## CHIEF CYTOGENETICIST

DISTINGUISHING FEATURES OF THE CLASS: Under general supervision of the Medical Director, this position administers the Medical Genetics Laboratory. The incumbent is responsible for the administrative and technical planning, coordinating and monitoring of the highly specialized laboratory analyses offered by the Westchester County Medical Centers' Medical Genetic Laboratory. Responsibilities involve performing, supervising and interpreting laboratory procedures for accurate diagnosis of genetic disorders. Responsibility also involves providing instruction to Medical Students, Interns and Residents, and maintaining quality levels in the Medical Genetics Laboratory for successful completion of the New York State Department of Health proficiency testing in cytogenetics and successful completion of the National Tay-Sachs and Allied Disease Association proficiency testing program for Tay-Sachs. General supervision is exercised over a number of technical personnel. Does related work as required.

## **EXAMPLES OF WORK:** (Illustrative Only)

Administers the day-to-day operations of the Westchester County Medical Centers' Medical Genetic Laboratory providing complete genetic evaluations of patients referred to the Medical Genetics Unit;

Directs the technical planning and coordination of Cytogenetics Laboratory procedures, which deal exclusively with chromosomes and their role in inheritance and genetic disorder:

Performs, supervises and monitors the highly specialized Cytogenetic chromosome analyses in the following areas: genetic evaluation of referred patients to detect abnormalities; assists in prenatal diagnosis through amniocentesis; Hexosaminidase A Assay screening program to detect carriers of the gene for Tay-Sachs Disease; analyzes bone marrow specimens from patients in pre-leukemic or leukemic conditions to assist in diagnosis and treatment;

Supervises genetic counseling by supplying and explaining scientific and technical data to Genetic Counselors;

Conducts chromosome analyses on a variety of patients including newborn infants with multiple congenital malformations; the mentally retarded with or without malformations; newborns and children with ambiguous genitalia; adults with a history of infertility; and couples with a history of several spontaneous miscarriages;

Conducts chromosome analyses from tissue biopsy and abortus material;

Monitors the operation and maintenance of all laboratory equipment;

Participates in the selection and acquisition of specialized lab equipment;

Supervises the instruction of laboratory personnel, medical students, interns and residents in the use of equipment and specialized laboratory procedures;

## **EXAMPLES OF WORK:** (Continued)

Plans and participates in the development of research activities in the field of Cytogenetics;

Participates in the recruitment and evaluation of laboratory personnel;

Reviews all chromosome analyses cases with regard to quality, accuracy and for interpretation;

Insures that laboratory standards are maintained for a successful proficiency testing in Cytogenetics administered by the New York State Department of Health and successful completion of proficiency testing program for Tay-Sachs, administered by the National Tay-Sachs and Allied Diseases Association;

Works independently in the innovation of new techniques;

Submits required reports and maintains appropriate record systems;

Keeps abreast of the pertinent developments in the field.

REQUIRED KNOWLEDGE, SKILLS, ABILITIES AND ATTRIBUTES: Thorough knowledge of Cytogenetic Laboratory procedures including cell culture methods, differential staining, microscopy and photography; thorough knowledge of genetics and Biochemical methods; good knowledge of Cytogenetics laboratory standards and ability to maintain them; good knowledge of administrative procedures and practices; working knowledge of the organization and operation of a hospital; ability to assign, supervise and instruct laboratory personnel, medical students, interns and residents; ability to communicate effectively, both verbally and in writing; ability to deal effectively with the medical staff; thoroughness; accuracy; initiative; tactfulness; good judgment; physical condition commensurate with the demands of position.

MINIMUM ACCEPTABLE TRAINING AND EXPERIENCE: A Bachelor's Degree\* in a biomedical science and either; (a) completion of the requirements for a Master of Science Degree\* with a concentration in human genetics and four years of Cytogenetics Laboratory experience, one year of which must have been at the supervisory level; or (b) completion of the requirements for the Doctor of Philosophy Degree\* in Genetics and two years experience in a Cytogenetic laboratory; (c) an equivalent combination of the foregoing training and experience.

\*SPECIAL NOTE: Education beyond the secondary level must be from an institution recognized or accredited by the Board of Regents of the New York Education Department as a post-secondary, degree-granting institution.

West. Co. J. C.: Pending

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Job Class Code: C1537

Job Group: XIII