TEXAS A&M UNIVERSITY
Interdisciplinary Graduate Program in Genetics and Genomics

AGRICULTURE & LIFE SCIENCES
TEXAS A&M UNIVERSITY

Interdisciplinary Ph.D. Program in Genetics and Genomics through the Colleges of:

- **Agriculture and Life Sciences**
- **Engineering**
- **Science**
- **Texas A&M Health Science Center**
- **Veterinary Medicine and Biomedical Sciences**

Degree Information

The Interdisciplinary Program in Genetics and Genomics is the premier interdisciplinary Ph.D. program in the Natural Sciences at Texas A&M University and offers research opportunities in a diverse range of Specialties: Bioinformatics and Genomics; Conservation, Population and Evolution Genetics; Medical Genetics; Microbial Genetics; Molecular, Cellular and Developmental Genetics; and Plant Genetics. The Program provides research opportunities to aspiring scientists in these various fields for successful careersin academia, government, and industry. Completion of the Ph.D. degree requires core curriculum coursework, preliminary examinations, teaching, and the development, completion, and defense of a research project. Generally, 4 to 5 years of study is required to complete 96 semester hours. The Ph.D. degree is awarded principally on demonstrated ability to conduct significant and original scientific research. The Interdisciplinary Graduate Program in Genetics and Genomics welcomes all applicants without discrimination and is committed to providing an accessible and inclusive environment where all learners, including those with disabilities, have access to university resources.

Admission

Applicants undergo a holistic evaluation by our Admissions Committee based on undergraduate record (coursework, laboratory experience, and grades), letters of recommendation, resume, and statement of purpose. In addition to overall academic achievement (GPA), the committee considers factors including, but not limited to, the rigor and relevance of completed coursework (courses in Genetics, Genomics, Molecular Biology, Biochemistry, Bioinformatics, or similar areas are highly recommended), experience in laboratory research, scholarly outputs (presentations, publications), awards, leadership experience, faculty references, and scientific maturity. The GRE is not required nor considered for admission; however, the Test of English as a Foreign Language (TOEFL) is required for non-native English speakers. Early application is recommended. **Apply for free by 12/01/21.**

Placement and Jobs

Our students present their research at national and international conferences and publish in high-impact, peer-reviewed journals. Their teaching experience provides an additional valuable asset for future job opportunities. Our Ph.D. Graduates have been successful in obtaining faculty positions in top research Universities, teaching colleges, and biotechnology, pharmaceutical, and agricultural companies.

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Distinguished Faculty

The Faculty of Genetics and Genomics is composed of over 100 members from 18 departments across 5 colleges. Students benefit from faculty members' diverse scientific backgrounds and broad knowledge in different genetic sub-genres, both in the classroom and research laboratory setting.

Financial Support

Graduate students are supported with an annual stipend **starting at $30,000/Year** in 2022-2023. Compensation includes a 9-month teaching assistant position in the undergraduate geneticslaboratory course during the first year, medical insurance benefits, eligibility for in-state tuition, and paid tuition and fees. After the first year in the program, the graduate advisor will provide the stipend, tuition, and fees. 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.

Curriculum & Graduation Timeline

In the fall of the first year, the students perform laboratory rotations and start their graduate courses. During the **second and third semesters**, students provide teaching assistance to undergraduate students in Genetics. The main focus is on starting a research project with the assistance of the thesis advisor and three additional faculty members who form the thesis committee. This period is also when students will prepare for their preliminary examination, to be taken by the fall of the third year. The third, fourth, and fifth-year are dedicated to continuing and completing the thesis project, presenting data at conferences, and publishing the work, followed by the thesis defense.

Mentoring

Our goal is for students to succeed at Texas A&M University. The genetics and genomics program is designed to support students throughout their graduate studies. **Orientation** introduces newstudents to university policies, employee benefits, teaching and laboratory safety. Students will meet with faculty to discuss which coursesto select based on interest, undergraduate background, or to address any academic deficiencies. **Faculty talks** acquaint students with ongoing research. **Social gatherings** allow for opportunities to visit and interact with fellow students and faculty members outside of the academic environment.

During their three **laboratory rotations**, the students meet regularly with their **advisory committee** 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 and Genomics Graduate Student Association** also fosters interaction among students.

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.

Career Development

We aim to prepare students for the workforce within academia as well as in alternative scientific careers. For this, we offer additional training on competencies needed to succeed in different careers through a variety of certificates in business, entrepreneurship, science policy, teaching, and internships. We host a *Career Club* with activities such as seminars and workshops from distinguished guest speakers in diverse fields. We also provide resources for professional and personal development within and outside of Texas A&M University. Our students meet often with their academic advisor to learn more about career choices, refine the skills required to be successful in the job search, and generate a space for active discussion, and networking. Through this, our graduate students obtain a more holistic education and will be better prepared to meet the demands of today's job market.

Contact Information

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