Biotech-Career Pathway

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A plan to employ

Our big idea

Created in partnership with Ellyn Daugherty from San Mateo, CA, we have brought Wilson an innovative program to inspire students while giving them skills to earn more than just a liveable wage.

































1. Why biotech?

North Carolina, home of the Research Triangle...

- → #1 in Biomanufacturing
- → #1 in Pharma Manufacturing
- → <u>\$2 Billion dollar expansion in</u> <u>RTP</u>
- → Diverse skill set applies to many areas.

https://edpnc.com/industries/biotech-pharmaceuticals/

What can I do with a Biotech degree?

- Protein Safety Analyst
- Analytical Chemist
- Manufacturing Specialist
- Plant & Nursery Lab Assistant
- Microbiologist
- Teacher
- Forensic Analyst
- Science Writer



In 2010, I worked as an intern (lab assistant) for a contract pharmaceutical company. What was my pay scale?

\$10/hr... Six months later...

I was hired full time. The details are as follows: \$36,000/year. Full benefits. Medical was \$110/month w. \$750 deductible. Including dental. Spouse and children covered.

Did you know?

unemployed or made

less \$\$ since I started in

Temp agencies will hire

I have not been

at \$18/hour plus

2010

benefits.

From day ONE, we start in the lab. Students will have **more hands on lab time** than all of their years in science

combined.

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These cities are overflowing with biotech companies:

Wilson, NC

Greenville, NC

Raleigh/Durham, NC

2. Opportunities

Purdue Pharma

With a high school degree this company hires if the person has lab experience.

→ Merck

Not only a lab based facility, this company hires on the manufacturing side which requires knowledge of GMPs and GLPs. Our students study and enact these principles from day 1.

→ Fresenius Kabi

The leading manufacturer of a main COVID treatment, this company is expanding rapidly.

→ Avient Biosciences

The largest hemp research and extraction facility in Eastern NC.

Tip

Opportunity is all around us. We just need to get our foot in the door.



Let's go to Raleigh.

Syngenta is a science-based agtech company. They are a leading specialist in helping farmers around the world to grow safe and nutritious food.

Our biotech students grow and cultivate their own plants in Biotech 3.

Novozymes

Located in Morrisville, NC, this company specializes in enzyme development and enhancement.

Our biotech students are well versed in enzymes. Every semester we will work with these proteins to understand the handling and care of these delicate molecules.





After high school...

Our students will choose one of the following:





COLLEGE



Workplace

- Community College
- University



NC STATE UNIVERSITY









STEM majors really put the money on the table.

Science

Technology

Education

Mathematics



Einstein, Curie, Newton, and Darwin.

Show me the money!

- Univ. of Mount Olive Syngenta offers \$20,000 for crop related majors.
- NC State University Goodnight Scholars Program offers \$20k per year, renewable over 4 years for STEM majors.
- NC Central University BRITE program offers full tuition assistance, renewable over 4 years for STEM majors.

3. Our Program

Four years of hands-on laboratory and business development.

→ Year 1/2

Students learn and perfect good laboratory practices required for industry. Students also learn the business of industry.

→ Year 3/4

Students develop and complete independent research projects as they prepare for their senior year internships. These students will be able to earn college credit at our neighboring community college. Students will have an opportunity to earn up to 8 high school credits and 6+ college credits.

There are 2 semesters in their senior year for workplace experience.

You heard it right!

At this time, students will report to work for the semester rather than attending classes at SBH.

Sallie B. Howard Biotechnology Career Pathway



Senior Year

Applied Biotechnology 1: Prep for biotech workplace experience Applied Biotechnology 2: Placement into a biotech workplace experience

Optional: Dual Credit WCC Biotech Certificate Program Courses CCP

Sophomore Year

10th Grade Science Biotechnology 3 Biotechnology 4

8th Grade or summer Biotechnology Basics

ILab unit for all 8th grade SBHSAE students

SBHBCP

Year 1 Year 3 Biotech past & present: Plant reproduction, plant basic lab skills, bioethics, modification, and medicinal DNA & protein assays. discoveries. Start here Educate and specialize Year 2 Year 4 Assay development, Genomics, proteomics, independent research and

recombinant DNA, lab instrumentation, product pipeline studies.

internships.

4. SBH is Biotech

→ Enlighten

Bringing the opportunity to YOU.

→ Enrich

Allowing students to take their future into their own hands.

→ Empower

Give our communities the skills and connections to make their own success story.

Sallie B. Howard Biotech

Enrollment starts now.

We are a free public charter school. Looking for rising 8th and 9th grade students with an interest in STEM... How can we partner with you to bring this program to your youth?