

## NON-INVASIVE TECHNOLOGIST

DISTINGUISHING FEATURES OF THE CLASS: Under general supervision of the Director of Cardiology, an incumbent of this class is responsible for performing and supervising special non-invasive procedures using highly sophisticated techniques and equipment in order to monitor the movement, sound, and activity of the heart. Work involves the administration of tests, such as, electrocardiograms, echocardiograms, Holter monitoring, and stress tests, and also in supervising and training lower level technicians in accepted methods and procedures. This requires advanced level professional and technical judgment and independent initiative. Responsibility also involves maintaining adequate supplies and insuring the proper maintenance and repair of equipment by Biomedical Engineering staff. This class is also subject to shift assignment and on-call duty to handle emergency situations. Supervision is exercised over a number of lower level technicians. Does related work as required.

### EXAMPLES OF WORK: (Illustrative Only)

Implements departmental and hospital policies, and establishes uniform procedures for assigned area;

Prepares patient for phonocardiograph testing;

Operates phonocardiography instrumentation and correlates dual heart sounds with electrocardiographic recordings, as well as those of chest wall movement to determine complex cardiac abnormalities;

Develops, cuts and mounts phonocardiography film;

Records all aspects of phonocardiography testing;

Prepares patient for vectorcardiography testing;

Operates vectorcardiography equipment that provides three dimensional presentation of cardiac electrical activity and allows for the diagnosis of intraventricular conduction distances and myocardial infarction patterns;

Records, develops, cuts and mounts all vectorcardiographic tracings;

Prepares patients for echocardiography testing;

Operates echocardiography equipment to record ultrasound from the heart walls, valves and support structures;

Records all test results to assure diagnosis of structure and valve abnormalities and plural and pericardial effusions;

EXAMPLES OF WORK (continued):

Performs Systolic Time Interval and Apex Cardiography testing when patients condition so indicates;

Develops, cuts and mounts echocardiography results;

Conducts stress tests using accepted procedures, and monitors the results;

Records all results and prepares appropriate patient reports;

Supervises, trains and evaluates lower level technicians in the performance of these tests;

Maintains an adequate store of supplies used in the Non-Invasive Lab and reorders new supplies when inventory runs low;

Informs Biomedical Engineering staff of equipment failure and conducts follow-up on maintenance and repairs;

Attends meetings, conferences and seminars as required;

Instructs Nursing Students, Interns and Residents in the procedures and techniques for the above mentioned tests;

Performs related technical and administrative duties to insure the smooth and effective operation of the Non-Invasive Lab;

May access protected health information (PHI) in accordance with departmental assignments and guidelines defining levels of access (i.e. incidental vs. extensive);

May use computer applications or other automated systems such as spreadsheets, word processing, calendar, e-mail and database software in performing work assignments.

May perform other incidental tasks, as needed.

REQUIRED KNOWLEDGE, SKILLS, ABILITIES AND ATTRIBUTES: Thorough knowledge of modern techniques and procedures used in all phases of Non-Invasive Cardiology; skill in the operation of the standard and special laboratory equipment and apparatus; ability to understand, follow and convey complex technical instruction; ability to train and supervise the work of others; ability to read, write, speak, understand, and communicate in English sufficiently to perform the essential duties of the position; ability to use computer applications such as spreadsheets, word processing, e-mail and database software; intellectual integrity; accuracy; thoroughness; dependability; physical condition commensurate with the requirements of the position.

MINIMUM ACCEPTABLE TRAINING AND EXPERIENCE: High school or equivalency diploma and five years of experience where the primary function of the position was in a Cardiology Division of a hospital working with Non-Invasive equipment and performing echocardiograms and stress tests.

SUBSTITUTION: Satisfactory completion of 30 credits\* towards a Bachelor's Degree in a Biological Science may be substituted on a year for year basis for up to four years of the above stated 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 State Education Department as a post-secondary, degree-granting institution.

NOTE: Unless otherwise noted, only experience gained after attaining the minimum education level indicated in the minimum qualifications will be considered in evaluating experience.