



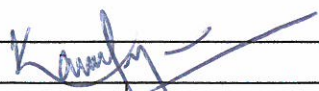
Clinical
Oncology

The Royal College of Radiologists

The Royal College of Radiologists
RCR-Cyclotron Trust Visiting Fellowships 2013/14 (Clinical Oncology)
POST-VISIT REPORT

Date for Return: This report must be completed and emailed to the RCR within 2 months of the end of your visit

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| 1. Name of Visiting Fellow | Dr Kamalnayan Gupta | |
| 2. Name of joint Visiting Fellow (if applicable) | - | |
| 3. Institution(s) of Visiting Fellow(s) | MD Anderson Cancer Centre – Proton Therapy Centre, Houston, Texas, USA | |
| 4. Name of Host(s) | University of Texas MD Anderson Cancer Centre, Houston | |
| 5. Institution(s) of host(s) | | |
| 6. Expenses claimed | £2000 | |
| 7. Visit Dates (ACTUAL) | a. Start Date 14.04.2014 | b. End Date 29.04.2014 |
| 8. 2nd visit dates (if applicable) | a. Start date | b. End Date |
| 9. Aims of the visit | <ol style="list-style-type: none">1. Experience of pencil beam scanning proton beam therapy for paediatric tumours and experience of the Spot Scanning Technique and dose painting proton therapy (DPPT).2. Understanding of Intensity modulated Proton Therapy (IMPT) which promises absolute precision radiation delivery and MDACC is one of the few centres offering this3. MD Anderson Cancer Center treats more sarcoma patients with protons than any other cancer hospital in the world and I would be particularly interested in understanding their patient selection and proton treatment planning with emphasis on dosimetry and verification. | |
| 10. Activities undertaken | <ol style="list-style-type: none">1. Attended new patient, follow up and on-treatment review clinics with focus on Urological, H&N, CNS, Sarcomas and Base of Skull malignancies (with Prof Mahajan, Dr Susan McGovern, Dr Andrew Lee, Dr Stephen Frank, Dr Rosenthal and others) involving initial patient review, patient selection for proton therapy and follow up of patients on protons.2. Discussion and review of proton therapy plans in radiation planning presentations with radiation oncologists and radiation physicists for Prostate, Sarcoma, H&N, chordoma, sarcoma and rare complex tumours3. Observed the workings of the scanning beam proton therapy and conventional scatter proton therapy gantries with understanding of single field and multiple field optimisation approaches for proton therapy4. Observed MD Anderson Proton Therapy complete work process for simulation, specific immobilisation set up and practicalities of proton therapy for most types of malignancies being treated at the centre. Took tour of the entire proton facility including cyclotron, gantries, stations.5. Review of proton therapy plans and attempting proton therapy planning with senior dosimetrists and radiation physicists and critiquing completed plans with suggestion of changes where required.6. Active attendance and participation at proton therapy clinics, radiotherapy planning clinics, teaching rounds, dosimetrists tutorials, tumour boards, grand rounds and ontreatment verification sessions. | |

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| 11. Benefits of the visit (short term) | |
| <ol style="list-style-type: none"> 1. Improved understanding of single field and multiple field optimisation approach in treatment planning of protons 2. Better personal knowledge about patient suitability, specific considerations in relation to proton therapy and especially in retreatment scenarios 3. Good understanding of application of both passive scatter plans and scanning beam plans (pencil beam protons or Intensity Modulated proton therapy. 4. First hand experience of challenges in proton beam planning in specific scenarios such as neo adjuvant, adjuvant, boost, retreatment, relapse and salvage settings | |
| 12. Envisaged benefits of the visit (longer term) | |
| <ol style="list-style-type: none"> 1. Appreciation of thought process behind optimal patient selection for proton therapy 2. Overall enhancement of my understanding of application of proton therapy in various settings whilst being mindful of potential limitations , thus providing a better cost benefit perspective. 3. Having been asked to contribute towards two projects at the MD Anderson Cancer Centr, will help further our collaboration with ultimate aim of effective and efficient patient care | |
| 13. Please outline any problems you encountered before, during or after your visit | |
| None | |
| 14. When do you intend to submit an article for the RCR Newsletter? | |
| 2015 | |
| 15. Any additional comments | |
| None | |
| Signed: |  |
| Date: | 30/4/2014 |
| Report approved by: | Clinical Oncology Professional Support and Standards Board |
| Date | 15 May 2014 |

Please return this form to Mrs Nan Parkinson, Professional Standards Administrator at:
nan_parkinson@rcr.ac.uk