops Flight Facility, where we were shown videos about sounding rockets (small rockets usually launched to do minor experiments) and learned about what NASA does on the site.





Academic Writing

- Academic writing (a **subgenre** of non-fiction writing) is characterized by:
 - Formal, sophisticated tone and language
 - Data (including tables and figures)
 - A structured format with claims supported by evidence
- Academic pieces can take the form of an essay lab report, dissertation, or even a presentation
- The purpose of academic writing is usually to:
 - Inform
 - Persuade
 - Prove a claim; and
 - Create/test new theories

Day 7 (Saturday July 15): Winterthur park visit!

- We visited Winterthur park.
- During our stay, we visited an impressive gallery with 18th-19th craftsman art.
- Later, we visited the famous collector's house of Henry Francis du pont.
- In Du Pont's house we saw a lot of rich people's stuff and I personally learned that around a hundred years ago, the term "made in China" was actually a sign of wealth.
- Additionally, there was a boardwalk with many shops and stands.

PARK HOTEL
WINTERTHUR ★★★★★





Day 8 (Sunday July 16)

Fort Delaware

- We visited Fort Delaware -- an old U.S. Fort overlooking the Delaware river which protected Philly.
- We learned how it used to be a Prisoners of War (POW) Camp for the Union during the Civil War, as well as a bunch of interesting things about Civil War era-firearms and forts.
- We got to see an artillery piece fire!





Day 9 (Sunday July 17) Delaware/Presentations

- We visited **Delaware State University (DSU)**, and learned about the programs it had there -- as well as the excellent food!
 - Test-optional, excellent nursing program -- D1 college!
- We gave the **first half** of our presentations saying farewell to our partners at REEU and ACS.
- We learned that we were **not** very good at bowling...



Day 10 (Tuesday July 18)

- We visited the WYe research and education center.
- Some of Dr. Ristvey's colleagues taught us about drones and their applications to agriculture.
- They gave us a tour of their research garden(which was surrounded by barbed wire in order to keep deer out).
- Later, we got to pick some aronia berries as well as some other berries and fruits.
- After having lunch, all of us (including reeu,acs students and our mentors) drove to the city of Cambridge lighthouse and said our farewells to each other.
- Lastly, we drove to the Harriet Tubman museum who was a very inspirational escaper of slavery during the civil war period as well as driving through the Herbal Garden of Blackwaters(we got to see bald eagles!!).





Day 11 (Wednesday July 19)

Visited 2 places:

UMD

Washington DC

UMD

- Located in College park
- Has ~30k students
- Classes are grouped by majors
- Dorm costs \$800-\$1200/month
- Free access to outdoor and indoor swimming pools
- Free access to gym
- Free access to a movie theater
- D1 for sports
- Has a farm



Washington DC



- Was too hot to walk so we did a driving tour
- Went to see Capitol Hill
- Drove around the statues of Ulysses S. Grant and Garfield
- Drove around important buildings like the Supreme court and the Canadian embassy
- Went to a monument honoring WWII soldiers



Day 12 (Tuesday July 20)

- Luray Caverns - a 400 million-year-old natural wonder in Virginia. Discovered in 1878 by tinsmith Andrew J. Campbell, the caverns are home to the Great Stalacpipe Organ, the world's largest musical instrument. The caverns contain the world's largest stalagmite organ, which we got to hear.
- Next to the Luray Caverns is The Car and Carriage Caravan Museum it is an attraction for automotive enthusiasts and history lovers. It features a collection of vintage cars, carriages, historical context, memorabilia, educational exhibits, and a well-preserved collection.
- The Shenandoah National Park Skyline Drive is a scenic roadway in Virginia, with a good view off the Blue Ridge Mountains. The road spans 105 miles.





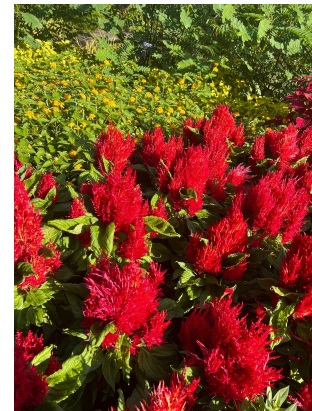




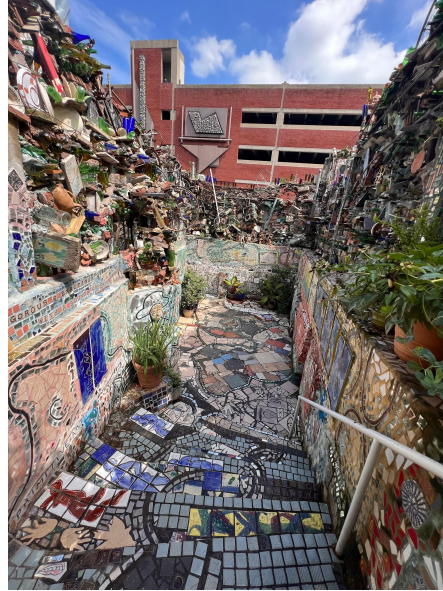
Day 13

Day 13 (Friday July 21):

- To begin our last day on the program, we traveled to the Magic Gardens southern Philly.
- The art at the gardens was an incorporation of many different cultures into a series of art works. (the bathrooms were even full of art!)
- After getting lunch, we traveled to the famous Longwood Gardens (the best in the world!).
- The Longwood Gardens were artificial unlike the gardens at the Winterthur park which we visited earlier.
- During our visit there, we got to complete an assignment that Dr. Volkis assigned to us about the differences between Winterthur and Longwood (mostly how the former was natural and the latter was artificial)
- After getting dinner at practically the best buffet we've been to on the entire trip, we got to see one of the best fountain art shows in the world (which was remarkable!).



Magic Gardens



All done by 1 person over many months!

LONGWOOD GARDENS

Longwood Gardens





Thank you for your attention