

# The Opportunity

Auburn University invites nominations and applications for the position of Dean of the College of Sciences and Mathematics. The dean serves as the chief academic and administrative officer for the college, and provides vision and leadership that enhances the college's tradition of excellence in teaching, research, service, outreach, and diversity. The dean reports directly to the provost and senior vice president for academic affairs and will be located in Auburn, Alabama.



## **About Auburn University**

A nationally ranked land-grant institution, Auburn University is frequently recognized for its commitment to world-class scholarship, interdisciplinary research with an elite, top-tier Carnegie R1 classification, life-changing outreach and an undergraduate education experience second to none. Our institution is committed to providing exceptional instruction, outreach, and research that translates the intellectual capital of our University into unique solutions that impact the world.

In recent years, Auburn has gained considerable momentum — including record student enrollments, impressive retention and graduation rates, competitive program rankings, transformational research and scholarly advancements, and unprecedented levels of donor support — that continues to inspire our work and fuels our continuing drive for innovation.

With a \$5.4 billion economic contribution to the state, Auburn has more than 300,000 graduates and provides 150-plus degree programs to nearly 30,000 undergraduate and graduate students.

\*Based on official 2020 figures. New data will be updated Fall of 2021

#### **QUICK FACTS FALL 2020\***

30,737

Total Enrollment

4,914

First-Time Freshmen

92%

First-Year Retention Rate

20:1

Student/Faculty Ratio

1,426

Full-time Faculty Members

2,446

Administrative/Professional Employees

1,454

Staff Employees

5,326

Total Full-Time Employees

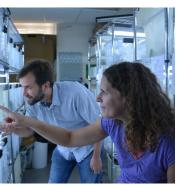
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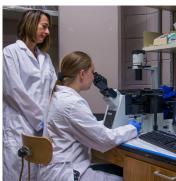
Research University











### **Our Mission**

As a land-grant institution, Auburn University is dedicated to improving the lives of the people of Alabama, the nation, and the world through forward-thinking education, life-enhancing research and scholarship, and selfless service.

#### **Our Vision**

To lead and shape the future of higher education.

## 6 Strategic goals

With a vision to lead and shape the future of higher education, we are guided by a strategic plan that presents a framework for our mission and vision, and articulates six pivotal goals that are critical to Auburn's future.

These goals include:

#### 1. ELEVATED AUBURN EXPERIENCE

Inspire and prepare students for life and careers through delivery of an excellent and supportive experience characterized by distinctive, innovative curricula and engaging student life programs.

#### 2. TRANSFORMATIVE RESEARCH

Elevate research and scholarly impact to address society's critical issues and promote economic development in Alabama and beyond.

#### 3. IMPACTFUL SERVICE

Expand our land-grant and service capabilities to foster greater innovation and engagement that enhances the quality of life and economic development in Alabama and beyond.

#### 4. EXCEPTIONAL AND ENGAGED FACULTY AND STAFF

Invest in our outstanding people to advance the university's mission through recruitment, development, support, recognition, rewards, and retention.

#### 5. STRATEGIC ENROLLMENT

Achieve a robust and diverse enrollment of students while enhancing access, affordability, and academic quality.

#### 6. OPERATIONAL EXCELLENCE

Implement operational efficiency and effectiveness measures that continuously support a culture of high performance at all levels of the university.







- · U.S. News & World Report has ranked Auburn among the top public universities in the U.S., and Kiplinger's named Auburn one of their 100 Best Values in Public Colleges.
- Forbes ranks Auburn as the top university in the state of Alabama for delivering a meaningful return on investment.
- · Named one of Money's Best Colleges for Your Money, Auburn is also the top-ranked university in the state of Alabama.
- · Auburn is the first university in the state to raise \$1 billion in a comprehensive fundraising campaign, and achieved this more than a year earlier than projected.
- · Auburn is listed with Distinction on the President's Higher Education Community Service Honor Roll, honoring dedication to civic engagement, service learning and outreach.
- Auburn has been designated an Innovation and Economic Prosperity University by the Association of Public and Land-Grant Universities, and in 2015 received the organization's Place Award for excellence in community, social and cultural development work.
- The Carnegie Classification of Institutions of Higher Education designated Auburn as an R1 institution in 2018, which is reserved for doctoral universities with the highest levels of research activity.
- According to the National Survey of Student Engagement, Auburn provides a supportive campus environment, and our students report higher satisfaction with their overall academic experience than students at peer institutions.
- In a survey of recent graduates, 97 percent feel their Auburn education has enhanced their opportunity for future advancement.
- · Auburn alumni are satisfied with their college choice, with 92 percent of recent graduates indicating they would choose Auburn again.



## **College of Sciences and Mathematics**

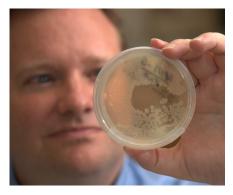
As one of the largest colleges at Auburn University, the College of Sciences and Mathematics (COSAM) believes that enhanced instruction improves student success. Our undergraduate and graduate programs offer abundant opportunities to participate in independent, productive research.

As a college, COSAM faculty and students conduct pioneering research that spans the basic sciences, including biology, chemistry, ecology, mathematics, pre-professional sciences, and physics, through opportunities for applied and clinical research. Our research initiatives are an extension of the university's mission – to produce global solutions through the pursuit of knowledge.

The college's undergraduate students who apply to medical school are accepted at a rate that is approximately 30 percent higher than the national average. Acceptance rates to other professional schools, such as dental and optometry school, are consistently between 80 and 100 percent each year.

## The college's seven strategic goals are organized around Auburn University's strategic plan:

- 1. Elevated Auburn Experience for Our Students
- 2. Transformative Research
- 3. Impactful Service
- 4. Exceptional and Engaged Faculty and Staff
- 5. Strategic Enrollment
- 6. Operational Excellence
- 7. Telling the COSAM Story





#### **Mission**

To provide foundational support for all aspects of the land-grant mission of Auburn University through (1) impactful courses and curricula, (2) forefront research that advances the mathematical, physical, and life sciences, and (3) outreach and service programs that improve the lives of citizens of Alabama, the nation, and the world.

#### Vision

COSAM will achieve this mission through programs that are recognized for their excellence and admired for their innovative design and spirit.

#### **IED Statement**

COSAM is committed to cultivating culturally competent professionals. COSAM's Office of Inclusion, Equity and Diversity provides resources to enhance awareness and appreciation of cultural and individual diversity, promote community, and prepare students to have a global impact in STEM.

#### **About COSAM**

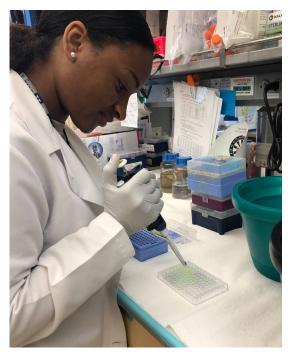
COSAM strives to provide students with a solid academic foundation, and our graduates consistently build on the college's tradition of excellence. COSAM graduates are world-class researchers, committed physicians, veterinarians, industry leaders, and inventors. Our alumni enrich their communities by serving others and continuously striving to improve the quality of life.

Faculty and staff help students prepare through mentoring, advising, innovative instruction, research opportunities and more. With more than 200 faculty and 100 full-time staff, COSAM is committed to enhancing student and faculty success. Through these efforts, we support an educational model that encourages discovery, promotes accessibility to research, encourages innovative faculty, and fosters interactive learning experiences designed to prepare our graduates to become inquisitive, globally-conscious citizens.

## **5 DEPARTMENTS:**

Biological Sciences
Chemistry and Biochemistry
Geosciences
Mathematics and Statistics
Physics

21	5	235
Distinct majors offered	Undergraduate minors	Faculty members
100+ Full-time staff members	15% of first year students in COSAM	719 Fall 2020 first year students
76%  Biomedical science majors	400+  Graduate students	\$18M  Extramural funds generated



#### **COSAM'S STRENGTHS INCLUDE:**

#### An impressive student body

More than 2,000 undergraduate and graduate students and approximately 500 degrees awarded each year.

#### More than 200 ranked faculty

In addition to 36 part-time faculty.

#### A solid research funding base

More than \$18+ million in annual research expenditures in FY 2019.

#### Unique collaborations

The college partners with numerous institutions, industry partners, and outreach programs.

#### Innovative resources

Efforts to support student success include a centralized advising office and peer-led programs.

#### **Dedicated diversity efforts**

To recruit and retain underrepresented students and faculty in science, technology, and mathematics.

## Continued support from industry and donors

Support the college's initiatives, including 17 endowed scholarships, professorships, eminent scholars, and chairs.



## **Exceptional Instruction**

The College of Science and Mathematics is strongly committed to offering robust educational opportunities and resources for undergraduate and graduate students. Our five departments deliver knowledge and expertise on topics ranging from molecular biology to statistics, connecting undergraduate students across campus with postgraduate students and faculty dedicated to student-centered teaching and extraordinary research.

Students are provided with unique opportunities to develop analytical and deductive reasoning skills within each discipline, whether in the classroom, in the lab, abroad, or the field. These efforts are bolstered by an active research faculty that provides students with experimental research opportunities and fosters a thoughtful appreciation for the scientific community.

The college serves all Auburn students by providing high-quality academic programs across a range of disciplines. Several departments offer courses that support the university's General Education requirements and provide laboratory-based instruction in the natural sciences. Moreover, the college offers various courses designed to develop quantifying skills that support majors within various campus programs.

In Spring 2020, **63 percent** of COSAM students graduated with academic honors.



#### **USpring 2020 graduates:**

- 212 Biomedical Sciences
- 62 Biological Sciences
- 38 Chemistry and Biochemistry
- 34 Mathematics and Statistics
- 13 Geosciences
- 5 Physics

#### **Professional School Placement Rates**

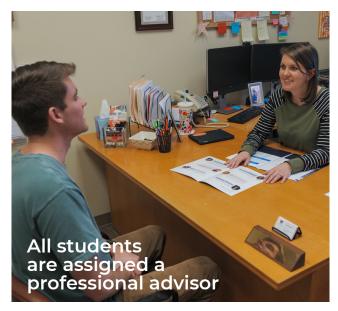
- COSAM students are consistently accepted into professional schools at a rate of more than 30 percentage points higher than the national average.
- · Approximately 98 percent of COSAM graduates in professional school programs reported that they are better prepared than their peers, regardless of where the others went to school.
- Biomedical Sciences applicants who used the Pre-Professional Advisory Committee (PPAC) earned an average MCAT score of **512**, which is in the **85th percentile and 11 points higher** than the national average.

## **Fostering Student Success**

In COSAM, all students are assigned a professional advisor to ensure they get academic information and discuss their options. Students are encouraged to stop by the Office of Student Services for help and support. Moreover, the Office of Student Services holds engaging research fairs to encourage students to learn about research and work in university labs. Students can present their research and win prizes. The Office of Inclusion, Equity and Diversity also offers weekly free tutoring in COSAM subjects.

By engaging in undergraduate research experiences, the college recognizes the importance of students pursuing opportunities that are useful in focusing and refining academic and career decisions, developing problem-solving skills, and applying knowledge learned in the classroom. Working with COSAM faculty, student researchers develop and demonstrate skills such as working in groups, contributing to a research team, meeting deadlines, improving public speaking skills through presentations at local and national professional conferences, and preparing scholarly papers for publications.

The Department of Chemistry and Biochemistry opened a new learning space in Extension Hall in 2020 to provide students in introductory chemistry courses with additional help and foster engagement throughout the semester.









## Transformational Research

Throughout our college, a spirit of collaboration exists across departments because advancements in science and technology require interdisciplinary approaches. In our research labs, undergraduate students work with graduate students and faculty, and their discovery is translated into solutions that impact the public and private sector.

Research in COSAM enriches the foundation for discovery and innovation at Auburn University. In 2020, COSAM generated \$18 million in extramural funds. COSAM research includes collaborations with the National Science Foundation, Department of Energy, NASA, EPSCoR, and major universities and laboratories around the world.

#### COSAM maintains outstanding faculty conducting cutting-edge research



Haruka Wada, Department of Biological Sciences, leads an interdisciplinary team with a four-year, \$2 million NSFfunded project modeling stress resilience, damage and fitness-related consequences.





Ryan Comes, Department of Physics, and Byron Farnum, Department of Chemistry and Biochemistry, received a \$280,000 NSF grant that will allow Auburn to have the best X-ray diffraction instrumentation in the state.



Funded by NSF, Ken Halanych just embarked for a threemonth research voyage to Antarctica with 20 leading scientists.



Christian Goldsmith, Department of Chemistry, received a \$420,000 NSF grant to study oxidative stress that impacts millions of people through cardiovascular, inflammatory and neurological disorders.



An interdisciplinary team of COSAM researchers received the university's first NSF Research Traineeship (NRT) grant. Funding includes \$3 million to train the next generation of scientists and leaders to conduct cutting-edge interdisciplinary and applied research, develop practical communication skills, and prepare them for the workforce. Karen McNeal from the Department of Geosciences is the primary investigator.



In 2018, the Department of Physics partnered with the Samuel Ginn College of Engineering to develop an astronomy app so that students taking an astronomy elective can use virtual reality headsets for an elevated student experience.

## Impactful Outreach

COSAM continues to be a leader in outreach through engaging STEM education for K-12 students. Our faculty spark excitement in diverse fields in sciences and mathematics for future generations through hands-on demonstrations and interactive learning events throughout the year.

The college's Office of Outreach offers STEM-centric programming for K-12 students year-round in more than 280 schools.

In 2019, more than 10,000 students, parents, teachers, and community members participated in events hosted by the Office of Outreach's Outreach offers interactive STEM education each summer during Science Matters and Drone Camp. In 2020, Governor Ivey appointed Mary Lou Ewald, director of COSAM outreach, to represent the newly-formed Alabama STEM Council.











## State-of-the-Art Facilities

#### **Leach Science Center**

Opened in 2019, the new Leach Science Center is a 62,500 square-foot addition to the College's resources designed to foster students and faculty collaboration. The upper-level teaching labs allow complex experiments to be set-up and run over a more extended period of time. The unique rooftop telescope terrace offers students a chance to remotely operate state-of-the-art stations from a third-floor interior classroom.

COSAM researchers have a new 3D printing lab in the Sciences Center Laboratory Building, where faculty from the Department of Chemistry and Biochemistry are printing sensors for research in the labs.

## Museum of Natural History

The Auburn University Museum of Natural History supports the college's efforts to advance biodiversity research while preserving and documenting the region's and planet's biodiversity. The museum leads and promotes activities related to natural history education and outreach for Auburn University and all citizens of Alabama.

# Academic Classroom and Laboratory Complex (ACLC)

In spring 2019, Auburn began construction on a 151,000 square-foot academic classroom and laboratory complex (ACLC). The building represents the university's strategic investment in elevating STEM teaching and learning, and increases the college's existing classroom and laboratory spaces.

#### Scheduled for completion summer 2021, the ACLC will include:

- · Six Engaged Active Student Learning (EASL) classrooms and laboratories.
- · Five lecture halls
- · 20 adaptable classrooms and laboratories
- · 2,000 student seating capacity

#### Donald E. Davis Arboretum

For more than half of a century, the Davis Arboretum has remained a conservation and education source through its more than 13.5 acres of natural woods. Located on Auburn's campus and open to the public, the Arboretum includes more than two miles of walking trails, and is the only garden in the entire SEC to have two nationally-accredited collections of Oaks and Azaleas. Additionally, the Arboretum breeds rare and endangered plants, and is used by the college to conduct outreach focused on educating the community about native plants and stormwater management.







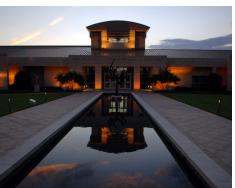












## **Our Community**

Auburn is a small, friendly university town in the rolling hills of east-central Alabama, with a population of approximately 76,000. Conveniently located along Interstate 85, Auburn is less than 60 miles northeast of Alabama's capital city of Montgomery, about 30 miles west of Columbus, Georgia and 100 miles southwest of Atlanta. The pristine, sandy-white beaches of Alabama's Gulf Shores can be reached in less than four hours. The university has a special relationship with the City of Auburn, including partnerships such as the Yarbrough Tennis Center and the Auburn Research Park. The famed Toomer's Corner marks the spot where the city and university intersect and is a destination for the city and university communities to gather in celebration.

Auburn residents overwhelmingly rate the city as a great place to live, work and raise children. *Forbes* has consistently ranked Auburn on its lists for Best Places to Retire and Best Small Places for Business and Careers. In 2018, Auburn was listed among the Top 100 Best Places to Live in the U.S. by *Livability*. Auburn's public schools are regularly ranked among the best in the state and nation.

Residents have access to a number of city parks and recreational programs, as well as Chewacla State Park's 696 scenic acres, including a 26-acre lake, waterfall and trails. In summer 2019, the Jay and Susie Gogue Performing Arts Center opened as a cultural destination offering world-class performances. The Gogue Center and Jule Collins Smith Museum offer a vibrant arts district for the campus, community, and region.

Opelika, Auburn's sister city, is full of small-town charm, rich in heritage and offers a high quality of life for its nearly 30,000 residents. Opelika is the county seat for Lee County, the eighth most populous county in Alabama and the home of Auburn University. The Auburn-Opelika metro area has approximately 162,000 residents.

Opelika is also home to the Opelika SportsPlex and Aquatics Center, Opelika Performing Arts Center, East Alabama Medical Center, Southern Union State Community College, (one of 27 institutions in the Alabama Community College System) and the Robert Trent Jones Golf Trail at Grand National.

# The Position

As dean, the individual selected will be responsible for leading the college in pursuit of the college and university's shared values including scholarship, instruction, outreach, and diversity. This individual will represent all departments, and centers within the college by advancing all programs inside and outside of the university. The dean will support and advocate for all students, faculty, and staff while ensuring that all constituents both enhance and improve their knowledge to better serve the college and university.

### **DEAN, COLLEGE OF SCIENCES & MATHEMATICS**

Auburn University invites nominations and applications for the position of Dean, College of Sciences & Mathematics. The dean serves as the College's chief academic and administrative officer and provides vision and leadership that enhances its tradition of excellence in teaching, research, service, outreach, and diversity. The dean reports directly to the Provost and Senior Vice President for Academic Affairs and will be located in Auburn, Alabama.

Auburn University is one of the nation's premier public land-grant institutions, and in 2021, it was ranked 40th among public universities by U.S. News and World Report. Auburn, an R1 research university, maintains high levels of research activity and high standards for teaching excellence, offering bachelor's, master's, educational specialist, and doctor's degrees in agriculture and engineering, the professions, and the arts and sciences. Its 2020-2021 enrollment of 30,737 students includes 24,505 undergraduates and 6,263 graduate and professional students. Organized into 12 academic colleges and schools, Auburn's 1,426 faculty members offer more than 200 educational programs. The university is nationally recognized for its commitment to academic excellence, positive work environment, student engagement, and beautiful campus.

Auburn residents enjoy a thriving community, recognized as one of the "best small towns in America," with a moderate climate and easy access to major cities or beach and recreational mountain facilities. Situated along the rapidly developing I-85 corridor between Atlanta, Georgia, and Montgomery, Alabama, the combined Auburn-Opelika, Alabama-Columbus, Georgia statistical area has a population of over 500,000, with excellent public-school systems, outstanding recreation areas, and an exceptional regional medical center.

The College of Sciences & Mathematics offers degrees across five departments, including Biological Sciences, Chemistry and Biochemistry, Geosciences, Mathematics and Statistics, and Physics. The College of Sciences & Mathematics has approximately 2,700 students, including 2,300 undergraduate and 400 graduate students and 160 faculty. In addition, the College is home to research clusters in Biophysics and Discipline-Based Education Research and averages more than \$18 million in research funding annually, including multiple NSF CAREER Awards each of the last several years.

The dean will lead the College in support of the university's shared values, including scholarship, instruction, outreach, and diversity. This individual will represent all academic units within the College and advance all programs inside and outside the university. In addition, the dean must support and advocate for all students, faculty, and staff while ensuring that all constituents both enhance and improve their knowledge to serve the College and university better. For more information on the position, click here.

Candidates must possess an earned doctorate, or commensurate credential, and academic and/or professional accomplishments that are sufficient to merit appointment with tenure at the rank of professor. The successful candidate will possess a demonstrated capacity to lead a growing organization, build consensus among stakeholders, foster increased research and scholarship, promote student advancement, enhance corporate and alumni relations, assertively fundraise, and effectively represent the College to outside constituencies. Experience in administration, fiscal management, faculty/staff development, and fundraising is highly desired. Knowledge of state and national accreditation standards is required. Other qualifications include collaborative leadership, shared decision-making, demonstrated effectiveness in sustaining collegial relationships with faculty staff, students, and administrators.

A successful track record in budget development and strategic planning and practical ability to balance advocacy for the College with the university community's needs is essential to success in this position. In addition, the candidate selected for this position must meet eligibility requirements to work in the United States when the appointment is scheduled to begin and continue working legally for the proposed term of employment.

Salary and benefits will be commensurate with education and experience.

While applications and nominations will be accepted until the position is filled, interested parties are encouraged to submit their curriculum vitae. To receive optimum consideration, submit a vitae and letter of interest to the address below by November 15, 2021.

Electronic submissions of all nominations and applications are encouraged. In addition, those with interest in this position should submit a curriculum vitae and a letter of application indicating experience as it relates to the position to:

Search Committee – Dean, College of Sciences & Mathematics Attention: Director, Breckenridge Partners

Email: mek@breckenridgepartners.com