



Ohio

Healthcare

JobsOhio

Healthcare in Ohio

What do you get when you cross leading health care institutions with world-class thought leaders? You have an unparalleled hub of health care innovation that is responsible for life-changing discoveries. Home to some of the world's best adult and pediatric care, coupled with a proven research consortium led by exceptionally skilled talent, Ohio is a destination for the world's most respected brands and trusted leaders

- 14 Nationally ranked hospitals are located in Ohio
 - Cleveland Clinic - 2nd best hospital in the nation
 - Cincinnati Children's - 3rd best pediatric hospital
 - Nationwide Children's - 7th best pediatric hospital
- Top 7 Research consortiums (CWRU, OSU, UC, CC)
- 16% of all U.S. Clinical Trials conducted in Ohio

- Annual operating costs in Ohio are \$6 million to \$20 million less than in competitive locations (NC, MA, CA, NJ) – and labor costs are typically 20 to 30 percent less than coastal pharmaceutical hubs

- 14 of the top 50 employers in Ohio are in healthcare
- More than 85,000 employees
- GSP: = \$16B annually
- Establishments = 3,700+



Cincinnati Children's is ranked 3rd best pediatric hospital and is ranked nationally in 10 pediatric specialties

Ohio has a very strong Healthcare presence

Best in class care

- 16 of the top 233 hospitals in the U.S.
- Top ten in pediatrics, 7% of all children's hospitals are in Ohio



R&D

- Top 7 research consortium
- 16% of all U.S. clinical trials are in OH



Corporate Leaders

- Home to corporate leaders in healthcare, with far-reaching impact for the Ohio bio-ecosystem



CardinalHealth

STERIS®



A Promise for Life



EXPRESS SCRIPTS®



a Johnson & Johnson company

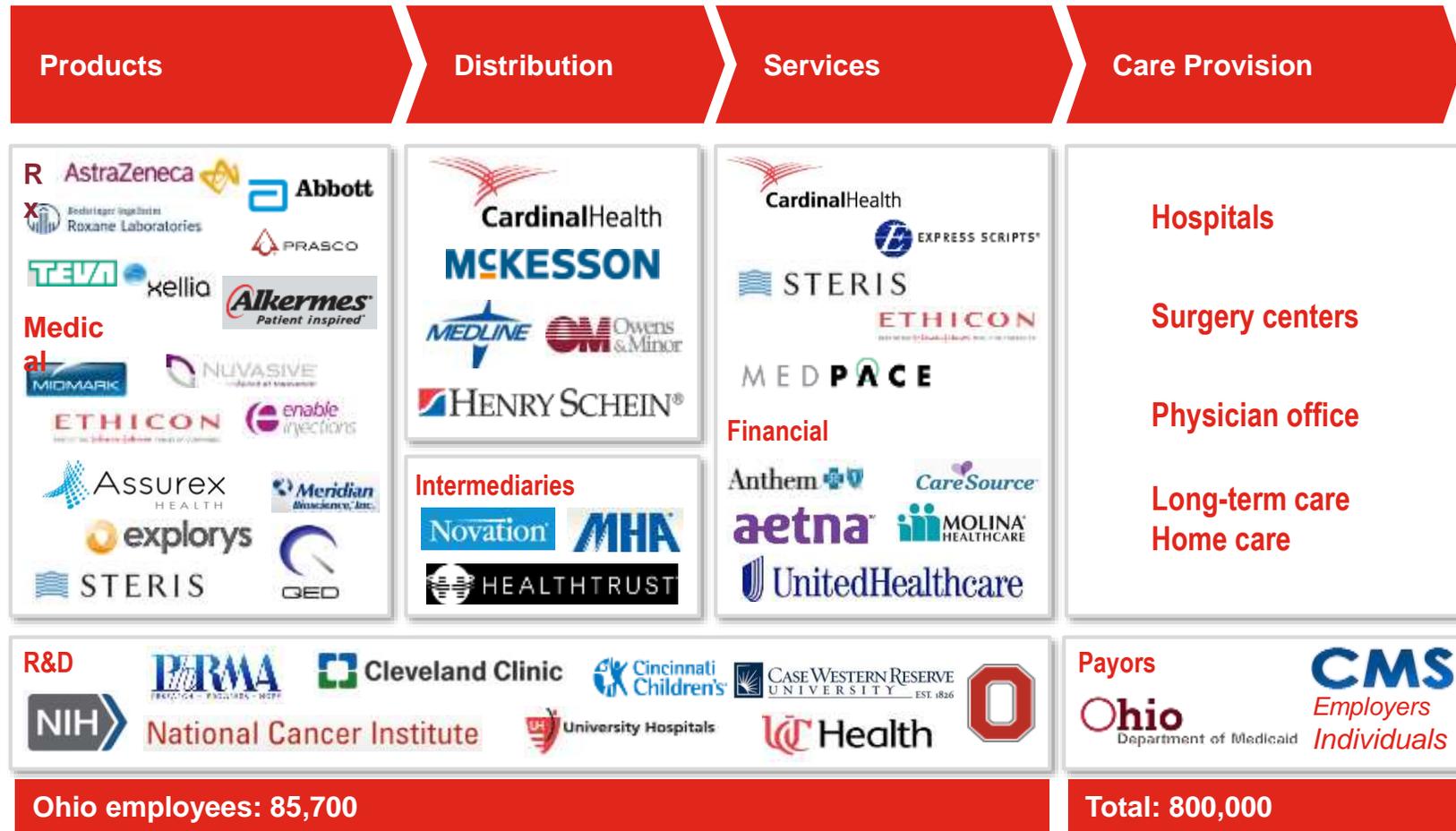
Emerging Innovations

- Ohio bioscience companies attracted over \$2.7 billion in funding in 2017
- 80 Ohio bioscience-related companies announced \$526 million in private investment in 2017

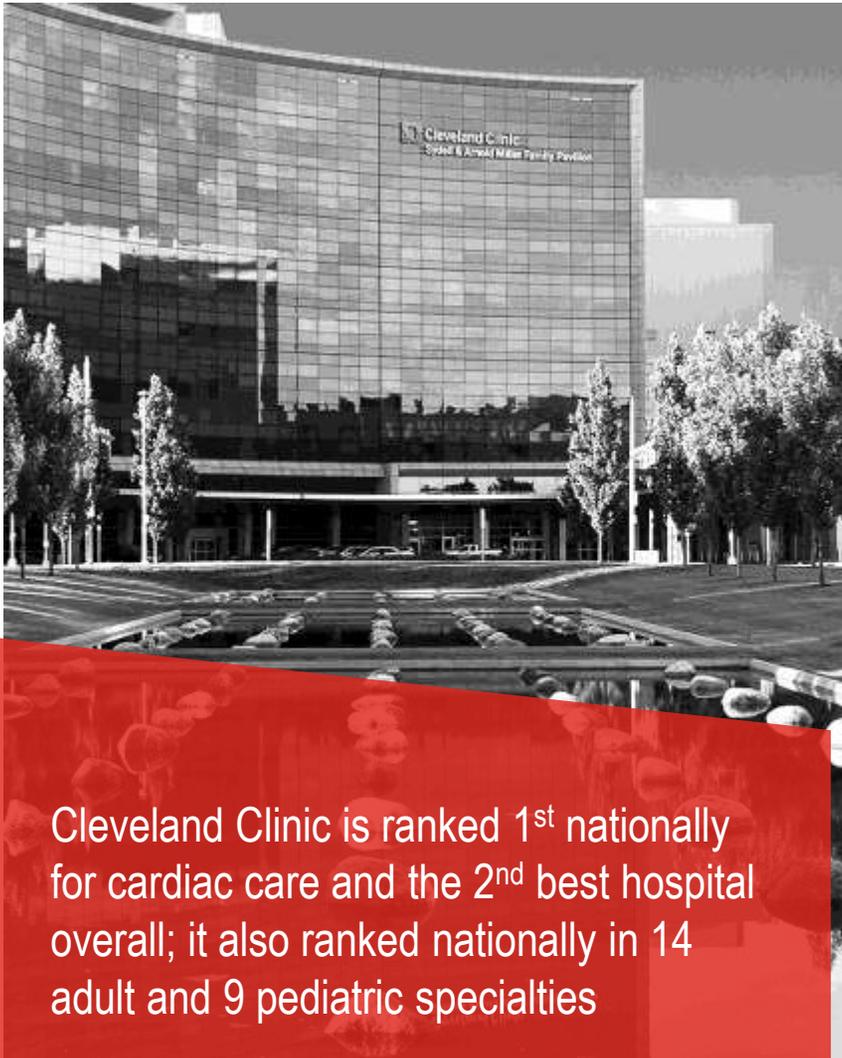


Sources: BioOhio, BioEnterprise, JobsOhio

Strong footprint across value chain



Best in Class Healthcare



Cleveland Clinic is ranked 1st nationally for cardiac care and the 2nd best hospital overall; it also ranked nationally in 14 adult and 9 pediatric specialties

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- Nationwide Children's Hospital is ranked 7th best pediatric hospital and is ranked nationally in 10 pediatric specialties
- The Ohio State University-James Cancer Center is rated "exceptional" by the National Cancer Institute
- The Cleveland Clinic Medical Park and the Health Tech Corridor in Cleveland are attracting innovators and industry leaders
- Ohio is home to three National Cancer Institute-designated comprehensive cancer centers: Ohio State University-James Cancer Center, Cleveland Clinic and Case Western
- Cincinnati Children's and the University of Cincinnati partner to run the world's most advanced proton research and treatment centers
- 14 Nationally ranked Hospitals are located in Ohio
- The Ohio State University, Cincinnati Children's, Cleveland Clinic, and University of Cincinnati are among the nation's top 100 NIH funding recipients.

Healthcare in Ohio



Pharma manufacturing, first FDA approved 3D printed pharmaceutical, key to success was FDA approved manufacturing site that was never used. FRX acquisition



Genetic/personalized medicine start-up in Mason, OH, over 400 employees, acquired by MyriTerabluead Genetics for over \$400M with commitment to Ohio



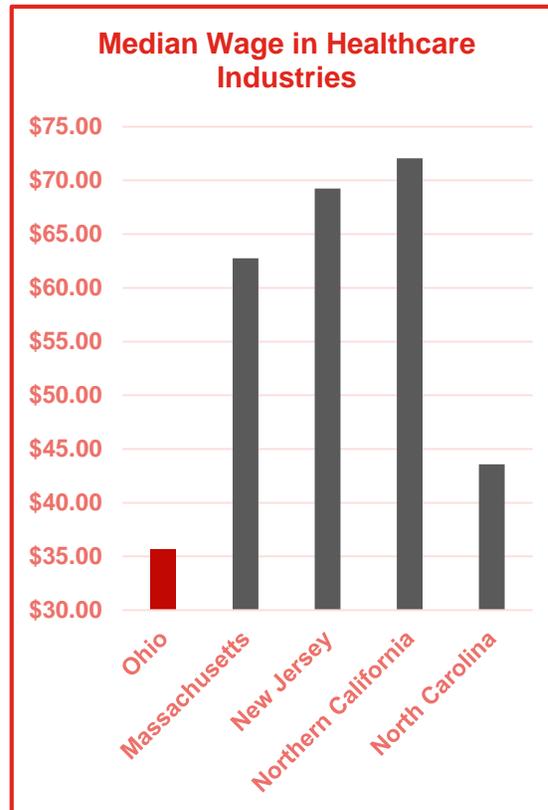
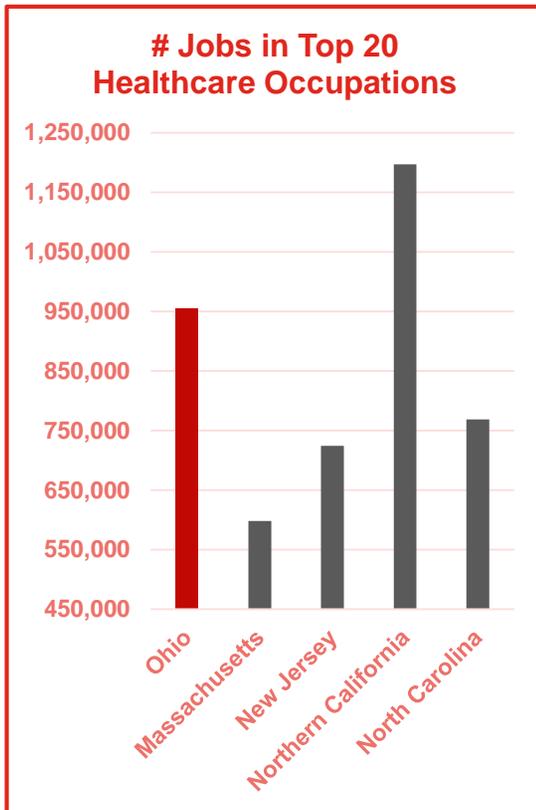
About 1,200 employees in Cincy, doubling over next 3 years, IPO in summer of 2016, contract research org (clinical trials), success driven by access to top care providers in world and access to patients



Managed healthcare plans for Medicaid population – Ohio , contract expansions for GA and IN – Adding 650 jobs to base of 2,250

Ohio Workforce and Wage

Ohio's labor costs are typically 20 to - 30% less than coastal pharmaceutical hubs



875 Bio-related Patents in 2015

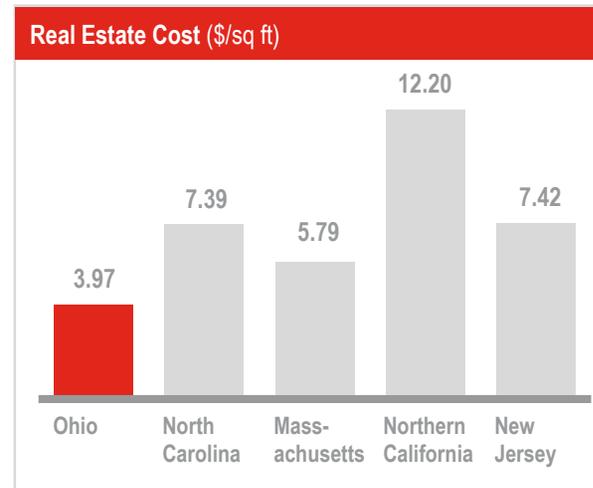
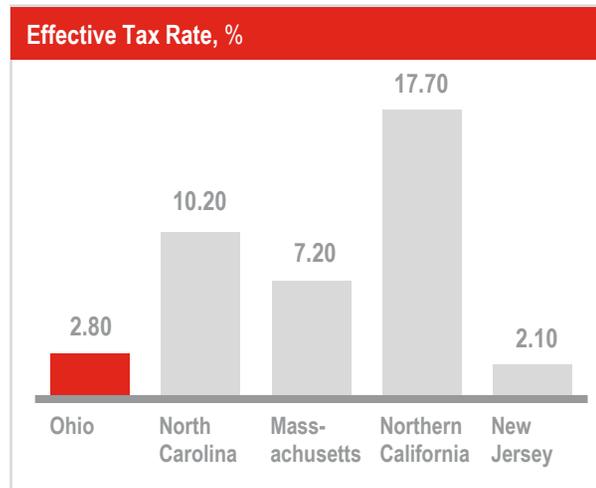
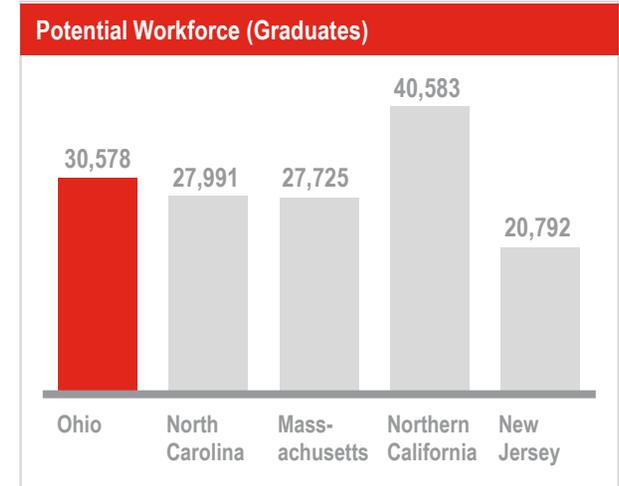
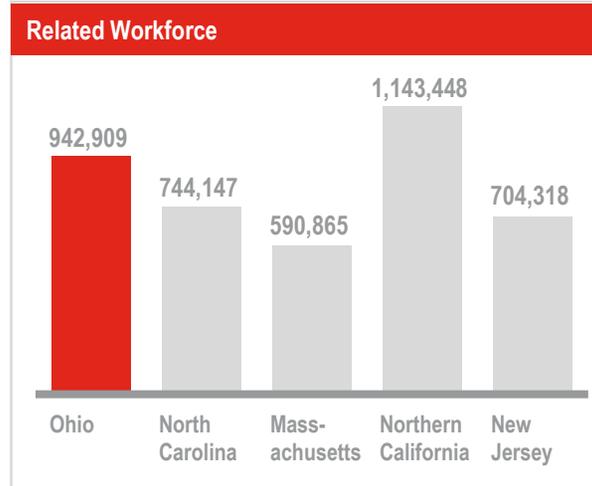
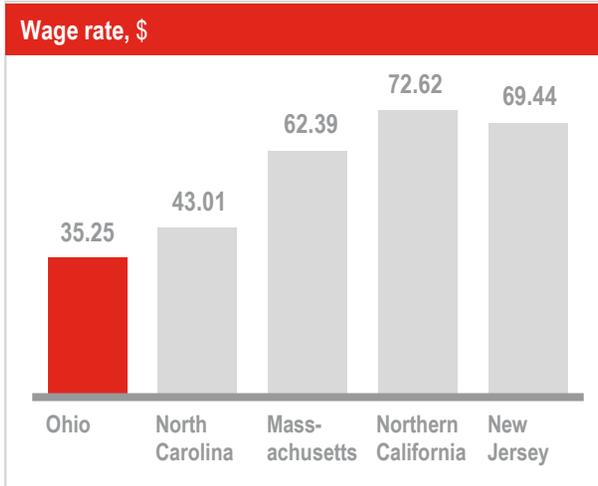
30,872 bioscience
(top 20 occupations) graduate completions in 2016

Select Dedicated Bioscience Programs



Sources: QCEW and EMSI Analyst, BioOhio
*Numbers exclude healthcare providers

Ohio is very well positioned across all key business dimensions: wages, workforce, cost and taxes



Scale, cost and availability advantages complemented by productivity and innovation legacy

Sources: U.S. Bureau of Labor Statistics, Location Matters 2015 Report, Tax Foundation, KPMG, Cushman & Wakefield, National Center for Education Statistics

R&D Resources

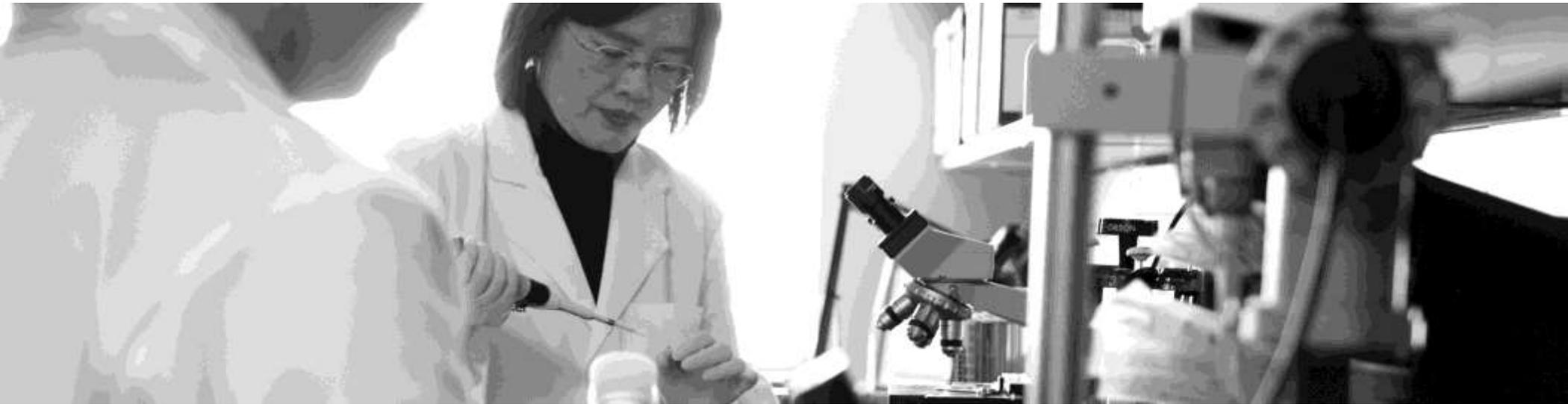


Top 7 research consortium

16% of all U.S. clinical trials are
in Ohio



Why Ohio: Access to research and innovation



Need	Proof	Value
Access to research, innovation, and thought leadership	<ul style="list-style-type: none">• Approximately 16 percent of all U.S. clinical drug trials in are conducted in Ohio• Ohio ranks 9th for the number of bio-related patents• OSU, Case Western, University of Cincinnati, Cincinnati Children's, Cleveland Clinic and Nationwide Children's comprise the nation's 7th best research consortium• Since 2000 Cleveland Clinic Innovations has helped launch 77 companies, which have gone on to raise more than \$1billion in additional funding, and issued more than 850 patents• BioOhio is an industry organization that supports all entities within Ohio's bioscience community• An Ohio company produced the first FDA-approved 3D printed pharmaceutical	<ul style="list-style-type: none">• healthcare companies can collaborate with academic and research institutions to get their ideas validated, increasing speed to development and commercialization.• More accessibility in Ohio to world-renowned thought leaders compared to other major bio areas (Boston or Research Triangle Park, for example).• The research conducted in Ohio results in health innovations that attract and create additional global health care leaders.

Why Ohio: Talent



Need	Proof	Value
Quality Workforce	<ul style="list-style-type: none">• Ohio has more than 83,500 healthcare employees• Some of the nation's best teaching hospitals are in Ohio, producing outstanding talent• Ohio's healthcare sector has outpaced national healthcare employment levels for the last 5 years, adding approximately 5,000 jobs since 2012• More than 200 institutions of higher education continually add to Ohio's healthcare talent pipeline• 30,872 bioscience (top 20 occupations) graduate completions in 2016• Ohio's labor costs are typically 20 to 30 percent less than coastal pharmaceutical hubs	<ul style="list-style-type: none">• Attract and retain the well-trained and highly skilled employees they need to succeed and grow.• A higher number of skilled healthcare workers at a reduced wage rate than competitive locations, which means you can get the workforce you need at a fraction of the cost.

Why Ohio: Business Climate



Need	Proof	Value
<p>A business environment conducive to growth</p>	<ul style="list-style-type: none"> • #4 best business climate in the U.S. (Site Selection 2017) • A balanced state budget with \$2 billion in reserves • Common sense regulatory environment • Annual operating costs in Ohio are \$6 million to \$20 million less than in competitive locations (NC, MA, CA, NJ) • Companies such as Alkermes and Xellia that could expand anywhere in the world choose to expand in Ohio • No tax on: corporate profits, inventory, personal property, machinery - equipment and R&D investments, products sold to customers outside of Ohio • Central location within 600 miles of 60 percent of U.S. and Canadian populations • Ohio's integrated transportation infrastructure • More affordable cost of living than east and west coasts 	<ul style="list-style-type: none"> • Attract and retain the well-trained and highly skilled employees they need to succeed and grow. • A higher number of skilled healthcare workers at a reduced wage rate than competitive locations, which means you can get the workforce you need at a fraction of the cost.

Success Story: Quality Electrodynamics (QED)



Company Profile

QED is a global developer, manufacturer and supplier of advanced medical equipment electronics. Current products include cutting edge MRI radiofrequency (RF) antennas/coils for diagnostic imaging at the full range of magnetic field strengths.

Why Ohio?

Imaging cluster in northeast Ohio anchored by Cleveland Clinic, University Hospitals and Case Western Reserve University. Accelerate innovation and business growth through partnerships with leading imaging OEMs.

R&D Center

- JobsOhio R&D Grant – First recipient
- Develop innovative imaging solutions to address society's most pressing challenges in healthcare: breakthroughs in access, affordability, quality, and speed leading to better outcomes
- Toshiba/Cannon first presence in Ohio
- Opportunity to partner with other imaging OEMs (Philips, GE, Siemens)

