

## CYTOTECHNOLOGIST I

This is skilled professional work in the evaluation of gynecological and nongynecological (fluid) cytology specimens to identify cancer and precancerous lesions. Employees work in the Cancer Cytology laboratories in the Division of Health Services, North Carolina Memorial Hospital, East Carolina University, and UNC-Chapel Hill.

Employees independently apply general knowledges, skills, and abilities of the work area to the basic pathophysiological processes being monitored. Employees discuss slides with higher level medical personnel and pathologist for diagnostic purposes. Work may include other related duties as determined by management. Work is supervised by a Cytotechnologist II or supervisor.

### I. DIFFICULTY OF WORK:

Variety and Scope - Employees receive gynecological and non-gynecological cancer smears for the identification of abnormal cells, atypicalities, inflammatory changes, and pathogenic organisms. Although the types of specimens examined are limited in variety, the knowledges associated with the identification of pathophysiological cell morphology are detailed.

Intricacy - Utilizing a binocular, multihead microscope, employees examine gynecological and non-gynecological cancer smears, which requires relating any relevant patient medical information. Employees examine cell morphology and coloring for evidence of pathological conditions indicating the presence of cancer; estimate the number of cells; and describe the slide and relate variations in cell morphology which may be a result of extraneous factors such as hormone therapy. Work requires the employees to classify smears into negative, atypical, suspicious, positive, and invasive based on a complete examination. Each slide may have characteristics of each level. Slides which are suspicious, positive, and invasive are reexamined and discussed with and signed out by a pathologist or the technical resource.

Subject Matter Complexity - Work requires a complete understanding of the theoretical application of procedures, cancer morphology, instrumentation utilized in the work area. Theoretical knowledge of cytology is also necessary to discuss test results with physicians.

Guidelines - Test procedures and instrumentation guides are available in the laboratory procedure manual. Employees are expected to utilize appropriate textbooks, manuals, and resource personnel to resolve routine problems.

### II. RESPONSIBILITY:

Nature of Instructions - Work assignments are typically made on a daily basis. Following orientation to the work area, work objectives, assignments, and deadlines are understood. Employees may receive instructions regarding theoretical application from the pathologist and/or technical resource.

Nature of Review - Technical review is provided by higher-level laboratory personnel and/or pathologist through the review of abnormal or unusual test results.

Scope of Decisions - Employees perform tests which have diagnostic impact upon hospital, private patient and local health department clients. Employees are responsible for examining slides and providing an accurate reading for diagnostic purposes and have an awareness of cancer cell morphology in order to refer questionable results to a higher level.

Consequence of Decisions - Inaccurate test results could result in an inappropriate, or lack of, diagnosis and treatment for the patient.

III. INTERPERSONAL COMMUNICATIONS:

Scope of Contacts - Work contacts are usually with laboratory personnel, students, pathologist and clinicians with the same or related technological field.

Nature and Purpose - Interactions with laboratory personnel are to receive, convey, and resolve work assignments and questionable test results. Interactions with clinicians and pathologist are to discuss test results and their significance.

IV. OTHER WORK DEMANDS:

Work Conditions - Work is performed in a medical laboratory where conditions are generally agreeable.

Hazards - Employees are required to sit in one position for prolonged periods of time and eyestrain can result from the continuous use of the microscope. There is some exposure to toxic chemicals.

V. RECRUITMENT STANDARDS:

Knowledges, Skills, and Abilities - Considerable knowledge of cytology as it relates to the diagnosis of cancer cells in pap smears; considerable knowledge of fixing and staining procedures used to prepare slides and of microscopy; ability to examine a slide, and concentrate for long periods of time utilizing a microscope; ability to make accurate observations and a diagnosis; ability to independently plan and complete work; physical ability to perform continual microscopic examinations and normal color perception.

Minimum Education and Experience - Completion of 60 semester hours of college coursework with 14 semester hours in the biological sciences and/or chemistry and completion of a one year training program in cytotechnology; or an equivalent combination of education and experience.

Minimum Education and Experience for a Trainee Appointment - High school or General Educational Development diploma and 14 hours of college coursework in the biological sciences and/or chemistry.

Administering the Class - Employees with a Bachelor of Science in the biological sciences should enter at the entry level of the trainee progression and may be promoted to the full class upon completion of one year of training in cytotechnology.