

# Business / Management / Operations / Strategy

Support a company or organization's development, management, and strategic planning.

#### **OVERVIEW**



#### IN LIFE SCIENCES INDUSTRY

As a company goes through its lifecycle, it needs proper management, strategic vision, and excellent execution in order to succeed.



#### WHO SHOULD APPLY?

Business & STEM students with interest in business and management. Additional special opportunities for those with advanced degrees (i.e., MBA, MPH, MSc, Ph.D., Pharm.D, MD).



#### WHAT ARE THE TYPES OF ROLES AVAILABLE?

**Business Development:** Business Development Intern, Business Development Associate

Investor Relations (IR): Biotech IR Intern, Biotech IR Analyst

Operations & Logistics: Operations Manager, Supply Chain Management Intern

<u>Organizational Management</u>: Business Relations Intern, Event & Industry Relations Intern, Product Management Intern

Sales: Sales Assistant, Sales Operations Intern

<u>Strategy</u>: Early Commercial Strategy Intern, Global Market Access Intern, New Markets Research Intern, Scientific Strategy Intern

#### WHAT ARE COMMON ASSOCIATED TASKS & RESPONSIBILITIES?

- Participate in client engagement and management activities
- Conduct data collection, market analysis, and competitive positioning
- Create gap analysis, due diligence, strategic assessment documents
- Draft reports, pitch decks, and business & strategy plans
- Create media (i.e., releases, presentations, website content, talking points)
- Coordinate projects and event logistics and planning

#### WHO IS HIRING IN NYC?

Biotech & Digital Health Companies

Life Sciences Strategy & Consulting Firms

Non-Profit & Social Impact Organizations





- Excellent communication (written and verbal) and interpersonal skills
- Strong market & data analysis and interpretation skills
- Familiarity with CRM systems and practices (i.e., Agile, Salesforce, Hubspot)
- Proficiency across Google Workspace and Microsoft 365 Office suites
- Basic understanding of biology, science, and management concepts
- Attention to detail and strong organizational skills

#### **ALUMNI SPOTLIGHT**



"Business is the essential bridge necessary to bring scientific advances to patients."

**KIARRA LAVACHE** 

Account Services Fellow at Havas Health Plus 2021 LifeSci NYC Intern at Icahn School of Medicine at Mount Sinai B.E. Biomedical Engineering Columbia University (2022)



"I enjoy exploring strategic issues necessary for life science industry clients to succeed in developing their businesses."

ALICE CHENG
Strategy & Operations Lead at Aegis Ventures
2018 LifeSci NYC Intern at Axovant
B.S. Neural Science
New York University (2019)



#### **RELATED ONE-PAGERS**

Science Communications
& Marketing

Non-Profit Administration & Management

<u>Healthcare Administration</u>
/ <u>Healthcare Management /</u>
Public Health

**HR / People Operations** 

Finance & Accounting







## Research / Research & Development / Laboratory Sciences

Support a company's scientific discovery, technology development, and laboratory operations.

#### **OVERVIEW**



#### IN LIFE SCIENCES INDUSTRY

Innovation is the engine of the life sciences industry. In order to develop and grow, a company must create and develop new drugs, therapies, and / or devices.



#### WHO SHOULD APPLY?

Science & engineering students. Specialized and higher level positions require advanced degrees (i.e., MSc, Ph.D., Pharm.D, MD). Medical Laboratory Sciences positions require MLS degree with appropriate license and certifications.



#### WHAT ARE THE TYPES OF ROLES AVAILABLE?

<u>Biomaterials / Material Science:</u> Material Science Intern, Polymer Science Intern <u>Biotechnology / Molecular Biology:</u> Biotechnology Formulation Intern, Immunology

Research Scientist, Microbiologist & Bioproduction Specialist Intern, Neurodegenerative Disease Research Scientist

<u>Environmental:</u> Community Scientist, Compost Intern, Environmental Research Intern <u>Medical Laboratory Sciences:</u> Clinical Laboratory Technologist, Medical Laboratory Technician

<u>Technical Support Services:</u> Lab Software Support Technician, Technical Literature Review Intern

#### WHAT ARE COMMON ASSOCIATED TASKS & RESPONSIBILITIES?

- Conduct laboratory experiments in testing, validation, product development and discovery
- Keep detailed notes and document findings in physical and electronic notebooks
- Create research plans and strategies to facilitate project development
- Ulitize, maintain, and troubleshoot research equipment and instrumentation
- Present research findings to team members, technical, and non-technical audiences
- Read relevant scientific literature, manuals, and Standard Operating Procedures (SOPs)
- Perform general laboratory operations and maintenance duties (i.e., creating solutions & instrument maintenance)

#### WHO IS HIRING IN NYC?

Cell, Biopharmaceutical & Protein Technology Companies

Biomaterials & Consumer Goods Companies

Analytical, Environmental & Medical Laboratories





- Detailed understanding of scientific method and relevant research topics
- Molecular biology/analytical techniques (i.e., biological sample collection & preparation, cell & tissue culture, DNA & RNA extraction, DNA / RNA isolation, ELISA, flow cytometry, gel electrophoresis, PCR, protein purification, qPCR, SDS-Page, western blotting)
- Prior academic lab and research experiences (Preferably 1+ yrs)
- Proficiency in data analysis software (i.e., MATLAB, Python, R)
- Excellent communication (written and verbal) and interpersonal skills
- Proficiency across Google Workspace and Microsoft 365 Office suites
- Strong analytical and critical thinking skills

#### **ALUMNI SPOTLIGHT**



"Working as a scientist means that my efforts have a big impact on people's lives. It continuously amazes me that my job means I get to develop new vaccines that will help millions of people, and that is a something I will always be proud of."

#### **EDDIE GADEE**

Senior Associate Scientist at Pfizer 2019 LifeSci NYC Intern at Xylyx Bio M.S. Biological and Pharmaceutical Biotechnology St. John's University (2020)



"Gather as many technical skills as you can and you will soon find out that the majority of them are transferable to many research fields. So don't give up if you can't find your niche! Open-mindedness is the name of the game in the life science industry."

#### **ROMA VISHWANATH**

Scientist II, Nutritional Biology & Safety at Helaina 2018 LifeSci NYC Intern at Mirimus M.S. Biotechnology and Entrepreneurship New York University (2019)

#### **RELATED ONE-PAGERS**

Clinical Research & Administration

**Engineering & Manufacturing** 

Quality Assurance (QA) / Quality Control (QC)







### **Computer Science & Data Analytics**

Integrate computers and data science to catalyze growth in various industries.

#### **OVERVIEW**



#### IN LIFE SCIENCES INDUSTRY

Traditionally, life sciences have been wet-lab and physical product-oriented, but advances in artificial intelligence, machine learning, and data science have led to the emergence of new health tech fields, such as mobile health, digital pathology, and healthcare analytics.



#### WHO SHOULD APPLY?

Students studying computer science, data science, IT / MIS, applied math, statistics, and associated fields. Advanced technical positions available for graduate students.



#### WHAT ARE THE TYPES OF ROLES AVAILABLE?

<u>Computer Science & Software Engineering</u>: Android Engineer Intern, Computer Networks Engineer, Full Stack Software Engineer Intern, iOS Mobile Software Engineering Intern, Web Developer Intern

<u>Data Science</u>: Data Analytics Intern, Data Center Infrastructure Intern, Data Science Intern

#### WHAT ARE COMMON ASSOCIATED TASKS & RESPONSIBILITIES?

- Collect, analyze, and interpret large data sets
- Communicate findings to stakeholders via visualization dashboards and written reports
- Contribute to product software technical documentation
- Create novel architecture and training paradigms for unsolved scientific and clinical problems
- Develop and validate software for medical devices and clinical web and mobile applications
- Make APIs and interfaces with medical systems and devices
- Work with clients in order to properly integrate solutions from company's product offerings

#### WHO IS HIRING IN NYC?

Biotech Companies & Startups

**Digital Health Companies** 

**Clinical Analytics Firms** 





- Ability to use multiple back-end languages (i.e., C#, Java, Python, Ruby)
- Deep understanding of database structures, theories, principles, and best practices
- Demonstrated ability of statistical data analysis software (i.e., SQL, R, Tableau)
- Excellent development habits, knowledge of best practices and documentation
- Experience with multiple front-end languages and libraries (i.e., HTML / CSS, JavaScript, XML)
- Familiarity with python and data science stack (i.e., NumPy, SciPy, Pandas) and deep learning framework (i.e., PyTorch, TensorFlow, JAX)
- Knowledge of different databases, web services, and UX / UI design
- Solid knowledge of programming fundamentals (i.e., algorithms, data structures, and design patterns)

#### **ALUMNI SPOTLIGHT**



"The world is becoming increasingly digital and producing innumerable data points. Data is an important component of many fields, including the life science industry. From hospitals to medtech, there is a big need to organize the plethora of data out there. I enjoy parsing through data and knowing that the work I do has an impact through its connection to healthcare/life sciences."

#### **ASHLEY ABID**

Co-Founder / Data Analyst at Skinterest Tech 2020 LifeSci NYC Intern at BioBAT M.S. Translational Medicine CUNY City College of New York (2018)



"The field of incorporating modern computational technology to the life sciences is relatively new and there are countless opportunities for faster innovation."

#### **AMINOOR RASHID**

Software Engineer at Memorial Sloan Kettering Cancer Center 2018 LifeSci NYC Intern at Lucerna M.A. Biology, B.A Biochemistry CUNY Hunter College (2015, 2018)



Bioinformatics & Computational Chemistry







### **Engineering & Manufacturing**

Design and fabricate safe and useful products to improve health health and the environment.



#### **OVERVIEW**



#### IN LIFE SCIENCES INDUSTRY

From antibodies to medical devices, engineers and manufacturing specialists are needed to safely convert ideas and benchtop prototypes into scalable products for the masses. Support engineering services are needed to conduct quality product development and manufacturing.



#### WHO SHOULD APPLY?

Engineering undergraduates, graduates, and associate's students in technology programs.





<u>Engineering</u>: Biomedical Engineer, Field Service Engineer, Hardware Engineering, Industrial Design Intern, Mechanical Designer, Mechatronics Engineer

<u>Manufacturing</u>: Manufacturing Engineer, Equipment Technician, Production Operator, Process Technician

#### WHAT ARE COMMON ASSOCIATED TASKS & RESPONSIBILITIES?

- Contribute to technical documentation for product development
- Design electrical schematics and build protoboards for products
- Prepare engineering drawings and high-level drawing packages
- Assist with supply chain logistics and optimization of processes and process flows
- Create and revise Standard Operating Procedures (SOPs) and batch records
- Help with equipment installation, qualification, operation, and maintenance
- Contribute to hardware quality test definition, execution and reporting
- Collaborate with vendors to source raw materials and prototype devices

#### WHO IS HIRING IN NYC?

Cell, Biopharmaceutical & Protein Technology Companies Biomaterials, Consumer Goods, and Medical Device Companies

Academic & Industrial Laboratories





- Aptitude in CAD and modeling softwares (i.e., Rhino, DRM, FEA)
- Desire and ability to learn new tools, languages and design techniques
- Knowledge of physical prototyping (i.e., woodworking, metalworking, vacuum forming, 3D printing, laser-cutting, CNC routing)
- Extensive knowledge of circuitry, electronics, sensors, actuators, etc.
- Experience with drafting and drawing detailing
- Hands-on mechanical experience and ability to troubleshoot equipment
- Experience with programming (i.e., C#, Linux, Python)
- Excellent communication (written and verbal) and interpersonal skills

#### **ALUMNI SPOTLIGHT**



"Very often, small-scale experiments serve as proof of concept to show what needs to be done to obtain a certain key result, but they are frequently unsuitable for direct scale-up. Engineering takes the key concepts from these experiments and makes them more suitable and feasible by reducing cost and increasing efficiency while also ensuring quality."

Jin Xin

Chemical and Materials R&D Engineer / Program Manager at Upward Farms 2020 LifeSci NYC Intern at Helaina
B.S. Chemical & Biomolecular Engineering
New York University (2020)



"Engineering and manufacturing in the life sciences allow you to work hands-on with biological systems. It is an exciting puzzle where you are constantly learning, problem-solving, and designing new solutions."

#### **Eliana Abrams**

Summit Coordinator at Biofabricate 2021 LifeSci NYC Intern at Helaina B.S. Pre-Medicine with Studio Art & Chemistry Minors New York University (2021)



#### **RELATED ONE-PAGERS**

Research / Research & Development / Laboratory Sciences

**Regulatory Affairs** 

Quality Assurance (QA) / Quality Control (QC)







## **Bioinformatics & Computational Chemistry**

Use computational tools analyze biological and chemical data which drive advancements in drug development, genetic engineering, and personalized medicine.

#### **OVERVIEW**



#### IN LIFE SCIENCES INDUSTRY

Bioinformatics uses computational tools and analysis to interpret biological data, which has implications for drug development, genetic engineering, and personalized medicine. Computational chemistry uses computer simulation and modeling to solve complex chemical problems in drug discovery and drug design.



#### WHO SHOULD APPLY?

Graduate students in computational biology, bioinformatics, statistics, computer science or related fields. Undergraduate students would be considered only with prior computational science experience (i.e., school and recreational projects).



#### WHAT ARE THE TYPES OF ROLES AVAILABLE?

<u>Bioinformatics</u>: Bioinformatics & Machine Learning Intern, Transcriptomics & Bioinformatics Staff Scientist

**Computational Chemistry**: Computational Chemistry Intern, Computational Chemist

#### WHAT ARE COMMON ASSOCIATED TASKS & RESPONSIBILITIES?

- Support research teams in developing analysis pipelines through script writing, coding, and troubleshooting
- Work with interdisciplinary teams of scientists & developers
- Apply modern machine learning and AI methods for novel biological discovery
- Analyze, Interpret, and visualize results to facilitate biological or disease discovery
- Utilize machine learning and protein structure modeling for antibody design
- Develop innovative algorithms to streamline and disrupt R&D processes
- Implement new modules and algorithms for the analysis of sequencing data

#### WHO IS HIRING IN NYC?

Cell, Biopharmaceutical & Protein Technology Companies

Biomaterials & Consumer Goods Companies

Analytical, Environmental & Medical Laboratories





- Experience developing and utilizing data analysis tools to manipulate large datasets
- Strong programming skills (i.e., R / Bioconductor, Python, Perl, C++, Unix, Bash scripts)
- Experience working with bioinformatics formats (i.e., SAM, BAM, VCF, FASTQ, FASTA)
- Familiarity with both antibody-related and standard genomic / protein databases (i.e., IMGT, OAS, NCBI)
- Strong analytical and problem-solving skills
- Excellent communication (written and verbal) and interpersonal skills
- Interest in and knowledge of molecular biology and genetics

#### **INDUSTRY SPOTLIGHT**



"Bioinformatics is crucial to study the life sciences because of the incredible amount of data that is being collected across the industry. Bioinformatics strategies allow us to take the massive amount of complex data that is available in the life science industry to make biological interpretations and extract meaningful insights that can drive our understanding of biology."

#### **ALYSSA FRONK**

Associate Director of Computational Biology at Envisagenics Ph.D. Biomedical Sciences Albert Einstein School of Medicine (2020)



"The field of genomics is at the early stages of a secular growth cycle that was initiated due to advances in data processing and storage of important biological and chemical information. As a result, there are tremendous career opportunities for analysts and programmers who are also interested in contributing towards the scientific research process."

#### SHIRAZ BHEDA

Bioinformatician at Center for Precision Medicine and Genomics at Columbia University 2020 LifeSci NYC Intern at Columbia School of Medicine M.S. Analytics Stevens Institute of Technology (2021)

#### **RELATED ONE-PAGERS**

Computer Science & Data
Analytics







### **Clinical Research & Administration**

Understand treatment effects and processes in order to strengthen healthcare systems for better patient experiences and health outcomes.

#### **OVERVIEW**



#### IN LIFE SCIENCES INDUSTRY

Clinical research analyzes the safety and effectiveness of medications, devices, diagnostic products, and treatment regimens intended for human use. The data analyzed and managed can come from multiple sources, such as toxicological and pharmaceutical studies, as well as from clinical measurements, such as case management outcomes, plans of care, and gaps in care.



#### WHO SHOULD APPLY?

Students from wide range of backgrounds (natural sciences and analytical, and healthcare administration majors, preferred) and special opportunities for those with advanced professional and STEM degrees (MBA, MS, MPH, MD, PhD).



#### WHAT ARE THE TYPES OF ROLES AVAILABLE?

Clinical Analysis Intern, Clinical Research Assistant, Clinical Research Operations Intern, Medical Data Review Intern, Research Department Administrator

#### WHAT ARE COMMON ASSOCIATED TASKS & RESPONSIBILITIES?

#### **Clinical Administration**

- Provide administrative support for clinical research departments
- Prepare institutional review board (IRB) submissions
- Help manage communications with regulatory and ethics committees
- Engage with study participants throughout clinical studies, including consent and study follow-up
- Create reports to showcase outcomes & findings
- Create study and site budgets and assist with financial support activities
- Maintain and order inventory and research materials

#### **Clinical Research**

- Design, develop, and execute clinical trials and experimental studies
- Conceptualize and synthesize the research findings and data for internal and external presentations
- Maintain clinical data systems and update study documentation
- Review spreadsheets, collate data, assist with analyzing and translating data

#### WHO IS HIRING IN NYC?

Biotechnology Companies

Academic & Community
Hospital Systems

Contract Research Organizations





- Desire and ability to learn new tools, languages and design techniques
- Knowledge of data analysis or clinical data management software
- General knowledge of molecular biology, pharmacology, biochemistry, and medical concepts
- Attention to detail and strong organizational skills
- Strong writing, verbal, analytical, and presentation skills
- Prior organizational management and data analysis experience
- Proficiency across Google Workspace and Microsoft 365 Office suites

#### **ALUMNI SPOTLIGHT**



"Working in clinical research facilitates the direct focus on cultural, mental and nutritional impact of people. It allows me to work ethically with empathy, respect and community building with each participant with a goal to identify causes, biological pathways and strategies for the development of medical challenges."

#### **CHIVELLE MENDOZA**

Clinical Research Coordinator/ Genetic Counselor Assistant at Columbia University Irving Medical Center 2018 LifeSci NYC Intern at Columbia University M.S. Translational Medicine CUNY City College of New York (2021) B.S. Biomedical Sciences CUNY Medgar Evers College (2020)



"My favorite thing about working in clinical research and administration is that I am always surrounded by brilliant people that I can learn from and have ample opportunity to take my career in any direction I want."

#### LYDIA FIKRU

Data Program Coordinator for Mount Sinai Cardiac Catheterization Lab 2020 LifeSci NYC Intern at Cureatr B.S. Medical Humanities New York University (2021)

#### **RELATED ONE-PAGERS**

Business / Management / Operations / Strategy

Non-Profit Administration & Management

Research / Research & Development / Laboratory Sciences







### **Science Education**

Educate the general public and / or children and teens about scientific principles and concepts in order to create a more informed, equitable, analytical, science-literate society.

#### **OVERVIEW**



#### IN LIFE SCIENCES INDUSTRY

Life Sciences Education has a diverse scope, encompassing community scientific education from K-12 to undergraduate & graduate school levels, curriculum and educational software development, and public health efforts. For those aiming to pursue careers in academia and medicine, teaching is a foundational skill.



#### WHO SHOULD APPLY?

Students with STEM, STEM education, public health, or science communications backgrounds.



#### WHAT ARE THE TYPES OF ROLES AVAILABLE?

<u>Curriculum Development</u>: Curriculum Design Intern, Learning & Development Fellow, Education & Research Design Intern

<u>Environmental & Community Education</u>: Community Scientist, Conservation Camp Counselor, Environmental educator

#### WHAT ARE COMMON ASSOCIATED TASKS & RESPONSIBILITIES?

- Lead interactive, hands-on, in-person, and virtual science workshops for students
- Develop science exploration programs for families and professional development workshops for teachers
- Work with academics to design curricula, outreach programs, and educational software
- Create, update, and disseminate content for scientific lesson plans
- Make educational resources to be used in programming and workshops
- Read literature about cutting-edge scientific and pedagogical research to keep educational materials relevant and engaging

#### WHO IS HIRING IN NYC?

**Academic Institutions** 

Science Education
Non-profit Organizations

Educational Software Companies





#### SKILLS AND QUALITIES YOU CAN EXPECT TO DEVELOP

- Detailed understanding of scientific method and relevant research topics
- Strong interest in pedagogy, science communication, and educational development
- Comfortable interacting with members of the public and individuals of varying educational levels
- Excellent communication (written and verbal) and interpersonal skills
- Strong organizational skills and problem-solving abilities
- Background scientific knowledge and training
- Strong project management skills with great ability to successfully execute planned activities

#### **ALUMNI SPOTLIGHT**



"I enjoy working in science education because I get to teach new technologies to all types of scientists, allowing them to improve their research practices."

#### **AISHA OZA**

Associate Scientist II, Materials Science Education Specialist at Schrödinger 2021 LifeSci NYC Intern at Alchemy B.S. Chemistry Barnard College (2020)



"Without science education there can be no future in life sciences. Education is what inspires and creates the next generation of innovative voices in the industry."

#### **JOSEPH PARZIALE**

Support Community Scientist at BioBus 2019 LifeSci NYC Intern at BioBus B.S. Biology CUNY Brooklyn College / Macaulay Honors College (2020)

#### **RELATED ONE-PAGERS**

Non-Profit Administration & Management

Science Communications
& Marketing







# **Healthcare Administration / Healthcare Management / Public Health**

Effectively plan and deliver healthcare services and public health initiatives to improve individual and societal well-being.

#### **OVERVIEW**

#### IN LIFE SCIENCES INDUSTRY



The healthcare industry is a multifaceted system that goes far beyond patient-facing roles. From managing healthcare facilities and coordinating care to influencing public health policy, the opportunities in this field are varied and impactful. Healthcare Management, Healthcare Administration, and Public Health are three distinct yet interconnected branches that enable the healthcare system to run efficiently and contribute to improved patient and community outcomes.



#### WHO SHOULD APPLY?

Students from STEM, business, and social Science backgrounds and special opportunities for those with advanced professional, STEM, and administration degrees (MBA, MPH, MD, PhD).





<u>Healthcare Management</u>: Clinical Operations Intern, Clinical Quality Associate, Patient Account Executive, Patient Success Coordinator

<u>Healthcare Administration:</u> Call Center Dispatcher, Clinical Assistant, Medical Biller, Medical Receptionist, Patient Scheduler, Dental Office Assistant Intern

<u>Public Health</u>: Biostatistician, Community Health Worker, Environmental Health Scientist, Epidemiologist, Global Health Specialist, Health Communications Specialist, Health Educator, Policy Advisor, Public Health Analyst

#### WHAT ARE COMMON ASSOCIATED TASKS & RESPONSIBILITIES?

#### **Healthcare Administration**

- Assist clinicians on various tasks including follow-up care instructions, patient care notification, care gap closure, and patient scheduling
- Manage personal health information in accordance with HIPAA regulations
- Organize internal and external meetings and events

#### Healthcare Management

- Assess, create recommendations, and develop templates for internal and external communications to patients, clinicians, and other stakeholders
- Work on quality care coordination and population health projects
- Produce reports on program and department activities and outcomes
- Help assess and develop quality measures with insurance companies, vendors, and managers

#### **Public Health**

- Build relationships with communities to assess health needs and provide resources
- Evaluate the effectiveness of public health programs and recommend improvements
- Collect and analyze data to identify public health trends and needs
- . Create and manage campaigns to educate communities on health issues
- Research and advocate for policies that improve community health

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#### WHO IS HIRING IN NYC?

Health Service Companies & Non-Profits

Academic & Community Hospital Systems

**Private Clinical Practices** 

#### **IMPORTANT SKILLS TO DEVELOP**

- Experience in an operational and / or administrative role, especially in a clinical setting
- Excellent communication (written and verbal) and interpersonal skills
- Working understanding of medical and healthcare terminology
- Ability to work independently and with a multidisciplinary team
- Excellent written, verbal and interpersonal communication skills
- Proficiency across Google Workspace and Microsoft 365 Office suites

#### **INDUSTRY SPOTLIGHT**



"Working in healthcare administration and management has allowed me to serve my community one patient at a time. People will sometimes remember the service, but will always remember how you make them feel."

#### **Danielle Booker**

Operation Manager at Northwell Health B.S. Law CUNY John Jay College (2023) A.S. Law CUNY Queensborough Community College (2020)



"Public health is fundamental to disseminating key life science findings on a community, population, and global level to drive prevention, management and treatment of various diseases."

#### **NURA ANWAR**

Assistant Director of Pediatric Initiatives at NYC Health + Hospitals M.P.H. Public Health New York University (2020)



#### **RELATED ONE-PAGERS**

Non-Profit Administration & Management

Business / Management /
Operations / Strategy

**HR / People Operations** 







## Quality Assurance (QA) / Quality Control (QC)

Ensure manufactured products meet their intended quality requirements and standards for a company and the life sciences industry.



#### **OVERVIEW**



#### IN LIFE SCIENCES INDUSTRY

From medical devices to biopharmaceuticals to medical software, life science companies must produce products with consistently high quality in order to maintain end-user safety, trust, and satisfaction.



#### WHO SHOULD APPLY?

Undergraduate & graduate students with STEM backgrounds.



#### WHAT ARE THE TYPES OF ROLES AVAILABLE?

Biotechnology Quality Assurance Intern, Compliance Associate, Quality Control Intern, Validation Scientist

#### WHAT ARE COMMON ASSOCIATED TASKS & RESPONSIBILITIES?

- Develop and run product tests based on standards, user requirements, end-user scenarios, and design specifications
- Improve testing strategies as well as review technical documentation
- Report and document technical issues and bugs
- Work with cross-functional teams to ensure quality throughout product development lifecycle
- Conduct inspections and report non-conformances
- Propose and implement QC assays
- Provide feedback on existing quality control processes and methods

#### WHO IS HIRING IN NYC?

**Biotechnology Companies** 

**Biomanufacturing Firms** 

Clinical Laboratories & Research Foundations





- Background scientific knowledge and training in particular STEM field (i.e., biotechnology, material science, software engineering)
- Ability to interpret, understand, and communicate with data
- Excellent communication (written and verbal) and interpersonal skills
- Strong organizational skills and problem-solving abilities project management skills
- Ability to interact with individuals in multiple teams at different levels
- Attention to detail and strong organizational skills

#### **INDUSTRY SPOTLIGHT**



"Our work in QA / QC underscores to the FDA and patients our commitment to safety and efficacy, embodying the company's mission and dedication to the production of safe and quality products."

Jonathan Pinkhasov Quality Control Analyst II at Legend Biotech B.S. Political Science and Biology CUNY Brooklyn College (2016)



"Quality is extremely important to any business/industry as it maintains the reliability of services or products by standardizing procedures to uphold high expectations."

ANDREA WILSON
Quality Engineer at PTI
B.E. Chemical Engineering
CUNY City College of New York (2018)



#### **RELATED ONE-PAGERS**

Research / Research & Development / Laboratory Sciences

Engineering & Manufacturing

**Regulatory Affairs** 







### **Finance & Accounting**

Manage, allocate, and report monetary resources and transactions to facilitate business growth and success.

#### **OVERVIEW**



#### IN LIFE SCIENCES INDUSTRY

Accounting and finance are crucial to business success and growth in the life sciences industry. Finance handles borrowing, investing, and capital-raising to fund current and future projects. Accounting manages financial records and operations for effective budgeting and reporting.



#### WHO SHOULD APPLY?

STEM, finance, business, and accounting students with extensive quantitative coursework and business experience. Special opportunities available for individuals with advanced degrees for equity research (Ph.D.) and venture capital (MBA). Training or knowledge in biological sciences is desirable.



#### WHAT ARE THE TYPES OF ROLES AVAILABLE?

<u>Accounting</u>: Accounting intern, Accounts payable administrator intern, Accounts receivable intern

Finance: Biotech Equity Research intern, Biotechnology Financial Analyst

#### WHAT ARE COMMON ASSOCIATED TASKS & RESPONSIBILITIES?

#### **Finance**

- Assist in analyzing clinical trials, scientific data, and financial models
- Identify and secure sources of funds (i.e., equity, debt, grants, or partnerships)
- Use budgeting, forecasting, and financial analysis to assess the profitability, liquidity, solvency, and the viability of current and new projects
- Research, write, and prepare drafts for financial presentations

#### **Accounting**

- Perform accounts receivable and accounts payable functions
- Conduct technical accounting, financial auditing, and SEC reporting duties

#### WHO IS HIRING IN NYC?

Cell, Biopharmaceutical & Protein Technology Companies

Biomaterials & Consumer Goods Companies

Analytical, Environmental & Medical Laboratories





#### **Finance**

- Strong analytical and financial modeling skills
- Excellent written & verbal communication and presentation skills
- Experience in biotech, life sciences field desired, but not required

#### **Accounting**

- Knowledge of accounts receivable/payable, general bookkeeping procedure, accounting principles, regulatory standards and compliance requirements
- Excellent communication (written and verbal) and interpersonal skills
- Attention to detail and strong organizational skills

#### **ALUMNI SPOTLIGHT**



"I love that I play a major role in organizing and securing incoming revenue for the company. This is important because revenue is what measures the performance of the business within the life sciences industry."

#### **BINTA SUMBUNDU**

Finance - Client Support Specialist at Havas Health & You 2018 LifeSci NYC Intern at Mirimus B.S. Human Biology Hunter College (2019)



"Finance in life sciences is important as we are in a growing culture of innovation and demand for groundbreaking treatments. The need for diverse financing approaches to support the development and commercialization of life sciences products will always be essential."

#### **BAYRON QUILLAY**

Associate Financial Analyst at Johnson & Johnson 2019 LifeSci NYC Intern at Deerfield Management B.A. Economics Hunter College (2021)

#### **RELATED ONE-PAGERS**

Business / Management / Operations / Strategy

Clinical Research & Administration

<u>Healthcare Administration</u>
/ Healthcare Management /
Public Health

**HR / People Operations** 







# Non-Profit Administration & Management

Improve the world through patient advocacy, environmental protection, disease awareness, and STEM education.



#### **OVERVIEW**



#### IN LIFE SCIENCES INDUSTRY

Nonprofit organizations in life sciences span a wide range of important causes and initiatives that range from patient advocacy, environmental stewardship, disease awareness, biotech ethics and regulations, and STEM youth development.



#### WHO SHOULD APPLY?

Students from all backgrounds. Special opportunities for individuals with advanced administration degrees (i.e., MBA, MPH, MPA).



#### WHAT ARE THE TYPES OF ROLES AVAILABLE?

**Management: Program Manager, Volunteer Services Manager** 

Fundraising: Fundraising Coordinator, Grant Writing Intern, Marketing Associate

<u>Administrative</u>: Compliance Coordinator, Membership Administrator, Member Services Representative, Project Coordinator Intern

#### WHAT ARE COMMON ASSOCIATED TASKS & RESPONSIBILITIES?

- Design and manage life science initiatives and programs that have a measurable impact on health, environment, and education
- Develop and execute strategies that align with the organization's mission (i.e, patient advocacy, environmental protection, disease awareness, and STEM education)
- Secure resources through grants, partnerships, and donations to support life science endeavors and research
- Engage with researchers, healthcare professionals, and the broader community to advance the organization's objectives
- Manage financial and human resources, ensuring efficient use in life science projects and outreach
- Develop public awareness marketing campaigns
- Recruit, mentor, and lead teams specialized in life sciences to further organizational goals and initiatives

#### WHO IS HIRING IN NYC?

Life Sciences / Medical / Environmental / Science Education Non-Profits

Disease & Patient Advocacy Foundations

Biotech Industry Interest Groups





- Experience in an operational or administrative role in an organization
- Ability to work collaboratively on a multidisciplinary team
- Great relationship-building, budget allocation, and strategic planning skills
- Excellent communication (written and verbal) and interpersonal skills
- Attention to detail and strong organizational skills

#### **ALUMNI SPOTLIGHT**



"I enjoy working in the nonprofit industry because I can use my specialized science knowledge and interests to make a more immediate impact. In the nonprofit industry, you can enable breakthroughs and put them into practice, which forms an essential part of the bench-to-bedside pipeline. I love that you get to work with people, not just cells."

#### **MARIEL SANDER**

Former Chief University Programs Officer at Generation Mental Health Association 2019 LifeSci NYC Intern at Wellth B.A. Neuroscience and Behavior & English Columbia University (2020)



"If you want to understand what it's like to work somewhere with an altruistic agenda, then the non-profit space is where you want to be. I clock in every day, knowing that my work is directly helping people and alleviating some of the burden they carry in the face of a cancer diagnosis."

#### **KAT MORANO**

Grants Coordinator at CancerCare 2020 LifeSci NYC Intern at New York Stem Cell Foundation B.S. Cell & Molecular Biology CUNY John Jay (2022)



Business / Management / Operations / Strategy

Clinical Research & Administration

<u>Healthcare Administration</u>
/ <u>Healthcare Management /</u>
Public Health

**HR / People Operations** 







# Science Communication & Marketing

Plan campaigns and develop materials to promote products and services to customers and prospective clients.



#### **OVERVIEW**



#### IN LIFE SCIENCES INDUSTRY

From biopharmaceuticals to medical devices to digital health products, marketing and communications are needed to increase brand and product awareness in order to drive sales.



#### WHO SHOULD APPLY?

Business and marketing students & STEM students who have excellent written and verbal communications skills.

#### WHAT ARE THE TYPES OF ROLES AVAILABLE?

**Communications:** Communications Coordinator, Science Communications Intern



<u>Marketing</u>: Brand Coordinator, Growth Marketing Intern, Marketing Intern Communications Coordinator, Campaign Management Intern, Digital Marketing Intern, Social Media intern, SEO Specialist

Market Research: Customer Research Intern, Market Analyst

Investor Relations (IR): Biotech IR Intern, IR Associate

#### WHAT ARE COMMON ASSOCIATED TASKS & RESPONSIBILITIES?

- Provide marketing analytics and competitive monitoring analysis
- Create blog posts and update websites
- Build and execute social media and sales campaigns
- Contribute to email marketing and lead generation efforts
- Update company website and assist in newsletter creation and management
- Work on prospect correspondence, SEO, and content creation tasks
- Help with sales process automation and sales tracking
- Draft and review technical corporate communications materials

#### WHO IS HIRING IN NYC?

Life Science Advertising & Marketing Agencies Biotech & Digital Health Firms (Startups & Established Companies)

Non-Profit/Social Impact Organizations





- Excellent communication (written and verbal) and interpersonal skills
- Attention to detail and strong organizational skills
- Knowledge of graphic design programs (i.e., Adobe Illustrator, InDesign, Photoshop), advertising platforms (i.e., Facebook & Google Adwords), analytics platforms (i.e., Google Analytics) & management platforms (i.e., Google Tag Manager)
- Good understanding of website marketing, social media marketing
- Proficiency across Google Workspace and Microsoft 365 Office suites
- Strong project management and time management skills
- Ability to break down complex ideas and topics into digestible information
- Desire to learn and keep up with trends in the life science industry

#### **INDUSTRY SPOTLIGHT**



"I enjoy the marketing side of the life science industry because it allows me to apply health knowledge to a broader audience. I apply my skills in health science, health accessibility, and health policy with a team of passionate people seeking to improve other's lives."

#### Sian Auer

Brand Representative at Oishii 2022 LifeSci NYC Intern at ConcentricLife 2021 LifeSci NYC Intern at BioBus B.S. Public Health, Food and Nutrition Science New York University (Class of 2024)



"In a world where there is an overwhelming amount of data, there is a need for effective medical communications and storytelling to enable conducive exchange of knowledge and promote collaboration. Ultimately the goal is for continued medical/scientific advancement and improved public health"

#### Sian Auer

Assistant Medical Director at Health Science Communications 2022 LifeSci NYC Intern at ConcentricLife 2021 LifeSci NYC Intern at BioBus Ph.D. & M.S. Biochemistry & Molecular City University of New York (2021, 2017)



#### RELATED ONE-PAGERS

<u>Business / Management /</u> <u>Operations / Strategy</u>

**Science Education** 

Healthcare Administration
/ Healthcare Management /
Public Health







# Human Resources (HR) / People Operations

Elevate organizations through strategic talent management and nurturing a dynamic workplace culture.



#### **OVERVIEW**

#### IN LIFE SCIENCES INDUSTRY



Human Resources focuses on the structural organization of employees, legal compliance, and ethics. People Operations humanizes business processes to improve employee engagement, development, and retention. Effective HR / People Operations and systems enable life sciences businesses to recruit and retain good talent in order to maximize the human capital that its required to advance projects and internal initiatives.



#### WHO SHOULD APPLY?

Students in business, liberal arts, psychology, and related fields. Advanced opportunities are available for MBA students.



#### WHAT ARE THE TYPES OF ROLES AVAILABLE?

DEI Intern, Employee Engagement Analyst, Front Office & Workplace Coordinator, HR & Recruiting Specialist, People / Office Intern, Recruitment Intern

#### WHAT ARE COMMON ASSOCIATED TASKS & RESPONSIBILITIES?

- Support full cycle recruiting efforts including on-campus programs and school outreach
- Create template job descriptions, recruiting collateral, and employment agreements
- Audit HR and recruiting files
- Assist with planning new hire social gatherings and conducting focus groups
- Facilitate diversity, equity and inclusion (DEI) programs and policy creation
- Analyze trends and building reports and PowerPoint presentations to present key takeaways

#### WHO IS HIRING IN NYC?

Biotech Firms (Startups & Established Companies)

**Digital Health Companies** 

Non-Profit/Social Impact Organizations





- Experience in HR, recruiting, organizational development or training
- Proficiency with Office 365 and Google Workspace suites
- Excellent communication (written and verbal) and interpersonal skills
- Great interpersonal skills and ability to interact with internal and external business partners and staff at all levels
- . Ability to maintain consistent professionalism under stressful situations
- . Ability to build, nurture, and grow professional relationships

#### **INDUSTRY SPOTLIGHT**



"The joy of working in life science recruiting comes from connecting brilliant minds together, sparking innovations that elevate human health."

ALICE K
Scientific Recruiter at Amtex Systems Inc.
B.Tech. Biotechnology
Bapuji Institute of Engineering & Technology (2020)



#### **RELATED ONE-PAGERS**

Business / Management / Operations / Strategy

Non-Profit Administration & Management

<u>Healthcare Administration</u>
/ Healthcare Management /
Public Health







### **Regulatory Affairs**

Upload human safety, compliance, and align company with legal and industry standards.

#### **OVERVIEW**



#### IN LIFE SCIENCES INDUSTRY

Many products in the life sciences industry, from medical devices to biopharmaceuticals are directly used by consumers. Individuals working in regulatory roles ensure that companies and their procedures and products are legally compliant.



#### WHO SHOULD APPLY?

Students with biomedical science, engineering, law, regulatory affairs, or marketing backgrounds.



#### WHAT ARE THE TYPES OF ROLES AVAILABLE?

Biotechnology Regulatory Affairs Intern, Compliance Associate, Regulatory Compliance Intern

#### WHAT ARE COMMON ASSOCIATED TASKS & RESPONSIBILITIES?

- Assist in development and drafting of new regulatory policies and procedures
- Update company's policies and procedures to meet new regulations
- Develop audit and monitoring tools
- Create and maintain spreadsheets for complaint tracking
- Provide strategic assessments and use primary and secondary research data to support existing and new regulatory strategies
- Perform literature searches to support and draft regulatory documents
- Submit regulatory reports and documents

#### WHO IS HIRING IN NYC?

**Biotechnology Companies** 

Biomanufacturing & Medical Device Firms

**Healthcare Organizations** 





- Legal knowledge and understanding of FDA and biotechnology industry regulations
- Excellent communication (written and verbal) and interpersonal skills
- Strong leadership, persuasion, and situation analysis skills
- Excellent organizational skills and problem-solving abilities
- Proficiency across Google Workspace and Microsoft 365 Office suites and data management software
- Attention to detail and strong organizational skills

#### **INDUSTRY SPOTLIGHT**



"I like the continuous learning and collaboration with different teams. It enables me to gain the perspectives from different backgrounds to shape the regulatory strategies."

**SANDY FOWLER**Senior Regulatory Affairs Specialist at Philips Ph.D. Cellular and Molecular Biology CUNY Graduate Center (2017)



#### **RELATED ONE-PAGERS**

Quality Assurance (QA) / Quality Control (QC)

Clinical Research & Administration



