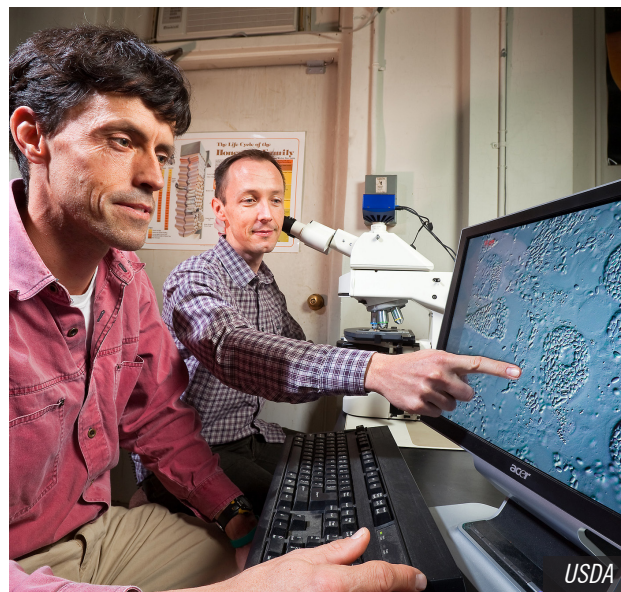


MOLECULAR BIOLOGIST

Molecular biologists examine plant, animal or human genetics and the variation and relationships between them. Molecular biologists can work with DNA and RNA from humans, plants, animals and other organisms while using their knowledge of chemistry, physiology, genetics, physics and biology in their work.

WHAT RESPONSIBILITIES WILL I HAVE?

- Develop new methods to diagnose and treat diseases
- Detect and identify environmental pollutants
- Serve as a scientific advisor or representative for business, government or education
- Look at genetic variations and gene expression in different species to determine how things are passed from one generation to another
- Genetically engineer new crops
- Conduct continued testing of new crops or other products
- Test the effectiveness of drugs used for treating different diseases and gene growth
- Examine the sequence of DNA to look for differences that may mean a likeliness to have a disease or cause to be resistant to the disease
- Supervise and direct the work of laboratory technicians
- Report findings through writing or presentations
- Compile data on research conducted
- Grow bacteria in order to determine product effectiveness
- Design and execute experiments
- Translate research into technologies that consumers can use or benefit from
- Extract DNA and RNA from cells and tissues



WHAT EDUCATION & TRAINING IS REQUIRED?

Bachelor's or Master's in a life science with a concentration in molecular biology

THE FOLLOWING HIGH SCHOOL COURSES ARE RECOMMENDED...

Agricultural education, chemistry, biology, physics, mathematics

TYPICAL EMPLOYERS

Laboratories owned by government agencies, hospitals, universities, research firms, pharmaceutical companies

FUTURE JOB MARKET/OUTLOOK



SUGGESTED PROFESSIONAL ORGANIZATIONS & ASSOCIATIONS

- American Association for the Advancement of Science
- American Society for Biochemistry & Molecular Biology
- American Society for Cell Biology

AVERAGE ANNUAL FULL-TIME SALARY

\$77,000