SENIOR BIOMEDICAL TECHNICIAN

DISTINGUISHING FEATURES OF THE CLASS: Under the general supervision of a Biomedical Engineer or the Director of Biomedical Engineering, an incumbent in this class provides maintenance and technical expertise to medical staff with regard to the operation and maintenance of sophisticated medical equipment. Performs inspection, testing and repair of equipment of average difficulty, ensuring that equipment functions within manufacturer specifications and code requirements and in a manner which is safe for both patients and staff. Generally, this would include simple to complex, multi-board and multi-component equipment. Incumbents work independently in repair and preventative maintenance programs. Supervision is not a regular responsibility of this class, however, incumbents may provide technical guidance and leadership. Does related work as required.

EXAMPLES OF WORK: (Illustrative Only)

Troubleshoots and repairs complex digital and analog circuitry to maintain proper medical equipment operation and ensure optimum operation of equipment;

Provides guidance and training to Biomedical Technicians in the use, safety, inspection, calibration, preventive maintenance and inventory of all equipment;

Interfaces medical ancillary devices to computers for clinical instrumentation data acquisition to assure quality control of medical devices and verify prompt response of clinicians and automated flow charting;

Inspects medical equipment to ensure compliance with manufacturers specifications and code requirements;

Tailors equipment applications to meet clinical needs and insures implementation;

Calibrates equipment to ensure accuracy and correct operation;

Provides in-service training to nursing and medical staff on electrical safety, use of existing medical equipment and proper operation of newly acquired equipment;

Performs emergency repairs on biomedical equipment as required;

Maintains proper documentation of repairs, calibrations, periodic safety inspections, preventive maintenance procedures and in-service training sessions.

Participates in comparative evaluation of equipment and recommends new equipment and enhancements;

Coordinates with subordinates on special projects, including equipment designs and modifications to meet special needs of the Medical Center.

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

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

EXAMPLES OF WORK: (Illustrative Only) (Cont'd)

May perform other incidental tasks as required.

REQUIRED KNOWLEDGE, SKILLS ABILITIES AND ATTRIBUTES: Thorough knowledge of the operation, repair and safety considerations of biomedical equipment and instrumentation; thorough knowledge of governmental code requirements and manufacturer specifications; good knowledge of the concepts of server and client operating systems and the networking associated with these devices; good knowledge of the operational aspects and environment of biomedical equipment as it relates to the treatment of patients; ability to determine the cause of operational malfunctions of biomedical equipment and make necessary repairs; ability to communicate and work well with others; ability to carry out instructions; ability to effectively use computer applications such as spreadsheets, word processing, calendar, e-mail and database software in performing work assignments; ability to read, write, speak, understand, and communicate in English sufficiently to perform the essential duties of the position; initiative; sound judgment; thoroughness; reliability; physical condition commensurate with the demands of the position.

MINIMUM ACCEPTABLE TRAINING AND EXPERIENCE: An Associate's Degree* in Electronics, Electrical or Biomedical Engineering and four years experience where the primary function of the position was the repair and preventive maintenance of biomedical equipment, one year of which must have been in a health care facility, or a facility that manufactures or services medical equipment.

SUBSTITUTIONS: (a) A Bachelor's Degree* in Electronics, Electrical or Biomedical Engineering may be substituted for the Associate's Degree and for two years of the above experience, but not for the one year of experience which must have been in a health care facility or facility that manufactures or services biomedical equipment; (b) Satisfactory completion of 60 college credits*, which must have included at least 30 credits in Electronics, Electrical or Biomedical Engineering, may be substituted for the Associate's Degree; (c). A Master's Degree* in one of the fields stated above may be substituted for one of the years of general experience. No substitution is allowed for the one year of specialized experience.

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