

ELECTRON MICROSCOPY TECHNOLOGIST III**NATURE OF WORK**

This is responsible technical, supervisory, and instructional work assisting in directing the operation and maintenance of the Electron Microscopy Unit.

Work involves assisting in planning, organizing, supervising, and directing the activities of the Electron Microscopy Laboratory, and responsibility for the operation of the Faculty of Medicine Biopsy Referral Service. Work also includes responsibility for ensuring that electron microscopy equipment is maintained in working condition. Work is performed under the general direction of a pathologist or the Director of the Electron Microscopy Unit, and is reviewed through conferences and assessment of results obtained.

ILLUSTRATIVE EXAMPLES OF WORK

Assists in planning, organizing, supervising and directing laboratory services for the electron microscopy unit; supervises and participates in the performance of all standardized tests and procedures; installs quality standards, quality control, to ensure accuracy of test results.

Performs electron microscopy examinations for the Faculty of Medicine Biopsy Referral Service for the purpose of clinical diagnosis; discusses findings with physicians and referring Pathologists.

Performs complex repair and maintenance work to electron microscope and associated equipment, such as vacuum pumps, electrical control systems, ultra microtomes, darkroom and shadowing equipment.

Participates as a member of the Electron Microscopy Advisory Committee.

Participates in the interview and the appointment of laboratory personnel; prepares and maintains work schedules; evaluates performance of subordinates and recommends personnel actions; performs other personnel management functions.

Provides on-the-job training to Electron Microscopy Technologists and instructs faculty, students, graduate and post-graduate workers in the operation of the electron microscope; lectures to students in formal laboratory courses relating to electron microscopy and cell structure.

Reads and studies professional literature and reports on electron microscopy and laboratory technology to keep abreast of new developments and to incorporate improved or extended subject matter into the on-the-job training programmes.

Maintains inventories and production records; requisitions new equipment and laboratory supplies.

Attends staff meetings and professional meetings as required; prepares special and periodic laboratory reports.

Performs related work as required.

REQUIREMENTS OF WORK

Thorough experience in a medical or related laboratory including supervisory experience and considerable experience in operating and maintaining electron microscopy equipment; graduation from high school supplemented by completion of an approved registered technologist course in electron microscopy, and preferably completion of post-basic formalized advanced training; or any equivalent combination of experience and training.

Thorough knowledge of the principles, methods, materials, and practices of laboratory technology.

Thorough knowledge of electron microscopy principles, methods and procedures including processing and developing film.

Thorough knowledge of recent developments, current literature, and sources of information in electron microscopy.

Thorough knowledge of the administrative and supervisory principles involved in the operation and maintenance of laboratories.

Considerable knowledge of the occupational hazards and safety precautions of the work.

Considerable knowledge of effective teaching and instructional principles and practices.

Ability to plan, organize, schedule and supervise the work of subordinates.

Ability to prepare and present lectures and instructions to student and subordinate technologists.

Ability to supervise the preparation of reports and the maintenance of records concerning the work.

Ability to evaluate and analyze laboratory techniques and procedures and to devise new techniques and procedures.

Ability to establish and maintain effective working relationships with students, faculty, subordinates, and administrative personnel.

Skill in the use of medical laboratory equipment in the performance of required tests and examinations.

Skill in demonstrating the use of electron microscopy equipment.

Eye sight sufficiently strong to permit extended microscopic work and with normal colour perception.

Possession of certificate of registration in the Canadian Society of Laboratory Technologists.

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