

**BioForward  
Economic Impact  
Report 2022:**  
Company Kit

Data provided by:  
**TEconomy Partners**  
2022 Wisconsin Biohealth  
Economic Impact Report

# Wisconsin: We Have It **All** Right Here

**Innovation lives in Wisconsin**, where every step in the development lifecycle is supported, allowing companies based here to grow and further enhance their capabilities, talent, and profitability. Our Midwest location creates an interconnected ecosystem of biohealth leaders uniquely positioned to positively impact health on a global scale.

Wisconsin's robust and comprehensive biohealth cluster represents every facet of the supply chain forming a network that supports innovation. As the rest of the United States and international partners look to strengthen supply chains and contract with quality manufacturing, Wisconsin is in a leading position to meet those demands.

We're home to world-class educational institutions, including the University of Wisconsin – Madison, that are driving innovation, developing some of the greatest minds in the industry, and filling the state's talent pipeline.

The state is an attractive place for companies that want to grow and expand, providing the talent, supply network, quality of life, and investment potential for success. From new production facilities to headquarters operations, companies are doubling down on Wisconsin as a key location in which to thrive in the biohealth ecosystem.

**As a company in the state of Wisconsin,  
you are a part of something big.**



Wisconsin is matching the overall

**GROWTH  
RATES**

in the national biohealth industry

The biohealth industry grew by

**10.6%**

from 2018-2021

Biohealth's growth generated

**\$32B**

in statewide impact

# Supply Chain Strength

## Fuels Biomanufacturing in Wisconsin

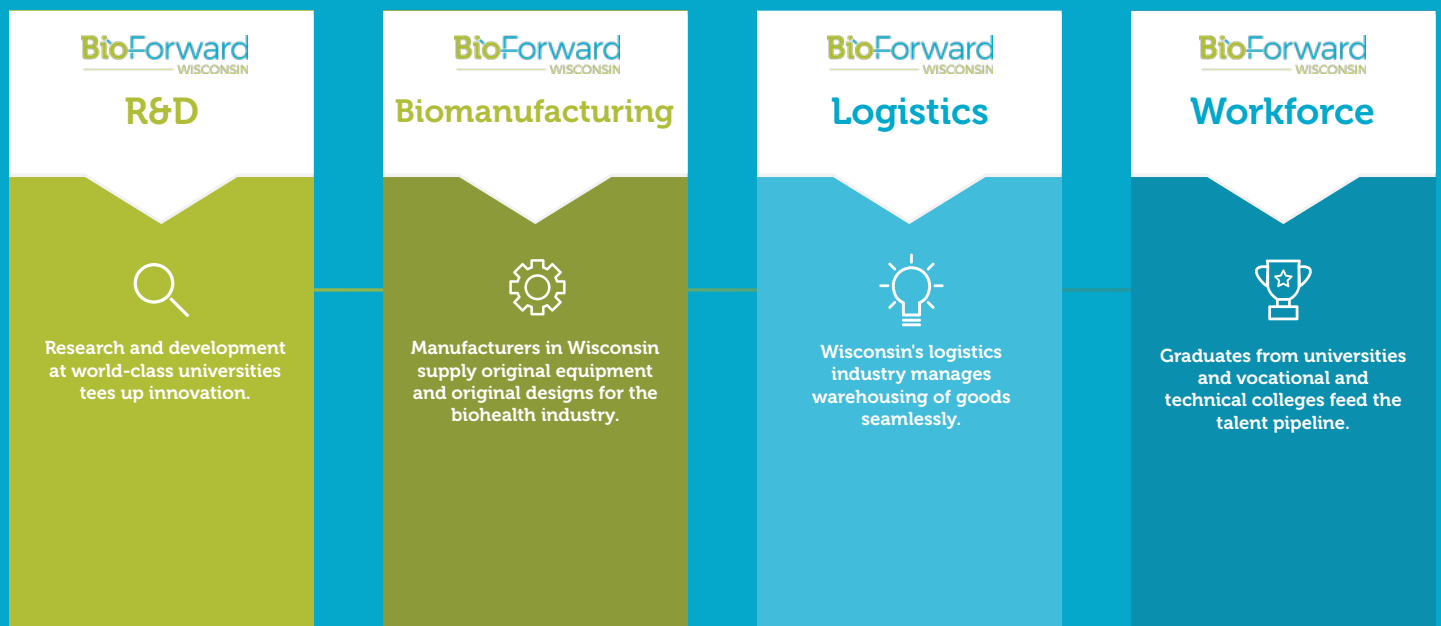
**While other states and markets** are still struggling with supply chain challenges created by the pandemic, Wisconsin supplied more than \$6 billion in products and services to the state's biohealth industry, which accounted for nearly 34,000 jobs. This makes Wisconsin a powerful force, not only in the state, but throughout the nation, and across the globe.

Wisconsin's biohealth supply chain operations and biomanufacturing are symbiotic: Research and development and the exchange of ideas tees off the industry to manufacturers that supply original equipment and original designs for the industry. Wisconsin's logistics industry manages warehousing and movement of goods seamlessly. Meanwhile, the men and women supporting biohealth's supply chain live in every corner of the state and contribute to the greater good of biohealth.

With a high concentration of in-state and FDA registered suppliers, the state has everything it needs to provide stability, cost benefits, and quick and easy access to materials.

**The men and women supporting biohealth's supply chain live in every corner of the state and contribute to the greater good of biohealth.**

## A Secure Supply Chain



# Made in WI: A Manufacturing Powerhouse

**Wisconsin is a powerhouse** in medical device manufacturing and drug and pharmaceutical biomanufacturing. The state's medical device and equipment manufacturing supports **12,000 jobs** and is **34% more concentrated** in our state relative to national averages. The drug and pharmaceutical subsector known as "biomanufacturing" **grew by 29%** since 2018, well outpacing the strong national growth of 14%.

## Detailed Industry Strengths

Large and highly specialized concentration in medical device—nearly 12K jobs, 34% greater concentration than US average (LQ is 1.34)

Irradiation Apparatus Mfg. (LQ is 13.87) –representing intensive focus on medical imaging, emerging focus in radiotherapies/nuclear medicine

Biologics Manufacturing (LQ is 3.30) – includes cell and tissue engineering, mfg.

Active Pharmaceutical Ingredients

Research Tools & Instrumentation

Contract Research Organizations, Contract Development Manufacturing Organizations

Medicinal & Botanical Mfg. (LQ is 1.16)

## Innovation Ecosystem Highlights

Leading focus area in patent awards

Associated with leading areas of highly concentrated University R&D in biological & biomedical sciences (LQ is 1.17), and in health sciences (LQ is 1.12)

Leading area in recent VC, Angel Investments

Forward BIO Institute and Forward BIOLABS investment into Biohealth ecosystem: R&D to commercialization, developing talent and supporting entrepreneurs



**12K**

Jobs in the medical device and equipment sector

**34%**

Greater concentration of jobs in the medical device and equipment sector

**29%**

Growth in the pharmaceutical sector since 2018



GE HealthCare

BioForward  
WISCONSIN

# GE HealthCare

## Thrives in Wisconsin

The biomanufacturing giant thrives off of innovation from Wisconsin's universities, taps into talent pipelines statewide, and takes advantage of a robust, localized supply chain.

**"When you fuel innovation, you fuel the strength of the entire biohealth network. Wisconsin's investments in its university system deliver groundbreaking research and development and robust talent pipelines, major drivers for GE HealthCare's continued growth here."**

-Eric Ruedinger  
Global GM for Anesthesia and Respiratory Care  
GE HealthCare

In Wisconsin specifically, GE HealthCare generates around \$8 billion in direct and indirect annual economic impact, exports around \$1.5 billion in goods from the state and has more than 1,000 suppliers in Wisconsin, according to the company.

GE HealthCare generates

**\$8B**

in direct and indirect annual  
economic impact in Wisconsin

GE HealthCare exports

**\$1.5B**

in goods from the state

GE HealthCare uses

**1,000**

suppliers in Wisconsin



# Investing, Expanding & Innovating in Wisconsin

**Wisconsin's robust biohealth ecosystem makes it the place for companies to invest and expand** with economic opportunities for the state abound. The state has seen a host of both expansions and investments in facilities and capabilities as well as several mergers and acquisitions affecting Wisconsin-based companies.

In turn, these activities have fueled job growth and access to supplies. For example, the drug and pharmaceutical subsector has seen a 22% increase in jobs since 2018 and has been propelled by numerous manufacturing facility expansions as well as new lab buildouts, investments in office space, and enhanced R&D facilities and capabilities.



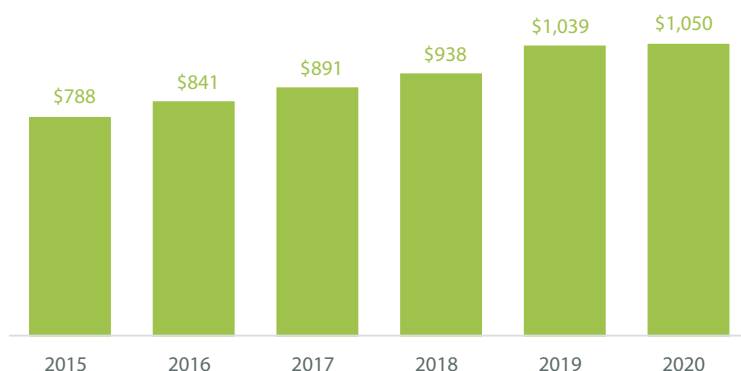
# World-Class University Systems

Wisconsin's internationally renowned universities and research institutions are critical to the success of the biohealth industry. **Partnerships with these world-class institutions lead to innovative discoveries, development of product lines impacting sales and jobs, and a talent pipeline that is vital to ongoing growth of the Wisconsin biohealth industry.**

## Biohealth Research and Development

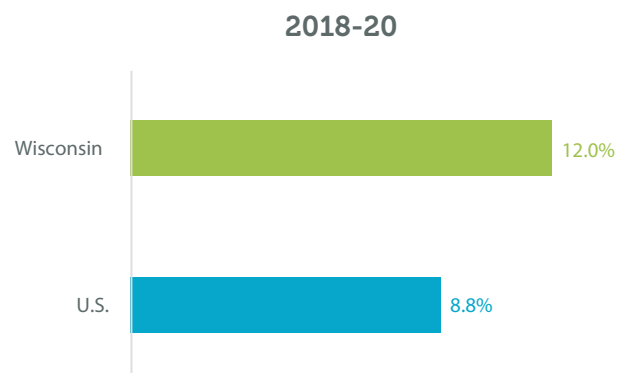
Wisconsin benefits by having an especially large and leading university R&D engine fueling discovery and innovation, which in 2019 and 2020 surpassed \$1 billion in annual expenditures and has outpaced the growth in U.S R&D investments by 12% since 2018. With institutions like University of Wisconsin-Madison and Medical College of Wisconsin leading the pack, the state is poised to support companies looking for innovative scientific discoveries, industry academia partnerships, and strong talent right in their backyard.

## University Biohealth R&D Expenditures in Wisconsin, Levels and Growth Trends (\$ in Millions)



**“Innovation is Wisconsin’s hallmark, and the state’s investment in its university system fuels the entire biohealth ecosystem from research, manufacturing, logistics, and talent.”**

-Nicolas Paris, CEO of Gilson

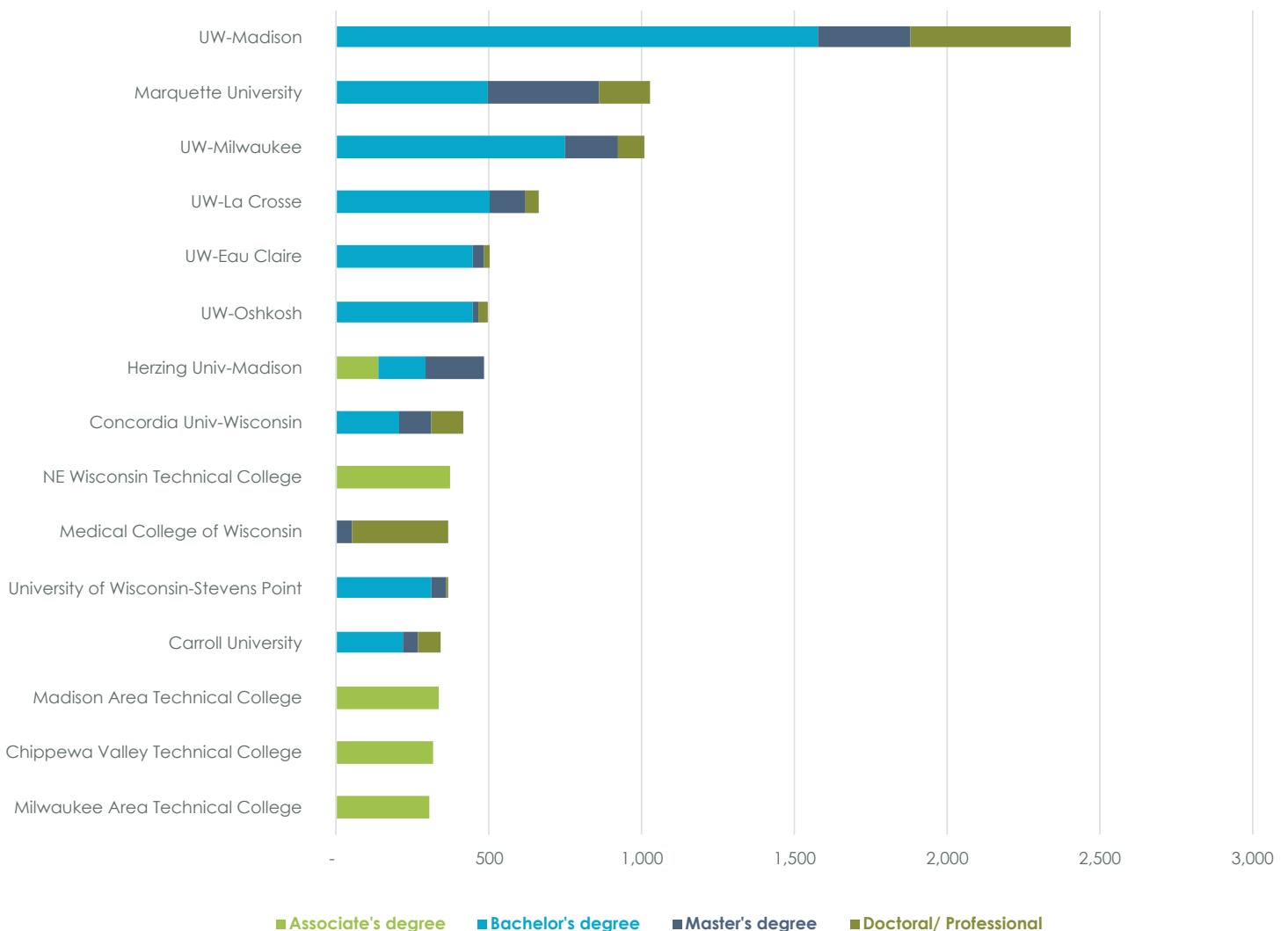


# Quality Workforce & Talent Development

## Wisconsin's colleges and universities

have a strong concentration in health and life science degree fields at the Associate's level and above, with just over one in five degrees conferred in one of these fields (Figure 18). This 21% share essentially matches that of the U.S. (20%).

**Leading Health and Life Sciences Institutions by Degree Counts (Associate's and Higher), 2021**





# High Wages & Affordable Cost of Living

**Not only is Wisconsin a unique and inviting** place for companies, it's also a wonderful region for individuals to thrive professionally in a biohealth career and in their personal lives. Affordable cost of housing, transportation, healthcare, education, food and utilities compared to the coasts gives Wisconsin an edge in recruiting talent.

**Wisconsin's biohealth industry draws potential employees and retains talent by promoting an impressive career trajectory potential and quality of life.**



**"Best Place to Live  
is In Wisconsin"**

-Livability (2022)

**"Wisconsin is the #4 Least  
Stressed State"**

-Wallethub (2022)

**"Wisconsin is the #9 Best  
State for Opportunity"**

-U.S. News & World Report (2022)

**"Wisconsin ranks #5 for  
Outdoor Recreation"**

-The Office of Outdoor Recreation

**Wisconsin is both a great place to work and an amazing place to live. Some of the nation's most dynamic businesses and leaders have chosen to call Wisconsin home – and for good reason.** The state boasts not only a low cost of living, but short commute times, breathtaking parks and recreation, world-class university systems, high-quality healthcare and top-ranked school systems.

**Wisconsin ranks in the top 10 in:** Health Care Quality, Pre-K – 12 Education, Opportunity, and Long-Term Fiscal Stability. Source: U.S. News & World Report

2

Top Ranked Research Universities

#5

Best State for Quality Schools

10

Top 10 Manufacturing State

**BioForward Wisconsin** has focused member efforts to attract qualified talent to our region, providing the invaluable human resource necessary for growth opportunities, and connecting businesses for engaging and beneficial partnerships.



# Wisconsin's Biohealth Industry: **Success** and **Stability** Fueling the State's Economy

**Wisconsin's biohealth industry** impacts economic growth, supply chains, employment trends, and talent pools that grow the state's economy and tax base. The robust industry generates \$32 billion in total economic impact across every corner of the state, contributing to the payrolls of 129,000 people working in manufacturing, research and development, and transportation and distribution.

The localized biohealth supply chain is a case study in successful, efficient movement and distribution of equipment and material. Wisconsin supplied more than \$6 billion in products and services to the state's biohealth industry, which alone accounted for nearly 34,000 jobs.

Outside of manufacturing and logistics, the state is also aggressive and successful in its research and development at world-class universities. These universities are critical to the biohealth industry and make the state attractive for investment because of their innovation, relationships, and talent pipeline created within.

**Wisconsin is advancing across all sectors of the industry, recruiting jobs and talent, promoting research and development, and growing Wisconsin's reputation globally as a leader in biohealth.**

**129K**

Jobs

**\$32B**

In Economic Impact

**\$6B**

In Products & Services



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View the  
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