genetics.tamu.edu

Degree Information

The Program in Genetics is the main interdisciplinary PhD program in the Natural Sciences at Texas A&M University and offers research opportunities in a diverse range of Specialties: Bioinformatics and Genomics; Conservation and Population Genetics; Medical Genetics; Microbial Genetics; Molecular, Cellular and Developmental Genetics; and Plant Genetics. The goal of the Program is to provide research opportunities to aspiring research scientists in these various fields for successful careers in academia and industry. Completion of the Ph.D. degree requires core curriculum coursework, passing of the preliminary examinations, the development, completion and defense of a research project and teaching. Generally, 4 to 5 years of study is required to complete 96 semester hours with a GPR of 3.0 or higher. The Ph.D. degree is awarded principally on demonstrated ability to conduct significant and original scientific research.

Admission

Admission is based on undergraduate record (coursework, laboratory experience, and grades), letters of recommendation, and performance on the GRE and TOEFL exams. Coursework in general genetics, molecular genetics and biochemistry are essential. Applicants whose native language is not English should plan to take the Test of English as a Foreign Language (TOEFL). To be eligible for an invitation to our annual recruiting weekend held in February, domestic applications must be submitted by **December 20**. Early application is recommended.

Placement and Jobs

Our students are expected to present their research at national and international conferences and publish in established, high-impact peer-reviewed journals, and their teaching experience provides an additional valuable asset for future job opportunities. Our PhD graduates have been successful in obtaining faculty positions in top research Universities, teaching colleges, as well as companies in the fields of biotechnology, pharmaceuticals and agriculture.

AGRICULTURE & LIFE SCIENCES
TEXAS A&M UNIVERSITY

Graduate Studies in Genetics

MS
PhD

Interdisciplinary Program in Genetics

In the Colleges of

Agriculture and Life Sciences

Science

Veterinary Medicine and Biomedical Sciences

Education

Texas A&M Health Science Center

Distinguished Faculty

The Faculty of Genetics is composed of more than 70 members from 19 departments across 5 colleges. Students benefit from faculty members' different scientific background and broad knowledge in diverse genetic sub genres, both in the classroom and research laboratory setting.

Extensive Facilities

Students have access to facilities from all partners in the program, including multiple state-of-the-art labs and high-end computer systems. High-speed wireless internet access is available throughout the campus.

Curriculum & Graduation Timeline

In the first year, the students **perform laboratory rotations**, start their **graduate courses**, **provide teaching assistance** to Undergraduates in Genetics, and transition into a laboratory. The laboratory rotations provide an opportunity to evaluate suitable laboratory environments for their graduate research. It is anticipated that most students have decided on a research laboratory by the start of the second semester.

During the second and third semesters, the main activity is focused on getting a research project started, with the assistance of the thesis advisor and three Genetics faculty that will form the thesis committee. This period is also the time when students will prepare for their preliminary examination, to be taken after the second, but before the end of the third year. The third, fourth and fifth year are dedicated to continuing and completing the thesis project, presenting data at conferences and publish the work, followed by the thesis defense.

Mentoring

Our goal is for students to succeed at Texas A&M. The genetics program is designed to support students throughout their graduate studies. **Orientation** introduces new students to university policies, employee benefits, teaching and laboratory safety. Students will meet with the faculty to discuss which courses to select based on interest, undergraduate background, or to address any academic deficiencies. F**aculty talks** acquaint students with the faculty and their research. **Socials gatherings** allow for opportunities to visit and interact with faculty members outside the university environment. During their three **laboratory rotations**, the students meet regularly with their **advisory committee** during the first year to evaluate their progress and help in the identification and transition into a suitable laboratory environment for their graduate research. Students will select a **thesis committee** after the first year that will provide continued mentorship throughout graduate school. Our **genetics graduate student association** also fosters interaction among students.

Financial Support

First-year graduate students are supported with the equivalent of a $24,500 annual stipend. Compensation includes a 9-month teaching assistant position in the undergraduate genetics laboratory course, medical insurance benefits, eligibility for in-state tuition, and paid tuition and fees. After the first 9-months in the program, the stipend for the students becomes the responsibility of the graduate advisor. As part of the training process, all students are expected to apply for graduate research fellowships available from a range of sources, including Texas A&M, the federal government (NSF and NIH), and private foundations.

Contact Information

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