

# job families

EXPLORATION

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## DR discovery RESEARCH

### 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

Qualifications:  
M.S. or Ph.D. in Biology  
Salary Range:  
\$60,000 - \$120,000

#### BIOINFORMATICS SCIENTIST

Qualifications:  
M.S. or Ph.D. in Statistics/Biostatistics  
Salary Range:  
\$85,000 - \$110,000

#### LABORATORY ASSISTANT

Qualifications:  
High School Diploma  
Salary Range:  
\$25,000 - \$45,000

#### ANALYST

Qualifications:  
B.S. in Computer Science, Mathematics, Bioinformatics, or Molecular Biology  
Salary Range:  
\$25,000 - \$35,000

## MS manufacturing & supply chain

### JOB GROUPS

#### PLANNING & SUPPLIER MANAGEMENT

Workers involved with planning and supplier management ensure that the organization is aware of the market trends that may influence production. In addition, they manage the vendors who supply the raw materials used in drug production.

#### PRODUCTION & OPERATIONS

Workers involved in production and operations follow strict processes in the assessment of test samples, purification procedures, and maintenance of advanced equipment. In addition, organizations must ensure that the raw materials needed at various stages of production are available.

#### TRANSPORTATION & DISTRIBUTION

Products must be made available to customers. There are many workers in an organization that are involved in the process of putting shipments together and transporting them to customers. For example, workers must package and monitor shipments and make sure that the company is following all of the state laws associated with transporting of goods.

#### 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.

### EXAMPLE OCCUPATIONS

#### DIRECTOR OF PLANNING & FORECASTING

Qualifications:  
Ph.D. in Science (e.g., Biology, Chemistry, Engineering)  
Salary Range:  
\$150,000 - \$200,000

#### MANUFACTURING SUPERVISOR

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

#### TRANSPORTATION ANALYST

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

#### SENIOR ENGINEER

Qualifications:  
B.S. in Engineering  
Salary Range:  
\$80,000 - \$120,000

#### PLANNER

Qualifications:  
B.S. in Science (e.g., Biology, Chemistry, Engineering)  
Salary Range:  
\$40,000 - \$80,000

#### MANUFACTURING TECHNICIAN

Qualifications:  
High School Diploma  
Salary Range:  
\$40,000 - \$80,000

#### WAREHOUSE TECHNICIAN

Qualifications:  
High School Diploma  
Salary Range:  
\$30,000 - \$40,000

#### FACILITIES TECHNICIAN

Qualifications:  
A.A./A.S. in Mechanical/  
Electrical Field  
Salary Range:  
\$30,000 - \$40,000

## B bio-business

### JOB GROUPS

#### COMMUNICATIONS

Communications specialists support organizational relations with the public and investors. These individuals work to increase public awareness of company activities and scientific contributions.

#### INFORMATION SYSTEMS

Workers in this area provide technical support, computer software and hardware installation, system management, and maintenance of computer systems.

#### 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.

#### FINANCE/ 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.

#### 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

Qualifications:  
B.A. in Communications, English, or Business Related Field  
Salary Range:  
\$100,000 - \$150,000

#### CHIEF INFORMATION OFFICER

Qualifications:  
B.S./M.S. in Computer Science, Information Technology, Business Administration, or a Related Field  
Salary Range:  
\$150,000 - \$250,000

#### BUSINESS DEVELOPMENT MANAGER

Qualifications:  
B.S. in Marketing/  
Business  
Salary Range:  
\$80,000 - \$100,000

#### FINANCE ACCOUNTING MANAGER

Qualifications:  
B.S. in Accounting, Finance  
Salary Range:  
\$80,000 - \$100,000

#### LEGAL COUNSEL

Qualifications:  
Law Degree  
Salary Range:  
\$150,000 - \$250,000

#### HUMAN RESOURCES MANAGER

Qualifications:  
B.S. in Human Resources or Related Business Field  
Salary Range:  
\$80,000 - \$100,000

#### COMMUNICATIONS SPECIALIST

Qualifications:  
B.S. or B.A. in Communications or Business  
Salary Range:  
\$40,000 - \$80,000

#### INFORMATION SERVICE TECHNICIAN

Qualifications:  
High School Diploma  
Salary Range:  
\$40,000 - \$80,000

#### CONTRACTS ADMINISTRATOR

Qualifications:  
B.S. in Business  
Salary Range:  
\$50,000 - \$80,000

#### FINANCIAL ANALYST

Qualifications:  
B.S. in Finance Accounting  
Salary Range:  
\$50,000 - \$80,000

#### PARALEGAL

Qualifications:  
B.S. Degree  
Salary Range:  
\$40,000 - \$80,000

#### HUMAN RESOURCES REPRESENTATIVE

Qualifications:  
B.S. in Human Resources or Related Business Field  
Salary Range:  
\$40,000 - \$80,000

## CD clinical 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 market.

#### 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. Scientists in this area use their expertise to guide the experimental design, data collection effort, and analysis.

#### MEDICAL WRITER

Clinical trial procedures and outcomes must be well documented to protect the company, trial participants, and consumers. Medical writers work with researchers and administrators to develop written documents for regulatory approval, scientific journals, conferences, and marketing initiatives.

#### CLINICAL TRIAL RECRUITMENT

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

### EXAMPLE OCCUPATIONS

#### MEDICAL EXPERT

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

#### DIRECTOR OF CLINICAL RESEARCH DEVELOPMENT

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

#### DIRECTOR OF CLINICAL BIostatISTICS

Qualifications:  
M.S. or Ph.D. in Biological/Biomedical Sciences  
Salary Range:  
\$120,000 - \$200,000

#### PROTOCOL DEVELOPMENT SCIENTIST

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

#### DIRECTOR OF CLINICAL PROJECTS MANAGEMENT

Qualifications:  
B.S. or M.S. in Science  
Salary Range:  
\$80,000 - \$200,000

#### CLINICAL RESEARCH ASSOCIATE

Qualifications:  
B.S. in Biological/Biomedical Sciences or R.N.  
Salary Range:  
\$40,000 - \$80,000

#### BIostatISTICS ASSOCIATE

Qualifications:  
B.S. in Biological/Biomedical Sciences  
Salary Range:  
\$80,000 - \$110,000

#### MEDICAL WRITER

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

#### CLINICAL TRIAL ASSOCIATE

Qualifications:  
B.S. in Science or R.N.  
Salary Range:  
\$40,000 - \$80,000

## QR quality/regulatory CONTROL/AFFAIRS

### JOB GROUPS

#### QUALITY ASSURANCE

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

#### QUALITY CONTROL

Once the process for manufacturing has been outlined and implemented, workers in the area of quality control work to make sure that the raw materials, equipment, and applied process all meet both internal and external standards.

#### VALIDATION

Validation specialists develop, implement, and manage testing plans and methods to ensure that the manufacturing procedures and resulting products meet regulatory requirements.

#### DISPENSARY/ MEASUREMENT

In order for the products to be manufactured, the large quantities of materials must be scaled down to sizes that are needed for individual production. Workers in this area need a solid understanding of measurement.

#### REGULATORY

Workers in the regulatory affairs job group ensure that the product development process and the final product meet the requirements of various regulating agencies. These workers prepare procedural documentation, ensure that the correct paperwork is submitted to the proper agencies, and notify employees within the organizations of required policies and procedures.

### EXAMPLE OCCUPATIONS

#### QUALITY ASSURANCE MANAGER

Qualifications:  
B.S. in Biological/Biomedical Science  
Salary Range:  
\$80,000 - \$120,000

#### QUALITY CONTROL ENGINEER/SUPERVISOR

Qualifications:  
B.S./M.S. in Engineering  
Salary Range:  
\$60,000 - \$120,000

#### VALIDATION DIRECTOR

Qualifications:  
B.S./M.S. in Science (e.g., Biology, Chemistry, Engineering)  
Salary Range:  
\$120,000 - \$200,000

#### SENIOR TECHNICIAN

Qualifications:  
Experience in Measurement  
Salary Range:  
\$40,000 - \$80,000

#### MANAGER REGULATORY AFFAIRS

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

#### QUALITY ASSURANCE DOCUMENTATION ADMINISTRATOR

Qualifications:  
High School Diploma  
Salary Range:  
\$30,000 - \$50,000

#### QUALITY CONTROL TECHNICIAN

Qualifications:  
High School Diploma  
Salary Range:  
\$35,000 - \$60,000

#### VALIDATION SPECIALIST

Qualifications:  
B.S./M.S. in Science (e.g., Biology, Chemistry, Engineering)  
Salary Range:  
\$40,000 - \$80,000

#### DISPENSARY TECHNICIAN

Qualifications:  
Experience in Measurement  
Salary Range:  
\$30,000 - \$50,000

#### REGULATORY AFFAIRS ASSOCIATE

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

## SM 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

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

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

#### MARKETING RESEARCH MANAGER

Qualifications:  
B.S. in Marketing or Business, MBA preferred  
Salary Range:  
\$80,000 - \$120,000

#### SALES REPRESENTATIVE

Qualifications:  
B.S./M.S. in related Scientific Discipline (e.g., Biology), Marketing, or Communications  
Salary Range:  
\$30,000 - \$120,000

#### MEDICAL INFORMATION SPECIALIST

Qualifications:  
B.S. in Pharmacy or Nursing or M.S./Ph.D. (e.g., Biology), Marketing, or Communications  
Salary Range:  
\$30,000 - \$70,000