

# FOUNDING DEAN CYNTHIA Y. YOUNG

Cynthia Y. Young became the Founding Dean of the College of Science in 2017. Under her leadership, Science developed an aspirational 2026 strategic plan focused on excellence in scientific discovery, learning and engagement that is both locally relevant and globally impactful. Dean Young and the Science Leadership Team are focused on three key goals: strengthening the national and international prominence of our scientific discovery; elevating the science learning experience; and challenging the status quo. She has worked to strengthen the culture and the power of strategic partnerships internally and externally. We believe that diversity makes us smarter as we tackle tomorrow's greatest scientific challenges and prepare the next generation of leading scientists.

# **WELCOME TO SCIENCE**

We believe that science is at the heart of the modern land-grant university. Faculty, staff and students focus on excellence, seeking high-impact and transformational experiences. As an aspiring world-class College of Science, we strive to be globally impactful and prepare our graduates to be leaders in an increasingly diverse and interconnected world. Science aims to explain the behavior of interacting subatomic particles, reacting molecules, evolving cells and organisms, rotating galaxies, and even space and time themselves.

# **MISSION**

We pursue excellence in scientific discovery, learning and engagement that is both locally relevant and globally impactful.

# **DEPARTMENTS AND DEGREE PROGRAMS**

### **Biological Sciences**

Biology applications affect the health and wellbeing of individuals in their societies and the continuation of earth as a balanced ecosystem. This department aims to produce informed persons who contribute to the scientific community and to the ongoing dialogue concerning ethical, social and political issues that have biological context or consequences.

Biological Sciences: B.A., B.S., M.S., Ph.D. Environmental Toxicology: M.S., Ph.D. Microbiology: B.S., M.S., Ph.D. Online M.S. for Science Educators



### Chemistry

Chemistry is an integral part of modern life and forms the basis for advances in nearly all areas of science and technology. Our goal is to be nationally recognized among peers as an outstanding department that responds to the educational, technological and economic needs of the region and the nation.

Chemistry: B.A., B.S., M.S., Ph.D.

### Genetics and Biochemistry

The department offers the advantages of both a large major research university and the personal attention and collegial environment of a small private institution – a recipe for personal development and future success. Genetics and biochemistry are the fastest-growing majors at Clemson.

Biochemistry: B.S. Genetics: B.S., Ph.D. Biochemistry and Molecular Biology: Ph.D.

#### Mathematical and Statistical Sciences

Mathematics touches nearly every facet of our world, from economic development to the environment to healthcare and communication systems. Students can experience mathematics as a science in search of pattern, form and structure, whose operating sphere is one of numbers, algorithms, ideas and models. Graduates go on to all facets of industry and academia.

#### Mathematical Sciences: B.A., B.S., M.S., Ph.D. Online M.S. in Data Science & Analytics

#### **Physics and Astronomy**

Physics forms the basis of study upon which the other branches of science are founded. Theorists and experimentalists explore, test and discover phenomena that provide evidence for novel and unified theories based on these physical laws. The department is recognized for its experimental, computational and theoretical work in astronomical, atmospheric, biological, condensed matter and fundamental physics.

Physics: B.A., B.S., M.S., Ph.D.

## **CENTERS AND PROGRAMS**

#### **Clemson Center for Human Genetics**

CCHG faculty and staff study the genetics of human disease, advancing our understanding of the fundamental principles by which genetic and environmental factors determine and predict both healthy traits and susceptibility to disease in humans. The Center is housed in Self Regional Hall, a state-of-the-art facility located in Greenwood, South Carolina and actively engages regional, national and international partnerships and provides excellent opportunities for graduate students and postdoctoral research.

#### The Eukaryotic Pathogens Innovation Center (EPIC)

EPIC is an interdisciplinary research cooperative in biomedical research on eukaryotic pathogens, the causative agents of some of the most devastating and intractable diseases in humans including malaria, amoebic dysentery and fungal meningitis. Globalization has led to an increase in such infections in the US, driving the importance of the research.

#### Statistics and Mathematics Consulting Center (SMCC)

SMCC serves University researchers and external parties through interdisciplinary data analysis, statistical guidance and interpretation, problem-solving, scientific computing and mathematical modeling. Services are provided on a sliding scale, and annual external partnerships are available.

#### Science Outreach Center (CUSOC)

Striving to inspire and empower the scientist within each of us, CUSOC makes science relevant and fun through hands-on labs, camps and activities for learners of all ages. Programs include interactive lab experiences, science camps, courses for teachers and a monthly science forum.

### Health Professions Advising (HPA)

HPA is a universitywide program housed in the College. Advising and support are provided to students interested in pursuing careers in chiropractic medicine, dentistry, medicine, optometry, pharmacy, physician assistant, physical therapy, occupational therapy and speech language pathology fields.

