



# Research Director

Bio-economy Skills Profile



Building skills for Canada's bio-economy

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## About BioTalent Canada

### Helping Canada's Bio-economy thrive globally

Canada is a world leader in biotechnology—the application of living organisms to industrial, agricultural, medical and other processes and products. To maintain and build on this leadership, the sector needs highly trained, job-ready people.

By acting as a national hub and central resource for employers, job-seekers, students, educators and government agencies, BioTalent Canada helps make this happen.

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The opinions and interpretations expressed in this publication are those of the author and do not necessarily reflect those of the Government of Canada.



Building skills for Canada's bio-economy

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## **About the BioTalent Canada bio-economy skills profiles**

Biotechnology's fusion of science and business creates unique requirements for occupations in the sector. Executives and managers must have technical expertise; technical staff often needs entrepreneurial skill sets. Occupational descriptions from other sources don't always fit the bio-economy context. That's why, in partnership with industry stakeholders, BioTalent Canada has developed skills profiles specific to the bio-economy including this description of the role research director.

## **Occupational Definition**

Research directors oversee and direct the design and implementation of research, pre-market and post-market research programs. This involves directing the development and implementation of pre- and post-market approval studies including cost-benefit, health outcomes and indication extension studies; ensuring compliance with Good Clinical Practices, Standard Operating Procedures and regulatory and legal requirements. In this role a research director acts in an expert advisor capacity: providing leadership, establishing and maintaining high-level scientific external relationships with opinion leaders. The research director reports to a vice president. This role involves the provision of advice and guidance to the executive team in identifying and protecting intellectual property and making scientific presentations at advisory boards, key scientific meetings and external committee meetings. A research director will also oversee the development of strategic and operating plans, budgets and forecasts, the development of protocols, and general department logistics and administration.

The research director normally possesses a masters or PhD degree, coupled with 10 years of progressively more responsible scientific-focused roles. In addition they are responsible for the management of the research professionals involved in the research, pre-clinical studies, clinical trials and/or field trials and the oversight of investigator performance to milestones and contract objectives. Research directors work for Canadian biotechnology companies of different sizes (i.e., small, medium, large) and in various biotechnology areas, such as:

- Agriculture
- Aquaculture
- Bioenergy
- Bioinformatics
- Bioproducts
- Biosciences
- Environment
- Food Processing
- Forestry
- Genomics
- Human and Animal Health
- Industrial
- Life Sciences
- Medical Devices
- Natural Resources
- Nanotechnology
- Nutraceuticals
- Pharmaceuticals

### ***Components of the skills profile***

Every BioTalent Canada skills profile presents the areas of competence, tasks and sub-tasks associated with a specific occupation.

**Area of competence (AC):** This describes a major function or responsibility associated with the profession, trade or position.

**Task:** This is a specific, observable unit of work with definite start and end points. Tasks can be broken down into two or more steps and are generally performed in a limited period of time. Tasks and ACs are identified in behavioural terms, beginning with a verb that describes the applied behaviour.

**Subtask:** This is a distinct, observable activity that comprises the steps involved in a task.

**Important Action/Performance Standard:** This provides a criterion for assessing competence and may be used as a performance indicator.

### ***Focus on competencies***

The BioTalent Canada skills profiles are built around areas of competence because competencies are flexible, inclusive and linked directly to performance: they are the traits or qualities a professional must have to succeed in a given role within a given organization, and can be used for recruiting, professional development, curriculum planning and many other purposes.

### ***How to use the profiles***

The complete contents of this or any BioTalent Canada skills profile are unlikely to be used for any one position. Because they are comprehensive, they include every area of competence, task and subtask that could be required for a specific occupation. In reality, the definition of a given job will encompass a narrower subset of the profile. Hiring organizations must choose the elements of the profiles that are relevant to their businesses—and tailor those elements as necessary to more precisely describe their particular job requirements.

The profiles can be put to many uses:

- **Employers** can use them to develop job descriptions, performance evaluations, professional development, succession planning, team building, target skills needed, and recruitment plans.
- **Job seekers** can use them to tailor their resumes, prepare for interviews, see job descriptions and identify additional professional development needs.
- **Educators** can build industry-oriented curricula from the profiles to produce job-ready graduates.
- **Students** can enhance their understanding of employers' expectations and choose the right educational programs to equip themselves with the skills for success.

### **Scenario**

The following illustrates how an employer might use the BioTalent Canada skills profiles to identify professional development priorities for his or her team.

#### *Step 1*

The employer would review the ACs for each occupation and identify which apply to the related positions within his or her company, omitting those that are not relevant.

#### *Step 2*

Under the selected ACs, the employer then notes which of the associated tasks, subtasks and important actions are relevant to that specific position within his or her business.

#### *Step 3*

Now with a complete, tailored profile, the employer can assess employee performance. Needs areas are easily identified and defined—to a significant depth of detail.

#### *Step 4*

Based on the needs analysis, the employer can either develop or seek out professional development programs that address employee needs areas.

## **Situational Analysis**

The Research director is usually a member of the senior management team of a biotechnology company and oversees the research functions of the company. Research directors take responsibility and are accountable for all aspects of the research undertaken in the organization under their direction. They provide leadership to the research teams and work closely with personnel from other departments, such as regulatory affairs, intellectual property, manufacturing, quality control, and quality assurance. They develop, direct and implement strategic management plans, policies, and procedures for research in order to achieve the best overall outcomes in keeping with company goals and objectives. They integrate research activities, processes and systems into an effective and efficient research operation, to bring innovation and potential new products forward for development. In larger organizations the scope of the role is likely to be broader, and may have responsibility for a number of geographically separate research sites. In smaller organizations the role may be responsible for more varied and numerous tasks associated with the overall research and development function.

In addition to research responsibilities, research directors also have human resource and financial management responsibilities. They monitor and maintain budgetary control for their research operations and expenditures. They monitor costs and investigate anomalies, providing regular status reports to senior management on progress toward established research and financial targets. Research directors may also manage costs by optimizing the use of internal and external research capabilities. They provide direction for outsourcing, including vendor selection, business requirements, technology transfer, and resolution of any contract-related issues or concerns.

Research directors typically have extensive backgrounds in science and most have either a master's or a doctorate degree in a relevant scientific field supplemented with a number of years of research experience and management. Employers look to their research directors to have at least 10 years experience managing research and development programs in industry or 10+ years in successive technical and leadership positions in research and development. There is also growing interest in proven commercialization experience, working knowledge of legislative or regulatory guidelines and public policy statutes of direct relevance to the organization's research focus and appropriate industry experience.

An on-going responsibility is to stay current with developments and emerging trends in the marketplace, the scientific field of study, and the international arena. Employers look to the research director to introduce new technology and innovation into their research agenda. Research directors are also expected to lead their research staff in updating their knowledge and skills and in staying current with industry trends. This means a research director is continuously learning, through reading, scanning the Internet, taking professional seminars and networking with peers, colleagues and trusted knowledge leaders.

The occupation of research director calls for a responsible, driven, visionary individual to build and promote a positive and productive research environment. From a business perspective, research directors need effective planning and organizational skills, the ability to adapt and respond to changing and evolving challenges and priorities, and must be comfortable working in a demanding, fast-paced environment. A research director must have excellent listening, verbal and written communication skills, as they collaborate, consult and communicate with a broad spectrum of individuals: scientists, staff, management, and external stakeholders. In addition, they must demonstrate good time and resource management capabilities as well as be able to identify/set priorities and manage multiple tasks. They must be able to work in a team and partner effectively with internal and external stakeholders to identify and meet objectives. It is also important that a research director demonstrates positive interpersonal skills – in working closely and effectively with others, in persuading and influencing decisions, and in developing support for research proposals and positions. They apply critical thinking and problem-solving skills to identify priorities, to assess and manage risk and to seek out potential opportunities which embody the goals and mandates of the organization.

### Essential Skills

The most important Essential Skill(s) for this Profile: ✓				
	Reading Text		Thinking Skills – Problem Solving	Working With Others
	Document Use	✓	Thinking Skills – Decision Making	Computer Use
	Writing	✓	Thinking Skills – Critical Thinking	Continuous Learning
	Numeracy		Thinking Skills – Job Task Planning & Organizing	
✓	Oral Communication		Thinking Skills – Significant Use of Memory	
			Thinking Skills – Finding Information	

Research directors must have excellent verbal communication skills, as they collaborate, consult and communicate with a broad spectrum of individuals: scientists, staff, management, and external stakeholders. They need strong critical thinking skills to support a well developed capacity to make informed decisions based on data and options provided by the research manager/scientists.

## Language Benchmarks

The majority of communications tasks associated with the required competencies and activities of a competent research director were found to be between Canadian Language Benchmark levels 9 – 11. This finding is based on a limited sampling of representatives in industry. The actual language benchmark requirements for this occupation within an organization will be subject to the organization's requirements, and the definition of the occupational role within the organization.

## **Competency Profile**

*A Research Director must be able to:*

### ***A. Develop the research strategy***

TASKS	SUBTASKS	IMPORTANT ACTIONS / PERFORMANCE STANDARDS
1. Analyze research trends and directions	1.1. Survey literature.	
	1.2. Review secondary data.	
	1.3. Network with peers/colleagues.	
	1.4. Research competitors in terms of research activities, position in the research cycle.	
	1.5. Review latest technologies.	
2. Develop a research strategy that supports company goals and objectives	2.1. Formulate overview of marketplace	Established Corporate Goals and Objectives
	2.2. Analyze research development projects.	
	2.3. Conduct SWOT (strengths, weaknesses, opportunities, threats) analysis.	
	2.4. Develop research business plan.	
	2.5. Analyze demand.	
	2.6. Conduct gap analysis.	
	2.7. Identify and assess risks.	
	2.8. Develop alternatives.	
	2.9. Evaluate alternatives.	
	2.10. Select recommended strategy.	
	2.11. Submit strategy recommendation to the Executive team.	
	2.12. Address issues/concerns as appropriate.	
	2.13. Obtain Executive team approval for the recommended research strategy.	

A Research Director must be able to:

**B. Develop the research plan**

TASKS	SUBTASKS	IMPORTANT ACTIONS / PERFORMANCE STANDARDS
1. Develop a research plan to implement the approved research strategy	1.1. State approved goals and objectives.	Corporate Research Strategy, Food and Drug Act (FDA) and Health Canada Regulations, Corporate intellectual property (IP) position
	1.2. Outline timelines.	
	1.3. Define roles and responsibilities.	
	1.4. Identify changes required in current organization/structure.	
	1.5. Develop funding estimate.	
	1.6. Collaborate to ensure input from all appropriate organizational sources.	
	1.7. Prepare business case.	
2. Identify key performance indicators and measurement data requirements	2.1. Solicit input on key performance measures.	
	2.2. Develop potential performance measures.	
	2.3. Identify data needed to measure performance.	
	2.4. Determine availability and retrievability of data/information needed to measure performance.	
	2.5. Assess feasibility of potential performance measures in terms of data/information availability.	

TASKS	SUBTASKS	IMPORTANT ACTIONS / PERFORMANCE STANDARDS
	2.6. Develop key performance measures and supporting data/information (Specific, Measurable, Achievable, Relevant and Timebound -SMART).	
	2.7. Develop recommendations for key performance measures and incorporate into the proposed research plan.	
3. Obtain approval for the research plan	3.1. Seek approval of the proposed research plan.	
	3.2. Address objections/concerns.	
	3.3. Obtain Executive team approval for the plan.	
	3.4. Communicate the plan.	
4. Secure funding for the research plan	4.1. Identify internal funding sources.	
	4.2. Obtain executive team commitment re: internal funding.	
	4.3. Identify external sources of funding.	
	4.4. Prepare submissions for external funding.	
	4.5. Submit submissions to appropriate funding sources after Executive approval..	
	4.6. Prepare back up plans in event submissions denied or approvals delayed.	

A Research Director must be able to:

**C. Implement the research plan**

TASKS	SUBTASKS	IMPORTANT ACTIONS / PERFORMANCE STANDARDS
1. Organize structurally to support the research plan	1.1. Identify work to be done in each research program.	Corporate Research Strategy, Food and Drug Act (FDA) and Health Canada Regulations, Corporate intellectual property (IP) position
	1.2. Estimate level of work.	
	1.3. Determine quality and level of resources needed to do the work.	
	1.4. Outline organizational structure.	
	1.5. Identify positions within each program.	
	1.6. Develop job descriptions/classifications.	
	1.7. Assess impact to current organization structure.	
	1.8. Meet with impacted staff (if necessary).	
	1.9. Transition to planned organizational structure.	
	1.10. Staff vacant/open positions.	
2. Action the research plan	2.1. Develop and integrate research program plans.	
	2.2. Establish reporting criteria.	
	2.3. Develop standard template for reporting purposes	
	2.4. Identify expectations and milestones.	
	2.5. Seek and build consensus on timelines.	
	2.6. Ensure research program managers understand and support strategy and overall plan.	
	2.7. Ensure research program managers implement and monitor the research plan.	

TASKS	SUBTASKS	IMPORTANT ACTIONS / PERFORMANCE STANDARDS
3. Manage issues and risks on a proactive basis	3.1. Identify emerging issues and risks.	
	3.2. Quantify the financial impact of each risk/issue.	
	3.3. Determine probability of occurrence for risks/issues.	
	3.4. Assess impact of potential risk/issue to the research plan and objectives.	
	3.5. Develop mitigation strategies and plans for each emerging risk/issue.	
	3.6. Obtain approval for the developed mitigation strategies.	
	3.7. Monitor emerging risks/issues.	
4. Manage budgets & forecasts	4.1. Access necessary information for budgeting and forecasting (funding resources and human resources).	
	4.2. Communicate expectations with regards to budgets and forecasting (human resources).	
	4.3. Seek input from teams.	
5. Evaluate performance to plan	5.1. Review progress reports from each research program.	
	5.2. Evaluate progress and performance to established performance indicators.	
	5.3. Identify gaps.	
	5.4. Identify appropriate corrective actions.	
	5.5. Develop research plan/research program sub-plans as appropriate.	
6. Communicate performance and results to the Executive team	6.1. Manage expectations.	
	6.2. Prepare report and supporting documentation.	

TASKS	SUBTASKS	IMPORTANT ACTIONS / PERFORMANCE STANDARDS
	6.3. Present progress reports, achievements and options, if necessary.	
	6.4. Analyze alternative actions re: optimization or correction and recommend alternative actions.	
	6.5. Obtain approval for any proposed corrective actions and/or plan revisions.	
	6.6. Integrate approved revisions/corrective actions into operational plans.	

A Research Director must be able to:

**D. Establish outsourcing relationships**

TASKS	SUBTASKS	IMPORTANT ACTIONS / PERFORMANCE STANDARDS
1. Establish requirements and evaluation criteria	1.1. Define work to be done by subcontractors.	Corporate Research Strategy, Food and Drug Act (FDA) and Health Canada Regulations
2. Review and assess potential subcontractors	2.1. Review subcontractors to participate in research programs.	
	2.2. Identify key subcontractors and initiate contact.	
3. Select subcontractors	3.1. Apply selection criteria to review proposals	
	3.2. Identify those subcontractors that meet selection criteria.	
	3.3. Seek approval from the Executive team to initiate negotiations with the identified subcontractors.	
4. Negotiate subcontractor contracts	4.1. Identify negotiation team members.	
	4.2. Develop negotiation strategy.	
	4.3. Implement negotiation strategy.	
	4.4. Explore and develop performance management indicators and measurement data.	
	4.5. Negotiate key contractual agreements.	
	4.6. Prepare contract (in collaboration with Legal department).	
	4.7. Seek approval of the prepared contract by the Executive team.	
	4.8. Conclude negotiations with contract sign off by both parties.	

TASKS	SUBTASKS	IMPORTANT ACTIONS / PERFORMANCE STANDARDS
	4.9. Approve invoices for payment, dependent on established approval criteria	

*A Research Director must be able to:*

***E. Advance the research initiative***

TASKS	SUBTASKS	IMPORTANT ACTIONS / PERFORMANCE STANDARDS
1. Assess research outcomes	1.1. Evaluate research outcomes objectively.	Corporate Research Strategy, Food and Drug Act (FDA) and Health Canada Regulations, Corporate intellectual property (IP) position
	1.2. Evaluate potential for continued development/commercialization.	
	1.3. Complete a feasibility review.	
	1.4. Seek internal input.	
	1.5. Seek external input.	
	1.6. Prepare recommendations and report on moving research outcomes forward in the development process.	
2. Support the regulatory submission process	2.1. Identify registration requirements.	(Good Clinical Practices (GCP) and other terms of references, e.g., Quality assurance (QA), Regulatory Affairs (RA), current Good Manufacturing Practices (cGMP))
	2.2. Ensure awareness of regulatory guidelines.	
3. Present results to the scientific community	3.1. Respect corporate guidelines re: intellectual property and sensitive business information.	Corporate Guidelines
	3.2. Publish in reputable scientific journals.	
	3.3. Present findings at conferences.	

TASKS	SUBTASKS	IMPORTANT ACTIONS / PERFORMANCE STANDARDS
	3.4. Discuss with members of peer networks.	

A Research Director must be able to:

**F. Provide advisory/expert services**

TASKS	SUBTASKS	IMPORTANT ACTIONS / PERFORMANCE STANDARDS
1. Serve as a scientific advisor	1.1. Maintain networks with other experts in the appropriate field.	Corporate Research Strategy, Food and Drug Act (FDA) and Health Canada Regulations, Corporate intellectual property (IP) position
	1.2. Stay current with pertinent legislation and regulations.	
	1.3. Share 'lessons learned' (both positive and negative) from past pre-clinical studies and clinical/field trials.	
	1.4. Communicate leading practices in working to Good Clinical Practice (GCP) requirements.	
	1.5. Update knowledge and understanding by reading scientific/medical journals and attending professional conferences.	
	1.6. Participate on Data Safety Monitoring Board (DSMB).	
	1.7. Serve as Safety/Medical Officer/Monitor, dependent on qualifications, as required.	
2. Participate in peer reviews for external publications	2.1. Evaluate content of a proposed publication.	
	2.2. Provide a critique of a proposed publication.	
	2.3. Make suggestions to improve quality/scientific basis of a proposed publication.	

TASKS	SUBTASKS	IMPORTANT ACTIONS / PERFORMANCE STANDARDS
	2.4. Identify overlooked ideas, theories or bodies of knowledge pertinent to the content of a proposed publication.	
	2.5. Highlight shortcomings of an proposed publication e.g. incomplete conclusions, faulty logic.	
3. Maintain status as a 'recognized' authority	3.1. Publish in peer-reviewed journals.	
	3.2. Act as keynote presenter at national conferences.	
	3.3. Author and publish books.	
	3.4. Maintain a strong publication record.	
	3.5. Pursue public recognition through association awards, press releases.	
4. Mentor and coach peers and the management team	4.1. Discuss opportunities for growth with peers/team members.	
	4.2. Share expert knowledge and experience.	
	4.3. Explore avenues available for peers/team member personal and professional growth.	
	4.4. Provide guidance and support.	
	4.5. Provide contacts and open networks.	
	4.6. Offer positive reinforcement and recognition.	

A Research Director must be able to:

**G. Comply with legislation/regulations**

TASKS	SUBTASKS	IMPORTANT ACTIONS / PERFORMANCE STANDARDS
1. Understand legislative/regulatory requirements	1.1. Review relevant literature.	Corporate Research Strategy, relevant industry and regulatory guidelines
	1.2. Analyze prevailing legislations and capture parameters/controls relevant and/or applicable to the research programs.	
	1.3. Document requirements.	
2. Analyze and assess risk exposure	2.1. Identify elements of risk .	
	2.2. Estimate probability of occurrence and impact in the event of occurrence.	
	2.3. Develop a risk management strategy and plan in keeping with estimates.	
3. Develop guidelines to ensure compliance with legislation and regulations	3.1. Identify and promote key objectives.	
	3.2. Oversee development and documentation of the guidelines.	
	3.3. Submit guidelines for approval, as appropriate.	
	3.4. Communicate guidelines to research professionals and staff.	

A Research Director must be able to:

**H. Comply with corporate policies and guidelines**

TASKS	SUBTASKS	IMPORTANT ACTIONS / PERFORMANCE STANDARDS
1. Ensure compliance with corporate policies and procedures	1.1. Review corporate policies, procedures, internal audit reports etc.	Corporate Research Strategy, Corporate Policies and Procedures
	1.2. Determine key areas for monitoring.	
	1.3. Develop monitoring framework and procedure(s).	
2. Review compliance to corporate policies/procedures	2.1. Monitor compliance.	
	2.2. Identify situations/instances of non-compliance.	
	2.3. Assess impact of non-compliances on the research plan and objectives.	
3. Respond with appropriate corrective action to identified situations of non-compliance	3.1. Review identified non-compliances with research manager(s).	
	3.2. Determine appropriate corrective action(s).	
	3.3. Get approval and implement corrective actions.	

A Research Director must be able to:

**I. Manage research professionals**

TASKS	SUBTASKS	IMPORTANT ACTIONS / PERFORMANCE STANDARDS
1. Identify development needs	1.1. Identify weaknesses and strengths.	Corporate Human Resources Management Policies and Procedures and Relevant jurisdictional legislation
	1.2. Develop a skill and competency matrix.	
	1.3. Liaise with Human Resources to identify and develop learning programs.	
	1.4. Oversee implementation of the learning programs.	
	1.5. Monitor performance.	
	1.6. Follow up on progress/improvements.	
2. Provide opportunities for continuous learning	2.1. Promote a continuous learning culture.	
	2.2. Provide resources for continuous learning opportunities/initiatives.	
	2.3. Be aware of new trends in learning.	
	2.4. Recognize individuals' efforts and success in continuous learning.	
3. Evaluate performance	3.1. Seek feedback on the performance review process.	
	3.2. Develop key performance criteria.	
	3.3. Develop and utilize a standard review process.	
	3.4. Oversee implementation of the standard review process.	
	3.5. Assess effectiveness of standard review process.	
	3.6. Adjust review process as appropriate.	

A Research Director must be able to:

**J. Demonstrate accepted management capabilities**

TASKS	SUBTASKS	IMPORTANT ACTIONS / PERFORMANCE STANDARDS
1. Apply accepted management principles and techniques	1.1. Align management and leadership style with the corporate culture and objectives.	Corporate Research Strategy, Corporate Policies and Procedures
	1.2. Ensure that management team uses accepted management principles and techniques.	
	1.3. Create opportunities for information sharing across the management team, e.g. regular meetings, governance structure.	
	1.4. Make sure the organizational procedures and structures are in place to achieve corporate goals.	
	1.5. Ensure the execution of strategies and tactics.	
	1.6. Establish the appropriate controls for evaluating performance.	
2. Plan and implement strategically	2.1. Look forward /anticipate trends that may impact research.	
	2.2. Ensure alignment of research objectives with organizational direction and goals.	
	2.3. Chair meetings, as required.	
	2.4. Facilitate team planning efforts.	
	2.5. Consider the consequences and future implications of plans and actions.	
	2.6. Recommend actions or options to mitigate or prevent negative consequences.	
	2.7. Develop contingency plans.	

TASKS	SUBTASKS	IMPORTANT ACTIONS / PERFORMANCE STANDARDS
	2.8. Work towards measurable objectives.	
	2.9. Promote accountability.	
	2.10. Establish framework for monitoring plans.	
3. Delegate appropriately	3.1. Know strengths and weaknesses of team members.	
	3.2. Set expectations.	
	3.3. Give autonomy.	
	3.4. Allow for personal growth opportunities.	
	3.5. Communicate regularly/frequently.	
4. Influence decisions	4.1. Define the best approach to promote a position.	
	4.2. Articulate the position with clarity.	
	4.3. Understand the positions of the other parties.	
	4.4. Promote the benefits of preferred position.	
	4.5. Identify the shortcoming/drawbacks of the other parties' positions.	
	4.6. Show how preferred position addresses shortcomings in other parties' positions.	
5. Manage risk	5.1. Identify, qualify and quantify risks.	
	5.2. Identify the risk/benefit/cost proposition.	
	5.3. Develop contingency/remedial plans to mitigate risk.	
	5.4. Communicate risks.	
	5.5. Obtain legal advice/counsel, as appropriate.	
	5.6. Establish 'Go/No Go' decision criteria in consultation with the Executive team.	

TASKS	SUBTASKS	IMPORTANT ACTIONS / PERFORMANCE STANDARDS
	5.7. Make 'Go/No Go' decisions as dictated by circumstances and risk assessment and approved by the Executive.	
6. Identify and protect intellectual property	6.1. Understand corporate policies, guidelines and procedures pertaining to intellectual property.	Corporate Policies on intellectual property (IP)
	6.2. Determine whether developments are able to be protected (in conjunction with Legal/Intellectual Property staff).	
	6.3. Identify work considered to be intellectual property (in conjunction with Legal/Intellectual Property staff).	
	6.4. Determine whether developments are able to be protected (in conjunction with Legal/Intellectual Property staff).	
	6.5. Initiate the necessary actions to protect intellectual property, as approved by the Executive team.	
	6.6. Monitor to confirm that the necessary steps are being taken regarding protection of intellectual property.	
7. Protect sensitive/confidential information	7.1. Identify those records which meet the definition of sensitive information under the <i>Personal Information Protection and Electronic Documents Act (PIPEDA)</i> .	Protection of personal information legislation (e.g., <i>Personal Information Protection and Electronic Documents Act</i> (PIPEDA)) Protection of confidential information policies and procedures Food and Drug Act (FDA) and Health Canada Regulations referencing patient data)
	7.2. Assure maintenance of confidentiality of the information.	

TASKS	SUBTASKS	IMPORTANT ACTIONS / PERFORMANCE STANDARDS
	7.3. Identify personnel who may access sensitive information.	
	7.4. Communicate confidential information appropriately to those who have a functional 'need to know'.	
	7.5. Store and secure confidential information in observance of applicable laws and company policies/procedures.	
8. Use computers to analyze/manage data and information	8.1. Identify data and information requirements.	
	8.2. Use computers to collect, analyze and interpret complex data.	
	8.3. Establish a formal system for computerized data/information collection, storage, access, retrieval, archiving and disposition.	
	8.4. Apply advanced computer skills, including use of MS Word, Excel, PowerPoint.	
	8.5. Use SAS data files and Excel databases to organize data/information.	
	8.6. Use computers to analyze data, generate reports and create presentations, posters and manuscripts.	
9. Establish effective working relationships	9.1. Work effectively with team members and others.	
	9.2. Share current knowledge with new colleagues using an established framework and protocols.	
	9.3. Recognize the skills and abilities of others.	
	9.4. Show respect.	

TASKS	SUBTASKS	IMPORTANT ACTIONS / PERFORMANCE STANDARDS
	9.5. Accept and appreciate different ways of doing things.	
10. Manage work activities	10.1. Utilize responsible practices which contribute to the cost-effective use of resources.	
	10.2. Maximize efficient use of resources (e.g., time, equipment, personnel).	
	10.3. Develop and report against budgets & forecasts.	
	10.4. Manage research timelines against established expectations.	
	10.5. Manage risk.	
	10.6. Apply continuous quality improvement techniques and risk management processes.	

A Research Director must be able to:

**K. Apply professional practices**

TASKS	SUBTASKS	IMPORTANT ACTIONS / PERFORMANCE STANDARDS
1. Comply with corporate, regulatory and legislative policies, requirements, procedures and protocols	1.1. Follow established corporate protocols and procedural documentation (e.g., policies, procedures, standard operating procedures (SOPs)).	Established corporate protocols and procedural documentation (e.g., policies, procedures, standard operating procedures (SOPs)) Protection of personal information legislation (e.g., <i>Personal Information Protection and Electronic Documents Act (PIPEDA)</i> ) Protection of confidential information policies and procedures Food and Drug Act (FDA) and Health Canada Regulations referencing patient data
	1.2. Maintain confidentiality (e.g., data, records, intellectual property, client information).	
	1.3. Practice and adhere to leading project management practices.	
	1.4. Practice and adhere to legislative/regulatory requirements.	
	1.5. Comply with all applicable regulations, legislation and Good Practices (GxPs).	
2. Demonstrate project management capabilities	2.1. Manage large and complex projects.	
	2.2. Show financial acumen in the planning and oversight of project budgets and valuations.	
	2.3. Apply understanding of portfolio management concepts.	

TASKS	SUBTASKS	IMPORTANT ACTIONS / PERFORMANCE STANDARDS
	2.4. Apply in-depth specialty knowledge to complete projects of diverse scope and complexity.	
3. Demonstrate medical, scientific and research and development (R&D) experience	3.1. Apply knowledge of research settings and protocols as required.	
	3.2. Comply with regulatory authorities on research issues.	
	3.3. Apply scientific principles and concepts to research efforts.	
	3.4. Apply knowledge of global regulatory requirements where appropriate (Food and Drug Act (FDA), International Conference on Harmonization (ICH) etc.).	
	3.5. Use understanding of regulatory statistical requirements to provide statistically sound research design and analysis input to submission documents.	
	3.6. Apply experience working with research data to create study reports submission data summaries and other contributions to regulatory documents.	
4. Ensure staff are knowledgeable of and take appropriate safety measures	4.1. Use appropriate personal protective equipment (e.g., mask, gloves, laboratory coat, etc.).	Workplace Hazard Management Information System (WHMIS) and related federal and provincial legislation
	4.2. Utilize laboratory safety devices in a correct manner (e.g., biological safety cabinets, fume hoods, laminar flow cabinets, safety pipeting devices, safety containers and carriers, safety showers, eye washes).	

TASKS	SUBTASKS	IMPORTANT ACTIONS / PERFORMANCE STANDARDS
	4.3. Apply the principles of working with hazardous chemical or biological material regarding reagent preparation, storage and disposal and equipment cleaning and disinfecting (as per Workplace Hazard Management Information System (WHMIS) requirements and related legislation).	
	4.4. Take the appropriate actions to minimize the potential hazards/dangers related to disinfection/sterilization methods, biological samples, radioactive materials, equipment and laboratory supplies.	
	4.5. Seek appropriate first-aid treatment by mobilizing emergency response (e.g., external and/or internal response, such as an Emergency Response Team) to respond to incidents such as chemical injury, traumatic injury, electrical shock, burns, radioisotope contamination.	
	4.6. Respond appropriately to fire emergencies.	
	4.7. Report incidents related to safety and personal injury (e.g., needle stick injuries), in a timely manner to management.	
5. Demonstrate professional integrity	5.1. Report findings and results accurately and honestly.	
	5.2. Respect confidentiality (e.g., data, records, intellectual property, client information).	
	5.3. Take responsibility for actions and decisions.	

TASKS	SUBTASKS	IMPORTANT ACTIONS / PERFORMANCE STANDARDS
	5.4. Accept accountability for outcomes of actions and decisions.	
	5.5. Maintain high standards in practice.	
	5.6. Apply relevant internationally accepted protocols and practices, regulations, and legislation.	
	5.7. Follow rules and regulations administered by regulatory bodies, such as Health Canada, Agriculture and Agri-Food Canada.	
	5.8. Maintain confidentiality (e.g., data, records, intellectual property, client information).	
	5.9. Demonstrate openness, transparency and fairness.	
	5.10. Show respect for team members, peers and other individuals.	
	5.11. Act with regard to corporate ethics and values.	

A Research Director must be able to:

**L. Demonstrate personal competencies**

TASKS	SUBTASKS	IMPORTANT ACTIONS / PERFORMANCE STANDARDS
1. Demonstrate leadership	1.1. Look at the big picture.	
	1.2. Focus on goals and objectives.	
	1.3. Demonstrate commitment.	
	1.4. Promote and demonstrate ethical behaviour and integrity.	
	1.5. Show and promote mutual respect.	
	1.6. Promote trust and honesty.	
	1.7. Set an example.	
	1.8. Accept accountability.	
2. Set priorities	2.1. Reference critical information when setting priorities.	
	2.2. Establish criteria such as risk, time-sensitivity, investment required, etc. to facilitate priority setting.	
	2.3. Consider available resources and redistribute work/assignments, as appropriate.	
	2.4. Maintain awareness of time-sensitive issues and critical deadlines.	
	2.5. Keep goals and objectives in mind.	
	2.6. Multi-task where possible and practical.	
	2.7. Communicate priorities to team members/relevant personnel.	
3. Organize work	3.1. Think ahead and anticipate.	
	3.2. Demonstrate effective time management.	
	3.3. Set priorities and objectives.	

TASKS	SUBTASKS	IMPORTANT ACTIONS / PERFORMANCE STANDARDS
	3.4. Identify and manage resources needed to complete work.	
	3.5. Establish processes/systems/methodologies to enhance effectiveness.	
	3.6. Determine the information/data to be collected.	
	3.7. Recognize where templates and standard forms would facilitate data and information management.	
4. Build networks internally and externally	4.1. Communicate well, clearly, and in a timely manner.	
	4.2. Listen.	
	4.3. Ensure awareness of differences, treating everyone fairly/equitably and accommodate to special needs.	
	4.4. Recognize the skills and abilities of others.	
	4.5. Use various approaches in response to different individual styles.	
5. Solve problems	5.1. Identify the problem.	
	5.2. Identify the causes of the problem.	
	5.3. Understand the science or the technology relevant to the problem or issue.	
	5.4. Involve experts and professionals in the problem-solving exercise.	
	5.5. Consider options for resolution.	
	5.6. Determine the appropriate course of action.	
	5.7. Oversee implementation of solutions.	

TASKS	SUBTASKS	IMPORTANT ACTIONS / PERFORMANCE STANDARDS
	5.8. Assess the effectiveness of the selected course of action.	
6. Communicate clearly and effectively	6.1. Demonstrate an ability to clearly articulate complex issues orally and in writing.	
	6.2. Explain point of view clearly and concisely.	
	6.3. Deliver and adapt message for appropriate audiences.	
	6.4. Use appropriate terminology.	
	6.5. Translate, simplify and explain terms when speaking with parties who may not be familiar with the terminology.	
7. Embrace continuous learning and development	7.1. Allocate time for continuous learning.	
	7.2. Identify opportunities for continuous learning e.g. business management.	
	7.3. Build on 'lessons learned' from past research efforts.	
	7.4. Keep abreast of relevant science and technology.	
	7.5. Nurture the ability and enthusiasm to learn new skills and techniques.	

## Strong Board of Directors

The Board of Directors is composed of experts in the field of HR, CEOs, CFOs and CSOs from across Canada with extensive financial and industry experience representing companies and organizations in Canada's bio-economy. BioTalent Canada is not a membership organization and therefore relies on the guidance provided by its dedicated volunteer Board of Directors.

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