



Research Assistant

A **Research Assistant** is a trained professional who helps conduct investigative and original studies in a laboratory setting. They perform a wide range of duties that include researching past and current research initiatives and results, setting up (including identifying financial, human and material resources), conducting and documenting experiments, recording detailed observations, analyzing data, and interpreting and communicating results. This may require mentoring and supervisory activity. They are also responsible for preparing samples, testing equipment, and developing protocols and standard operating procedures (SOPs). Samples must be handled and labelled with care and research notes need to be orderly, coherent, and accurate. Once experiments are completed the research assistant stores samples in their appropriate locations and cleans the laboratory.

Learn more about the role of a Research Assistant by downloading the full skills profile for free at www.biotalent.ca/profiles.



Research Assistant



BioTalent Canada's Bio-economy Skills Profiles

Biotechnology's fusion of science and business creates unique requirements for jobs in the sector. Candidates often need skills suited both to the lab and the boardroom. As a result, occupational descriptions from other sources or sectors don't always fit the bio-economy exactly. That's why, in partnership with industry stakeholders, BioTalent Canada has developed skills profiles specific to the bio-economy—a project that will continue with the ongoing addition of other functions over time.

Each profile includes a definition of the occupation, a list of competencies and associated tasks, a summary situational analysis, language benchmarks, and essential skills.

Who can use these profiles?

Easy to use and interpret, our *Bio-economy Skills Profiles* were created to meet the needs of a wide range of audiences. Here's how you might use them if you're an:

Employer: Develop job descriptions, performance evaluation criteria, professional development programs, succession plans, team building initiatives and recruitment plans.

Job seeker: Identify your professional development needs, tailor your resume for a specific position, prepare for interviews and interpret job descriptions.

Educator: Build industry-oriented curricula to help produce job-ready graduates.

Student: Grow your understanding of employers' expectations and choose the right educational programs to equip yourself with the skills for success.

Validated by industry

BioTalent Canada created its *Bio-economy Skills Profiles* in consultation with industry to accurately capture the needs of biotechnology companies and produce truly practical, relevant resources. These profiles summarize the high-level skills required for each occupational profile and itemize in detail the common

tasks associated with each function. Because the profiles are comprehensive, not every skill may be required for a single position: instead, the profiles present the full sets of skills that could be expected of a person in a given role within companies at various stages of development.

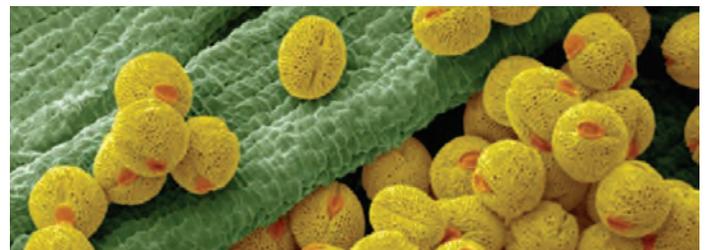
Information you can trust

BioTalent Canada is the country's source for reliable, objective and accurate information on skills development and human resources in the bio-economy. Our aim as Canada's biotechnology sector council is to deliver the human resources tools, information and skills development resources industry needs to ensure an adequate supply of job-ready people.

Understanding the bio-economy

Canada's bio-economy is engaged in the research, development, commercialization and manufacturing of biotechnology products. The bio-economy is constantly expanding as new technologies and techniques are applied to an ever-broader range of industries and sectors including:

Agriculture	Genomics
Aquaculture	Human and Animal Health
Bioenergy	Industrial
Bioinformatics	Life Sciences
Bioproducts	Medical Devices



Biosciences	Nanotechnology
Environment	Natural Resources
Food Processing	Nutraceuticals
Forestry	Pharmaceuticals

Bio-economy Competency Profile Checklist

A Research Assistant in the bio-economy has a bachelor's degree or college diploma in a science or medical field, experience in a clinical or research environment, and excellent organizational and communication skills. Many also hold post-graduate degrees.

Building on these, a **Research Assistant** must be able to:

A. Complete preliminary research activities

- 1. Establish the methodology
- 2. Conduct investigation
- 3. Consolidate gathered information
- 4. Complete the analysis

B. Manage staff

- 1. Assist in recruitment
- 2. Supervise and train students
- 3. Mentor and supervise staff
- 4. Evaluate performance
- 5. Plan and delegate

C. Maintain laboratory readiness

- 1. Manage laboratory supply inventory
- 2. Manage laboratory equipment
- 3. Maintain a clean and organized work environment

D. Manage samples

- 1. Collect samples
- 2. Preserve sample integrity
- 3. Store samples
- 4. Dispose of samples



E. Conduct experiments

- 1. Prepare for analysis
- 2. Analyze samples
- 3. Determine results
- 4. Analyze results
- 5. Report results
- 6. Develop new projects

F. Develop standard operating procedures (SOP)

- 1. Determine regulatory requirements
- 2. Develop methodology/ies
- 3. Document methodology/ies
- 4. Transfer methodology knowledge

G. Administer research records

- 1. Store records
- 2. Retrieve records
- 3. Distribute records

H. Communicate

- 1. Communicate with diverse audiences
- 2. Develop networks
- 3. Build effective working relationships
- 4. Make presentations

I. Apply professional practices

- 1. Take appropriate safety measures
- 2. Comply with established policies, procedures and protocols
- 3. Demonstrate technical skills
- 4. Manage work activities
- 5. Ensure quality of work practices

J. Demonstrate personal competencies

- 1. Maintain a high level of professional integrity
- 2. Organize work
- 3. Set priorities
- 4. Demonstrate attention to detail
- 5. Solve problems
- 6. Manage data and information
- 7. Adapt to change in work environment
- 8. Embrace continuous learning



Get started today

Even before you download the full **Research Assistant Skills Profile**, get a sense of the information it contains and how you might use it in your work. Attached here is a quick-reference checklist that summarizes the core skills required for the position and the common tasks associated.

Go to www.biotalent.ca/profiles and download the complete Research Assistant Skills Profile.

