



## Industry Spotlight

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# Biopharmaceuticals (US Cluster Mapping)

City of Sugar Land, TX

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# Spotlight Summary

Biopharmaceuticals (US Cluster Mapping)  
City of Sugar Land, TX – 2019Q4

## EMPLOYMENT



**421**

Regional employment / **306,230** in the nation

## WAGES



**\$35,032**

Avg Wages per Worker / **\$120,383** in the nation

**11.6%**

Avg Ann % Change Last 10 Years / **+0.8%** in the U.S.



**0.5%**

% of Total Employment / **0.2%** in the U.S.

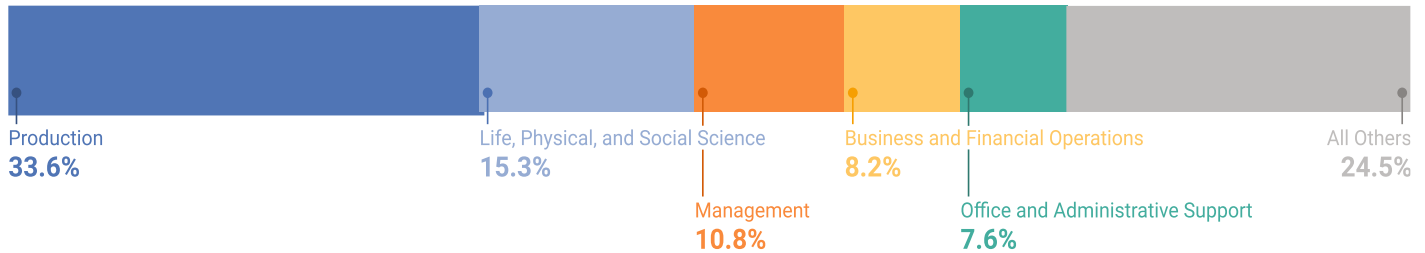


**-2.0%**

Avg Ann % Change Last 10 Years / **+1.6%** in the U.S.



## TOP OCCUPATION GROUPS



## TOP INDUSTRIES

Avg Ann % Change in Employment, Last 10 Years

**11.6%**



Pharmaceutical Preparation Manufacturing

**n/a**



In-Vitro Diagnostic Substance Manufacturing

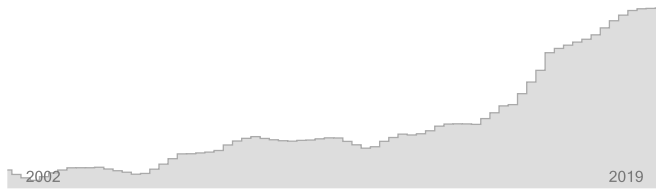
**0.7%**



Medicinal and Botanical Manufacturing

# Industry Snapshot


## EMPLOYMENT



## WAGES

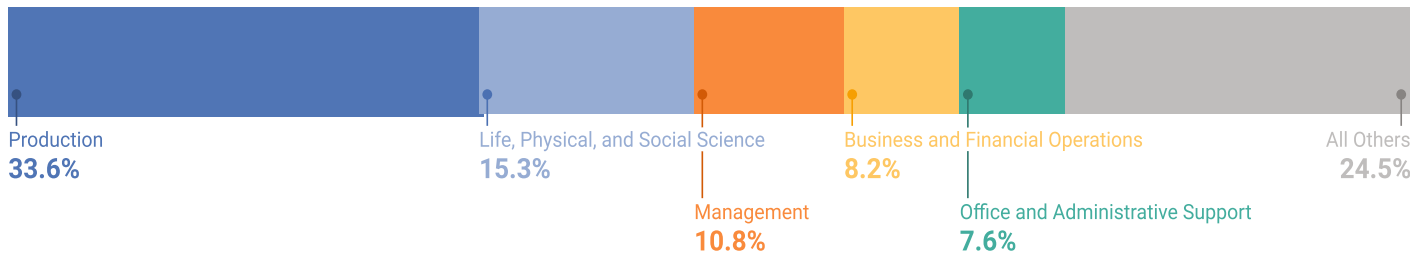


6-Digit Industry	Empl	Avg Ann Wages	LQ	5yr History	Annual Demand	Forecast Ann Growth
Pharmaceutical Preparation Manufacturing	416	\$34,193	4.07		49	2.2%
In-Vitro Diagnostic Substance Manufacturing	4	\$118,000	0.32		1	2.2%
Medicinal and Botanical Manufacturing	1	\$87,855	0.05		0	2.6%
<b>Biopharmaceuticals (US Cluster Mapping)</b>	<b>421</b>	<b>\$35,032</b>	<b>2.85</b>		<b>50</b>	<b>2.2%</b>

 Employment is one of the broadest and most timely measures of a region's economy. Fluctuations in the number of jobs shed light on the health of an industry. A growing employment base creates more opportunities for regional residents and helps a region grow its population.

 Since wages and salaries generally compose the majority of a household's income, the annual average wages of a region affect its average household income, housing market, quality of life, and other socioeconomic indicators.

# Staffing Pattern



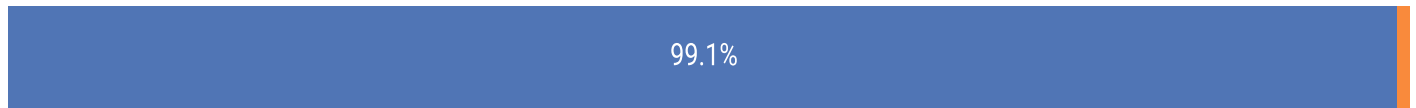
6-digit Occupation	Empl	Avg Ann Wages	Annual Demand
Packaging and Filling Machine Operators and Tenders	33	\$34,200	5
Inspectors, Testers, Sorters, Samplers, and Weighers	24	\$46,700	3
Chemists	22	\$93,900	3
Chemical Equipment Operators and Tenders	21	\$58,000	3
Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products	20	\$84,100	3
Mixing and Blending Machine Setters, Operators, and Tenders	17	\$36,800	2
First-Line Supervisors of Production and Operating Workers	14	\$86,400	2
Medical Scientists, Except Epidemiologists	9	\$78,700	1
Chemical Technicians	9	\$61,900	1
Industrial Engineers	9	\$128,600	1
Remaining Component Occupations	222	\$85,400	27
<b>Total</b>	<b>421</b>		



 The mix of occupations points to the ability of a region to support an industry and its flexibility to adapt to future demand. Industry wages are a component of the cost of labor for regional employers.

# Employment Distribution by Type

The table below shows the employment mix by ownership type for Biopharmaceuticals (US Cluster Mapping) for the City of Sugar Land, TX. Four of these ownership types — federal, state, and local government and the private sector — together constitute “Covered Employment” (employment covered by the Unemployment Insurance programs of the United States and reported via the Quarterly Census of Employment and Wages).

“Self-Employment” refers to unincorporated self-employment and represents workers whose primary job is self-employment (that is, these data do not include workers whose primary job is a wage-and-salary position that is supplemented with self-employment).

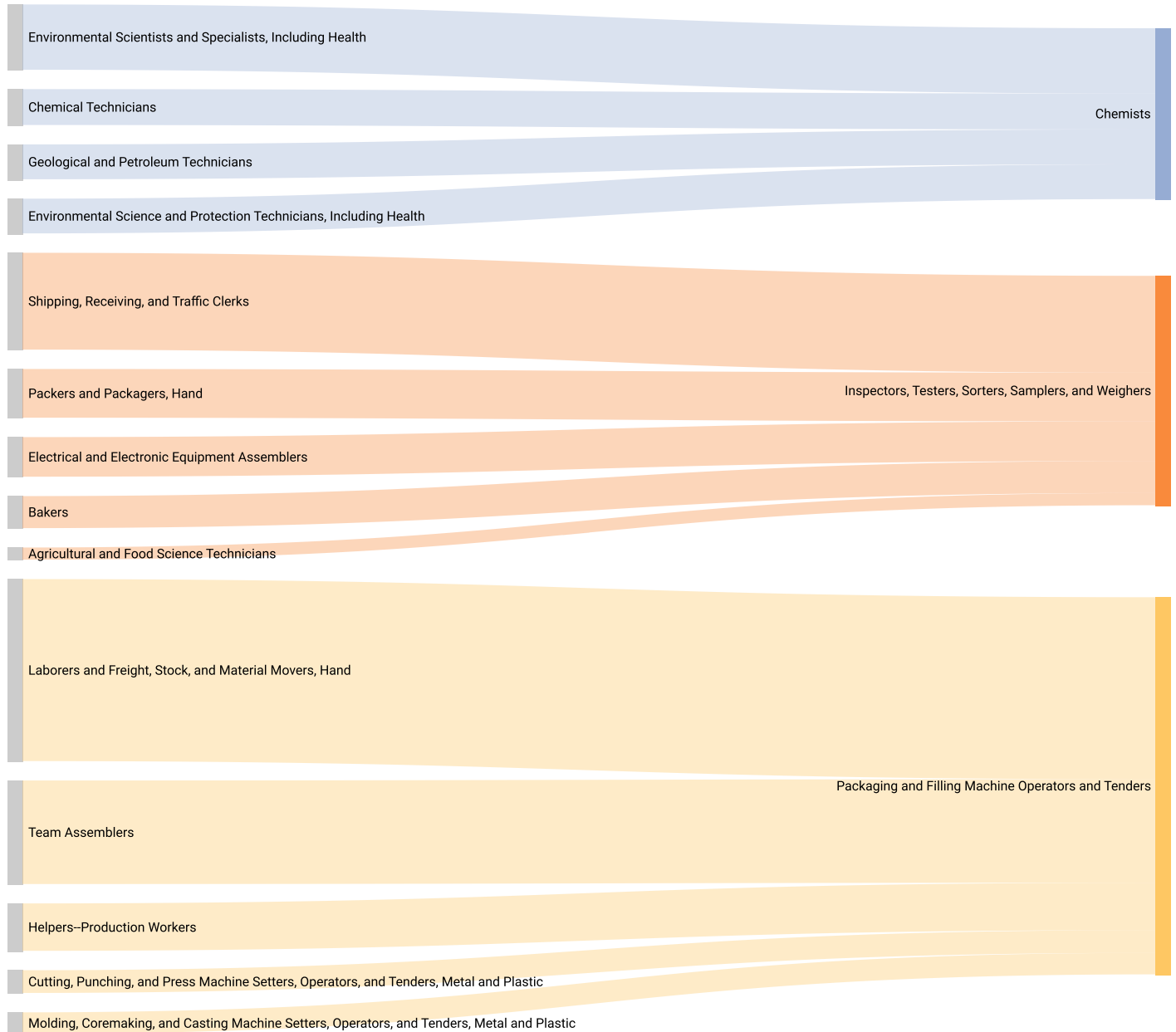



	<b>Empl</b>	<b>%</b>
 Private	418	99.1%
 Self-Employment	4	0.9%

Source: JobsEQ®

 Strong entrepreneurial activity is indicative of growing industries. Using self-employment as a proxy for entrepreneurs, a higher share of self-employed individuals within a regional industry points to future growth.

# Sector Strategy Pathways



 The graphics on this page illustrate relationships and potential movement (from left to right) between occupations that share similar skill sets. Developing career pathways as a strategy promotes industry employment growth and workforce engagement.

# City of Sugar Land, TX Regional Map





# Industry Definition

**Biopharmaceuticals (US Cluster Mapping) is defined as the following NAICS industries:**

<b>Code</b>	<b>Description</b>
325411	Medicinal and Botanical Manufacturing
325412	Pharmaceutical Preparation Manufacturing
325413	In-Vitro Diagnostic Substance Manufacturing
325414	Biological Product (except Diagnostic) Manufacturing

# Data Notes

- Industry employment and wages (including total regional employment and wages) are as of 2019Q4 and are based upon BLS QCEW data, imputed by Chmura where necessary, and supplemented by additional sources including Census ZBP data. Employment forecasts are modeled by Chmura and are consistent with BLS national-level 10-year forecasts.
- Occupation employment is as of 2019Q4 and is based on industry employment and local staffing patterns calculated by Chmura and utilizing BLS OES data. Occupation wages are per the BLS OES data and are as of 2018.
- GDP is derived from BEA data and imputations by Chmura. Productivity (output per worker) is calculated by Chmura using industry employment and wages as well as GDP and BLS output data. Supply chain modeling including purchases by industry are developed by Chmura.
- Postsecondary awards are per the NCES and are for the 2017-2018 academic year.
- Establishment counts are per the BLS QCEW data.
- Figures may not sum due to rounding.

## FAQ

### What is (LQ) location quotient?

Location quotient is a measurement of concentration in comparison to the nation. An LQ of 1.00 indicates a region has the same concentration of an industry (or occupation) as the nation. An LQ of 2.00 would mean the region has twice the expected employment compared to the nation and an LQ of 0.50 would mean the region has half the expected employment in comparison to the nation.

### What is annual demand?

Annual demand is a of the sum of the annual projected growth demand and separation demand. Separation demand is the number of jobs required due to separations—labor force exits (including retirements) and turnover resulting from workers moving from one occupation into another. Note that separation demand does not include all turnover—it does not include when workers stay in the same occupation but switch employers. Growth demand is the increase or decrease of jobs expected due to expansion or contraction of the overall number of jobs.

### What is the difference between industry wages and occupation wages?

Industry wages and occupation wages are estimated via separate data sets, often the time periods being reported do not align, and wages are defined slightly differently in the two systems (for example, certain bonuses are included in the industry wages but not the occupation wages). It is therefore common that estimates of the average industry wages and average occupation wages in a region do not match exactly.