

Curriculum Vitae

Dr Christopher M Nutting BSc MD MRCP ECMO FRCR

Consultant and Honorary Senior Lecturer in Clinical Oncology

Head of Head and Neck Unit
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Autumn 2004

Precis

Dr Christopher M Nutting BSc MRCP FRCR MD ECMO

Dr Nutting is Consultant and Honorary Senior Lecturer in Clinical Oncology at the Royal Marsden and Royal Brompton Hospitals. He practices at the Harley Street Oncology Centre. He specializes in the management of head and neck, thoracic and pelvic malignancy and has a specialist interest in the application of high-technology radiotherapy techniques and chemoradiation for a number of tumour types. He is an International expert in Intensity Modulated Radiotherapy (IMRT), and other conformal radiation techniques. He also has an interest in chemoradiation techniques applied to head and neck and lung cancer.

He trained in Oncology at the Royal Marsden Hospital and St Bartholomews Hospital, and was awarded his Medical Doctorate from The Institute of Cancer Research (University of London). He gained specialist clinical training in New York, University of Michigan, and a number of European Centres. He is a regular contributor to National and International clinical meetings and has published over 80 articles in his field of expertise.

Name: Christopher Martin NUTTING

Age: 36

Nationality: British

Education: Portsmouth Grammar School

University College and Middlesex Hospital School of Medicine

Qualifications: 1st Class BSc Cell Pathology (University of London) 1989

MB BS (University of London) 1992

Member of the Royal College of Physicians (UK) 1995

Fellow of the Royal College of Radiologists (UK) 1998

European Society of Medical Oncology Certification 1999

Advanced Certificate in Health Management (Imperial College Management School, University of London) 2000

Medical Doctorate (MD), University of London 2001

Postgraduate Prizes and Awards:

Markson Lecturer, Glasgow University 2004

ESTRO-Varian Clinical Oncology Prize 2001

British Institute of Radiology Sir Godfrey Hounsfield Lecturer 2000

Royal College of Radiologists Ross Award 2000 (for presentation to BCRM)

British Institute of Radiology Flude Prize 2000 (for advancing UK radiology)

European School of Oncology Hans Wyder Travel Fellowship 2000

Leonard Levy Prize (best oral paper presentation at IOS 2000)

Royal College of Radiologists Durrant Travelling Fellowship 1999

RSM Radiology Section Finzi Prize Winner 1999

Cancer Research Campaign Clinical Research Fellowship 1998

Royal Marsden Hospital Ronald Raven Clinical Research Prize 1998

Undergraduate: Cancer Research Campaign National Undergraduate Prize 1991
Royal College of Radiologists Undergraduate Prize 1991
Allen Goldsmith Clinical Prize in Oncology (Medical School finals)
Maurice Elton Prize in Oncology (Medical School Essay Prize)
Reitlinger Prize (University of London intercalated BSc Prize)
John Jepson Essay Prize ("The Molecular Basis of Medicine")
Poster prize, Uro-oncology '90 meeting

Appointments

Current: Consultant in Clinical Oncology Royal Marsden Hospital
Head of Head and Neck Unit, Royal Marsden Hospital
Honorary Senior Lecturer in Clinical Oncology, Institute of Cancer Research.
Cancer Services Collaborative National Clinical Lead Head and Neck Cancer

Previous: 2000-2001
Senior Registrar, Radiotherapy and Oncology, St Bartholomew's Hospital, London.

1998-2000
Cancer Research Campaign Clinical Research Fellow and Honorary Senior Registrar, Department of Urological Oncology and Academic Unit, Institute of Cancer Research and Royal Marsden Hospital, Sutton.

1995- 1998
Specialist Registrar training rotation in Clinical Oncology at the Royal Marsden Hospital, London and Surrey, and St Lukes Hospital, Guildford.

1993- 1995
Senior House Officer rotation in General Medicine at University Hospital, Queens Medical Centre, Nottingham.

1992-1993
House Officer at Middlesex and University College Hospitals (Clinical Oncology) then at Royal Surrey County Hospital, Guildford (General Surgery).

Clinical Practice:

General: My current post specialises in management of patients with head and neck, skin and lung malignancy. I work within the Royal Marsden, Royal Brompton, and St Georges Hospitals. The post provides tertiary care for National and International referrals. I have experience in developing head and neck and lung cancer services, and managing a research portfolio in these disciplines. All my patients are treated in clinical and research protocols with external beam radiation, chemotherapy and surgery. I have special interest and am the clinical lead for conformal radiotherapy, IMRT, stereotactic and brachytherapy programmes in the head and neck region, and have experience in structuring and developing these services.

Research: I firmly believe that the future of improving outcomes in cancer treatment is through well designed clinical research programmes. I have been involved in the evaluation of conformal and intensity-modulated radiotherapy techniques for a number of tumour sites. During my MD (ICR 1998-2000; Supervisors Prof Webb and Prof Dearnaley) I was able to show the ability of conformal radiotherapy techniques to allow normal-tissue sparing and escalation of radiation dose. I described class solutions for IMRT in the treatment of tumours of the paranasal sinuses, larynx, hypopharynx, thyroid, parotid, oesophagus, prostate and pelvic lymph node irradiation. This period of research culminated in the clinical implementation of the IMRT programme at the RMT/ICR that treated the first patients with inverse-planned IMRT in September 2000 in the context of a Phase I/II pelvic node dose escalation study in prostate cancer patients. Since my appointment at the RMH/ICR I have developed my research areas with clinical trial protocols and radiotherapy technical development concentrating on head and neck cancer.

Clinical Research Protocols:

Radiotherapy: I am the Principle Investigator of two clinical trials in head and neck IMRT.

The first is a CRUK-sponsored International Phase III trial in head and neck cancer patients designed to confirm the benefits of parotid gland-sparing IMRT. This is the first randomised study of IMRT against conventional radiotherapy in head and neck cancer, and involves some of the best UK and European radiotherapy centres. The trial is supported by a Clinical Trial Award to the ICR from CRUK, and by the NCRI head and neck and radiotherapy groups.

The second is a single centre Phase I/II dose escalation study in patients with thyroid, larynx and hypopharynx cancer. This study aims to determine the maximum safe dose of chemo-radiotherapy which can be delivered with IMRT to these tumour sites. The trial continues to actively recruit.

Mucositis: I have been involved in a number of studies to modulate this radiotherapy complication.

I am currently the PI of an International randomised study of the use of a new topical agent to reduce mucositis.

Imaging: Two protocols are currently underway. They are investigating the role of MRI in treatment planning for skull base tumours, and more recently I have been awarded a grant to study FDG PET and integrate this into radiotherapy treatment planning for advanced head and neck cancers.

Chemotherapy: Over the last year I have been involved with trials of cytotoxic and biological chemotherapy agents in head and neck cancer.

Lung cancer: I am the local investigator for two NCRI sponsored lung cancer chemo-radiotherapy trials.

International: In 1999 I spent one month studying at the Memorial Sloane Kettering Cancer Centre in New York, and University of Michigan, in Ann Arbor on a RCR Travelling Fellowship. I have also visited several other centres in Europe and USA that have implemented high-tech radiotherapy techniques. I am regular invited lecturer on the International radiotherapy and oncology circuit.

Research Grants: I hold research grants in excess of £650,000.

CRUK Clinical Trial Grant: Parotid sparing IMRT Trial £250,000

RCR/BUPA Fellowship to study PET in head and neck cancer RT. £50,000

CRUK Research Registrar to conduct IMRT studies in head and neck cancer. From CRUK programme grant led by Prof A Horwich. £80,000

Jansen Cilag. Study of recombinant erythropoietin in head and neck cancer patients undergoing radical radiotherapy. £20,000 (Completed 2003)

Royal Marsden Head and Neck Research Trust. Salary for the support of a Research Nurse. £90,000

ML Laboratories. Study of an anti-microbial bucal insert in patients undergoing oral cavity and oropharyngeal irradiation. (Completed 2003)

Vion Pharmaceuticals. Genetically modified Salmonella Typhimurium as a gene therapy delivery system in head and neck cancer. (Completed 2003)

Vion Pharmaceuticals. Triapine, a novel ribonucleotide reductase inhibitor in head and neck cancer.

Astra-Zeneca. Studies of the use of Iressa, an EGFR TK inhibitor in head and neck cancer. £150,000

Biotech Pharma. Randomised trial of Beta-glucan in oral mucositis during radiotherapy.

Teaching: Throughout my career I have been involved in the teaching of medical students, SHO's (MRCP), and Specialist Registrars (FRCR I and II) as well as nurses and radiographers. During my MD I personally supervised two postgraduate students from India and China who undertook clinical projects in conformal therapy. I am associate clinical tutor for the Royal Marsden Clinical Oncology trainees.

Ongoing Research Supervision:

I currently supervise five research fellows:

Dr T Guerrero-Urbano is supervised for MD Joint with Prof Dearnaley investigating IMRT in the protocols described above. 2002-2004

Dr Kate Newbold supervised for MD investigating application of PET in treatment planning.

Dr Nikos Katigoglo supervised with Dr K Harrington.

Dr Vicky Mihalaki supervised with Dr K Harrington.

Dr S Rogers supervised with Dr K Harrington.

Completed supervision:

Dr Katherine Merry Supervised for Physics MSc joint with Miss Bidmead.

NCRI: I am a member of the NCRI head and neck group

Media/Internet: I have been involved in several press conferences to launch the clinical trials, and have given interviews on National Radio and TV. I am involved in the development of an interactive educational Web Site. This resource will be used interactively to teach site visitors conformal radiotherapy techniques. I am the clinical adviser to a web site on radiation side effects for patients, and have set up web sites for the head and neck unit, and myself.

Roles in industry: I am a member of an International research and development consortium on conformal radiotherapy and IMRT sponsored by Elekta. I have undertaken teaching and development work in the UK and abroad with Elekta, Varian and Marcomimed Oncology Systems.

Astra-Zeneca Iressa advisory boards in Lung and head and neck cancer.

PRESENTATIONS

Invited lectures:

- UK:**
- Markson Lecturer Glasgow 2004**
How can recent advances in radiotherapy technology improve patient care?
 - IPEM: Head and Neck cancer: Advances in radiotherapy planning, treatment and future developments 2003**
Target Volume Definition
 - Royal Marsden Hospital Physics Course 2003**
IMRT for head and neck cancer
 - British Oncology Association Annual Meeting 2003**
Most important advances in head and neck cancer
The physics of IMRT: a guide for the oncologist
 - East Surrey Cancer centre 2003**
IMRT at the Royal Marsden Hospital
 - IMRT in clinical practice 2003**
From conformal therapy to IMRT
IMRT for Head and Neck cancer
Clinical trial results
 - Royal Society of Medicine Oncology Section 2002**
The role of IMRT in head and neck cancer
 - British Institute of Radiology Applications of Portal Imaging 2002**
Portal imaging applications- a clinicians perspective
 - British Association of Plastic Surgery 2002**
Advanced radiotherapy techniques in clinical practice
 - Royal College of Radiologists Annual Meeting 2002**
Novel Techniques in radiotherapy for Head and Neck Cancer
 - British Association of Head and Neck Oncologists 2002**
The role of conformal radiotherapy techniques in Head and Neck Cancer
 - South west London Lung Tumour Working Group 2002**
Radical Radiotherapy for Lung Cancer
 - Advances in Radiotherapy Course Royal Marsden Hospital 2001**
Advances in Brachytherapy
 - Royal Marsden Stereotactic Radiotherapy Course 2001**
The role of stereotactic radiotherapy in head and neck cancer
 - Royal Brompton MSc course 2001**
Radiotherapy for Lung Cancer
 - Junior Oncology Club 2001**

IMRT the Future of Radiotherapy?

British Institute of Radiology Sir Godfrey Hounsfield Lecture 2000

“Intensity Modulation: The Most Important Advance in Radiotherapy since the Linear Accelerator?”

IPEM Conformal Radiotherapy 2000, London

“The three dimensional conformal radiotherapy process” and

“IMRT for tumours of the Head and Neck”

London Gynaecological Oncology Group (LGOG) 2000

“IMRT and its application to gynaecological oncology”

Kingston University Postgraduate Programme in Radiography 2000

“Management of Urological Tumours”

Velindre Hospital Cardiff 2000.

“Advances in conformal therapy and IMRT”

Elekta Oncology Systems International Annual Marketing Meeting 1999

“Conformal Radiotherapy”

Centre for Cancer and Palliative Care Studies Workshop 1999

“Conformal Radiotherapy Reduces Side Effects of Irradiation”

Royal Marsden Hospital Treatment Planning Course 1999 and 2000

“Treatment planning techniques in head and neck cancer”

International: Japanese Workshop on Conformal radiotherapy techniques 2004

The future of IMRT and conformal techniques

Northern France head and neck group 2003

Using Radiation technology to reduce xerostomia

ECCO 12 Copenhagen

New Technologies session

Targetted radiotherapy techniques

Elekta Nordic Users Group Estonia 2003

IMRT: The Royal Marsden Experience

EWOC 2003 Switzerland

Modern radiotherapy techniques – Revolution or Evolution?

ICTR 2003 Lugano

Clinical Future of IMRT

Clinical IMRT in Europe 2002 Vienna

The Royal Marsden IMRT experience

ESTRO 21 2002

Technological Advances in Radiotherapy

Clinical possibilities with new technology

IMRT2K Brussels, Belgium 2000

“3DCRT vs IMRT: Progress and problems”

Normal tissue reactions in radiotherapy, Marburg, Germany 2000

“Prostate cancer – the Royal Marsden Experience”

UniversitätsSpital Zurich, Switzerland 2000

IMRT: Clinical evaluation and implementation

University of Michigan, Ann Arbor, USA 1999

“A randomised study of customised immobilisation system for the treatment of prostate cancer with conformal radiotherapy”

Presentations at Academic meetings:

UK:

UKRO1 2003

Inter-fraction organ motion: The effect on Conventional Conformal, and IMRT prostate treatments.

How routine can IMRT become in daily clinical practice?

British Skull Base Society

2002 Le-Fort osteotomy and Ir 192 afterloading for recurrent nasopharyngeal carcinoma

RSM Oncology Section (Sylvia Lawler Prize Presentations)

1999: “A randomised study of an immobilisation system for the treatment of prostate cancer with conformal radiotherapy” (oral)

1995: “Small Cell Carcinoma of the Prostate” (oral)

British Cancer Research Meeting

2000: “Evaluation and Implementation of IMRT”

1999: “A prospective randomised trial of a customised immobilisation system for conformal prostate radiotherapy” (poster)

1997: “Treatment of Benign Meningioma of the skull base” (poster)

Royal College of Radiologists Annual Meeting

1999: “The use of an immobilisation system in the treatment of prostate cancer with conformal radiotherapy - A prospective randomised trial” (poster)

1998: “A woman with 15 primary tumours and a mutation in p53: Tumour induction by adjuvant therapy?” (poster)

RSM Radiology Section (Finzi Prize Presentation)

1999: “Pre-clinical evaluation and implementation of intensity modulated radiotherapy at the Royal Marsden NHS Trust” (oral)

British Neuro-Oncology Group

1997: “Results of Treatment of Benign Meningioma of the skull base with radiotherapy” (oral)

Radiology:

1999: “Intensity modulated radiotherapy in tumours of the head and neck” (oral)

Cancer Research Campaign Grantees Meeting

1999: “Development of intensity-modulated radiotherapy (IMRT) for head and neck and pelvic tumours”. (poster)

International: International Conference on Translational Research and Pre-clinical Strategies in Clinical Radio-oncology 2003

I was invited to chair the sessions on new radiotherapy techniques.

IMRT in Europe 2002

Chair of Session on IMRT planning

“Implementation and quality control of IMRT for head and neck cancer”

International Conference on Translational Research and Pre-clinical Strategies in Clinical Radio-oncology 2000.

I chaired the session on Investigational Radiation Physics.

“Reduction in small and large bowel irradiation using an optimised intensity-modulated pelvic radiotherapy technique (IMRT) in patients with prostate cancer”(oral)

“Optimisation of beam-orientations in IMRT treatment planning of head and neck tumours” (poster)

Normal Tissue Reactions in Radiotherapy and Oncology, Marburg, Germany

2000: “Radiotherapy for carcinoma of the oesophagus: A comparison of 3D conformal and intensity-modulated techniques” (oral)

European Cancer Conference (ECCO 10)

1999: “The use of an immobilisation system in the treatment of prostate cancer with conformal radiotherapy - A prospective randomised trial” (oral)

1999: “Intensity modulated radiotherapy for carcinoma of the thyroid and parotid gland” (poster)

European Skull Base Congress

1997: “Treatment of Benign Meningioma of the skull base with fractionated radiotherapy” (oral)

PUBLICATIONS

Papers published or “in press” for peer-reviewed Journals

Original Articles:

1. Clark CH, Bidmead AM, Mubata CD, Harrington KJ, **Nutting CM**. Intensity-modulated radiotherapy improves target coverage, spinal cord sparing and allows dose escalation in patients with locally advanced cancer of the larynx. *Radiother Oncol*. 2004;70:189-98.
2. Adams EJ, Convery DJ, Cosgrove VP, McNair HA, Staffurth JN, Vaarkamp J, **Nutting CM**, Warrington AP, Webb S, Balycky J, Dearnaley DP. Clinical implementation of dynamic and step-and-shoot IMRT to treat prostate cancer with high risk of pelvic lymph node involvement. *Radiother Oncol*. 2004;70:1-10.
3. McNair HA, Parker C, Hansen VN, Askew L, Mukherjee R, **Nutting C**, Norman AR, Dearnaley DP. An evaluation of Beam cath in the verification process for prostate cancer radiotherapy. *Clin Oncol*. 2004;16:138-47.
4. Michalaki VJ, Hall J, Henk JM, **Nutting CM**, Harrington KJ. Definitive radiotherapy for extramedullary plasmacytomas of the head and neck. *Br J Radiol*. 2003;76:738-41.
5. **Nutting CM**, Normile PS, Bedford JL, Harrington KJ, Webb SA. Systematic study of techniques for elective cervical nodal irradiation with anterior or opposed anterior and posterior beams. *Radiother Oncol*. 2003;69:43-51.
6. Westbury CB, Harrington KJ, Rhys-Evans P, Archer DJ, Searle AE, Henk JM, Black CM, **Nutting CM**. Raynaud's phenomenon after radical radiotherapy for tumours of the head and neck. *Postgrad Med J*. 2003;79:176-7.
7. McNair HA, Adams EJ, Clark CH, Miles EA, **Nutting CM**. Implementation of IMRT in the radiotherapy department. *Br J Radiol*. 2003;76:850-6.
8. EJ Adams, DJ Convery, VP Cosgrove, H McNair, JN Staffurth, J Vaarkamp, **CM Nutting**, AP Warrington, S Webb, J Balycky, DP Dearnaley. Clinical implementation of dynamic and step and shoot IMRT to treat prostate cancer with high risk of pelvic lymph node involvement. In Press *Radiotherapy and Oncology*.
9. S Flampouri, EM Donovan, PM Evans, H McNair, **CM Nutting**, M Partridge, F Verhaegen. Clinical implementation of an optimised radiotherapy beam for portal imaging. *Radiotherapy and Oncology*
10. Hall CE, Harris R, A'Hern R, Archer DJ, Rhys-Evans P, Henk JM, Harrington KJ, **Nutting CM**. Le Fort I osteotomy and low-dose rate Ir192 brachytherapy for treatment of recurrent nasopharyngeal tumours. *Radiother Oncol*. 2003;66:41-8.
11. Mendes RL, **Nutting CM**, Harrington KJ. Managing side effects of radiotherapy in head and neck cancer. *Hosp Med*. 2002;63:712-7
12. **C Nutting**, CM Corbishley, B Sanchez-Nieto, VP Cosgrove, S Webb, DP Dearnaley. Potential improvements in the therapeutic ratio of prostate cancer irradiation: Dose escalation of pathologically identified lesions using IMRT. *British J Radiology* 2002;75:
13. DJ Convery, VP Cosgrove, J Staffurth, H McNair, J Vaarkamp, **CM Nutting**, AP Warrington, S Webb, J Balycky, DP Dearnaley. Implementation of inverse-planned IMRT with dynamic MLC delivery for the treatment of prostate and pelvic nodes at the Royal Marsden NHS Trust. *Radiother Oncol* 2002
14. C Hector, PM Evans, S Webb, S Pradhan, **C Nutting**. The effect of Inter fraction organ motion on conventional, conformal and IMRT prostate treatments. *Radiother Oncol* 2002
15. **C Nutting**, DJ Convery, VP Cosgrove, CG Rowbottom, AR Padhani, S Webb, DP Dearnaley. Reduction of small and large bowel irradiation using an optimised intensity-modulated pelvic radiotherapy technique (IMRT) in patients with prostate cancer. *Int J Radiat Oncol Biol Phys* 2000;48:649-56
16. **C Nutting**, JL Bedford, VP Cosgrove, DM Tait, DP Dearnaley, and S Webb. Radiotherapy for carcinoma of the oesophagus: A comparison of 3D conformal and intensity-modulated techniques. *Radiother Oncol* 2001;61:157-163

17. **C Nutting**, VS Khoo, V Walker, H McNair, C Beardmore, A Norman, DP Dearnaley. A randomised trial of the use of a customised immobilisation system in the treatment of prostate cancer with conformal radiotherapy. *Radiother Oncol* 2000;57:1-9
18. CG Rowbottom, **C Nutting**, S Webb. Beam-orientation optimisation of IMRT: Clinical application to parotid gland tumours. *Radiother Oncol* 2001;59:169-177
19. **C Nutting**, C Rowbottom, VP Cosgrove, JM Henk, DP Dearnaley, and S Webb. Optimisation of radiotherapy for carcinoma of the parotid gland: A comparison of conventional, three-dimensional conformal, and intensity-modulated techniques. *Radiother Oncol* 2001;60:163-172
20. **C Nutting**, DJ Convery, VP Cosgrove, L Vini, CL Harmer, DP Dearnaley, and S Webb. Improvements in target coverage and reduced spinal cord irradiation using intensity-modulated radiotherapy (IMRT) in patients with carcinoma of the thyroid gland *Radiother Oncol* 2001;60:173-180
21. E J Adams, **C Nutting**, DJ Convery, VP Cosgrove, JM Henk, DP Dearnaley, S Webb. The potential role of intensity-modulated radiotherapy in the treatment of tumours of the maxillary sinus. *Int J Radiat Oncol Biol Phys* 2001;51:579-588
22. **C Nutting**, M Brada, L Brazil, A Sibtain, F Saran, C Westbury, D Traish, S Ashley, A Moore, DGT Thomas. Radiotherapy in the treatment of benign meningioma of the skull base. *J Neurosurg* 1999;90(5):823-7
23. **C Nutting**, S Hyer, L Vini, C Harmer. Failure of TSH rise prior to radioiodine therapy for thyroid cancer: implications for treatment. *Clin Oncol* 1999;11:269-271
24. **C Nutting**, J Chowaniec. Evaluation of the actions and interactions of epidermal growth factor and retinoic acid on transformed urothelial cells in culture: Implications for the use of retinoid therapy in the treatment of bladder cancer patients. *Clin Oncol* 1992;4:51- 55
25. B Sanchez-Nieto and **C Nutting**. Clinical application of biological models. In The practical use of TCP and NTCP models in the evaluation of treatment plans in radiotherapy. Eds G Gagliardi, M Cattameo and A Nahum *Physica Medica* vol XVII. suppl 2: 86-92, 2001

Review Articles:

26. Guerrero Urbano MT, Nutting CM. Clinical use of intensity-modulated radiotherapy: part I. *Br J Radiol.* 2004;77(914):88-96.
27. Guerrero Urbano MT, Nutting CM. Clinical use of intensity-modulated radiotherapy: part II. *Br J Radiol.* 2004;77(915):177-82.
28. Rogers SJ, Harrington KJ, Eccles SA, **Nutting CM**. Combination epidermal growth factor receptor inhibition and radical radiotherapy for NSCLC. *Expert Rev Anticancer Ther.* 2004 Aug;4(4):569-83.
29. Harrington KJ, **Nutting CM**. Interactions between ionizing radiation and drugs in head and neck cancer: how can we maximize the therapeutic Index? *Curr Opin Investig Drugs.* 2002;3:807-11
30. **C Nutting**, DP Dearnaley, S Webb. Intensity Modulated Radiotherapy: A clinical review. *Br J Radiology* 2000;54:459-469
31. **C Nutting**, DP Dearnaley. Conformal Radiation therapy for prostate cancer. *Urologic Oncology* 2000 (in press)
32. **C Nutting**, RA Huddart. Rethinking secondary prevention of superficial bladder cancer: Is there a role for retinoids? *BJU International* 2000;85:1023-1026
33. **Nutting CM**, Huddart RA. Retinoids in the prevention of bladder cancer. *Expert Rev Anticancer Ther.* 2001;1:541-5
34. **C Nutting** and DP Dearnaley. Prostate Cancer – The Royal Marsden Conformal Experience. *Radiother Oncol* 2000 (in press)
35. **C Nutting** and RA Huddart. The use of retinoids in the treatment of bladder cancer. *Future Drugs* 2002
36. K Harrington, **C Nutting**. Advances in therapy for head and neck cancer. *Reviews in anti cancer therapy* 2002

Case Reports:

37. **C Nutting**, RS Camplejohn, R Gilchrist, P Blake, G Knee, WQ Yao, G Ross, C Fisher, R Eeles. A patient with 17 primary tumours and a germ line mutation in *TP53*: Tumour induction by adjuvant therapy? *Clin Oncol* 2000;12:300-304
38. **C Nutting**, A Folkes. The use of raltitrexed in a patient with 5 FU - induced cardiac ischaemia (letter). *Clinical Oncology* 1999;11:66
39. **C Nutting**, A Horwich, C Fisher, C Parsons, D Dearnaley. Small cell carcinoma of the prostate. *J R Soc Med* 1997;90:340-341
40. **C Nutting**, SR Page. Iatrogenic Cushing's syndrome due to nasal betamethasone: a problem not to be sniffed at! *Postgrad Med J* 1995;71:231-2

Papers submitted and undergoing peer review:

41. V Michalaky, **C Nutting**, K Harrington. Thyroid lymphoma: role of radiotherapy in the management. *IJROBP*
42. P Ross, Lpyle, RP A'Hern, P Rhys-Evans, D Archer, K Harrington, **C Nutting**, ME Gore. Epirubicin, Cisplatin and protracted infusion 5-fluorouracil for advanced salivary adenoid cystic carcinoma. *JCO* 2002
43. **C Nutting**, C Jenkins, GE Rose, A Norton, PN Plowman. Primary orbital lymphoma: A review of recent analyses of pathological and clinical prognostic factors. *Eur J Haematol* 2001
44. C Nutting, C Mubata, A Nahum. Clinical Applications of Monte Carlo Dose Calculation in Radiotherapy. *Br J Radiol*

Chapters in books

45. **C Nutting**, D P Dearnaley. Neoadjuvant downstaging before radical radiotherapy. In: Bowsher WG (Editor). *Challenges in Prostate Cancer*. Chapman and Hall London. (in press) 2000
46. **C Nutting**, RA Huddart. Prostate cancer. In: Todd D (Editor). *The National Association of Primary Care Official Review 1999*. Scorpio Publishing, Surrey. 293-5
47. **C Nutting**, DP Dearnaley. External Beam radiotherapy in the management of localised prostate cancer. In: Syrigos K (Editor). *Prostate Cancer: Biology, Diagnosis, and Management*. Oxford University Press (in press) 2000
48. G Ross, ANJ Tutt, **C Nutting**. Indikationen und stellenwert strahlen-therapeutischer mabnahmen in der schmerztherapie bei tumorpatienten. In *Interdisziplinare schmerztherapie bei tumourpatienten*. Bartsch H H, von Hornstein W (Hrsg). Basel, Karger, 1998 p45-53
49. **C Nutting**, DP Dearnaley. Prostate Cancer. In: Gore M and Russell J (Editors). *Cancer in General Practice*. J Gregory Publications (in press) 2000
50. **C Nutting**, M Bidmead, KJ Harrington, and JM Henk. BIR Geometric uncertainties in radiotherapy: Head and neck cancer. In *Geometric Uncertainties*, A McKenzie Ed.

Abstracts

51. C Hector, PM Evans, C Nutting, S Pradham, S Webb. Inter-fraction organ motion:The effect on Conventional Conformal, amd IMRT prostate treatments. *UKRO*
52. EA Miles, CH Clark, MT Guerrero-Urbano, DP Dearnaley, CM Nutting. How routine can IMRT become in daily clinical practice? *UKRO* 2003
53. J Chapman, VN Hansen, H McNair, J Balykyi, K Harrington, **C Nutting**. Implementation of 3D conformal radiotherapy for patients with head and neck cancer. *BAHNO 2002 Abstract book*
54. C Clark, M Bidmead, K Harrington, P Rhys Evans, C Harmer, **C Nutting**. Intensity-modulated radiotherapy for thyroid and laryngeal cancer: Implementation at the Royal marsden NHS Trust. *BAHNO 2002 Abstract book*

55. DS Hill, **C Nutting**, KJ Harrington, JM Henk, P Rhys Evans. Brachytherapy for recurrent SCC in the neck. BAHNO 2002 Abstract book
56. CEJ Hall, R Harris, R A'Hern, DJ Archer, P Rhys Evans, JM Henk, KJ Harrington, **C Nutting**. Le Fort Osteotomy and Low dose rate Ir192 Brachytherapy for treatment of recurrent nasopharyngeal tumours. BAHNO 2002 Abstract book
57. J Hall, **C Nutting**, JM Henk, KJ Harrington. Extramedullary plasmacytomas of the head and neck: the role of radiotherapy in their management. BAHNO 2002 Abstract book
58. V Cosgrove, DJ Convery, PS Murphy, **C Nutting**, S Webb. Dynamic MLC delivered IMRT: verification using Polyacrylamide gel dosimetry. In: Schlegal and Bortfeld (Editors). The use of computers in radiotherapy. Proceedings of XIII International Conference. Springer-Verlag, Berlin. 2000 p311-313
59. **C Nutting**, D Convery, V Cosgrove, C Rowbottom, A Padhani, S Webb, and DP Dearnaley. Reduction in small and large bowel irradiation using an optimised intensity-modulated pelvic radiotherapy technique (IMRT) in patients with prostate cancer. *Int J Radiat Oncol Biol Phys* 2000;46:750
60. C Rowbottom, **C Nutting**, S Webb. Optimisation of beam-orientations in IMRT treatment planning of head and neck tumours. *Int J Radiat Oncol Biol Phys* 2000;46:749
61. **C Nutting**, VS Khoo, V Walker, H McNair, C Beardmore, A Norman, DP Dearnaley. A customised immobilisation system for prostate cancer radiotherapy: A randomised trial. *Clin Oncol* 2000;12:65
62. **C Nutting**, J Bedford, V Cosgrove, S Webb, DP Dearnaley, D Tait. Radiotherapy for carcinoma of the oesophagus: A comparison of 3D conformal and IMRT techniques. *Radiother Oncol* 2000 (in press)
63. **C Nutting**, CG Rowbottom, S Webb. Improving efficiency of intensity modulated radiotherapy: an algorithm for optimisation of beam orientation. *Br J Radiol* 2000;72(Suppl):93
64. **C Nutting**, C Rowbottom, D Convery, V Cosgrove, DP Dearnaley, C Harmer, JM Henk, S Webb. Intensity modulated radiotherapy in tumours of the head and neck. *Br J Radiology* 1999;72:98-99
65. **C Nutting**, V Khoo, V Walker, A Norman, D P Dearnaley. A prospective randomised trial of a customised immobilisation system for conformal prostate cancer radiotherapy. *Br J Cancer* 1999;80:59
66. **C Nutting**, V Khoo, V Walker, A Norman, DP Dearnaley. The use of an immobilisation system in the treatment of prostate cancer with conformal radiotherapy-A prospective randomised trial. *EJC* 1999;35;S95
67. **C Nutting**, D Convery, C Rowbottom, V Cosgrove, DP Dearnaley, JM Henk, C Harmer, S Webb. Intensity modulated radiotherapy for carcinoma of the thyroid and parotid gland. *EJC* 1999;35;S96
68. **C Nutting**, L Brazil, J Steel, H Alheit, D Traish, S Ashley, M Brada. Benign meningioma of the skull base. *Br J Cancer* 1997;76 Suppl 1:50
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Editorials, letters and short communications:

74. **Nutting C**, Harrington K. In regards to Dr. Glatstein *Int J Radiat Oncol Biol Phys* 2003;55:561-562, and Dr. Amols, *Int J Radiat Oncol Biol Phys* 2003;56:1507. *Int J Radiat Oncol Biol Phys*. 2004 Mar 15;58(4):1316-7
75. **C Nutting**. Intensity-modulated radiotherapy (IMRT): the most important advance in radiotherapy since the linear accelerator? *Br J Radiol*. 2003;76:673

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78. **C Nutting**. Head and Neck cancer: Clinical and Translational approaches. *Lancet* 2003;361:2165
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80. **C Nutting**. Cancer. Principles and practice of Oncology (book review) *Br J Radiology* 2002;75:567
81. **C Nutting** on behalf of the Junior Radiologists Forum Executive: Results of the Junior Radiologists Forum Training Questionnaire 1999. Royal College of Radiologists Newsletter
82. **C Nutting** and S Short on behalf of the Junior Radiologists Forum Executive: Where now with training in Clinical Oncology? Editorial for *Clin Oncol* in press
83. **C Nutting**, DP Dearnaley. Reply to Professor Fiorino regarding: A randomised trial of the use of a customised immobilisation system in the treatment of prostate cancer with conformal radiotherapy. *Radiother Oncol* 2000;56:355-6
84. **C Nutting**. An evaluation of the cost-effectiveness of palliative chemotherapy in the treatment of advanced malignancy. A Thesis for the Management School, Imperial College of Science, Technology and Medicine.

Courses Organised: IPEM: Head and Neck cancer: Advances in radiotherapy planning, treatment and future developments.
February 2004

BIR: The Radical Treatment of Non-Small Cell Lung Cancer.
February 2004

British Oncological Association Annual Meeting September 2004

Head and Neck Cancer Update June 2004

Courses Attended: Prostate Brachytherapy, Leeds.
Advanced Certificate in Health Care Management (Imperial College).
Federation of European Cancer Societies (FECS) Methods in Clinical Research, Films Switzerland.

Advisory: I have been invited to sit on an advisory committee of the British Institute of Radiology to produce guidelines on geometric uncertainty in radiotherapy.
Royal Marsden Hospital Medical Exposures Committee
Royal College of Radiologists Clinical Research Committee

Administrative Posts:

Current: British Oncology Association Secretary 2002-
Member of Medical Exposures Committee 2001-
SW London Head and Neck Tumour Working Group 2001-
SW London Lung Cancer Tumour Working Group 2001-
Rare Cancer Division Clinical Governance Lead RMH 2001-
CHI project review board 2001-
Associate Editor BJR 2002-
Pan-London Training Committee 2002-

Previous: Royal College of Radiologists Junior Forum Executive 1999-2002
Royal College of Radiologists Junior Forum 1995-2002

British Oncology Association Council Member 2000-2002
President Doctors Mess University Hospital, 1995
BMA Trent Regional Committee, 1995
Chairman, QMC Junior Doctors Committee, 1995
University Hospital Study Leave Committee, 1995
University Hospital MRCP Teaching Committee, 1994-5
Chairman Radiotherapy Registrars Committee, RMH, 1997-8

Other interests: I spend my spare time with my wife and two daughters. During the winter months I play hockey for Hounslow Hockey Club. I play alto saxophone in a jazz big band.

Societies: Royal College of Radiologists
British Institute of Radiology
British Oncology Association (BOA)
British Association for Cancer Research (BACR)
European Society for Therapeutic Radiology and Oncology (ESTRO)
European Society for Medical Oncology (ESMO)
American Society for Therapeutic Radiology and Oncology (ASTRO)
American Society for Clinical Oncology (ASCO)
British Association of Head and Neck Oncologists (BAHNO)

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