The University of Pittsburgh Medical Center, one of the leading medical and cancer centres in the United States, operates two state-of-the-art Radiation Oncology Centres at the UPMC Beacon Hospital in Dublin and the UPMC Whitfield Cancer Centre in Waterford.

Each centre is equipped with two Varian linear accelerators with MLC, PV, Respiratory Gating and On Board Imaging capabilities. The qualified candidate will have the opportunity to be involved in all clinical operations, which include 4D-CT simulation, Gated Treatment, IMRT, IGRT, Conformal 3-D Planning, prostate I-125 brachytherapy and all aspects of physics QA.

UPMC Whitfield Cancer Centre wishes to recruit the following: Medical Physicist

The successful candidate will have a MSc in Medical Physics or related field. Preference will be given to candidates who have recently completed a recognized national training scheme and those with conformal and IMRT treatment planning experience. Exceptional candidates with less experience may be considered. For further information, please contact Luke Rock, Chief Medical Physicist at rockla@upmc.edu; telephone (01) 293 6631.

Salary: An attractive remuneration package will be offered to the successful candidate **Applications to:** Email:

APPENDIX 1 JOB DESCRIPTION

Job Title: Medical Physicist

Reports To: Chief Medical Physicist, UPMC Cancer Centers Ireland

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Job Purpose		
Conducts all aspects of Radiation Oncology physics including equipment calibration and commissioning, clinical support, maintenance of appropriate quality assurance for equipment and treatment delivery, compliance with radiation safety and licensing issues.		
☐ Neonate (0-1 month) ☐ Adult (18 – 65 years)	☐ Pediatric (2 months-12 year) ☐ Geriatric (66+ years)	☐ Adolescent (13 – 17 year)
Minimum Requirements		
Educational/Knowledge Requirements): :	

- 1. PhD or MSc from an accredited program in Medical Physics or related field.
- 2. Experience with 3-D conformal radiotherapy, brachytherapy and treatment planning systems is required, and radiosurgery and IMRT are highly desirable.

Licensure/Certification:

Irish/ European / US/ Canada appropriate license.

Responsibilities

- 1. Responsible for the systematic measurement, documentation, and assurance of the physical and dosimetric aspects of all radioactive sources/radiation producing equipment used in Radiation Oncology. Performs acceptance testing and commissioning of all treatment-related equipment. This includes calibration of all radiation producing sources and maintenance of all information for their appropriate use. Develops and documents performance specifications, testing, tolerances, and frequency of testing for all therapy equipment.
- 2. Maintains a comprehensive quality assurance program that ensures patients are provided tumor localization, radiation treatment, and dose distributions as prescribed. This includes assurance of the accuracy of treatment unit parameters.
- 3. Responsible for the development of treatment plans, acquisition and storage of data for treatment plans, calculation of dose distributions and machine settings for treatment delivery.
- 4. Provides consultation to the Radiation Oncologist on the physical and radiobiological aspect of treatment. Translates the desired treatment plan into a set of instructions for radiation therapists to execute.
- 5. Responsible for the in-vivo dose measurement and use of measuring devices for verification of dose delivery to patients. Provides interpretation/consultation to the Radiation Oncologist on basis of in-vivo dosimetry.
- 6. Directs the design, fabrication, and measurement of treatment beam modifiers and treatment aids.
- 7. Responsible to obtain and disseminate information pertaining to current practices within the field of Radiation Oncology Physics.
- 8. Initiates and/or collaborates on related research projects with other UPCI Physicists in Radiation Therapy in the Division of Medical Physics.
- 9. In conjunction with the Chief Medical Physicist, responsible for the initiation and implementation of new clinical practices and Medical Physics programmes.
- 10. Performs some organization and administration skills in the clinical practice of Radiation Oncology Physics. This includes decision in equipment usage/selection/replacement, physics and dosimetry staff requirements, assignments and recruitment, program operation, budget preparation, and continuing review of program's policies and procedures.
- 11. Responsible for the compliance with RPII Rules and Regulations.
- 12. Other responsibilities as directed by the Chief Medical Physicist or nominated deputy.

WORKING CONDITIONS/ENVIRONMENTAL FACTORS

The Medical Physicist works indoors in Radiation Oncology. As this position includes exposure to radiation, physicists are required to wear a film badge, which is read according to RPII regulations, and adhere to radiation policies/procedures established by the hospital. Medical physicists are required to follow universal precautions and infection control policies. Medical physicists are also required to comply with all policies/procedures in regards to handling hazardous materials and personal protection.