MOLECULAR AND CELL BIOLOGY (MS)

The Department of Molecular and Cell Biology offers Master of Science (M.S.) degree in Molecular and Cell Biology. Modern molecular and cell biology is an interdisciplinary field that overarches classic research disciplines. Upon admission to the Molecular and Cell Biology Field of Study, students pursuing a M.S. degree focus on one of four Areas of Concentration:

• Cell and Developmental Biology

• Genetics and Genomics

• Microbiology

• Structural Biology, Biochemistry and Biophysics

The M.S. in each of the Areas of Concentration may be either a coursework or research-based degree. Students enrolled in the program will develop competencies in critical thinking, hypothesis design and testing, and technical expertise required to conduct research as an independent scientist in molecular and cell biology. In addition to formal courses and laboratory research, training includes the development of skills in scientific writing and communication, and mentoring others in scholarly and research activities.

Location

- Storrs Campus

Modality

- In Person

The requirements for the Master of Science (M.S.) in Molecular and Cell Biology conform to the Graduate School regulations outlined in the Academic Regulations section of this catalog. The degree may be pursued under one of two plans: Plan A, which emphasizes independent research, or Plan B, which focuses on a broader, more comprehensive understanding of the field. Specific course requirements are determined by the student's advisory committee and must align with the minimum standards established by the Graduate School.

Learning Obejctives

1. Knowledge: Demonstrate appropriate breadth and depth of disciplinary knowledge and comprehension of the major topics, theories, and issues of the discipline, including demonstration of specialized knowledge of a sub-field sufficient to carry out substantive independent research or creative pursuits.
2. Research/applied skills: Use disciplinary methods and techniques ethically and professionally to apply knowledge, critically analyze, and, as appropriate to the degree, create new knowledge or achieve advanced creative accomplishments.
3. Communication: Communicate proficiently and effectively to a specialist or non-specialist audience, verbally and in writing, a structured, coherent academic presentation, representation, or argument that cogently summarizes their research or creative pursuit, relevant literature, and its significance at the level appropriate to discipline.