



University System of Maryland Job Class Specification

TITLE: ELECTRON MICROSCOPE TECHNICIAN SR
FLSA: NONEXEMPT
EEO6: H50
IPEDS-SOC: 19-4099

JOB CODE: N14EZN
JOB TYPE: SYSTEMWIDE
JOB FAMILY/SERIES: RES LAB

APPROVED BY:
Chancellor Donald N. Langenberg

EFFECTIVE DATE: 07/01/1996

JOB SUMMARY

Under general supervision, performs routine and advanced electron microscope (transmission and/or scanning) laboratory procedures related to the processing of specimens used for clinical and research purposes. Maintains laboratory equipment and trains others in such techniques.

PRIMARY DUTIES

1. Prepares specimens for observation under an electron microscope using specialized techniques such as negative staining, metal evaporation, and freeze etching.
2. Makes glass knives; uses and maintains diamond knives. Cuts and trims tissue to microscope dimensions using ultramicrotome.
3. Performs specialized photomicrography techniques. Develops and prints photographic negatives.
4. Performs specialized techniques such as immunochemistry, energy-dispersive micro-analysis, specialized molecular biology, etc.
5. Assists research investigators to develop or modify technologies to suit specific research needs related to electron microscopy.
6. Maintains electron microscopes including basic troubleshooting as well as ancillary equipment.
7. Maintains records and files of specimens prepared and photographed; maintains level of supplies in laboratory.
8. Performs laboratory safety procedures and ensures compliance with quality control standards.
9. Assist in the supervision and/or training of lower level technicians and students.

Note: The intent of this list of primary duties is to provide a representative summary of the major duties and responsibilities of this job. Incumbents perform other related duties assigned. Specific duties and responsibilities may vary based upon departmental needs.

MINIMUM QUALIFICATIONS

EDUCATION: High School Diploma or GED.

EXPERIENCE: Six years in electron microscope laboratory procedures.

OTHER:

REQUIRED KNOWLEDGE/SKILLS/ABILITIES

Comprehensive knowledge of the principles and techniques of performing electron microscope procedures. Comprehensive knowledge of and ability to adhere to safety guidelines established by OSHA/MOSHA and the Electron Microscope Society of America. Skill and ability to operate, record images, clean, and maintain basic parts of electron microscopes and ancillary equipment; to manipulate, cut and/or trim specimens and extremely small objects using special equipment and manipulators; to prepare glass knives used in electron microscopy; to develop and print negatives from recorded electron microscope images; to communicate effectively. Ability to demonstrate electron microscope techniques to others.

OTHER: Except for qualifications established by law, additional related experience and formal education in which one has gained the knowledge, skills, and abilities required for full performance of the work of the job class may be substituted for the education or experience requirement on a year-for-year basis with 30 college credits being equivalent to one year of experience.

CONDITIONS OF EMPLOYMENT

N/A