

## SENIOR LABORATORY TECHNICIAN (II-PULMONARY)

DISTINGUISHING FEATURES OF THE CLASS: Under general supervision, an incumbent in this class is responsible for performing pulmonary function tests to obtain data on the functioning level of patients' respiratory processes for use by physicians in diagnosing and treating pulmonary disorders. Responsibilities include performing specialized pulmonary function tests on neonatal, intensive and critical care patients, using thorough knowledge of cardiac arrhythmias and pulmonary physiology. Other duties include maintaining and calibrating respiration equipment and maintaining daily records, reports and statistics of laboratory activities. Work is performed in close coordination with physicians in the Division of Pulmonary Medicine. Incumbents must be sensitive to and give priority to urgent or "stat" test which may require overtime work after regularly scheduled hours. The Senior Laboratory Technician (II-Pulmonary) performs testing that is either specialized or of a more critical nature than the testing done by Senior Laboratory Technician (I-Pulmonary). Incumbents participate in the training and instruction of medical students, house staff, and subordinate level laboratory technicians. Does related work as required.

### EXAMPLES OF WORK: (Illustrative Only)

Performs blood gas analyses to determine the saturation of oxygen in the blood, hemoglobin count and other content such as pH, PO<sub>2</sub> and PCO<sub>2</sub> using blood gas analyzing equipment, reflectance oxymeter, micro hematocrit centrifuge and radiometer;

Performs pulmonary function tests, which include spirometry, lung volumes by helium dilution, nitrogen washout, or plethysmograph;

Performs specialized pulmonary function tests on neonatal patients using augmented mechanical equipment ("hugger" machines) to effectuate exhalation from neonatal patients;

Performs metabolic testing on patients on ventilators to measure gas exchanges;

Performs arterial and venous puncture;

Performs ear oxymeter tests on patients undergoing assessment of oxygenation at rest or exercise, including titration of oxygen therapy;

Performs pulmonary function stress testing which includes the monitoring of EKG, ear oxymetry, lung mechanics, and gas exchange;

Explains to patients the nature of the test and procedures, and trains them in the proper use of inhaled bronchodilators and other respiratory tools;

Trains and instructs students and house staff;

Test, calibrates and maintains equipment to ensure correct readings, following specified procedures;

EXAMPLES OF WORK: (Cont'd)

Assists in the maintenance, cleaning, and use of fiberoptic bronchoscope and related equipment;

Ensures the proper recording of all test results, equipment calibrations, and maintenance according to established procedures;

Ensures the maintenance of an adequate inventory of supplies;

Prepares detailed reports, including reports of individual patient studies and statistical reports of laboratory activity.

REQUIRED KNOWLEDGE, SKILLS, ABILITIES AND ATTRIBUTES: Thorough knowledge of modern laboratory techniques and procedures, particularly as they apply to pulmonary physiology and the basis for various pulmonary function tests; thorough knowledge of the procedures used in the operation and maintenance of the various tools and equipment used in a Pulmonary Laboratory; thorough knowledge of gas exchanges and its implications to diseases; skill in explaining and teaching complex technical instructions to others including patients, laboratory workers, students, and house staff; ability to perform complex pulmonary function tests on sick patients, evaluate the results and monitor patient response to tests; ability to set-up, calibrate and maintain equipment used for pulmonary function tests; sound professional judgment; reliability; accuracy; physical condition commensurate with the requirements of the position.

MINIMUM ACCEPTABLE TRAINING AND EXPERIENCE: Three years of clinical experience performing pulmonary function tests and possession of registration by the National Board of Respiratory Care as a Registered Pulmonary Function Technologist.

\*NOTE: The National Board of Respiratory Care issues two levels of credentials in pulmonary technology, the Certified Pulmonary Function Technologist and the Registered Pulmonary Function Technologist. Only experience obtained after Certification can be counted toward the required 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.