

IOWA'S BIOSCIENCE INDUSTRY



OUTPACING THE NATION IN BIOSCIENCE INDUSTRIES

Iowa is capitalizing on its success in agriculture and its research capabilities in plant, animal and human health to build a thriving biosciences industry in the state. From startup companies to globally respected industry leaders in research and development, Iowa's bioscience enterprises are discovering innovations to spur future economic growth.

In the last decade, Iowa made significant progress in building the industry, with employment growing 8% between 2016 and 2021 (Biotechnology Innovation Organization).

A critical mass of bioscience companies and research institutions in Iowa are pushing industry growth in the state. Today, roughly 1,805 entities are working to commercialize Iowa's bioscience innovations. Though well-known as a global leader in agricultural biosciences, Iowa has a competitive advantage in medical innovations; precision and digital agriculture; vaccines, diagnostics and immunotherapeutics; and biobased products because of the state's strong bioscience infrastructure and resources.

COMPANIES AT WORK IN IOWA



IOWA'S WINNING BIOSCIENCE BUSINESS CLIMATE

State government, private industry and world-class research help bioscience firms compete globally and turn breakthrough research discoveries into startup businesses through use of innovative strategies. Bioscience companies particularly benefit from Iowa's abundant access to raw materials and strong transportation infrastructure.

Additionally, companies operating in Iowa benefit from a business-friendly state government, business-minded tax incentives and a skilled and productive workforce within a right-to-work state. With one of the lowest costs of doing business in the country (CNBC, 2021), Iowa remains an attractive location for both new and existing bioscience firms. The state continues to support the biosciences industry via programs administered by the Iowa Economic Development Authority.



IOWA'S UNIVERSITIES LEAD IN BIOSCIENCE RESEARCH AND DEVELOPMENT

Iowa is home to three public universities – the University of Iowa, Iowa State University and the University of Northern Iowa – that are world-renowned for dynamic research capabilities in plant, animal and human biosciences. The universities leverage over \$1 billion in external funding, including research grants, on an annual basis.

IOWA ECONOMIC DEVELOPMENT AUTHORITY

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Exciting human and animal research advancements are being made at university research facilities across the state, including:

- The University of Iowa's Carver College of Medicine is comprised of 11 buildings totaling approximately 1.4 million gross square feet (921,000 net square feet) of usable space devoted to research, education, administration and events. Researchers in the college's over 280 laboratories are served by state-of-the-art core research and support facilities. The college's research enterprise garnered over \$295 million in external funding and is ranked 21st among public institutions by *U.S. News & World Report*.
- The University of Iowa Pharmaceuticals (UIP) is a Food and Drug Administration-registered pharmaceutical manufacturing facility. UIP provides contract pharmaceutical services, including pre-formulation studies, formulation development (including lyophilization cycle development), clinical supply, manufacturing, small scale commercial manufacturing, analytical method development and validation, routine quality control analysis, stability studies, and active pharmaceutical ingredient and excipient release testing to clients around the world.
- Iowa State University's College of Veterinary Medicine develops vaccines to control and eradicate animal diseases, provides a state-of-the-art teaching hospital, delivers pre-eminent, comprehensive programs in swine, dairy, beef and small ruminant production animal medicine and welfare. The college also conducts veterinary services that aim to protect animal and human health by providing effective diagnostic testing to tens of thousands of clients each year. The college is a cornerstone of one of the world's largest concentrations of animal health professionals, including the USDA's National Animal Disease Center, the National Veterinary Services Laboratories and the Center for Veterinary Biologics in Ames.

MORE PROOF IOWA IS THE PLACE FOR BUSINESS

- Iowa's pro-business government works to help bioscience businesses grow through a variety of programs offering direct financial assistance, tax credit programs – including an R&D tax credit – and bioscience job training funds.
- Iowa's skilled, well-educated and adaptable workforce provides higher-quality output and lower operational costs.
- In 2022, Iowa exported \$468 million in pharmaceutical products to 75 countries. Top export markets include the Netherlands (\$83.6 million), Canada (\$49.8 million), Germany (\$41.1 million), Mexico (\$33.7 million) and China (\$33.3 million). (WISERTrade, 2022)
- In 2021, Iowa's bioscience industry employed 26,469 across 1,805 individual business establishments. (BIO, 2021)
- Iowa has the third-highest number of animal scientists, with 777% more than the national average. (Bureau of Labor Statistics, 2022)
- Iowa has the tenth-highest concentration of food scientists in the country, with 72% more than the national average. (Bureau of Labor Statistics, 2022)
- Iowa has the highest concentration of employees in vaccine and immunotherapy biological manufacturing in the U.S. (Bureau of Labor Statistics, 2022)
- Iowa has the second-highest college graduation rate. (*U.S. News & World Report*, 2023)
- Iowa offers a Renewable Chemical Production Tax Credit to incentivize the production of high-value building block chemicals.

To learn more, contact the Iowa Economic Development Authority at opportunities@iowaeda.com or call +1.515.348.6200.