Molecular/Cellular Biology, PhD

This program focuses on the fundamental molecular events at the core of all life. Tailor the program around your interests, and gain skills in contemporary approaches used in molecular and cellular biology.

Program Description

Degree Awarded: PHD Molecular and Cellular Biology
The PhD program in molecular and cellular biology prepares students for careers that cross traditional disciplinary boundaries.

It provides a diverse range of research and training opportunities for doctoral students interested in pursuing a transdisciplinary approach to their studies that extends beyond the traditional boundaries of biological research. Participating faculty members and researchers are drawn from multiple departments, colleges, centers and institutes across the university, including:

- Department of Chemistry and Biochemistry
- Department of Psychology
- New College of Interdisciplinary Arts and Sciences
- School of Biological and Health Systems Engineering
- School for Engineering of Matter, Transport and Energy
- School of Human Evolution and Social Change
- School of Life Sciences
- School of Mathematical and Statistical Sciences

Participating faculty members are also based at partner institutions in the greater Phoenix area, including:

- Barrow Neurological Institute
- Carl T. Hayden Veteran's Administration Medical Center
- Mayo Clinic in Arizona
- Translational Genomics Research Institute
- University of Arizona College of Medicine-Phoenix.
At a Glance

- **College/School:** The College of Liberal Arts and Sciences
- **Location:** Tempe campus

Degree Requirements

84 credit hours, a written comprehensive exam, an oral comprehensive exam, a prospectus and a dissertation

**Required Core (9 credit hours)**
- MCB 555 Advanced Molecular and Cellular Sciences (6)
- MCB 556 Advanced Molecular and Cellular Biology II (3)

**Electives or Research (51 credit hours)**

**Other Requirements (12 credit hours)**
- BIO 543 Molecular Genetics and Genomics (3)
- BIO 610 Introduction to Responsible Conduct of Research in Life Sciences (1)
- MCB 701 Seminar: Molecular and Cellular Biology Colloquium (8)

**Culminating Experience (12 credit hours)**
- MCB 799 Dissertation (12)

Additional Curriculum Information
Courses listed as other requirements may be substituted with approval of the academic unit.

Admission Requirements

Applicants must fulfill the requirements of both the Graduate College and The College of Liberal Arts and Sciences.

Applicants are eligible to apply to the program if they have earned a bachelor's or master's degree in the biological sciences, biochemistry or a closely related field from a regionally accredited institution.

Applicants must have a minimum cumulative GPA of 3.00 (scale is 4.00 = "A") in the last 60 hours of their first bachelor's degree program, or applicants must have a minimum cumulative GPA of 3.00 (scale is 4.00 = "A") in an applicable master's degree program.
Applicants must submit the following:

1. graduate admission application and application fee
2. official transcripts
3. academic record form
4. personal statement
5. curriculum vitae or resume
6. three letters of recommendation
7. proof of English proficiency

Additional Application Information
An applicant whose native language is not English must provide proof of English proficiency regardless of current residency.

Research experience is a desired qualification.

Career Opportunities
A doctoral degree in molecular and cellular biology provides strong preparation for academic careers at every level from community colleges to research universities. The skills and knowledge obtained in this program are also valuable for government careers in federal and state agencies, and for careers in industry and nongovernmental organizations.

Career examples include:

- food, agriculture and health care scientists in academic, private and industrial labs
- principal investigators in government labs and non-profit organizations
- professors or instructors in universities and colleges
- science teachers in elementary and high schools

Contact Information

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