

UNDERGRADUATE TRAINING

Year 1

- Fall - Consult with a faculty adviser or career counselor who is familiar with careers in biochemistry and molecular biology to begin developing your personalized career plan.
- Fall – If you plan to transfer from a two-year institution to a four-year institution, begin planning early and ensure your credits will transfer.
- Complete introductory courses in biology, chemistry and math.
- Explore extracurricular science activities, such as the ASBMB Student Chapters program.¹² If a Student Chapter is not available on your campus, consider starting one.
- Begin looking for and applying to science-specific scholarships and awards.

Year 2

- Fall - Meet with your adviser to continue developing your career plan.

- Fall - Explore options for starting independent undergraduate research, either through an on-campus internship or at an external research institution. The ASBMB has a national database of research opportunities.¹³
- Spring - Decide on a major. Many institutions have interdisciplinary “biochemistry and molecular biology” majors. However, majors in chemistry or biology also can provide a solid foundation.
- Continue introductory courses from year one. Also consider completing physics coursework.
- Get involved in science-related extracurricular activities on your campus or in the local community.
- Apply for science-specific scholarships and awards.
- Consider doing internships, shadowing experiences and informational interviews to explore your career options. (see “Resources” section on page 18)
- If you will be transferring to a four-year institution in the fall, complete any necessary paperwork.



Year 3

- Fall - Meet with your faculty adviser to finalize your career plan.
- Fall - Begin or continue conducting independent undergraduate research. Discuss the possibility of attending a scientific meeting and presenting a poster with your research adviser. The ASBMB annual meeting has a poster competition exclusively for undergraduate research.¹⁴
- Begin taking advanced courses in biochemistry and molecular biology. Complete physics coursework if not already done.
- Complete internships, shadowing experiences and informational interviews as desired. (see “Resources” section on page 18)
- Decide if you will apply for graduate or professional school. If so, begin developing a competitive application packet. (see “Graduate training” section on page 14)
- Begin studying for the Graduate Record Exam (GRE) or other required standardized tests, depending on your career plans.

- Consider taking electives to strengthen writing and public speaking skills and learn general business skills.

Year 4

- Summer/fall – Complete applications for graduate or professional school. Begin early and solicit feedback from multiple advisers and/or mentors.
- Fall – Meet with your adviser to plan for your final year of college.
- Spring – Begin submitting job applications.
- Finish major requirements and any elective advanced biochemistry and molecular biology coursework.
- Complete your undergraduate research experience and present results at a local, regional or national scientific meeting.

