

Biochemist

Work out what molecules do inside living cells, then use that to make medicines and tests.

TYPICAL PAY

\$127,410

a year, full time

PAY RANGE

\$74k to \$201k

starting to experienced

TIME TO QUALIFY

4 to 11 years

after high school

DEMAND

Good

job outlook

LICENCE NEEDED

No

anyone can do it

WHERE YOU WORK

University labs, drug and biotech companies, government research...

How you get there

- 1 High school** Grades 11 and 12
Chemistry, biology and as much math as you can take. Ask a nearby university about summer lab programs for high school students.
- 2 Bachelor's degree** 4 years
Biochemistry, chemistry, or molecular and cell biology. Get into a professor's lab by your second year. Undergraduate research is what graduate schools actually read.
- 3 Technician job or straight to graduate school** 0 to 2 years
Many people spend a year or two as a paid research technician first. It makes a much stronger application.
- 4 Doctorate** 5 to 6 years
You are paid a stipend to do original research, then write and defend a dissertation. Admission is competitive and does not depend on grades alone.
- 5 Postdoctoral research or an industry job** 0 to 4 years
Academic careers need a postdoctoral stint. Company jobs often do not.

Pros and cons

- + You get paid to do the doctorate, so little graduate debt
- + Real chance to work on medicines that reach patients
- + Skills move between countries and industries
- Nine to eleven years before you lead your own work
- Most experiments fail, and you have to be fine with that
- University jobs are scarce and funding is never certain

Good to know

The first biotech medicine came from a bacterium

Human insulin made by genetically engineered bacteria was approved in the United States in 1982. Before that, people with diabetes relied on insulin extracted from pigs and cattle.

A road trip in California started modern genetics

PCR (the polymerase chain reaction), the method that copies DNA millions of times and makes most genetic testing possible, was thought up by Kary Mullis at a California company in 1983. He won a...

Optional boosts

Coding and data analysis. Mass spectrometry. Cryogenic electron microscopy. Regulatory knowledge.

Where these numbers come from

My Next Move: Biochemists and Biophysicists
American Society for Biochemistry and Molecular Biology
University of California Berkeley, Molecular and Cell Biology
National Science Foundation

Numbers checked September 2026. Pay figures are typical full-time annual amounts in United States dollars, based on Bureau of Labor Statistics wage data and published pay scales. They vary by state, employer and experience. Tuition is for in-state students at public schools unless the card says otherwise. Sources, links and the click-through version: <https://career.help/us/careers/biochemist>



Scan for the full clicker