



Internship and Career Services Industry Guide: Industry Science

INDUSTRY RESEARCH CAREERS: THE SCIENCES

Like many corporations, industrial research companies in the pharmaceutical, biotechnology, and chemical industries employ many individuals in numerous roles. This guide will specifically focus on research based jobs as well as a few other common entry points, what research companies are looking for, and how you can best prepare yourself.

RESEARCH & DEVELOPMENT (R&D) SCIENTIST

Research and Development of products are two distinct sectors of industry, but for the purposes of this guide they will be considered together. It is important to note there are several things to remember regarding R&D related roles:

- **Fast Pace:** There is an emphasis on speed and efficiency. High operating budgets allow for access to a wealth of equipment and materials in order to speed the pace of the projects.
- **Volatility:** Projects are continuously being evaluated and may be terminated quickly for a variety of reasons, including strategic business decisions. Scientists in industry must be adaptable in this fast-paced environment.
- **Organizational Structure:** There are multiple levels of hierarchy, and there are typically several additional layers of management. A successful scientist is expected to eventually take on an increasing amount of management responsibility within this structure.
- **Diverse Objectives:** Researchers can be involved in many aspects of the manufacturing process including mass production and quality control.

Online Resources:

[Butler University Undergrad Research](#)

[Butler University Chemistry Resources](#)

[Internship & Career Services: Guide to Professional Success PDF](#)

[Jobs in Science & Technology Science \(sciencecareers.org\)](#)

[Life Sciences Industry \(biospace.com\)](#)

[Job Board for Scientists with Advanced Degrees \(biocareers.com\)](#)

[American Chemical Society](#)

[American Pharmacist Association](#)

[Biotech Jobs and Research Resources \(thelabrat.com\)](#)

[Indiana's Top Life Sciences Companies \(biocrossroads.com\)](#)

[Indiana Pharmacists \(pharm.in.associationcareernetwork.com\)](#)

[American Society for Cell Biology](#)

[Science Online Magazine \(sciencemag.org/careers\)](#)

[Society for Industrial and Applied Mathematics \(siam.org\)](#)

[Find Life Science Internships \(internships.com\)](#)

[Indy Science Connect \(indyscienceconnect.com\)](#)

COMPETENCY	WHY THEY WANT IT	WHAT CAN YOU DO NOW
TECHNICAL SKILLS	Often a company is looking for candidates with a specific set of technical competencies. Although they may be willing to train on some elements of the work, they prefer that new scientists bring experience in most of the required technical skills so they can start producing quickly.	Read job ads and determine which skills are in demand. Identify contacts on campus who are currently using these techniques and ask them for training. Try to find out when training on specific equipment is being offered by vendors and attend these sessions.
TEAMWORK	Industry research is highly collaborative. Although it is usually unjustified, academics are viewed as researchers who are only able to operate independently.	Try to engage in team projects, inside and outside of research. Working on teams outside a lab setting counts! But think about how to effectively communicate this experience.
LEADERSHIP	Industry employers want scientists who have the potential to eventually lead their own research team. Demonstrating leadership abilities will distinguish a scientist beyond his/her technical abilities.	Volunteer to manage and mentor others in the lab. Join student organizations and community groups and take leadership roles.
ORAL AND WRITTEN COMMUNICATION SKILLS	In an industrial research setting, one must be able to effectively explain research to a variety of stakeholders at a range of technical specificity. The ability to speak to different audiences and competently explain your work is essential for these roles.	Seek out additional opportunities to talk in non-traditional settings. Make sure to effectively convey your communication experience.
NETWORKING/CONNECTIONS	Open positions in industry get hundreds of applications and it is difficult for hiring managers to sort through all of this. A lead on a verified candidate from within the company goes a long way. It also serves as evidence of your pro-activeness and social competency.	Talking to current industry scientists (especially alums) is an essential step in trying to secure one of these jobs. They may be able to direct you toward specific units looking for your expertise or even tell you about current or upcoming openings.

CAREER TITLES:

- R&D Scientist
- Entry Level Scientist (Biologist, Chemist, Engineer, Pharmacist, Microbiologist, etc.)
- Laboratory Technician
- Laboratory Coordinator

- Tech Support Specialist
- Sales Representative
- Medical Science Liaison
- Medical Writer
- Laboratory Assistant
- Clinical Research Assistant
- Chemical Engineer
- Data Analyst
- Environmental Health Scientist
- Field Technician
- Molecular Biologist
- Medical Research Tech