

AGRICULTURAL and MEDICAL BIOTECHNOLOGY

Science is in Our Genes

The Agricultural and Medical Biotechnology (ABT) program is a life sciences degree for students who wish to pursue opportunities in biotechnology, human health, agricultural productivity and environmental sustainability. You will gain a strong foundation in chemistry, biology and genetics, be mentored by exceptional scientists, and gain valuable hands-on experience in cutting-edge research.

The design of the degree allows you to individualize coursework in a scientific area tailored to your career goals. To develop your skills as a scientist, you will complete your own research project under the guidance of a mentor of your choosing. You will be well prepared for a rewarding career in the agricultural or biomedical sciences with opportunities for graduate training in biological research, human and veterinary medicine, and other related professional fields.

CAREERS

This bachelor of science degree will prepare you for rewarding opportunities with biotechnology organizations, diverse academic disciplines, and governmental agencies including:

Pharmacists

Dispense prescription medications to patients and offer expertise in the safe use of prescriptions. 2019 Median Pay: \$128,090

Medical Scientists

Conduct research aimed at improving overall human health. 2019 Median Pay: \$88,790 Ten-Year Job Outlook: 8% (faster than average)

Agriculture and Food Scientists

Research ways to improve the efficiency and safety of agricultural establishments and products. 2019 Median Pay: \$65,160 Ten-Year Job Outlook: 7% (faster than average)

Chemists and Materials Scientists

Study substances at the atomic and molecular levels and analyze the ways in which the substances interact with one another. 2019 Median Pay: \$78,790

Source: U.S. Bureau of Labor Statistics, Occupational Outlook Handbook www.bls.gov/ooh/ **1.66** million people were employed by a bioscience firm¹

UN-BIO-LIEVABLE



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For more program info, take a photo of this code with your smartphone. No special app required.

DID YOU KNOW?

In our most recent advising survey, two-thirds of ABT students said they were extremely satisfied with their advisor, the highest rating possible. When asked what they like about their advisor, one student responded with:

Everything really. He is a great person to get connected with for the friendship as well as all of the great advice he provides for classes and outside the academic world. He is always willing to meet to help us with anything - even if it is just to get some coffee and chat. I couldn't ask for a better advisor.





¹ The Value of Bioscience Innovation in Growing Jobs and Improving Quality of Life, 2016; Biotechnology Innovation Organization **ABT STUDENTS** have a variety of interests, but they all have one thing in common: they want to use science to improve lives around the world.

RESEARCH EXPERIENCE

Research experience is at the heart of what we do. Your research mentor may recommend undergraduate student presentation opportunities at the appropriate professional meetings in your research field.

Students in ABT may also compete for the Glenn B. Collins Undergraduate Research Achievement Award that recognizes outstanding independent study and research.

ORGANIZATIONS AND CLUBS

ABT Club

Members are engaged with students, faculty, and professionals within biotechnology-related interests

Pre-Med Activities Council

Bringing together aspiring health professionals for service and opportunities to prepare for professional school

Pre-Vet Club

Utilized as a connection point for students to plan and prepare for veterinary school as a collective group





HIGHLIGHTED COURSES

ABT 201: Scientific Method in Biotechnology

Engaging with research is a daunting prospect for college students, but ABT 201 prepares future biotechnologists for successful research experiences by introducing who our scientists are and what the scientific method looks like in laboratories at UK.

ABT 301: Writing and Presentation in the Life Sciences

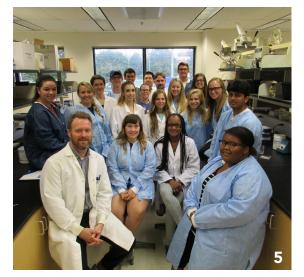
The hallmark of successful scientists are scholarly products like manuscripts and presentations. Students in ABT 301 learn how to develop and refine written and oral presentation skills required for any future professional.

ABT 395: Independent Study in Biotechnology

ABT 395 is not a regular classroom course. Instead of lectures and exams, you go to your lab and spend your time conducting experiments, collecting data, and analyzing results with the support of your research mentor.







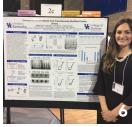




Photo 1: Student whose undergraduate research experience could help farmers control one of their most troublesome pests

Photo 2: Students at the Expanding Your Horizons conference teaching Middle School Girls in the Jacobs Science Building

Photo 3: ABT student conducting research pictured inoculating a large scale trial for a pro-biotic to be added to animal feed

Photo 4: ABT Club president and graduate of the ABT program.

Photo 5: ABT 495 Seniors in the lab

Photo 6: ABT Student presenting her research poster

Photo 7: Recipient for the Spring 2019 Glenn B. Collins Award and her mentor