

**ProTom International**

Job Title: Applied QA Physicist

Initial Date: 12/29/2010

Location: Boston, MA area

Status: FT

Department/Unit: Tech. Operations

Reviewed By: CTO/CEO

Reports To: CSO

Revised: 09/26/11

Summary:

ProTom International, a manufacturer of proton radiotherapy equipment, seeks an experienced physicist who can participate in, and lead efforts concerning Clinical Quality Assurance, Commissioning and Validation of a Proton Beam Scanning System. Candidate will work within a team of highly experienced individuals in various aspects of radiation therapy technology, including accelerator experts, electrical engineers, software engineers, and medical physicists in continuous quality and operational improvements for ProTom's **Radiance 330** proton therapy system.

Principal Responsibilities:

- Responsible for validation and calibration of beam delivery system at client site during testing and commissioning
- Develops validation and commissioning procedures.
- Develops quality assurance procedures for clinical operation of the overall **Radiance 330** system
- Performs and documents quantification of the beam properties and tolerances for clinical deployment
- Collaborates with clients to understand their treatment planning requirements and ensure seamless integration with the **Radiance 330** system
- Leads client discussion and establishment/understanding of treatment delivery performance standards
- Leads efforts related standards and documentation as it relates to regulatory requirements
- Collaborates with internal and external physics/technical teams on all aspects of software engineering, testing and commissioning
- Develops appropriate QA procedures
- Role includes integration of imaging systems and data management.
- Establishes a data analysis and management system to track repeated data acquisitions for quality assurance tracking purposes
- Acquires strong understanding of pencil-beam scanning technology for treatment planning

ProTom International, Inc.

All information contained herein is proprietary and confidential.

Qualifications:

The candidate must have a BS or MS in Applied, Medical or Engineering Physics, with a strong experimental background and with (1) a medical physics background or (2) a strong interest in medical applications of physics.

The candidate should possess experience in several of the areas below:

- radiation physics
- hands-on measurement techniques, with experience in dosimetry measurements preferred
- regulatory requirements for radiation devices in clinical practice
- treatment planning for radiotherapy

Skills/Abilities/Competencies:

- Good engineering practices necessary to successfully bring a medical device into the market
- Strong communication, verbal and written, and analytical skills
- Demonstrable collaboration skills, working with co-workers, outside vendors/agencies and clients
- Sharp analytical techniques preferably with experience in MATLAB programming

Working Conditions:

Work performed mainly in and around an accelerator vault, with no natural light

Systems to be worked on include accelerator, beam line, gantries, patient positioners, imaging systems, beam delivery nozzles and associated subsystems

Approximately 25-50 % travel required; traditionally concentrated at client site, post install

Working flexible hours, sometimes in excess of 40 hrs per week may be required, particularly during install, testing and commissioning at client site

Nights and weekend work may be required

Fiscal Responsibilities:

Responsible for using ProTom resources in an efficient manner and identifying opportunities for savings; participates in operating and capital budget preparation at direction of CSO