## Biology Occupation Report

CIP 26.0101

Cochise, Pima, SC

### Biology/Biological Sciences, General

CIP 2010: A general program of biology at the introductory, basic level or a program in biology or the biological sciences that is undifferentiated as to title or content. Includes instruction in general biology and programs covering a variety of biological specializations.\* *Program Description - Settings* 

### **Occupation Gender Breakdown 2016**

	Gender	Jobs	Percent
•	Males	207	59.8%
•	Females	139	40.2%

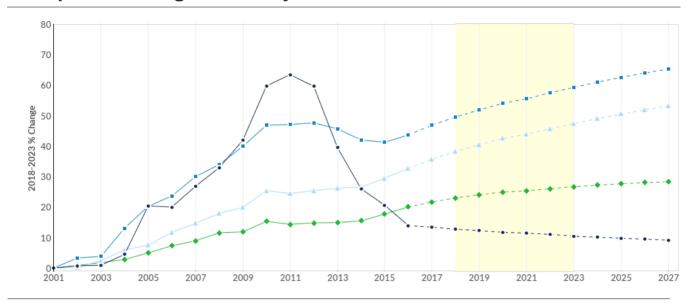
### Occupation Age Breakdown 2016

	Age	Jobs	Percent
•	14-18	0	0.0%
•	19-24	11	3.1%
•	25-34	77	22.2%
•	35-44	89	25.6%
•	45-54	84	24.2%
•	55-64	70	20.1%
•	65+	17	4.8%

### **Occupation Summary for 26.0101**

346	6.4%	\$41.39/hr
Jobs (2016)	% Change (2018-2023)	Median Hourly Earnings
14% above National average	Nation: 3.0%	Nation: \$46.01/hr

## **Occupation Change Summary**



	Region	2018 Jobs	2023 Jobs	Change	% Change	Median Hourly Earnings
•	Cochise County, AZ	44	43	-1	-2%	\$47.30
•	Cochise, Pima, SC	361	384	23	6%	\$41.39
•	Arizona (AZ)	1,681	1,793	112	7%	\$39.28
•	United States	103,939	107,050	3,111	3%	\$46.01

SOC	Description	Typical Entry Level Education	Work Experience Required	Typical On-The- Job Training
11-9121	Natural Sciences Managers	Bachelor's degree	5 years or more	None
19-1029	Biological Scientists, All Other	Bachelor's degree	None	None
19-1099	Life Scientists, All Other	Bachelor's degree	None	None

## Occupation Breakdown - 2018 Jobs

Occupation	Description	Cochise County, AZ	Cochise, Pima, SC	Arizona (AZ)	United States
19-1029	Biological Scientists, All Other	26	157	564	37,775
11-9121	Natural Sciences Managers	16	192	1,022	57,738
19-1099	Life Scientists, All Other	<10	12	95	8,426
	Total	44	361	1,681	103,939

# Occupation Breakdown - 2023 Jobs

Occupation	Description	Cochise County,	Cochise, Pima, SC	Arizona (AZ)	United States
19-1029	Biological Scientists, All Other	26	165	593	38,662
11-9121	Natural Sciences Managers	16	206	1,097	59,671
19-1099	Life Scientists, All Other	<10	13	103	8,716
	Total	43	384	1,793	107,050

## **Occupation Breakdown - Change**

Occupation	Description	Cochise County, AZ	Cochise, Pima, SC	Arizona (AZ)	United States
11-9121	Natural Sciences Managers	0	14	75	1,933
19-1029	Biological Scientists, All Other	0	8	29	887
19-1099	Life Scientists, All Other		1	8	290
	Total	-1	23	112	3,111

# **Occupation Breakdown - Median Hourly Earnings**

Occupation	Description	Cochise County,	Cochise, Pima, SC	Arizona (AZ)	United States
19-1029	Biological Scientists, All Other	\$49.41	\$35.23	\$35.00	\$35.96
11-9121	Natural Sciences Managers	\$43.09	\$49.49	\$45.64	\$57.62
19-1099	Life Scientists, All Other		\$34.58	\$36.66	\$35.60
	Total	\$46.76	\$42.73	\$41.52	\$47.93

## **Top Industries – Change from 2018 - 2023**

NAICS Code	Description	Cochise County,	Cochise, Pima, SC	Arizona (AZ)	United States
902999	State Government, Excluding Education and Hospitals			2	157
541330	Engineering Services			0	52
541712	Research and Development in the Physical, Engineering, and Life Sciences (except Biotechnology)		11	26	760
901199	Federal Government, Civilian, Excluding Postal Service	-1	6	3	-477
541711	Research and Development in Biotechnology		0	14	581
	Total	-1	19	46	1,074

Source: QCEW Employees, Non-QCEW Employees & Self-Employed - Emsi 2017.3 Class of Worker

#### **National Educational Attainment**

Biological Scientists, All Other (19-1029)

	Education Level	2016 Percent
•	Less than high school diploma	0.1%
•	High school diploma or equivalent	0.2%
•	Some college, no degree	2.1%
•	Associate's degree	2.2%
•	Bachelor's degree	43.8%
•	Master's degree	32.0%
•	Doctoral or professional degree	19.6%

<sup>\*</sup> National Educational Attainment - Settings

#### **National Educational Attainment**

Life Scientists, All Other (19-1099)

	Education Level	2016 Percent
•	Less than high school diploma	0.1%
•	High school diploma or equivalent	0.3%
•	Some college, no degree	0.9%
•	Associate's degree	0.5%
•	Bachelor's degree	7.5%
•	Master's degree	28.9%
•	Doctoral or professional degree	61.8%

<sup>\*</sup> National Educational Attainment - Settings

#### **National Educational Attainment**

Natural Sciences Managers (11-9121)

	Education Level	2016 Percent
•	Less than high school diploma	0.6%
•	High school diploma or equivalent	1.4%
•	Some college, no degree	4.0%
•	Associate's degree	2.3%
•	Bachelor's degree	33.2%
•	Master's degree	31.4%
•	Doctoral or professional degree	27.2%

<sup>\*</sup> National Educational Attainment - Settings

### **Appendix A - Data Sources and Calculations**

#### **Location Quotient**

Location quotient (LQ) is a way of quantifying how concentrated a particular industry, cluster, occupation, or demographic group is in a region as compared to the nation. It can reveal what makes a particular region unique in comparison to the national average.

### **Occupation Data**

EMSI occupation employment data are based on final EMSI industry data and final EMSI staffing patterns. Wage estimates are based on Occupational Employment Statistics (QCEW and Non-QCEW Employees classes of worker) and the American Community Survey (Self-Employed and Extended Proprietors). Occupational wage estimates also affected by county-level EMSI earnings by industry.

### **Completers Data**

The completers data in this report is taken directly from the national IPEDS database published by the U.S. Department of Education's National Center for Education Statistics.

#### Institution Data

The institution data in this report is taken directly from the national IPEDS database published by the U.S. Department of Education's National Center for Education Statistics.

### **Industry Data**

EMSI industry data have various sources depending on the class of worker. (1) For QCEW Employees, EMSI primarily uses the QCEW (Quarterly Census of Employment and Wages), with supplemental estimates from County Business Patterns and Current Employment Statistics. (2) Non-QCEW employees data are based on a number of sources including QCEW, Current Employment Statistics, County Business Patterns, BEA State and Local Personal Income reports, the National Industry-Occupation Employment Matrix (NIOEM), the American Community Survey, and Railroad Retirement Board statistics. (3) Self-Employed and Extended Proprietor classes of worker data are primarily based on the American Community Survey, Nonemployer Statistics, and BEA State and Local Personal Income Reports. Projections for QCEW and Non-QCEW Employees are informed by NIOEM and long-term industry projections published by individual states.

### **Staffing Patterns Data**

The staffing pattern data in this report are compiled from several sources using a specialized process. For QCEW and Non-QCEW Employees classes of worker, sources include Occupational Employment Statistics, the National Industry-Occupation Employment Matrix, and the American Community Survey. For the Self-Employed and Extended Proprietors classes of worker, the primary source is the American Community Survey, with a small amount of information from Occupational Employment Statistics.

#### **State Data Sources**

This report uses state data from the following agencies: Arizona Department of Administration, Office of Employment and Population Statistics