100 families

getgrowing | CAREER PATHS





JOB GROUPS

RESEARCH DISCOVERY

Researchers in this area conduct experiments and direct research activities to discover new medications. Researchers work to design and perform research experiments at the molecular level through detailed manipulation, observation, data analysis, and interpretation. After performing experiments, these professionals analyze the data and interpret the results.

BIOINFORMATICS

Bioinformatics professionals build the technological tools that are needed to improve the data analysis process for large data sets. In short, workers in the bioinformatics job group use advanced mathematical algorithms and computer science to organize, analyze, and interpret biological data.

EXAMPLE OCCUPATIONS

SCIENTIST/PHARMACOLOGIST

M.S. or Ph.D. in Biology \$60,000 - \$120,000

BIOINFORMATICS SCIENTIST

M.S. or Ph.D. in Statistics/Biostatistics

\$85,000 - \$110,000

LABORATORY ASSISTANT

High School Diploma

ANALYST

\$25,000 - \$35,000

B.S. in Computer Science, Mathematics, Bioinformatics, or Molecular Biology \$25,000 - \$45,000

EXAMPLE OCCUPATIONS

ms manufacturing & supply chain

PRODUCTION &

Workers involved in production and

procedures, and maintenance of

advanced equipment. In addition,

production are available.

operations follow strict processes in the

assessment of test samples, purification

organizations must ensure that the raw

materials needed at various stages of

DIRECTOR OF PLANNING & FORECASTING

JOB GROUPS

PLANNING & SUPPLIER

management ensure that the

organization is aware of the

Workers involved with

planning and supplier

market trends that may

influence production. In

materials used in drug

production.

addition, they manage the

vendors who supply the raw

Ph.D. in Science (e.g., Biology, Chemistry Engineering)

\$150,000 - \$200,000

PLANNER

B.S. in Science

Engineering)

(e.g., Biology, Chemistry

\$40,000 - \$80,000

MANUFACTURING SUPERVISOR

B.S. in Science (e.g., Biology, Chemistry, Engineering) \$80,000 - \$120,000

MANUFACTURING TECHNICIAN

High School Diploma \$40,000 - \$80,000

TRANSPORTATION ANALYST

TRANSPORTATION &

Products must be made available to

organization that are involved in the

transporting them to customers. For

example, workers must package and

customers. There are many workers in an

process of putting shipments together and

monitor shipments and make sure that the

company is following all of the state laws

associated with transporting of goods.

High School Diploma/ B.S. in Business \$40,000 - \$80,000

WAREHOUSE TECHNICIAN

High School Diploma \$30,000 - \$40,000

FACILITIES

Workers in this area maintain facility equipment and space to ensure that all safety standards are met. In addition, they provide guidance to develop standard operating procedures.

SENIOR ENGINEER

B.S. in Engineering \$80,000 - \$120,000

FACILITIES TECHNICIAN

A.A./A.S. in Mechanical/ **Electrical Field**

\$30,000 - \$40,000

JOB GROUPS

Communications

specialists support

with the public and

als work to increase

public awareness of

scientific contributions.

COMMUNICATIONS **INFORMATION** SYSTEMS

bio-business

Workers in this area organizational relations provide technical support, computer software and investors. These individuhardware installation, system management, and maintenance of computer company activities and

BUSINESS **DEVELOPMENT**

Workers in this job group engage in the preparation, negotiation, and management of contracts that have been secured. In addition, workers in this area identify strategic alliances for future contracts and licensure.

ACCOUNTING

Workers in this job group keep track of the financial operations of the organization. They track financial systems such as external contracts, employee compensation, and stocks.

FINANCE ACCOUNTING

MANAGER

Finance

B.S. in Accounting

FINANCIAL ANALYST

\$50,000 - \$80,000

B.S. in Finance Accounting

LEGAL

Many of the functional areas in bioscience companies benefit from legal advice when entering into contracts and agreements with everyone from clinical trial participants to material suppliers. In addition, these professionals may also help to prepare patent filings for the company.

HUMAN RESOURCES

Human resources professionals support organizational goals through the management of personnel. Employees in this group usually work in a specialized area. Key areas in most large firms include employee relations, compensation, benefits, training, and equal employment opportunity.

EXAMPLE OCCUPATIONS

CORPORATE COMMUNICATIONS MANAGER

B.S./M.S. in Computer B.A. in Communications, Science, Information English, or Business Related Technology, Business Administration, or a Related Field

\$100,000 - \$150,000

COMMUNICATIONS

SPECIALIST

B.S. or B.A. in

\$40,000 - \$80,000

\$150,000 - \$250,000

OFFICER

CHIEF INFORMATION

INFORMATION SERVICE TECHNICIAN

High School Diploma Communications or Business \$40,000 - \$80,000

\$80,000 - \$100,000 \$80,000 - \$100,000

CONTRACTS

BUSINESS DEVELOPMENT

MANAGER

B.S. in Marketing

ADMINISTRATOR B.S. in Business

\$50,000 - \$80,000

B.S. Degree

\$40,000 - \$80,000

PARALEGAL

LEGAL COUNSEL

\$150,000 - \$250,000

Law Degree

HUMAN RESOURCES

REPRESENTATIVE

HUMAN RESOURCES

B.S. in Human Resources or

Related Business Field

\$80,000 - \$100,000

MANAGER

B.S. in Human Resources or **Related Business Field**

\$40,000 - \$80,000

MARKETING

clinica **DEVELOPMENT**

JOB GROUPS

MEDICAL EXPERT

Medical experts provide support services throughout pharmaceutical companies. They provide training for clinical staff and use their medical expertise to consult marketing, sales, and regulatory affairs teams.

CLINICAL RESEARCH

Workers in the clinical research group carry out clinical trials, analyze data, and interpret results to make recommendations about whether new products should go to

BIOSTATISTICS

Scientists who engage in clinical trials are often supported by specialists who are skilled in applying advanced statistics in the analysis of diverse data sets.

to protect the company, trial participants, and consumers. Scientists in this area use their expertise to guide the experiapproval, scientific journals, mental design, data collection conferences, and marketing effort, and analysis.

MEDICAL WRITER

Clinical trial procedures and outcomes must be well documented Medical writers work with researchers and administrators to develop written documents for regulatory initiatives.

CLINICAL TRIAL RECRUITMENT

Before a drug can go to market, the demonstrate that it is effective and safe for human consumption. Managing the clinical trial process requires workers who will be able to recruitment plan and work directly with participants.

developing organization must develop and carry out a participant

EXAMPLE OCCUPATIONS

MEDICAL EXPERT

M.S. or Ph.D. in Science (e.g., Biology) \$120,000 - \$200,000

RESEARCH DEVELOPMENT

M.S. or Ph.D. in Science (e.g., Biology) \$150,000 - \$200,000

market.

CLINICAL RESEARCH ASSOCIATE

\$40,000 - \$80,000

B.S. in Biological/Biomedical Sciences or R.N.

DIRECTOR OF CLINICAL

M.S. or Ph.D. in Biological/Biomedical Sciences

DIRECTOR OF CLINICAL

BIOSTATISTICS

\$120,000 - \$200,000

BIOSTATISTICS ASSOCIATE

B.S. in Biological/Biomedical Sciences \$80,000 - \$110,000

PROTOCOL DEVELOPMENT SCIENTIST

B.S. or M.S. in Biological/Biomedical Sciences or R.N. \$80,000 - \$200,000

MEDICAL WRITER

M.S. in Science (e.g., Biology) or R.N. \$80,000 - \$110,000

B.S. or M.S. in Science \$80,000 - \$200,000

DIRECTOR OF CLINICAL

PROJECTS MANAGEMENT

CLINICAL TRIAL ASSOCIATE

B.S. in Science or R.N. \$40,000 - \$80,000

quality/regulatory

JOB GROUPS

QUALITY ASSURANCE

Workers in the quality assurance job group take the first steps to minimize product defects by establishing specific guidelines for the manufacturing process. Workers in this area manage and participate in the review of the manufacturing procedures.

QUALITY ASSURANCE

B.S. in Biological/Biomedical

\$80,000 - \$120,000

QUALITY ASSURANCE

DOCUMENTATION

ADMINISTRATOR

High School Diploma

\$30,000 - \$50,000

MANAGER

Science

QUALITY CONTROL Once the process for manufacturing has been

QUALITY CONTROL

B.S./M.S. in Engineering

\$60,000 - \$120,000

QUALITY CONTROL

High School Diploma

\$35,000 - \$60,000

TECHNICIAN

ENGINEER/SUPERVISOR

that the raw materials, equipment, and applied process all meet both internal and external standards.

EXAMPLE OCCUPATIONS

outlined and implemented,

workers in the area of quality the manufacturing control work to make sure requirements.

VALIDATION

Validation specialists

VALIDATION DIRECTOR

Chemistry, Engineering)

VALIDATION SPECIALIST

B.S./M.S. in Science

\$40,000 - \$80,000

Engineering)

(e.g., Biology, Chemistry,

\$120,000 - \$200,000

B.S./M.S. in Science (e.g., Biology,

MEASUREMENT

develop, implement, and manage testing plans and methods to ensure that procedures and resulting products meet regulatory

REGULATORY DISPENSARY/

Workers in the regulatory affairs job group ensure that the product development In order for the products to be process and the final product meet the manufactured, the large requirements of various regulating quantities of materials must agencies. These workers prepare procedural be scaled down to sizes that documentation, ensure that the correct are needed for individual paperwork is submitted to the proper production. Workers in this agencies, and notify employees within the area need a solid understandorganizations of required policies and ing of measurement. procedures.

Experience in Measurement

DISPENSARY TECHNICIAN

Experience in Measurement

\$30,000 - \$50,000

\$40,000 - \$80,000

MANAGER REGULATORY AFFAIRS SENIOR TECHNICIAN

> (B.S./M.S. in Science (e.g., Biology, Chemistry, Engineering) \$80,000 - \$120,000

REGULATORY AFFAIRS ASSOCIATE

B.S. in Science (e.g., Biology, Chemistry, Engineering) \$30,000 - \$50,000

sales & MARKETING

JOB GROUPS

SALES

Those working in the sales job group provide technical assistance and information to customers, the medical and scientific community, and pharmaceutical employees.

Marketing specialists use their expertise to provide recommendations for activities such as product packaging, marketing budgets, product launches, and product expansion.

EXAMPLE OCCUPATIONS

MEDICAL/CLINICAL SCIENCE LIAISON

B.S. in Science (e.g., Biology, Chemistry, Engineering), MBA preferred \$80,000 - \$120,000

\$30,000 - \$120,000

SALES REPRESENTATIVE MEDICAL INFORMATION SPECIALIST

B.S./M.S. in related Scientific Discipline (e.g., Biology), Marketing, or Communications

MARKETING RESEARCH MANAGER

B.S. in Marketing or Business,

MBA preferred

\$80,000 - \$120,000

B.S. in Pharmacy or Nursing or M.S./Ph.D. Salary Range: \$30,000 - \$70,000

Visit www.bio-one.org for job information, career videos, and links to the universities and colleges that can prepare you for work in the biosciences.