

Ohio Bioscience Growth Report 2018

On behalf of BioOhio, our Board of Trustees, and our members, thank you for your support and interest in Ohio's bioscience industry. Founded in 1987, 2018 marks BioOhio's 31st anniversary as a reliable and objective source of information concerning the successful growth of bioscience in Ohio.

Ohio's bioscience industry is strong and continues to grow. With receptive markets and supportive infrastructure, the entrepreneurial spirit thrives right here in the Buckeye State. Today in Ohio, at least 3,336 bioscience-related organizations are manufacturing products, providing essential services, or researching the next breakthrough at 4,165 facilities around the state. This is an increase of 275 (7%) locations in the last five years and 961 (37%) since 2001.

Bioscience firms in Ohio employ over 78,800 workers at companies ranging from the large and well known such as Abbott, Battelle, Cardinal Health, Ethicon (a Johnson & Johnson company), Midmark, and STERIS, to young and growing companies including Abeona Therapeutics, Enable Injections, and Myonex Therapeutics. This figure is the highest on record and represents an increase of 10,480 (15%) since 2001.

Ohio's bioscience industry generated \$5.83 billion of payroll in 2016, a 25% (\$1.2B) increase relative to 2001. Bioscience sector jobs in Ohio paid an average wage of \$73,897, encompassing a wide variety of occupations. In comparison, the average wage for all industries in Ohio in 2016 was \$46,491.

The bioscience industry's economic impact is felt throughout the state, with bioscience-related companies found in 81 of 88 Ohio counties. Anchored by Cleveland and Akron, northeast Ohio led the state in the number of bioscience locations with 1,336 locations, 32% of the statewide total. The central and southwest regions followed with 741 (18%) and 653 (16%), respectively. Other regions are well represented by 350 locations in western Ohio, 246 in northwest Ohio, and 163 in southeast Ohio. Since 2001, all six Ohio regions have experienced growth in the number of locations. In terms of employees, northeast and central Ohio are closely aligned at 29% and 28% of the statewide total.

Bioscience companies continue to expand operations and announce new facilities in the state, with 46 projects announced in 2017, projecting creation of 5,278 jobs and over \$632 million in capital investment. Abeona Therapeutics, Alkermes, CoverMyMeds, Ensemble Health Partners, Medpace, Midmark, Norwood Medical, PharmaForce, Q Laboratories, Quality Electrodynamics, RXQ Compounding, Sterigenics, Updox, West-Ward Pharmaceuticals, and Xellia Pharmaceuticals are all among the many companies that continue to grow in Ohio.

78,869
EMPLOYEES



3,336
COMPANIES



4,165
LOCATIONS



AVERAGE WAGE

\$73,897



BILLION IN PAYROLL

\$5.83





Ohio Bioscience Statewide Fact Sheet

Bioscience employment is the highest on record in Ohio.

Direct Employment Economic Indicators (2016)

78,869 Employees

3,336 Companies

4,165 Locations

\$73,897 Average Wage

\$5.83 Billion in Payroll

Bioscience Expansions (2017)

5,278 Projected New Jobs

\$632M Planned Investment

Bioscience Funding (2017)

\$526M Private Investment

\$1.4B Acquisitions & IPOs

\$754M National Institutes of Health Awards

\$5.5M Small Business Innovation Research & Technology Transfer Awards

\$29M National Science Foundation Awards

\$23M Ohio Third Frontier Awards

Bioscience Degrees & Certificates: 10,179 (2015)

Since 2012, over 490 new bioscience-related firms began operations in Ohio, including Diasome Pharmaceuticals, Kapios Health, Myonex Therapeutics, SapVax, ScriptDrop, Soin Neuroscience, and Xact Medical. Many existing firms, such as Inogen, Owens and Minor Distribution, Piping Rock Health Products, Pulse Flow Technologies, and RelateCare chose to locate their business in Ohio.

Ohio bioscience companies attracted over \$2.7 billion in funding in 2017, from sources including venture capital, exits, angel investment, federal research grants, and state initiatives such as the Ohio Third Frontier.

BioOhio analysis indicates that at least 80 Ohio bioscience-related companies announced \$526 million in private investment in 2017, the third highest level recorded since BioOhio began tracking deals in 2004. Recent years have been strong in the state, with the highest figure recorded in 2014 (\$559M), followed by 2013 (\$544M). Exit activity in the state remained strong in 2016-17, totalling over \$2.4 billion, including significant public offerings from Abeona Therapeutics, Athersys, Medpace, and ViewRay.

Ohio-based institutions and companies received \$754 million from the National Institutes of Health (NIH) in 2017, well ahead of the U.S. average of \$475 million. Case Western Reserve University, The Ohio State University, Cincinnati Children's, Cleveland Clinic, and University of Cincinnati were once again among the nation's top 100 NIH funding recipients.

Bioscience education continues to thrive in Ohio. In 2015, 10,179 bioscience-related degrees and certificates were awarded to students in Ohio, an increase of 58% since 2006. The number of schools with bioscience-related programs has also increased, from 85 in 2006 to 102 public and private schools directly impacting the industry in Ohio in 2016.

Download the full report at BioOhio.com/Ohio

Photo: Charles River Laboratories