

ELECTRON MICROSCOPY TECHNOLOGIST II

NATURE OF WORK

This is skilled technical work utilizing electron microscopy equipment in the examination and documentation of biological and clinical materials for teaching and research purposes.

Work involves responsibility for the operation of an electron microscope. Work includes instruction of students and subordinate technologists in electron microscopy technology. Work is performed with considerable independent judgement and initiative in accordance with accepted technological standards and practices. Work is reviewed through discussions, analysis of reports, and observation of results obtained.

ILLUSTRATIVE EXAMPLES OF WORK

Operates electron microscopy equipment and takes photomicrographs of biological and clinical materials; develops photographic plates and film; prepares and documents prints for teaching and research purposes.

Maintains accurate records and prepares technical reports, including procedures and results of laboratory tests and examinations.

Performs a variety of electron microscopical procedures on varied specimens; fixes, processes, stains, examines, and classifies specimens using a variety of fixatives and stains; processes biopsy samples on site at a number of hospitals.

Provides lead direction to subordinate technologists in the methods and standardized procedures used in the electron microscopy unit.

Instructs students, technicians, graduate and post-graduate workers in the operation of the electron microscope.

Performs routine maintenance and minor repair work on the equipment used.

Requisitions supplies and equipment for the electron microscopy unit.

Performs related work as required.

REQUIREMENTS OF WORK

Considerable experience in a medical or related laboratory, including experience in operating and maintaining electron microscopy equipment; graduation from high school supplemented by completion of an approved laboratory technology course, and completion of an

approved registered technologist course in electron microscopy; or any equivalent combination of experience and training which provides the following knowledge, abilities, and skills:

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

Considerable knowledge of the basic principles of chemistry and histology as related to laboratory technology.

Considerable knowledge of the hazards and safety precautions involved in the work.

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

Knowledge of recent developments and current literature in the field of electron microscopy.

Ability to operate an electron microscope and related equipment.

Ability to instruct and assist students and subordinates in the operation of electron microscopy equipment in practical work situations.

Ability to express oneself clearly and effectively, both orally and in writing.

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

Skill in operating electron microscope and related equipment.

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

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

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1993.03.05

Confirmed: 2004.01.05