

**Job Class Profile:            Laboratory Technologist III****Pay Level:                      LX-32                      Point Band:                      857-891**

Factor	Knowledge	Interpersonal Skills	Physical Effort	Concentration	Complexity	Accountability & Decision Making	Impact	Development and Leadership	Environmental Working Conditions	Total Points
Rating	6	4	4	8	5	5	5	2	6	
Points	280	67	25	38	150	108	103	43	64	878

**JOB SUMMARY**

The Laboratory Technologist III performs advanced/highly specialized tests and procedures relating to cytology, genetics, or pathology requiring an advanced level of training.

**Key and Periodic Activities**

- Reviews client history and interprets and enters results of testing in computerized patient records. Files specimen slides, client requisitions, etc.
- Provides technical expertise and direction related to laboratory practices, procedures, and reporting of results; discusses tests and findings with medical and clinical personnel, and provides interpretative guidance on the findings; orientates new staff, trains and instructs technologists and medical personnel.
- Performs advanced (specialized) procedures, tests, studies, etc., and reports results as applicable. Examples:
  - Locates and assesses the quality of metaphase cells (microscopically), and digitally captures the images of the metaphases for analysis and for the diagnosis of chromosomal abnormalities. Performs metaphase chromosome preparations, karyotypes, special staining of chromosomes, Fluorescent In Situ Hybridization (FISH) studies, and molecular analysis of Deoxyribonucleic Acid I Ribonucleic Acid (DNA/RNA) to assist the physicians in diagnosis, treatment and monitoring and prevention of diseases.
  - Microscopically examines and interprets gynecological and non-gynecological cytology specimens to determine the presence or absence of pre/cancerous conditions.
  - Performs grossing of surgical specimens, examination of tissues, dissects organs, interprets normal anatomical variation from pathological processes/diseases, adjusts dissection techniques based on the pathology, formulates gross differential diagnosis, and dictates gross description. Performs/assists pathologist with post mortems and collects biological specimens such as bone marrow toxicological material and fine needle aspirates.
- Proof reads transcribed reports and release final reports on results of tests to health care providers.
- Consults with medical staff on testing and to discuss results.

### Key and Periodic Activities

- Maintains, monitors, reviews, documents, and implements quality assurance activities.
- Provides input into policy and procedure development.
- Prepares various reports (i.e. workload measurement, utilization, and test statistics).

## SKILL

### Knowledge

#### General and Specific Knowledge:

- Laboratory methodologies, trends, and standards.
- Instrumentation and testing regulations.
- Operation and maintenance of diagnostic equipment and instruments.
- Laboratory and safety guidelines and existing legislation.
- Quality Control and Assurance.
- Workplace hazard materials identification system (WHMIS).
- Anatomy and medical terminology.
- Laboratory Information Systems.
- Adult Learning Principles.

#### Formal Education and/or Certification(s):

Minimum: Graduation from an accredited program with a 3 year Diploma in Medical Laboratory Technology; or Undergraduate Degree (Science or Medical Laboratory), supplemented by an advanced diploma and/or training between 1 – 2 years in duration in a specialized area (Clinical Genetics, Cytology, or Pathology Assistant); registration as a General Registered Technologist (R.T.) or subject (R.T.) with the Canadian Society of Medical Laboratory Sciences (CSMLS) and registration in specialty area or as a subject RT in the specialty area.

#### Years of Experience:

Minimum: Either 3 – 4 years of experience with up to 2 years experience in a particular laboratory or between 2 – 3 years of experience depending on the laboratory assigned.

#### Competencies:

- Ability to repair and calibrate machinery.
- Analytical and problem solving skills.
- Leadership and team building.
- Oral and written communication skills.
- Computer skills.
- Observation skills.

### Interpersonal Skills

- A range of interpersonal skills are used to perform activities such as listening, asking questions, gaining the cooperation of others to complete work, address issues and/or solve problems, providing advice, routine and complex information to medical personnel, instructing/teaching/training staff and students, providing expert advice to staff and members of the healthcare team, dealing with upset/angry people, and as required facilitating meetings or making formal presentations to groups of people.
- Communications occur with employees within the immediate work area, department, and outside the organization, physicians, students, professional advisors, and manager, and less frequent contact with internal executives, professional associations, external executives and government departments.
- The most significant contacts are with the manager or physicians to communicate updates, receive guidance and direction on laboratory activities and discuss workload issues; healthcare professionals to discuss laboratory tests/procedures; and laboratory staff to discuss laboratory activities and findings.

## EFFORT

### Physical Effort

- This class regularly exerts physical effort resulting in considerable fatigue, and requiring periods of rest.
- Constant lifts or moves objects less than 10 lbs (i.e. specimens, slides, scalpels, forceps, scissors, supplies, etc.), and occasionally objects up to 25 lbs (i.e. specimens, supplies, reagents, and equipment), and in some cases depending on the area of work there are infrequent instances where lifting or moving over 50 lbs (i.e. specimen containers, bodies during autopsy) would be required.
- Depending on the activity being performed there is a requirement for either constantly stands to dissect specimens, view specimens through a microscope, enter results into a computer - sometimes for extending periods, or sits on a workbench for extended periods requiring constant repetitive movement to cut specimens, use an analyzer or view specimens through a microscope, examine specimens, record results, or to perform work on the computer. Due to the nature some work activities there may be a moderate likelihood of back, neck, and repetitive strain injuries which will require the use of ergonomic microscopes and chairs and requiring that regular breaks be taken.
- There is a regular requirement to walk throughout the department to consult with coworkers, physicians, retrieve supplies, etc. and when performing autopsies, grossing activities, or certain other types of tests/procedures there can be constant bending or stretching and working in awkward positions.
- When performing some activities there is a requirement for constant fine finger and precision work such as when using hand tools (i.e. scalpels, forceps, scissors, microscope, etc.), and sometimes is required to use gross motor skills, perform with accurate control and steadiness to dissect specimens, prepare samples, use pipettes, and to manipulate microscope lenses, or to troubleshoot equipment.

### Concentration

- **Visual** concentration is required to look under a microscope at specimens, slides, and samples to interpret results or perform certain procedures, to see abnormalities in specimens sometimes requiring a magnifying device, to check reports and samples on monitors or computer screens for accuracy, to read digital thermometers, barcode labels, to collect samples, to match specimens with slides, label specimens, to prepare mixtures and solutions, and to prepare slides and document information.
- **Auditory** concentration is required to give information including recording and listening to playback of gross dissection reports, to listen for alarms on pumps, centrifuges, staining machines, cover slips, timers, or alerts from equipment, and to listen and respond on the telephone.
- Other sensory demands required include **touch** to check controls on the microscope, feel specimens for texture, in order to describe them (i.e. smooth, rubbery, soft, etc.), and **smell** as activities involve working with various chemicals (i.e. ethanol, acetone, and formaldehyde), requiring concentration in order to detect possible harmful situations, as well as to detect necrosis or infection.
- **Repetitive tasks requiring alertness** include screening, correlation and validation of tests results, patient and specimen identification, performing similar tests and procedures, and using similar instruments. A **higher than normal level of attentiveness or alertness for the health and safety of others** is required when working with sharp instruments, when handling multiple or similar type samples to prevent mix-up, when working with infectious substances, chemicals and biohazard waste, and when reviewing test analysis for accuracy of results.
- There is a **lack of control over the work pace** when there are staff shortages, instrument or equipment malfunctions, emergencies, and when there are an unpredictable number of specimens that are received. There are **time pressures** due to the workload and the turn around time requirements to complete tests and deadlines in completing tasks and projects. There are many **interruptions** from telephone calls.
- **Eye/hand coordination** is required to perform laboratory tests/procedures (i.e. precision pipetting, hold minute pieces of tissue with tweezers, manipulate glass slides, etc.), view specimens under a microscope, manipulation of small glass tubes, and to type using a computer keyboard.
- **Exact results and precision** is required when performing procedures/tests, interpreting or making comparisons of chromosomes, dissecting specimens in order to capture pathology within very fine margins, interpreting lesions on slides in order to provide accurate results of tests.

### Complexity

- Complexity in the tasks assigned varies. Some tasks are constantly repetitive, well defined, requiring the use of similar skills and knowledge, whereas other tasks and activities require a broad range of skills and a diversity of knowledge requiring scientific interpretation and a depth of knowledge. Problems can be simple where a limited number of solutions to select from exist, and they can be addressed by following procedures and/or guidelines. Often there are problems with a limited opportunity for standardization. Some tasks are technical and in some cases may be unique having policy significance. Tasks may also require creative problem definition, analysis, and solution development though a team setting.

- Typical challenging problems are related to decisions being made regarding interpretation and handling of tests and complex specimens (i.e. being able to recognize nuances that lead to different results).
- Complexities tend to be resolved through discussion with the manager, physicians, other technologists, and review of policies or operational manuals, national guidelines, standards, practices, textbooks, journal articles, internet, and external suppliers/vendors are available to assist with problem solving.

## RESPONSIBILITY

### Accountability and Decision-Making

- Laboratory tasks are highly monitored and controlled through documentation, checks and balances, quality control, monitoring, compliance activities, and occurrence reporting.
- Some activities are performed independently within the laboratory while others require working collaboratively with a physician, lead technologist, or the manager.
- Decisions related to testing such as triaging and grossing specimens, and signing off on negative test results, can be made without approval.
- Prior approval would be required to make some changes to policies and procedures, and to purchase equipment and supplies. Due to the nature of the work and its high involvement with medical staff, abnormal cases must be reviewed by a senior staff member before being sent to medical professionals for final diagnosis.
- Discretion and judgment is exercised to interpret directions and apply guidelines when completing and interpreting tests and when the situation affects the safety of others. There is some discretion to exercise within predetermined limits and procedures during the interpretation of tests, when performing independently predetermined procedures, when completing more tests on samples if necessary, and in the arrangement of the workflow including handling of priority cases.
- A high degree of independent discretion and judgment is exercised when making decisions related to the analyzing and interpretation of tests and results, and checking controls.

### Impact

- Tasks performed have an impact within the immediate work area (i.e. staff), department, in and outside the organization (i.e. physicians, clinics, etc.), and on patients. There is a significant impact felt by the patient when incorrect test results are given to health care providers; thus, impacting the diagnosis and treatment plan.
- Work activities impact equipment (i.e. laboratory equipment), processes and systems (i.e. tests and procedures performed), information (i.e. results of tests), material resources (i.e. inventory used), health and safety, finances (i.e. supplies required), human resources, and corporate image.
- Typical examples of mistakes or errors are incorrectly describing a specimen, using incorrect patient information, data entry, mislabelling samples, using incorrect reagents, incorrect interpretation of results, and entering incorrect data into reports.
- The impact of a mistake or error, depending on the circumstances, could be moderate to extreme. While errors can be extreme, due to quality control procedures testing errors are mitigated. Generally, errors are detected by other laboratory technologists or health

professionals and are corrected within hours of identification. Laboratory tasks are highly monitored and controlled through documentation, checks and balances, quality control, monitoring, compliance activities, and occurrence reporting.

#### **Development and Leadership of Others**

- Provides on the job advice and guidance, orientation to new employees, on-the-job training to staff, formal mentoring to students training in the specialized area, and acts as a technical mentor for their specialized area.

### **WORKING CONDITIONS**

#### **Environmental Working Conditions**

- During work activities, there is a requirement to take special precautions and use safety equipment when appropriate. This includes wearing of proper footwear, gloves, masks, goggles, face shields, safety glasses, respirator when exposed to chemicals, fume hoods when pouring off reagents and setting up procedures, use proper sharps containers for disposal, be familiar and use eyewash stations, and wear laboratory coats.
- The potential for minor cuts, bruises, abrasions, partial and total disability is limited if health and safety procedures are followed.
- There is exposure to lack of privacy, unusual/distracting noise, physical hazards, health and safety risks and adverse characteristics in the work environment to varying degrees. These include exposure to dirt/dust/filth, fumes (i.e. ethanol, acetone, and formaldehyde), vibration, electrical shocks, awkward and confining work stations, bodily fluids and waste, infectious diseases, sharp objects, odours, hazardous chemicals (i.e. acids, bases, radioactive material), toxic or poisonous substances, wet or slippery surfaces (i.e. water and hot wax), limited lighting and ventilation, and glare from monitors and microscopes.