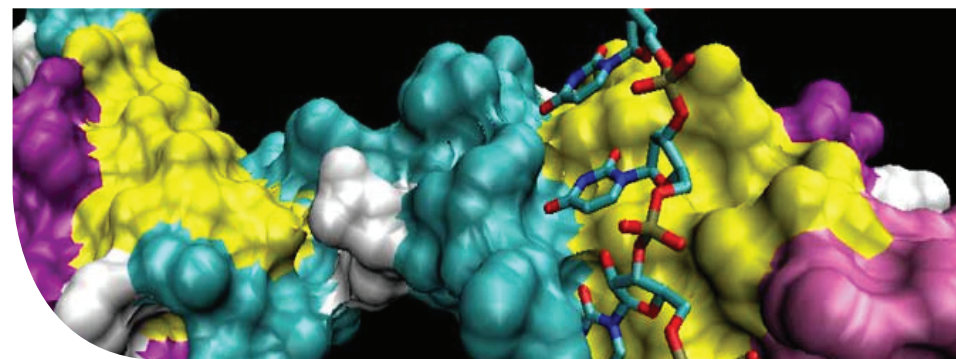


Career Spotlight

Mathematical Biophysicist

Mathematical biophysicists develop theories and methods of the physical sciences for the investigation of biological systems. Biophysicists attempt to explain why our biophysical environment behaves as it does. They investigate the biological processes of humans and other organisms, such as plants and animals.



EDUCATION

A Ph.D. degree usually is required for independent research, but a master's degree is sufficient for some jobs in applied research or product development.

WHEN MATH IS USED

Mathematical biophysicists use math as they apply models and experimental techniques to larger systems such as tissues, organs, populations, and ecosystems. Scientists in this field conduct research concerned with understanding the interactions between the various systems of a cell, including the interactions between DNA, RNA and protein biosynthesis.

POTENTIAL EMPLOYERS

About 39 percent of all biological scientists are employed by the federal, state, and local governments. Federal biological scientists work mainly for the U.S. Departments of Agriculture, Interior, and Defense and for the National Institutes of Health. Most of the rest work in scientific research and testing laboratories, the pharmaceutical and medicine manufacturing industry, or colleges and universities.

FACTS

- Mathematical biology is the study of biological principles and laws together with the formulation of mathematical models.
- Biophysicists enjoy a diverse and varied career.
- The biophysicist career is expected to grow 9% through 2016, providing more job opportunities for new graduates.

CITATIONS

<http://en.wikipedia.org/wiki/Biophysics>
<http://www.careercornerstone.org/biology/bioearn.htm>
http://www.ehow.com/about_5341105_biophysicist-job-description.html
<http://www.bls.gov/oes/current/oes191021.htm>
http://wiki.answers.com/Q/What_does_a_biophysicist_do?#slide=1
<http://www.bls.gov/oes/current/oes191021.htm>

MATH REQUIRED

- College Algebra
- Trigonometry
- Geometry
- Calculus I and II
- Linear Algebra

Low-end Salary: \$44,640/yr
Median Salary: \$82,150/yr
High-end Salary: \$153,810/yr