Job Title	Senior Clinical Measurement Scientist – Neurophysiology
Department	Non Invasive Cardiology
Reports to	Chief Cardiac Technician
Date	January 2014

## **Job Description**

#### **Overall Purpose of Job**

Under the general supervision of a supervisor or the neurophysiologist on call, but according to established procedures, performs EPs, EEGs and assists consultants in EMGs and NCS on patients in the ICU, Operating Room and Diagnostic Lab. To provide exceptional patient care in an environment where quality, respect, caring and compassion are at the centre of all we do.

Performs duties and responsibilities according to the philosophy and standards of the UPMC Health System, including conveying courtesy, respect, enthusiasm and positive attitudes in work situations with patients, peers, medical staff and visitors; assists other staff members and hospital personnel in completion of needed tasks; makes patient care and interdepartmental service the number one priority.

#### **Key Responsibilities and Deliverables**

- Applies suitable electrodes on predetermined measured positions on the patient's head and checks their performance as well as adjust for nonstandard situations.
- Selects predetermined electrode combination as well as non-standard montages as needed as well as adjust for nonstandard situations.
- Obtains standard recordings, utilises judgment to determine whether patient meets normal standards and reports significant changes to appropriate personnel.
- Recognises artifacts, differentiates them from Evoked Potential patterns and takes appropriate steps to eliminate them.
- Performs all necessary troubleshooting in cases of suboptimal results prior and during the testing procedure or during intraoperative monitoring.
- Performs portable, difficult and/or unusual recordings, particularly EPs in the intensive care unit and without direct supervision. Utilises appropriate patient care techniques in testing critical care patients. Practices universal precaution techniques.
- Thoroughly understands various disease states and factors that relate to them, various medication effects, clinical changes or complications to insure high technical quality.
- Operates the equipment according to the departmental procedure in order to obtain optimal results.
- Provides a hard copy report for physician's interpretation and clinical report. Provides special plotting samples when needed.
- Transports equipment.

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- Thoroughly understands cerebral vascular system.
- Thoroughly understands and is able to differentiate between normal and abnormal findings.
- Records patient history on technician sheet and documents preliminary test results on the patient's chart.
- Discusses results with interpreting and requesting physicians if needed.
- Exercises judgment, according to the patient's diagnosis for the placement of the oximetry reading patch.
- Sets up the equipment.
- Capability to abstract relevant medical history from the patient's clinical record, if available, and incorporates tech observations. Completes all necessary paper work. Is capable to recognise discrepancies between patient's ordered testing and their diagnosis.
- Keeps abreast of the advanced technology in the neurodiagnostic field. Continues to acquire knowledge of the following: normal brain anatomy and function, diseases states encounter, electrical patterns of the brain's normal and pathological circumstances.
- Calibrates and maintains the equipment for optimal performance; understands the functioning of all of the testing equipment; is able to assist in troubleshooting in conjunction with the vendors and is able to perform more complex repairs.
- Understands and is able to carry out protocols for coping with emergency situations which may occur in the laboratory. Maintains the maximum safety for patients.
- Assists medical staff during nonstandard procedures. Assists with research collection data. Assists with the administrative duties of the neurodiagnostic supervisor during absences.
- Functions as a consultant for junior staff providing guidance in all situations and uses judgment to determine course of action. Train new technologist.
- Keeps lab fully supplied and all equipment in working condition.
- Enters patient information into database program.
- Completes all necessary paperwork including information in all logbooks, bills, etc.
- Performs all other duties as assigned.
- Demonstrates competency at evaluating the status of all equipment and be able to provide a detailed description for any equipment maintenance.
- Must be competent at minor repair of equipment.
- Participate in and provides leadership for training of new staff; including orientation, training plan, creating/updating the training manual, trainee progress tracking, mandatory hospital safety training, and quality assurance.
- Under direction of superior, takes leadership role in faculty problems and resolutions at off-site facilities. This
  includes communications and coordination of schedules and policies at the outside hospitals with their
  administration, maintaining the supply inventory, coordinating equipment maintenance, creating a
  maintenance and equipment problem log, over-seeing staff during multiple cases at the outside facility, and
  providing quality assurance assessment.
- Can function in a supervisory role in the absence of the supervisor.

# **Person Specification**

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Qualifications	<ul> <li>Bachelor degree in Science with emphasis in neuroscience, biology, mathematics, physics or related field including Anatomy/Physiology or clinical experience in the respective Physiology field.</li> </ul>
Experience	<ul> <li>At least three years of full time experience in the respective Neurophysiology field and certification in the Evoked Potentials, Intraoperative Monitoring or EEG is required, CNIM certified.</li> <li>ECNE Part 1.</li> <li>NCS experience required.</li> </ul>
Job Specific Competencies and Knowledge	<ul> <li>Teamwork</li> <li>Demonstrate ability to work as part of a multi-disciplinary team.</li> <li>Demonstrate motivation and an innovative approach to job.</li> <li>Professional Knowledge</li> <li>Demonstrate clinical competence and relevant experience in a Neurology Department.</li> <li>Demonstrate an ability to contribute to overall service development.</li> <li>Planning &amp; Organisational Skills</li> <li>Demonstrate organisational skills including effective time management.</li> <li>Demonstrate the ability to manage deadlines and effectively manage multiple tasks.</li> <li>Communication &amp; Interpersonal Skills</li> <li>Demonstrate effective communication skills including the ability to present information in a clear and concise manner.</li> <li>Demonstrate excellent communication skills especially the ability to communicate clear and concise instructions to patients in an understandable fashion.</li> <li>Demonstrate an awareness and appreciation of the service user.</li> <li>Demonstrate evidence of ability to empathise with and treat patients, relatives and colleagues with dignity and respect.</li> </ul>
Personal Competencies	All posts in UPMC Beacon Hospital require a high level of flexibility to ensure the delivery of an effective service therefore, the post holder will be required to demonstrate flexibility as and when required by their manager or hospital management.

This job description is intended to be an outline of the areas of responsibility and deliverables at the time of its writing. As the Hospital and the post holder develop, this job description may be subject to review in light of the changing needs of the Hospital.

Job Description received by employee:

Signature

Date

Name (Block Capitals)