

BIOMEDICAL TECHNICIAN-SURGICAL

DISTINGUISHING FEATURES OF THE CLASS: Under general supervision, the incumbent of this class is responsible for inspecting, maintaining, calibrating and operating sophisticated, state-of-the-art biomedical equipment designed for experimental and/or clinical use. This class differs from Biomedical Technician in that the incumbent of this class must also possess relevant surgical support skills to properly validate new techniques in instrumentation for safe and routine application in patients. Much of this work involves research and animal experimentation prior to application in humans. Supervision is not a function of this class, however technical direction in the area of expertise may be given to other technicians and students. Does related work as required.

EXAMPLES OF WORK: (Illustrative Only)

Assists in the inspection of biomedical instrumentation used in surgical and clinical procedures to assure its operational safety and efficacy;

Maintains and calibrates sophisticated biomedical equipment for experimental and/or clinical use;

Sets up the necessary biomedical equipment, experimental clinical condition and performs the necessary tasks to validate new techniques;

Operates various biomedical equipment and performs the relevant tests to acquire necessary physiologic data;

Sets up animal experiments to evaluate new biomedical devices/techniques before acquiring or adopting same for use on patients at Westchester County Medical Center;

Documents periodic safety inspections, preventive maintenance and calibration;

Advises and assists medical and nursing staff on use of new, sophisticated biomedical instrumentation;

Assists the Director of Biomedical Services on research and development of new techniques for clinical problems.

REQUIRED KNOWLEDGE, SKILLS, ABILITIES AND ATTRIBUTES: Good knowledge of the clinical application of biomedical equipment, its function and use; good knowledge of the procedures and techniques used in setting up animal experiments to evaluate new biomedical devices/techniques prior to use clinically; good knowledge of the operation, repair and safety considerations of biomedical equipment and instrumentation; ability to determine device malfunction and make necessary corrections to obtain the desired clinical result; ability to communicate and work well with others; ability to carry out complex written and oral instructions, particularly in a surgical setting; sound professional judgment; initiative; thoroughness; reliability; physical condition commensurate with the requirements of the position.

MINIMUM ACCEPTABLE TRAINING AND EXPERIENCE: Either (a) an Associate's Degree* in Biomedical Engineering and three years experience involving the set up and use of biomedical devices/instruments under both experimental and clinical conditions, one year of which must have been in a health care institution or medical laboratory working with animal models; or (b) five years experience as stated in (a), two of which must have been in a health care institution or medical laboratory working with animal models.

*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.