



OVERVIEW

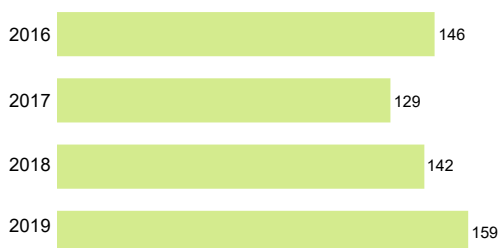
Alabama's multifaceted biosciences industry generates \$7.3 billion in economic activity annually while supporting 780 companies and nearly 48,000 direct and indirect jobs across the state, according to an analysis by researchers at the University of Alabama.

Alabama's biosciences sector is a robust combination of research institutions, labs, medical devices, innovative startups, pharmaceutical manufacturers, and more.



BIO-INDUSTRY INNOVATION

**Bioscience-Related U.S. Patents
2016-2019**

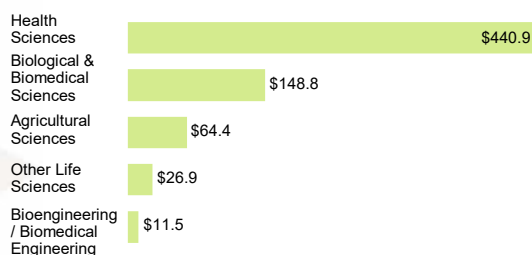


Source: Bio.org, Alabama: Bioscience Economy: Propelling Life-Saving Treatments, Supporting State & Local Communities, State Assessments
[https://bioalabama.com/resources/PDFs/AL_BIO2020_state_profile%20\(1\).pdf](https://bioalabama.com/resources/PDFs/AL_BIO2020_state_profile%20(1).pdf)

**Bioscience-Related U.S. Patents
by Segment 2016-2019**

Agricultural Chemicals	25
Biochemistry	56
Bioinformatics & Health IT	13
Biological Sampling & Analysis	21
Drugs & Pharmaceuticals	202
Genetics	14
Medical & Surgical Devices	213
Microbiology & Enzymes	25
Novel Plant Variants	7

**Bioscience Academic R&D Expenditures
\$ Millions FY 2018**



WIN with Alabama

**BIOSCIENCES
GENERATED
\$7.3 BILLION
IN ECONOMIC
ACTIVITY**

**SUPPORTING
780
COMPANIES**

**48,000
DIRECT AND
INDIRECT JOBS
ACROSS THE
STATE**

Source: BioAlabama

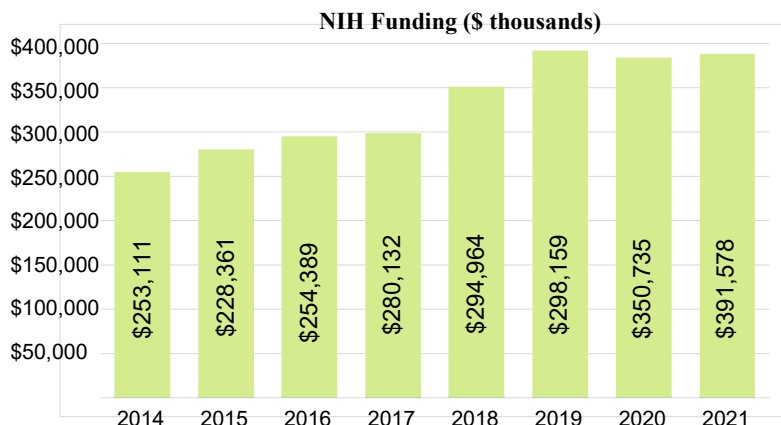


NATIONAL INSTITUTES OF HEALTH FUNDING

Alabama's Top NIH-funded Research Institutions

- University of Alabama at Birmingham
- HudsonAlpha Institute of Biotechnology
- Southern Research Institute
- University of South Alabama
- University of Alabama
- Auburn University
- Tuskegee University

Source: National Institutes of Health, NIH Awards by Location & Organization - U.S. FY2021



ASSETS SUPPORTING BIO-INDUSTRY



BioAlabama is a nonprofit that assists startups in a number of ways, including matching them with mentors and helping them identify sources of capital, from grants to early- and growth-stage equity funding.



The 270,000-square-foot Institute is a world-class genomic research center that is continually working to improve human health and well-being, while facilitating the entrepreneurial growth of scientific discoveries in collaboration with over 30 diverse associate companies located on site.



Innovation Depot is a 140,000 sq. ft. incubation facility and program that focuses on the development of emerging biotechnology, life sciences, information technology, and service business. The Center has 20,000 square feet of wet laboratory space and a shared equipment lab with an autoclave, centrifuge, low temp freezer and micro-optics.



Southern Research (SR) is an independent, 501(c)(3) nonprofit, scientific research organization pursuing entrepreneurial and collaborative initiatives to develop and maintain a pipeline of intellectual property and innovative technologies that positively impact real-world problems.

Southern Research has Developed
7 FDA Approved Cancer Drugs.



TALENT PRODUCER—GREAT UNIVERSITIES



THE UNIVERSITY OF ALABAMA AT BIRMINGHAM

University of Alabama at
Birmingham Bill L. Harbert
Institute for Innovation and
Entrepreneurship actively seeks
national and international companies
that wish to develop and
commercialize UAB's innovations.



THE UNIVERSITY OF ALABAMA IN HUNTSVILLE

University of Alabama in Huntsville
Office of Technology
Commercialization acts as a liaison
between university innovators and
industry investors.



AUBURN

UNIVERSITY

Auburn University Office of
Innovation Advancement &
Commercialization serves as the link
between the commercial marketplace
and Auburn University faculty.



University of South Alabama's
Office of Commercialization and
Industry Collaboration assists
faculty in turning their inventions into
marketable products.

Alabama has five research universities across the state that have a strong bioscience
-related focus.



Source: Classified R1 and R2 universities according
to Carnegie Classifications of Institutions
2021 Update Public File, [https://
carnegieclassifications.acenet.edu/downloads.php](https://carnegieclassifications.acenet.edu/downloads.php)



THE UNIVERSITY OF ALABAMA

University of Alabama Office for Innovation &
Commercialization is responsible for
commercializing the innovations generated by UA
faculty, staff and students, through licenses to
industry or via the formation of spin-off enterprises.



COMPANY HIGHLIGHTS

Throughout Alabama are concentrations of large and small, new and well-established bioscience and related companies.



eurofins



Discovery BioMed, recently acquired by **Eurofins**, specializes in custom human cell engineering and human cell-based drug discovery. The company supports the commercial and academic drug discovery community by integrating human cell research platforms at any and all points within the drug discovery critical path.

Pharmavite is one of the nation's largest manufacturers of high quality vitamins, minerals and other dietary supplements. In 2013, after conducting an extensive site search in the U.S., **Pharmavite**, the maker of Nature Made vitamins and supplements, opened a \$76 million manufacturing facility in Opelika.



With international headquarters in Birmingham, **BioHorizons** is one of the fastest-growing global implant and biologics companies in the dental implant industry. Its portfolio includes dental implants, instruments and biologics products.

BioHorizons is a medical technology company focused on dental implants, as well as hard and soft tissue regeneration products, for the replacement of missing teeth. **BioHorizons** has products in 90 markets around the globe.



Evonik Industries is a leader in bioresorbable polymer and injectable drug delivery technologies. In 2014, **Evonik** opened its first U.S. Innovation Center in Birmingham. The Center is focused on medical devices and technology.

Evonik specializes in drug delivery technologies and manufacturing for pharmaceutical, biotechnology, and medical device companies and employs 800 people in Alabama.



Located in the HudsonAlpha, Huntsville **iCubate** is a privately-held molecular diagnostic company. The integrated iCubate System enables extraction, multiplexed amplification and detection automatically in a closed and disposable cassette. **iCubate** provides a sample-in answer-out diagnostic test with high multiplexing ARM-PCR technology in a user friendly, flexible platform. Other **iCubate** products are available worldwide for non-clinical, research-use only in the areas of health, agriculture, and food safety.



Baxter Incorporated makes hemodialysis dialyzers, and high-tech blood filtering product used in kidney dialysis treatment. In 2017, the facility, located in Opelika, completed a \$270 million expansion project that more than doubled the size of its production facility to increase production of dialyzers to serve patients with end-stage renal disease.



GeneCapture in Huntsville was awarded a \$1 million, two-year Small Business Technology Transfer (STTR) contract to develop a portable disease detector. This is a "gene signature matching platform" that screens for hundreds of pathogens in less than one hour.



Serina Therapeutics in Huntsville developed a proprietary polymer technology designed to optimize drug delivery to maximize compliance, therapeutic outcomes, safety and quality of life for patients.



Cummings Research Park is home to the 2nd largest research park in the U.S.



University of South Alabama Technology Park, located in Mobile, serves to facilitate interaction between the University and the high-tech and biomedical businesses.



Auburn Research Park is 170 acre mixed-use campus incorporating high technology companies, university research facilities, business support centers, and technology transfer capabilities