

St. John's College of Liberal Arts and Sciences

# **Bachelor of Science in Biology**









# **ABOUT THE B.S. IN BIOLOGY**

A biology degree from St. John's provides you with both breadth and depth in the study of modern biology. Three introductory courses offer a strong background in the major disciplines of biology. You then choose from more specialized courses in areas such as biochemistry, bioinformatics, ecology, molecular biology, neuroscience, physiology. Chemistry, mathematics, and physics are also required. Those who wish to take their studies further may apply to the five-year combined B.S./M.S. degree in biology, saving one year on the separate B.S. and M.S. programs. Accomplished faculty members offer research opportunities in their laboratories. The department also offers excellent pre-health career advisement and, for highly motivated students, a premedical track for biology majors in molecular biosciences (PMD track).

### WHAT CAN I DO WITH A B.S. IN BIOLOGY?

While biology is an ideal major for those interested in health professions such as dentistry, medicine, public health, or veterinary medicine, there are many diverse career paths available to biologists. Opportunities are growing in environmental careers, industry, research, and teaching careers. Biologists with an interest in law may pursue patent law, as well as forensics and criminal investigation. Biologists who are interested in art may enter the medical illustration, bioanimation, and film fields.

The explosion of data resulting from the newfound ability to sequence genomes has created unprecedented opportunities in research. DNA sequence information is leading to rapid new discoveries in evolution, including human evolution and infectious disease. With expertise in biology, you can solve the mysteries of microbial diseases and invent new treatments for them, as well as for cancer and other diseases. We are now at the threshold of being able to sequence the DNA of each individual patient, ushering in a new age of personalized medicine.

Biological research is also needed for emerging diseases in wildlife and other ecological problems. For example, growing human populations require better methods of agriculture to create sustainable food sources. Botanists and biologists will be called upon to help solve this critical issue.

Recent graduates of the biology program at St. John's have secured positions in the following dynamic fields:

- Bioinformatics
- Biomedical research
- Biophysics
- Forensics and criminal investigation

- Marine biology
- Microbiology and immunology
- Molecular biology
- Public health
- Science writing



# **Bachelor of Science in Biology**

# **MESSAGE FROM THE CHAIR**

The Bachelor of Science degree in Biology offers a rigorous and exciting academic environment, developing both the practical skills and intellectual abilities and habits of critical thinking that make our students attractive to a wide variety of employers in the public and private sectors. Many of our students go on to postgraduate studies in medicine, dentistry, veterinary medicine, and other health professions. Others go to top-rated graduate schools to earn master's degrees and doctorates. Many of our faculty members are internationally known for their research, and they bring this cutting-edge experience to the classroom. Your biology program at St. John's will prepare you for a future of exciting opportunities.

# Dianella G. Howarth, Ph.D.

Professor and Chair, Biological Sciences howarthd@stjohns.edu

#### RESEARCH AND PROFESSIONAL DEVELOPMENT

Especially motivated students may apply for the five-year combined B.S./M.S. biology program, saving one year in earning both degrees. There is also a premedical track for biology majors in molecular biosciences (PMD track) that features preferential placement in research laboratories, supported trips to research meetings, opportunities to take graduate courses (when appropriate), and additional courses in biology, chemistry, physics, and English to prepare you for the MCATs. Upon graduation, students who complete the PMD track receive a certificate.

# **SCHOLARSHIPS AND FINANCIAL AID**

St. John's University strives to place an outstanding higher education within the financial reach of all qualified applicants. Each academic year, the Office of Student Financial Services awards more than \$500 million in aid to students who demonstrate financial need. The Office of Undergraduate Admission also awards highly competitive academic scholarships.

For more information about scholarships and financial aid, please visit **www.stjohns.edu/services/financial**.

#### PROGRAM INFORMATION AND APPLICATIONS

Dianella G. Howarth, Ph.D.

Professor and Chair, Biological Sciences howarthd@stjohns.edu 718-990-6269

# **ADMISSION INFORMATION**

Office of Undergraduate Admission 1-888-9STJOHNS admission@stjohns.edu

www.stjohns.edu/admission-aid/undergraduate-admission