

GENETICS AND GENOMICS, B.S.

WISCONSIN EXPERIENCE

Research experience

Many genetics and genomics majors conduct research in a faculty-led research lab where they receive direct mentorship from faculty, staff, and graduate students. With hundreds of faculty members on campus using genetic strategies in their labs, students have many research options.

Student organizations

The Undergraduate Genetics Association (<https://win.wisc.edu/organization/UGA/>), a club for all students interested in genetics and genomics, brings in guest speakers to discuss their research and career paths; provides guidance on finding campus research and internship opportunities; holds informational sessions on jobs and careers; and hosts networking, volunteer, and social events. The Pre-Genetic Counseling Organization (<https://win.wisc.edu/organization/pregeneticcounseling/>), for students interested in genetic counseling, hosts talks by genetic counselors, clinicians, and ethicists; informs students of advocacy opportunities; provides training in practical counseling skills; and offers networking, volunteer, outreach, and social events.

Global engagement

Genetics and genomics majors participate in study abroad programs in countries around the world, including in China, Costa Rica, England, Germany, Mexico, New Zealand, and Uganda. Students can find more information on the CALS study abroad advising page (<https://cals.wisc.edu/academics/undergraduate-students/studyabroad/study-abroad-advising/>).

Community engagement and volunteering

Students have opportunities to engage in volunteer activities through the Undergraduate Genetics Association, including participating in campus' annual Darwin Day (<https://evolution.wisc.edu/darwin-day/>) science outreach event. The Pre-Genetic Counseling Organization also offers outreach opportunities.

Internships

Majors are encouraged to participate in internships. With a large biotech industry presence in the Madison area, there are many opportunities for students to participate in genetically-relevant internship experiences. Students can use these internship opportunities to complete the research requirement for the genetics and genomics major.

A rich history or genetics

Established in 1910, the UW–Madison Department of Genetics is among the oldest genetics departments in the nation and is highly regarded for its research contributions in diverse areas of the field. Many of the greatest discoveries in genetics and genomics took place at UW–Madison, including cracking the genetic code, sequencing one of the first bacterial genomes, synthesizing the first gene, and developing targeted gene knockout methods in mice.