

Biochemist

Work out the chemistry inside living cells, for a drug company, a hospital lab or a university.

TYPICAL PAY

\$83,000

a year, full time

PAY RANGE

\$53k to \$139k

starting to experienced

TIME TO QUALIFY

4 to 9 years

after high school

DEMAND

Moderate

job outlook

LICENCE NEEDED

No

anyone can do it

WHERE YOU WORK

Hospital labs, drug and biotech companies, university research la...

How you get there

- 1 High school** Grades 11 and 12
Chemistry and biology are essential, and take the highest math your school offers.
- 2 Bachelor of Science in biochemistry** 4 years
Four years of organic chemistry, molecular biology, genetics and a lot of lab time. An honours thesis year is the standard on-ramp to graduate school.
- 3 Master's degree or straight to PhD** 2 to 6 years
Many Canadian programs let strong students transfer from a master's into a PhD after a year.
- 4 Postdoctoral research** 2 to 4 years
A paid research contract, often abroad, that most academic and senior industry jobs still expect.
- 5 Clinical route, if you want a hospital lab** 2 years
A two-year accredited postdoctoral fellowship in clinical biochemistry, then the certifying exam.

Pros and cons

- + You work on the chemistry of medicines and disease
- + Graduate school is funded, so you earn while you train
- + Skills transfer to drug companies, hospitals and government
- The full path is long, often nine years or more
- Postdoctoral pay is low for someone with a PhD
- Most experiments do not work, which wears people down

Optional boosts

Clinical biochemistry. Protein and antibody science. Mass spectrometry. Regulatory affairs.

Good to know

Canada's most famous biochemistry happened in a hot att...

The Toronto lab where insulin was purified in 1921 and 1922 had no air conditioning. The team worked through a brutal summer, and the first patient treated was a 14 year old boy.

Stem cells were proven in Toronto

James Till and Ernest McCulloch demonstrated the existence of stem cells at the Ontario Cancer Institute in 1961. Nearly all modern stem cell medicine traces back to that work.

Where these numbers come from

Job Bank: Physiologist-biochemist, wages (updated November 2025)
Canadian Society of Clinical Chemists, clinical biochemistry training and certification
Chemical Institute of Canada
Association of the Chemical Profession of Alberta

Numbers checked September 2026. Pay figures are typical full-time annual amounts in Canadian dollars, based on Government of Canada Job Bank wage data and published salary grids. They vary by province, employer and experience. Tuition is for domestic students. Sources, links and the click-through version: <https://career.help/ca/careers/biochemist>



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