

# BIOSCIENCE

Capitalize on Oregon's strong life science and biotechnology research hubs and significant bioscience cluster for your business expansion

Capitalize on Oregon's fast growing export market as exports have doubled since 2013

**\$614M**

Pharmaceuticals, medicines and medical equipment and supplies exported in 2023

Invest in Oregon and tap into the US Biotechnology market valued at \$553.1 billion in 2023

## WHY OREGON FOR BIOSCIENCE?

Bioscience in Oregon is generating exciting new research, life-changing products, and increasing amounts of venture capital and foreign direct investment.

Strong academic institutions, a critical mass of talent, and robust support through incubator and accelerator organizations are driving continued interest in Oregon as an investment destination.

### > Diverse talent pool

Universities and institutes produce highly-skilled graduates and house hundreds of knowledgeable researchers

### > Ingrained innovation

Ranked 4<sup>th</sup> across the US states for innovation, with strong bioscience and tech ecosystems that companies can tap into

### > Established bioscience community

Global companies such as Abcam, Genentech, Lonza, Micro Systems Engineering, and Thermo Fisher Scientific have already chosen Oregon for their ventures

### > Dedicated business support

A culture of supporting sustainability and growth in life sciences, bioscience, biotech and device manufacturing

### > A location to expand and thrive

1-2 hour flights to key locations (LA, San Francisco, Seattle, San Jose, Oakland, Vancouver), with Pacific Rim trade access and easy distribution to California

### > Cross-industry innovation

The Bioscience industry in Oregon overlaps with other major industries such as High Technology, allowing companies to efficiently share expertise and drive innovation across multiple sectors.

# TAP INTO OREGON'S BIOSCIENCE ECOSYSTEM

Oregon's Bioscience industry is rapidly expanding, fueled by a growing talent pool and a substantial base of highly skilled professionals. The state is already home to numerous innovative businesses in the sector, reinforcing Oregon's position as a strong prospect for investment opportunities.

20,803

Highly skilled sector-specific employees

1,960

Innovative businesses

8,199

Studying biology/ biomedical sciences at public universities in 2023

130%

10- year export growth

## By locating in Oregon, you can

- || Leverage a large, highly skilled talent pool to fuel your research
- || Collaborate with over 1,900 innovative businesses across the value chain
- || Tap into university research and access a large future talent pool
- || Service the wider US market from a lower-cost base on the west coast
- || Capitalize on US export success and catapult your business to the world



## Evolving Market Segments

Emerging market niches in Bioscience thrive due to enhanced technology collaboration and high class university research groups:

- || Cell and gene therapy
- || Genome sequencing research
- || Healthy aging expertise

# THRIVE ACROSS KEY SUBSECTORS

Oregon boasts a significant bioscience ecosystem driving the future of medical innovation. Benefit from a rapidly expanding export market and a pipeline of emerging technologies with significant growth potential.

### Life Sciences and Medicine

A diverse, innovative, and fast-growing industry with employment evenly split between medicine manufacturing and wholesaling; laboratories; and research and development.

The majority of Oregon's burgeoning cannabis industry is also included here.

**\$104M to \$243M**

Export growth from 2013 to 2023

### Medical Devices

A wide array of medical products with specialty in advanced metals, like titanium, including those used for orthopedic implants, dental, and other medical equipment.

Research and development investments by the industry have resulted in many new patents and innovative products used throughout the world.

**12.4% increase**

Medical Equipment and Supplies Manufacturing exports from 2013 to 2023

# HIGHLY SKILLED CURRENT AND FUTURE TALENT

Tap into strong future talent and existing large talent pool of highly skilled, biotechnology and bioscience focused staff ready to catapult your research forward. Oregon has several highly ranked universities and community colleges with skilled talent across a number of Bioscience related subjects.



## || Oregon State University

Ranked most innovative university in the Pacific Northwest. Offers biochemistry, biology, chemistry, microbiology and pre-medicine.

## || University of Portland

Offers biology, biochemistry, chemistry, cell, molecular and biomedical science, and human biology.

## || Portland State University

Offers biochemistry, chemistry, neuroscience, and pre-medical laboratory science.

## || Oregon Health & Science University

Specialist public research university focusing primarily on health sciences. Offers medicine, dentistry, pharmacy, and public health.

## University of Oregon

- || Biochemistry
- || Bioengineering
- || Biology
- || Chemistry
- || Neuroscience

## Pacific University

- || Bioinformatics
- || Biology
- || Chemistry
- || Healthcare science
- || Medical science
- || Pharmacy
- || Pre-medicine

## George Fox University

Number one private university in the state.

- || Biochemistry
- || Biology
- || Medical science

## Portland Community College

- || Cell biology
- || Genetics
- || Microbiology
- || Pathophysiology

Access a thriving pipeline of emerging talent, alongside an established pool of skilled professionals.

20,803

Highly skilled employees

8,199

Studying biology/  
biomedical sciences at  
public universities in 2023

52%

Employment growth from  
2013 to 2023

# UNLOCK INNOVATION SUPPORT

## 7th

State for innovation

### Support for innovative companies

**Oregon Bioscience Incubator** is a multi-client bioscience complex providing startups and scientists with mentoring, bioscience facilities, meeting and event space, and shared equipment.

**Papé Family Innovation Center** by University of Oregon offers a mix of meeting spaces, wet lab benches, and procedure rooms. It will soon offer individual modules for companies to lease, giving flexibility to startups.

Title here

## 4th

State in the US for patents



## 6th

State for industry R&D investments

### Access state-of-the-art facilities

Collaborate with Oregon's bioscience institutes to access a range of facilities from computational to large-scale equipment. The Center for Quantitative Life Sciences facilitates genome-enabled and data-driven research in the life and environmental sciences. The Center for Electron Microscopy and Nanofabrication is a service center and a signature research facility of the Oregon Nanoscience and Microtechnology Institute.

## 10th

State for high employment

### Strong expertise in aging

- || **Institute on Aging** – multidisciplinary research organization with prominent leaders in aging and gerontology
- || **Behavioral Health and Aging Research Lab** – promotes mental health and wellbeing across the lifespan
- || **Oregon Center for Aging and Technology** – develops technologies to assess everyday home activities

### Dedication to cell and gene therapy: Oregon Health & Science University

- || Centre for Embryonic Cell and Gene Therapy
- || Centre for Regenerative Medicine
- || Vaccine and Gene Therapy Institute
- || Oregon Stem Cell Centre

### Cross-sector innovation

**Hewlett Packard's Corvallis Microfluidics Tech Hub (CorMic)** developing, scaling, and commercializing microfluidics technology for semiconductor cooling, biotechnology, and advanced materials.

# A TRACK RECORD FOR EXCELLENCE

Strong track record of attracting global superpowers to capitalize on keen talent and a growing bioscience cluster

Oregon is a hub for Bioscience success, where companies can benefit from a rich ecosystem and supportive network. The state's strategic advantages make it an ideal place for businesses to innovate and expand.

## \$175 million Genentech investment in Hillsboro

Owned by Swiss drug-maker, Roche, Genentech invested in a 130,000 sq ft expansion in its existing major operation. The new facility will be dedicated to the commercialization of individualized medicines.

The company used an Enterprise Zone incentive, abating taxes associated from the investment for three-to-five years. The city of Hillsboro worked with local, regional and state entities to deliver a first-of-its-kind air cargo service out of Hillsboro Airport, providing the company, as well as other businesses in the area, an additional freight option for low-volume high-value cargo.

## Further expansion to Lonza's site in Bend

Swiss-based Lonza Group has continued to invest and expand their site in Bend in recent years, creating an emerging hub of bioscience. In 2023, it established a Solid Form Services offering to support customers in advancing compounds to the clinic and beyond.

In 2020, the company invested \$87 million into the site for manufacturing and research and development activities highlighting their ongoing confidence in their local presence.

## Thermo Fisher Scientific continues to expand its portfolio

**With a number of sites in Oregon, the company provides important products and services to bioscience companies both locally and globally.**

In 2016, Thermo Fisher acquired Hillsboro-based FEI Co for \$4.2 billion, the second-largest sale of a technology company ever in Oregon. This bolstered Thermo's scientific instruments offering due to FEI's leading electron microscopy platforms. In 2017, Thermo Fisher acquired Patheon's site in Bend, which in the same year saw an investment of approximately \$9 million.

# DEDICATED EXPERT BUSINESS SUPPORT

Supporting your investment journey and navigating the ecosystem to guide you to success so you can focus on nurturing your bioscience business.

## Oregon Bio

**A consortium of universities, public officials, educators and bioscience executives, supporting the regional bioscience community.**

This member-based trade association is responsible for communicating the industry's economic impact, issues and challenges to the public sector, educators and the general public.

- || Continually seeking to support sustainability and growth in the life science, bioscience, biotechnology and device manufacturing sectors
- || Member services to lower operational costs and promote partnering, so members can achieve their scientific, economic and social potential

Location: Portland, Oregon

[www.oregonbio.org](http://www.oregonbio.org)

## Oregon Business and Industry (OBI)

**Founded in 2017, with the merger of Oregon's two most significant statewide business organizations, Associated Oregon Industries and the Oregon Business Association.**

Now Oregon's largest and most effective statewide business advocacy group.

- || 1,600+ members in every region of Oregon, including small and large businesses, representing virtually every industry and sector, and employing more than 250,000 Oregonians
- || Coming together as Oregon Business & Industry with commitment to building a stronger Oregon

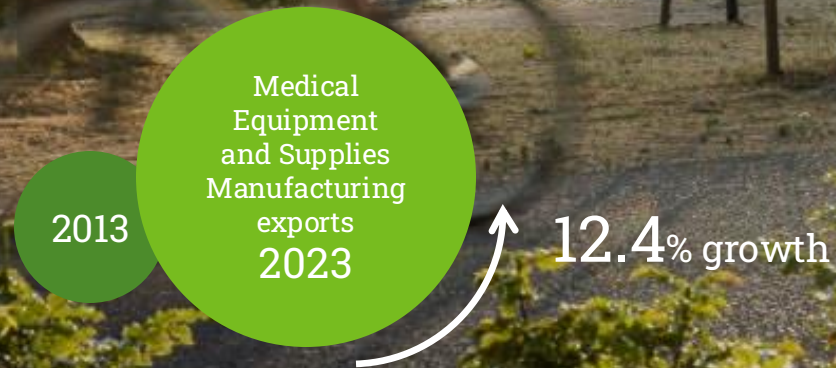
Locations: Portland and Salem

[www.oregonbusinessindustry.com](http://www.oregonbusinessindustry.com)



# ACCESS THE GLOBAL MARKET FROM OREGON

Biosciences exports from Oregon  
were worth \$614 million in 2023



The US is the world's top exporter of medical devices and 3rd largest exporter of pharmaceutical products globally.

By locating in Oregon you can take advantage of this globally trusted bioscience powerhouse and build a business that can grow globally.

## Canada

# \$196M

As the US's largest export destination, it is no surprise that Canada imports the most pharmaceuticals and medicines.

**38%** of Canada's medical device imports from US in 2022.

## Switzerland

# \$123M

Switzerland's strong chemical and life sciences industry makes up 49% of their exports. As an important trade partner, the US is the 2nd largest exporter into Switzerland, behind only Germany, for medical devices and fifth for medicines.

## Germany

# \$182M

With the largest European pharmaceutical and medical device market, Germany is the 3<sup>rd</sup> largest medical devices importer globally with \$2.4 billion from the US (largest importing partner).

US is **4<sup>th</sup>** largest pharmaceutical importer into Germany.

# BIOSCIENCE CLUSTERS

## GREATER PORTLAND

Greater Portland is emerging as a hotbed for new companies in computational biology, biochemistry and cellular programming.

These companies are delivering life-changing innovations, and the region's output is sure to grow as Greater Portland continues to attract the world's best bioscience minds.

### Top five bioscience firms

- || Genentech
- || Thermo Fisher Scientific
- || Micro Systems Engineering
- || Acumed
- || Absci

Top  
10

In the emerging bioscience market, ranked by real estate firm CBRE.

**Twice** the average national concentration of life scientists and biological technicians.



### A trusted location for next-generation technologies

Twist Bioscience, a synthetic biology and genomics company headquartered in San Francisco, has doubled down on its investment in Wilsonville, for its "Factory of the Future". Nearly doubling the 110,000-square foot facility, the company chose Greater Portland due to its access to tech and bioscience talent, as well as its many advanced manufacturing firms.

This further solidifies the region's growing reputation as a hub for firms at the forefront of cutting-edge biotechnology innovation.

Highly-  
skilled  
talent

Specialized university labs include OHSU's National Primate Research Center, University of Oregon's Genomics & Cell Characterization Core Facility, and OHSU's BioLibrary. Access to hands-on education boosts the number of STEM occupations, making up 27% of the region's jobs in 2022.

Silicon  
Forest  
expertise

Home to Intel's global R&D headquarters, Greater Portland is uniquely positioned to support bioscience companies, sharing the semiconductor industry's engineering talent pool and suppliers, as well as experts practiced in delivering cleanrooms for product testing and development.

Cancer  
treatment  
pioneer

Oregon Health & Science University is the region's premier research institution, employing 18,000 and receiving a record \$600 million in research grant funding in 2023. OHSU is home to the Knight Cancer Institute, a leader in personalized cancer medicine.

# BIOSCIENCE CLUSTERS

## WILLAMETTE VALLEY

While Willamette Valley may be better known for its vineyards, Bend and Eugene are growing as innovative bioscience hubs.

Industry employment has increased by 76% in the past two decades, and current bio positions in Oregon pay 40% above the state's average private wage.

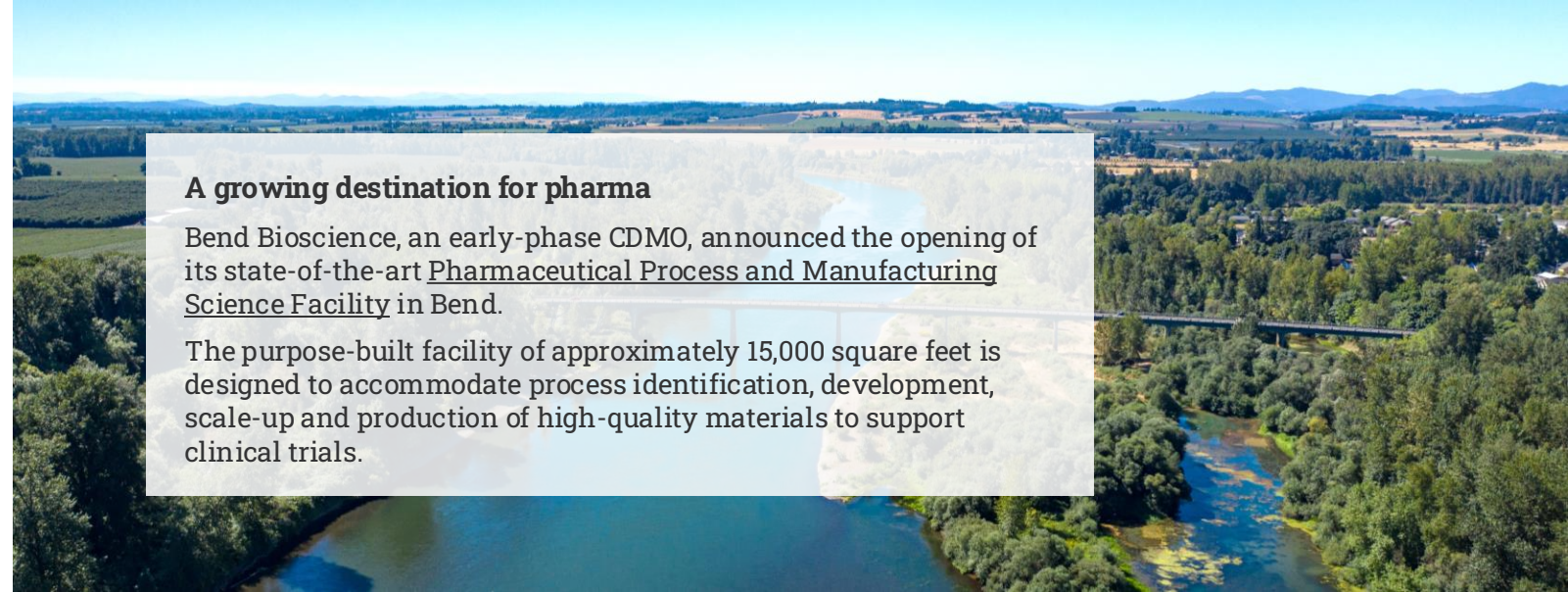
### Bioscience firms

- || Thermo Fisher Scientific
- || Bend Bioscience
- || Abcam
- || Lonza
- || VWR Avantor

## Home to two

Of Oregon's public universities:

- || University of Oregon
- || Oregon State University



### A growing destination for pharma

Bend Bioscience, an early-phase CDMO, announced the opening of its state-of-the-art Pharmaceutical Process and Manufacturing Science Facility in Bend.

The purpose-built facility of approximately 15,000 square feet is designed to accommodate process identification, development, scale-up and production of high-quality materials to support clinical trials.

## Scientific Impact support for innovation

Industry and academic collaborations are taking shape in Willamette Valley's emerging science and tech cluster, spurred on by the billion-dollar investment in University of Oregon's Phil and Penny Knight Campus for Accelerating Scientific Impact in Eugene. The initiative aims to fast-track scientific discoveries into innovations.

## Neuroscience expertise

The University of Oregon is home to the Institute of Neuroscience, a highly collaborative faculty with expertise in genetics, development, electrophysiology, optogenetics, computational modeling, theory and functional MRI. It also boasts the Center on Brain Injury Research and Training and Center for Translational Neuroscience.

## Key research facilities

Collaborate with Oregon State University to access powerful platforms and instrumentation. The Electron Microscopy Facility provides faculty, staff, students, and industrial collaborators with access to electron microscopes. The OSU Mass Spectrometry Center is a central pillar in the network of interactive research in the state.



Business Oregon, the state's economic development agency, invests in Oregon businesses, communities, and people to promote a globally competitive, diverse, and inclusive economy. The agency's services span rural community development and infrastructure financing; business retention, expansion and recruitment; export promotion and international trade; investments in industry research and development and entrepreneurship; small business assistance; and support for arts and cultural organizations. Learn more at [biz.oregon.gov](http://biz.oregon.gov).