

# Biochemistry

Career Pathways

## School of Sciences

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### Overview:

Biochemistry explores the chemical processes within and related to living organisms. It is a laboratory based science that brings together biology and chemistry. By using chemical knowledge and techniques, biochemists can understand and solve biological problems. Biochemistry focuses on processes happening at a molecular level. It focuses on what's happening inside our cells, studying components like proteins, lipids and organelles. It also looks at how cells communicate with each other, for example growth or fighting illness. Biochemists need to understand how the structure of a molecule relates to its function, allowing them to predict how molecules will interact.

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### Acquired Skills MOST Valued by Employers

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### Internship Sites for Stevenson Students:

- Athena
  - Chesapeake Urology
  - Giant Pharmacy
  - Johns Hopkins Hospital
  - Medstar Union Memorial Sports Medicine at Bel Air
  - Sheppard Pratt Health System
  - Sinai Hospital
  - Stevenson University
  - Tetra Tech, Inc.
  - The Living Legacy Foundation
  - University of MD Center for Vaccine Development
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### Graduate Schools Attended by Stevenson Alumni:

- University of Maryland School of Pharmacy
- Notre Dame of Maryland School of Pharmacy
- Shenandoah University Division of Physical Therapy
- Ohio State University Graduate School in Chemistry
- Lake Erie College of Osteopathic Medicine
- Virginia Commonwealth University School of Pharmacy
- Hofstra University Physician Assistant Studies Program

### An Employer's Perspective:

This is a rapidly expanding field and critical skills include analytical and critical thinking, communication, personal abilities, math, problem solving, and perseverance.

“Employment of biochemists is projected to grow 19 percent from 2012 to 2022, faster than the average for all occupations. More biochemists will be needed to use the knowledge they have gained from basic research to develop biological products and processes that improve our lives.”