



The graduate program in **Human and Statistical Genetics** uses an integrated, leading-edge approach to the study of human disease. It prepares future human geneticists to master novel statistical methods and acquire the expertise to perform all phases of human genetics research from the laboratory bench to effective data analysis.

This program is best suited to students who are either majoring in biological sciences with an analytical and/or mathematical background or students majoring in statistical and/or analytical sciences with a background in biology. Dissertations are typically devoted to analysis of a biological program pertaining to human or mammalian biology or to the development of a novel analytical method.

Research Environment

Program faculty are engaged in a wide variety of human and mammalian research projects to understand the molecular basis of normal and disease states.

research areas include:

- detection of loci for simple and complex/quantitative traits in humans
- association analyses for common and rare variants
- development of novel statistical methods for gene discovery
- mapping of simple and quantitative traits in model organisms
- genomic approaches to gene expression, transcriptional regulation, and development
- functional analysis of genes and variants for human disease

Human & Statistical Genetics



Required Courses

- Fundamentals of Mammalian Genetics
- Human Genetic Analysis
- Computational Statistical Genetics
- Ethics & Research Science
- Graduate Research Fundamentals

Advanced Electives

Select *THREE (3)* from:

- Advanced Genetics
- An Introduction to Genomic Analysis
- Bioinformatics
- Computational Molecular Biology
- Current Research in Chromatin, Epigenetics & Nuclear Organization
- Data Mining & Applications to Computational Biology
- Epidemiology, Clinical Trials, Study Design & Management
- Fundamentals of Molecular Cell Biology
- Genomics
- Nucleic Acids & Protein Synthesis
- Population Genetics
- Probability
- Stochastic Processes

APPLICATION
DEADLINE

DECEMBER

1

EXPLORE & APPLY:
tinyurl.com/dbbstour

For more information about the **HUMAN & STATISTICAL GENETICS** program and faculty research:
tinyurl.com/dbbs-hsgfaculty



dbbs-info@email.wustl.edu



facebook.com/wustldbbs



[@WUSTLdbbs](https://twitter.com/WUSTLdbbs)

Program Benefits & Support

- Full tuition funding and benefits*, including:
generous stipend | travel funds for scientific meetings | health, life, and disability insurance coverage
- Opportunities to obtain nationally competitive fellowships, awards, and grants
- Free Metro U-Pass to travel in and around the St. Louis area
- Access to all university educational, entertainment, and recreational resources

**guaranteed, provided that satisfactory progress towards completion of degree requirements is met*