

ECU MEDICAL BOTANY

DEPT OF BIOLOGICAL & ENVIRONMENTAL SCIENCES

Careers with a Medical Botany Degree:

Agricultural plant scientist
Agronomist
Chief grower
Conservationist
Enthobotanists
Environmental biologist
Forest ecologist
Graduate school
Horticulturist
Industrial ecologist
Interpretive naturalist
Mycologist
NASA
Plant breeder
Research assistant
Soil and water
Conservationist
Technical assistant
Toxicologist
Wetland conservationist

A Bachelor of Science in Medical Botany empowers students to apply coursework in:

Botany
Zoology
Genetics
Physiology
Microbiology
Medical Botany
Entomology
Plant Ecophysiology



It provides flexibility through electives so that many path options are available all with the goal in mind of students understanding the complex relationship between plants and humans. Ultimately, this deep understanding will enable students to enter graduate school or employment so that they may transform their futures in biotech, agribusiness, pharmacology, medicine, homeopathy, horticulture, law, Native American affairs, research, industry and others into successful futures.



East Central University

1100 E. 14th St.

Ada, Oklahoma 74820



www.ecok.edu/BIO • 580-559-5497

Campus Tours:

ecok.edu/take-a-tour

580-559-5628

ecutiger@ecok.edu

DEPARTMENT OF BIOLOGICAL & ENVIRONMENTAL SCIENCES

> MEET THE MEDICAL BOTANY FACULTY



Leah Dudley, Ph.D.

- Plant Eophysiolologist
- B.S. in Biology, Ph.D. in Biology
- Office: PES 168 / 580-559-5495 / ldudley@ecok.edu
- Courses Taught: Botany, Medical Botany, Ecology, Ethnobotany Evolution, General Biology, Mycology, Plant Ecophysiology, and Evolution
- Research Interest: My research generally explores how plants deal with a drying world, using dichotomies such as male versus female plants of

dioecious species and outcrossing vs. selfing plant mating systems to test predictions. I meld tools and ideas from both plant ecophysiology and evolution in both field and greenhouse environments from extreme montane environments to lowland prairies. Currently, I am applying these themes to a culturally relevant agricultural system, The Three Sisters. I am addressing how plant-pollinator interactions are influenced by polyculture (bean, corn & squash) compared to monoculture growing conditions under varying soil water availability.



George Wang, Ph.D.

- Community Ecologist
- B.S. in Zoology, M.S. in Biology, Ph.D. in Environmental and Evolutionary Biology
- Office: PES 104 / 580-559-5694 / gwang@ecok.edu
- Courses Taught: Evolution, General Biology, General Ecology, General Zoology, Human Anatomy, Medical Terminology
- Research Interest: I am a community ecologist interested in plant-insect interactions. I conduct field-and-laboratory based experiments

to examine the effects of various biotic and abiotic factors on insect performance and community dynamics.



Alisha Howard, Ph.D.

- Geneticist
- B.S. in Biochemistry and Molecular Biology, B.S. in Chemistry (A.C.S. certified), Ph.D. in Biochemistry and Molecular Biology
- Office: PES 164 / 580-559-5792 / ahoward@ecok.edu
- Courses Taught: General Biology, Genetics, Intro to Biotechnology, Biochemistry of Human Disease, Research Methods/BioEthics, Genomics and Bioinformatics, Immunology

• Research Interest: We are using the viral oncoprotein tax from human T-cell leukemia virus to identify new host-virus interactions important in viral gene activation.



April Nesbit, Ph.D.

- Molecular Biologist
- B.S. in Biochemistry, Ph.D. in Biomolecular Chemistry
- Office: PES 170 / 580-559-5501 / anesbit@ecok.edu
- Courses Taught: General Biology, General Microbiology, Forensics, Immunology, Biochemical Genetics, Cell and Molecular Biology, Advanced Molecular Biology, Biology Senior Seminar
- Research Interest: Regulation of alternative metabolism in E. coli,

identifying bacteria isolates from Blue River, isolating bacteria that produce antibiotics.

Biological & Environmental Sciences

Dean: Dr. Ken Andrews

Chair: Dr. Mike Bay

Degree: Bachelor of Science

Concentrations: 7

Minors: 2

Faculty: 8 full-time & 2 part-time

Organizations: 4

Scholarships: 25

Location: 158 PES Building

ECU at a Glance

Undergraduate Enrollment: 3,300

Undergraduate Majors: 60+

Student to Faculty Ratio: 17 to 1

Average Class Size: 22

Faculty with PhDs: 65%

States Represented: 28

Countries Represented: 30+

Year Founded: 1909

Campus Size: 140 acres

Area Location: Ada, Oklahoma

Tiger Spirit

Mascot: Roary the Tiger

School Colors: Orange & Black

Student Organizations: 35+

Athletics: NCAA Division II

Men's:
Football
Baseball
Basketball
Cross Country
Track & Field
Golf

Women's:
Basketball
Volleyball
Softball
Soccer
Cross Country
Track & Field
Golf

To prepare students for tomorrow's world through a dynamic & diverse learning experience.

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• Fort Smith

• Dallas, TX