# APPLIED RESEARCH INSTITUTE

**Executive Director Position Profile** 



# The Opportunity

EXECUTIVE DIRECTOR, APPLIED RESEARCH INSTITUTE

Auburn University invites nominations and applications for the position of Executive Director,
Auburn University Applied Research Institute.
As the inaugural Executive Director of the Institute, this individual will be responsible for providing oversight and leadership for this newly created Institute headquartered in Huntsville,
Alabama. Reporting to the Senior Vice President for Research and Economic Development, the Executive Director will work very closely with leadership in the College of Engineering, College of Science and Mathematics and College of Veterinary Medicine, as well as other University leadership and the City of Huntsville.

The Executive Director will be the primary voice for Auburn University in the Huntsville community and in other related sites with significant defense and aerospace efforts. The Executive Director will conduct high level interactions with funding sources in defense, aerospace and biotech sectors; connect funding opportunities to the Institute and to research professionals on Auburn's main campus; provide leadership to ensure appropriate research staff are available for projects within the Institute; and be responsible for local oversight for operations of the Auburn University Research and Innovation Campus.



# **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 more than 30,000 undergraduate and graduate students.

**Quick Facts\*** 

33,015

Total Enrollment

5,935

First-Time Freshmen

93%

First-Year Retention Rate

20:1

Student/Faculty Ratio

1,435

Full-time Faculty Members

2,619

Administrative/Professional Employees

1,498

Staff Employees

5,552

Total Full-Time Employees

**R1** 

Research University

\$349 Million

Research Expenditures

\*Based on latest figures.





# **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:

### 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.

#### Transformative Research

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

### • 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.

# 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.

# Strategic Enrollment

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

# 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 more than \$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.



# SAMUEL GINN COLLEGE OF ENGINEERING

Auburn Engineering has a long and rich tradition of excellence in engineering education. The Samuel Ginn College of Engineering is the highest ranked engineering program in the state, and consistently ranks among the top institutions in the country. The college produces more than one third of Alabama's engineering graduates and is a top 25 producer of African American engineering graduates in the nation.

As a college, Auburn Engineering faculty and students conduct pioneering research with a focus on five strategic research areas: advanced manufacturing and materials; cybersecurity and intelligent systems; energy and environment; infrastructure and transportation; and biomedical and health systems engineering. The college's research initiatives are an extension of the university's mission – to produce global solutions through the pursuit of knowledge.

### 10 Departments/Programs\*:

Aerospace Engineering

Biosystems Engineering

Chemical Engineering

Civil and Environmental Engineering

Computer Science and Software Engineering

**Electrical and Computer Engineering** 

Industrial and Systems Engineering

Materials Engineering\*

Mechanical Engineering

#### Mission

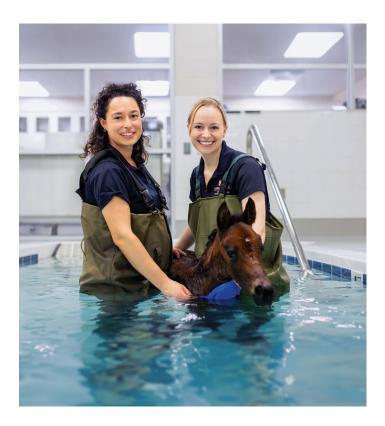
The Samuel Ginn College of Engineering embraces its land-grant values in order to transform lives and enhance society through impactful engineering education and research. The Samuel Ginn College of Engineering will:

- Prepare students, through high quality internationally recognized instructional programs, to practice engineering professionally and ethically in a competitive global environment.
- Expand scientific and engineering knowledge through innovative research and creative partnerships involving academia, industry and government.
- Provide programs to assist individuals and organizations to find solutions to engineering problems through education, consulting and practical research.

#### Vision

The Samuel Ginn College of Engineering will be an innovative and engaged community of faculty, staff, and students who exemplify excellence through an exceptional student-centered engineering experience and transformational research that improves quality of life and fosters economic growth. The Samuel Ginn College of Engineering will be:

- The best student-centered engineering experience in America.
- A leader in research and service that improves the quality of life and fosters economic growth.
- A community of faculty, staff, and students that exemplifies excellence and innovation.



# COLLEGE OF VETERINARY MEDICINE

Auburn University's College of Veterinary Medicine has earned its international reputation for quality education, research and clinical service through the efforts of many generations of dedicated faculty, staff, students and alumni. Since 1892, Auburn has influenced the character and scope of veterinary medicine on a global scale. As the country's seventholdest veterinary school and the first in the South, Auburn is one of the nation's premiere institutions for teaching, research and advanced diagnostic services for animals of all species. At Auburn, students have the opportunity to work in a welcoming, collaborative, intellectually-stimulating environment with more than 150 nationally and internationally recognized faculty, who are board-certified specialists in disciplines ranging from infectious diseases to genomics to surgery.

#### **Our Mission**

The mission of the college is to prepare individuals for careers of excellence in veterinary medicine, including private and public practice, industrial medicine, academics and research. The college provides programs of instruction, research, outreach and service that are in the best interests of the citizens of the state of Alabama, the region, the nation and the world.

#### **Our Vision**

The college nationally and internationally recognized as a preeminent comprehensive college of veterinary medicine, a national resource in veterinary medical education, a preferred provider of veterinary medical care in the Southeast and the home of a scholarly research enterprise that drives discovery and innovation. Successful pursuit of the college's mission will advance the health of animals, people and the environment. The college will promote and advance Auburn's reputation through a culture of accountability, efficiency, innovation and a commitment to quality in every aspect of its mission.

#### Research

Our research is grounded in One Health, a collaborative, multisectoral and transdisciplinary approach — working at the local, regional, national, and global levels — with the goal of achieving optimal health outcomes recognizing the interconnection between people, animals, plants and their shared environment. A dedication to biomedicine and One Health initiatives helps us consult, collaborate and connect to breed healthier animals that won't pass along diseases, make food safer, develop vaccines and protect the environment.

Our research enterprise is aligned with the training of Biomedical Sciences graduate students through emphasis areas such as epidemiology, genomics, genetic diseases and detection canine science to capitalize on cross-disciplinary training opportunities with the faculty mentor's research.

#### **Students**

The Auburn University College of Veterinary Medicine is fully accredited by the American Veterinary Medical Association Council on Education. To practice clinical veterinary medicine in the United States, students must pass the North American Veterinary Licensing Examination (NAVLE). Auburn graduates far exceed the accrediting expectation of at least an 80% pass rate on the NAVLE.



# COLLEGE OF SCIENCE AND MATHEMATICS

As a leading college at Auburn University, the College of Sciences and Mathematics (COSAM) includes five departments:

- Biological Sciences
- Chemistry and Biochemistry
- Geosciences
- Mathematics and Statistics
- Physics

Auburn University's Arboretum, Natural History Museum and the Leach Science Center are also housed within the college.

#### 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.

COSAM is committed to developing and maintaining world-class research programs to train the next generation of scientists and mathematicians. Our faculty and staff bring more than \$11 million per year in new external competitive funding to support the college's research, education and outreach activities. COSAM's research portfolio includes highly respected work in theoretical and experimental physics, advanced mathematics, ecology and biodiversity, computational and experimental chemistry and biochemistry, and applied geosciences. COSAM is also leading new multidepartmental research efforts including biophysics, materials science and discipline-based education research.

#### At-A-Glance

- 2,000 undergraduate students
- 400 graduate students
- 200+ faculty members
- 100+ staff
- 17 endowed scholarships, professorships, eminent scholars and chairs

#### **COSAM Students**

COSAM students continually receive accolades and awards. COSAM students have been recognized as USA Today Academic All Stars, Gates and Goldwater Scholars and many more.

### TRANSFORMATIONAL RESEARCH

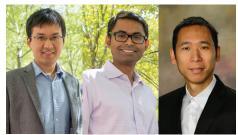
Auburn University is committing unprecedented levels of support for research across campus, bolstering programs long at the forefront of improving quality of life around the world and fostering economic competitiveness for our state, region and nation.

In FY23, the university totaled \$349 million in research expenditures and generated \$301 million in extramural funding through collaborations with funding agencies including the National Science Foundation, Department of Energy, NASA, Department of Defense, the National Institute of Health, the National Institutes of Standards and Technology, United States Department of Agriculture as well as major universities and laboratories around the world.

# Auburn University maintains outstanding faculty conducting cutting-edge, impactful research:



The Interdisciplinary Center for Advanced Manufacturing Systems at Auburn University is the recipient of a \$7.2 million award from the Department of Defense's Office of Industrial Policy's Industrial Base Analysis and Sustainment Program to encourage small and mediumsized manufacturers to adopt the advanced technologies associated with Industry 4.0, or smart manufacturing.



Over the last year, the National Science Foundation awarded three CAREER awards to Auburn Engineering assistant professors Xiaowen Gong, Vrishank Raghav and Anh Nguyen for their work in federated learning, pulsatile flow and artificial intelligence, respectively.



The U.S. Army recently awarded Auburn's National Center for Additive Manufacturing Excellence another \$4.5 million toward qualification research necessary to further additive manufacturing adoption in Army operations, specifically those conducted by the Army's Combat Capabilities Development Command Ground Vehicle Systems Center.



Mark Carpenter, professor of mathematics and statistics within the College of Sciences and Mathematics, was recently awarded a \$610,000 Department of Defense contract, for AI/ML modeling and support.



The Auburn University College of Veterinary Medicine was recently awarded a five-year, \$24 million contract by the U.S. Department of Homeland Security Science and Technology Directorate to advance detection canine sciences and enhance operational threat detection capabilities.



Drawing extensively upon the expertise from Auburn's National Center for Additive Manufacturing Excellence and the Interdisciplinary Center for Advanced Manufacturing Systems, the Auburn University Applied Research Institute is overseeing a \$50 million project aimed at boosting U.S. Army modernization efforts through advanced manufacturing.



# IMPACTFUL OUTREACH

Auburn University's commitment to outreach is second to none. From redefining innovation in elementary and secondary educational engagement to revitalizing underserved communities with transformative research initiatives, Auburn's impact extends well beyond our campus. Whether it's inspiring future scientists through STEM events, igniting a passion for reading through literacy programs or providing internationally renowned sustainable rural housing solutions, our strategic partnerships and belief in the human touch continue to expand this vital component of the university's mission.















# AUBURN UNIVERSITY RESEARCH AND INNOVATION CAMPUS

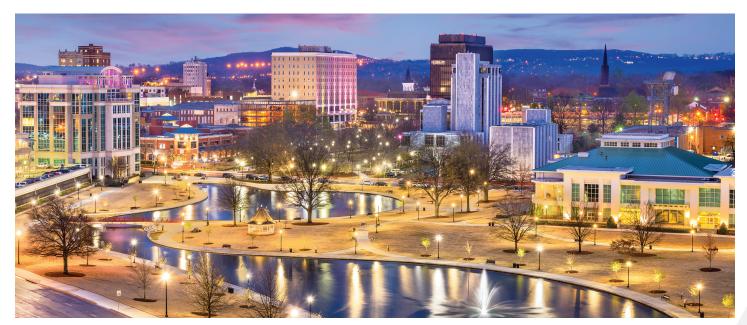
The Auburn University Research and Innovation Campus in Huntsville, Alabama, expanded Auburn's presence in the fastest-growing tech hub in the country, establishing a permanent foundation from which Auburn leverages its regional reputation and thriving public-private partnerships into unprecedented national prestige and influence.

Designed to foster a new era of interagency and interdisciplinary collaboration necessary to secure the nation into the next century, the facility serves as a state-of-the-art research space, collaboration engine and conference center that focuses Auburn's expertise and next-generation resources on the defense, aerospace and law enforcement agencies that call Redstone Arsenal home.



# **HUNTSVILLE/MADISON COUNTY, ALABAMA**

Military, space, telecommunications, biotechnology, diversified manufacturing and a variety of emerging specialties provide challenging work in delightful surroundings. The area enjoys a favorable cost of living and quality of life. Mountains, lakes, woodlands and the Tennessee River accommodate numerous recreational activities. A temperate climate enhances the season for outdoor sports, including world-class golf, hiking, biking, and fishing. Major concerts, Broadway and symphony performances, extensive permanent collections and traveling exhibitions contribute to a wonderful way of life.







# EXECUTIVE DIRECTOR, AUBURN UNIVERSITY APPLIED RESEARCH INSTITUTE

Auburn University invites nominations and applications for the position of Executive Director, Auburn University Applied Research Institute to be located at the Auburn University Research and Innovation Campus in Huntsville, Alabama. As the inaugural Executive Director, this individual will be responsible for providing oversight and leadership for a multi-disciplinary applied research program to serve the defense, aerospace, and biotech sectors. This will include working very closely with the Auburn University Senior Vice President for Research and Economic Development, the Dean of Engineering and other college deans. The Executive Director will be the primary voice for Auburn University in the Huntsville community and in other related sites with significant defense and aerospace efforts. The Executive Director will conduct high level interactions with funding sources in defense, aerospace and biotech sectors; connect funding opportunities to the Institute and to research professionals on Auburn's main campus; provide leadership to ensure appropriate research staff are available for projects within the Institute; and be responsible for local oversight for operations of the Auburn University Research and Innovation Campus. Ongoing research programs in the Institute includes digital engineering, advanced manufacturing, design for additive manufacturing, cyber and critical infrastructure security, systems engineering, space and missile defense systems. The Executive Director will be expected to provide the following essential functions:

STRATEGIC LEADERSHIP – Develops long-term vision, strategies, and tactics for the Applied Research Institute, ensuring that the Institute gains a prominent role in applied research and innovation among the defense, aerospace and biotech sectors. The Executive Director will work closely with leadership on Auburn's main campus to maintain alignment and connections with overall university research priorities.

RESEARCH MANAGEMENT – Works closely with the Institute personnel to ensure the Institute goals are achieved within budget and time constraints and projects are carried out with high quality.

FUNDING AND BUDGETING – Works closely with leadership on the Auburn University main campus to secure necessary resources for basic operational support of the Institute. Focuses significant efforts on engaging with external funding agencies and identifying research opportunities that can be pursued by the Institute or interdisciplinary teams of researchers on Auburn's main campus. Manages the Institute's budget to effectively allocate and utilize resources.

TEAM BUILDING AND MANAGEMENT – Works with the Director of Corporate Relations; the Director of Applied Research; and the Director of Business Operations, Community Relations, & Special Events to recruit, mentor, and oversee a team of professionals to achieve the goals of the Applied Research Institute. Fosters a collaborative environment and promotes continuous growth.

COMMUNITY ENGAGEMENT – Engages with community, industry, and other stakeholders to ensure the Institute's contributions are aligned with their needs and priorities. Facilitates engagement of Auburn University main campus faculty and students with Institute activities and the Huntsville community at large.

REPORTING - Provides regular reports to senior Auburn University leaders and stakeholders about the Institute's progress, achievements, challenges, and future plans. Conducts activities with input from an advisory council for the Institute. May perform other duties as assigned by supervisors.

The successful candidate must manage the direction, coordination, continual growth and assessment of the campus and work with the Huntsville region and Redstone Arsenal on issues and various opportunities related to the Institute.

The Executive Director will report to the Senior Vice President for Research and Economic Development and the Dean of the College of Engineering and be housed at the Auburn University Research and Innovation Campus in Huntsville but will be expected to maintain a significant presence at the main Auburn University campus in Auburn, Alabama.

Auburn University is an R1 institution and one of the nation's premier public land-grant institutions. In 2023, Auburn was ranked 42nd among public universities by U.S. News & World Report. Auburn maintains high levels of research activity and high standards for teaching excellence, offering bachelor's, master's, educational specialist and doctorate degrees in agriculture and engineering, the professions, and the arts and sciences. Its 2023 enrollment of 33,015 students includes 25,379 undergraduates and 6,385 graduate and professional students. Organized into 12 academic colleges and schools, Auburn's 1,435 faculty members offer more than 150 plus educational programs. In FY23, the university reported total research expenditures of \$349 million. The university is nationally recognized for its commitment to academic excellence, its positive work environment, student engagement and beautiful campus.

The city of Huntsville has been named the second-best place to live in the United States by U.S. News & World Report's 2023-2024 rankings. The city's thriving job market, low cost of living and high quality of life were cited as the primary reasons for its top ranking. In the past ten years, Huntsville has watched its star steadily rise to claim top tier placements in numerous national standings ranging from affordability to jobs, quality of life, retirement, education, recreation and more. According to U.S. News & World Report's data analysis, Huntsville's diverse economy, excellent educational institutions, and vibrant community were acknowledged as its significant assets. The city's reputation as a leading center for technological innovation and aerospace industries has created its ranking and the most populous city in the state of Alabama

#### The successful candidate will have the following qualifications:

- Demonstrated record of high-level leadership of a complex research organization in the defense, aerospace or biotech sector.
- Demonstrated record of working with federal and state agencies and the private sector and securing extramural funding from these groups in support of applied research efforts.
- Excellent oral and written communication skills.
- Excellent skills in team building, creating alliances, and leading organizations.
- Master's degree in engineering or science field is desired, plus a minimum of 15 years of experience in applied research or development in defense or aerospace sectors. A PhD would be an asset.
- A Record of research scholarship through scholarly publications and presentations to the scientific and technical communities and/or a registration as a professional engineer might be helpful.
- Ability to obtain a DOD security clearance is required.

The candidate selected for this position must be able to meet eligibility requirements to work in the United States at the appointed time and continue working legally for the proposed term of employment.

Electronic submissions of all nominations and applications are encouraged. Those with interest in this position should submit a resume indicating experience as it relates to the position description to:

Search Committee – Executive Director, Auburn University Innovation & Applied Research Institute

Email: mek@breckenridgepartners.com

Candidate materials will be reviewed on an ongoing basis and until a successful candidate has been appointed.

Auburn University is an EEO/Vet/Disability Employer.







