



Health Education England

**Appointment of
Integrated Academic Training Programme
Academic Clinical Fellow In
Medical Oncology ST3**

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SECTION 1	Job Description – General Details
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Title:	Academic Clinical Fellow in Medical Oncology ST3
Location:	<p>Training will mainly be based at Department of Oncology, Addenbrooke's Hospital, Cambridge and in the University of Cambridge Department of Oncology, incorporating the Cancer Research UK Cambridge Research Institute.</p> <p>Training will include up to a total of 8 months FTE in Peterborough and King's Lynn hospitals</p>
Origin of Post:	These posts are funded by the National Institute for Health Research. The posts attract an Academic National Training Number NTN(A).
Duration of Post	A maximum of 3 years may be spent in this post
Main responsibilities:	<ol style="list-style-type: none"> 1. Clinical training in medical oncology 2. Training in clinical research in medical oncology and allied fields 3. Complete and submit competitive funding applications for higher degree with relevance to oncology
Protected Research Time	Protected research time will be provided by day release in year 1 and will include a modular course in clinical trials methodology. In years 2 and 3, the fellow will spend 3 months per year gaining laboratory experience and forming plans for a competitive grant funding application supervised by a senior member of the Department of Oncology.
Academic Programme Director	Dr Simon Pacey, Academic Consultant in Medical Oncology
Clinical Programme Director:	Dr Danish Mazhar, Consultant in Medical Oncology

SECTION 2 Detailed Description of the Post

Introduction - Training Objectives & Environment

This post will provide an exciting balance of clinical and research training and carry an academic training number, delivered using innovative teaching methods. The Academic Clinical Fellowship will allow the successful candidate to set aside time to develop academic skills and to prepare and complete for a training fellowship to undertake a higher degree.

It is expected that each fellow will remain in post for between 2 and 3 years during which time we will achieve the primary objective of providing a grounding in clinical practice and research. The fellow will be sufficiently well equipped to think medically and scientifically to gain competitive grant funding.

Basic, clinical and translational oncology research is expanding in Cambridge as part of the academic health sciences centre. Over the last 10 years £70 million of capital have been invested in new research buildings such as the Cancer Research UK Cambridge Research Institute. Approximately £150 million is already committed to support cancer research in Cambridge over the next 5 years. Even before these new investments, the Department of Oncology attracted £7 million of peer-reviewed grant funding annually. Clinical cancer research is well-established with Cambridge designated in the first tranche of cancer research networks (WACRN) and NTRAC centres as well as being an Experimental Medicine Centre. Cambridge enters over 3000 patients into a broad range of oncology studies annually and recruits 58% of patients into NIHR portfolio studies against a national average of 18%.

Protection of Research Time and Service Cover Arrangements

The fellowships are divided into 75% clinical training and 25% research training components.

In year 1, the Academic Clinical Fellow will train 2 days per week in clinical research methodology including practical work such as developing clinical protocols and guiding them through the ethics and regulatory systems. The fellow will visit several laboratory groups in year 1 to choose 2 groups with which to spend 3-month blocks in years 2 and 3.

In years 2 and 3, the Academic Clinical Fellow will spend one 3-month block per year in a laboratory group chosen in year 1, with a range of projects on offer. The fellow will gain experience of research methodologies, results and their analysis and their discussion in laboratory meetings. During this period the fellow will choose a project for a higher degree and form plans for a competitive grant application, together with their prospective supervisor.

The Academic Clinical Fellow will participate in the 6-monthly Training Fellows days, when presentations are made to the cadre of clinical and research fellows in the Department of Oncology. Constructive feedback is given by the senior faculty. These days have proved very successful.

Close links will be maintained with the Cambridge Academic training Office (CATO) and the Academic Clinical Fellow may choose to participate in CATO modular courses.

Clinical training takes exactly the same form as for standard specialist trainees, including participation in attachment rotas and the out-of-hours on-call arrangements. The fellow will take part in the grand round and the department's varied seminar programme.

Mentoring in academic matters will be provided by a consultant medical oncologist active in research, together with a clinical supervisor in accordance with the Royal College of Physicians guidelines.

Academic and Clinical Milestones:

The academic milestones, by which time the corresponding stage should have been reached, are:

Month 12: Completed laboratory visits and chosen 2 specific research attachments. Active participation in department academic timetable (eg lectures, journal clubs, annual meeting).

Month 24: Completed first laboratory block and started work on first competitive grant application form.

Month 36: Completed second laboratory block and submitted a competitive grant application form. Transfer to full-time clinical research fellowship.

The achievement of these academic milestones will be monitored by Dr Simon Pacey.

Training Infrastructure

The excellent clinical and research training infrastructure at the Addenbrooke's site is also described in the introduction to this section. The Department of Oncology has particular strengths in areas relevant to translational research including imaging and genomics. The department has an excellent track record of academic qualifications amongst its trainees.

Training Location & Links to Other training Programmes

The training will take place predominantly at the Addenbrooke's site with up to 8 months FTE spent at Peterborough and King's Lynn. The broad range of fellows in a range of specialties will provide a supportive peer group for oncology trainees.

Management Structure

The overall academic and clinical lead for the programme will be Dr Simon Pacey. Close links will be maintained with the Cambridge Academic training Programme.

Trainee-centred Nature of the Programme

There are two key features underlying the trainee-centred nature of this programme. First, fellows will choose their own project, and second the individual training needs of the fellow will be considered in planning their clinical training programme. ACFs in Medical Oncology have an excellent record of securing competitive funding for clinical research training posts to study for their PhD.

The trainee is encouraged to see the ACF in the context of the full Integrated Academic Training Programme. Most obviously, this means working towards a competitive application for a clinical research training fellowship to study for a PhD. There is also a very close link with the Clinical Lectureship Phase of the Integrated Academic Training Pathway.

ACFs will participate in 6-monthly Clinical Fellows days attended by all clinical academic trainees and selected senior faculty. Clinical research training fellows present their work and receive constructive appraisal from their fellow trainees and senior faculty. These days have been much appreciated by trainees and have helped to form a strong *esprit de corps*.

Quality Assurance

The senior faculty of the department will critically assess the suitability of the projects and the working of the programme. Clinical training will be assessed in the same way as for all Specialist Registrar posts by Health Education England and the Regional Postgraduate Training Committee.

Early Return to the Clinical Training Programme

A trainee who wishes to return early to the clinical training programme will be helped to do so as long as there has been satisfactory progress in the clinical part of the Academic Clinical Fellowship. This process will be managed by the Postgraduate Deanery and the Medical Oncology Training Committee.

The post-holder will have the following general duties:

- (a) provision with colleagues of a service to Addenbrooke's Hospital, with responsibility for the prevention, diagnosis and treatment of illness, and the proper functioning of the department;
- (b) out-of-hours responsibilities, including participation in registrar on-call rota;
- (c) cover for colleagues' annual leave and other authorised absences;
- (d) any responsibility which relates to a special interest;
- (e) professional supervision and management of junior medical staff;
- (f) responsibilities for carrying out teaching;
- (g) participating in medical audit, the Trust's Clinical Governance processes and in CPD;
- (h) involvement in research;
- (i) managerial responsibilities where appropriate;
- (j) The post holder must at all times carry out his/her duties with due regard to the Trust's Equal Opportunities Policy.
- (k) It is the responsibility of all employees to maintain a safe and healthy environment for patients, visitors and staff.
- (l) It is the responsibility of the postholder to ensure that all duties are carried out to the highest possible standard and in accordance with current quality initiatives
- (m) All staff who have access to or transfer data are responsible for that data and must respect confidentiality and comply with the requirement of the Data Protection Act 1998, in line with the Trust's policies.
- (n) The postholder is responsible for data quality and complying with the policies, procedures and accountability arrangements throughout the Trust for maintaining accuracy and probity in the recording of the Trust's activities.
- (o) Staff are required to comply with the requirements of the Freedom of Information Act 2000 in line with Trust Policy.
- (r) Any other duties which may be required from time to time.

SECTION 3	The Department of Oncology
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University Department

Head of Department of Oncology: Prof. Richard Gilbertson
 Academic Clinical Lead: Dr Simon Pacey

NHS Cancer Division

Director: Dr Hugo Ford
 Deputy Director: Dr Pippa Corrie

Clinical Directorates:

Systemic therapy	Dr Pippa Corrie
Radiotherapy	Dr Richard Benson
Haemato-oncology	Dr Charles Crawley

The Centre sees approximately 6,000 new patients per year

3.1 Oncology Consultants: Academic and NHS

The present medical staff establishment comprises:

Academic Department – all activities at Addenbrooke's & Papworth

Professor Sir B Ponder PhD FRCP FRCPATH F Med Sci FRS	Cancer genetics and genetic epidemiology.
Dr Richard Baird PhD MRCP CRUK Consultant Medical Oncologist	Early phase trials – focus on breast
Dr Bristi Basu PhD MRCP CRUK Consultant Medical Oncologist	Early phase trials – focus on pancreas
Dr J D Brenton MBBS PhD FRCP. CRUK Senior Clinical Research Fellow and Hon Consultant Medical Oncologist	Gynaecological cancer
Dr N Burnet MBBCh MD FRCS FRCR University Lecturer & Hon Consultant Clinical Oncologist	Radiotherapy & chemotherapy for brain and spinal tumours. Radiotherapy for sarcoma.
Professor C Caldas MD FACP FRCP FMedSci. Professor of Cancer Medicine & Hon Consultant Medical Oncologist	Breast cancer
Professor T Eisen PhD FRCP Professor of Medical Oncology & Hon Consultant Medical Oncologist	Kidney & lung cancers
Dr H M Earl MBBS PhD FRCP University Reader & Hon. Consultant Medical Oncologist	Breast, gynaecological cancers, sarcoma.
Professor Richard Gilbertson Li Ka Shing Chair of Oncology and Head of Department	Paediatric cancers
Dr R Jena MB BCh MRCP MD FRCR Senior Fellow & Hon Consultant Clinical Oncologist	Brain and spinal tumours
Professor D Jodrell PhD FRCP Professor of Cancer Therapeutics & Hon Consultant Medical Oncologist	Early phase clinical trials, hepatopancreatobiliary Cancer

Dr P H Jones PhD FRCP MRC Group Leader and Hon Consultant Medical Oncologist	CNS tumours
Dr Athena Matakidou PhD MRCP CRUK Clinician Scientist & Hon. Consultant Medical Oncologist	Renal cancer
Dr U McDermott PhD MRCP CRUK Clinician Scientist, Sanger Centre & Hon. Consultant Medical Oncologist	Colorectal cancer
Dr Simon Pacey PhD MRCP CRUK Consultant Medical Oncologist	Early phase trials – focus on urology and lung

NHS CONSULTANT	SPECIALIST INTERESTS and LOCATION <i>Those provided at Addenbrooke's are indicated in bold</i>
Dr A Ahmad BSc PhD MRCP(UK) Consultant Medical Oncologist	Colorectal cancer, Upper GI , breast cancer (Addenbrookes and Kings Lynn)
Dr R Benson MRCP FRCR Consultant Clinical Oncologist	Head & neck cancer, thyroid cancer, interstitial radiotherapy. Urological Cancer (Addenbrookes and Peterborough District Hospital)
Dr S Booth FRCP FFARCSI Macmillan Consultant Palliative Medicine	Palliative Medicine: Interests: breathlessness and chronic illness (Addenbrookes Hospital)
Dr R Bulusu MRCP MD MSc FRCR Consultant Clinical Oncologist	Lymphoma, gastrointestinal stromal tumours, upper GI, lung, and unknown primary (Addenbrookes and Bedford)
Dr P Corrie BSc PhD FRCP Consultant / Associate Lecturer in Medical Oncology	Hepatopancreatobiliary, melanoma. (Addenbrookes)
Dr C Coles MRCP, FRCR, PhD Consultant Clinical Oncologist	Breast radiotherapy research & clinical trials and gynaecological cancers (Addenbrookes)
Dr M Daly MB BCh BAO MRCP(Ire) FRCR Consultant Clinical Oncologist	Breast, colorectal, and gynaecological cancers. (Addenbrookes and Kings Lynn)
Dr K Fife MD MRCP FRCR FRANZCR Consultant Clinical Oncologist	Renal cancer, Skin cancers, lung (Addenbrookes and Peterborough District Hospital)
Dr H Ford MD MRCP Consultant Medical Oncologist	Lung cancer, upper GI, colorectal (Addenbrookes)
Dr D Gilligan FRCP FRCR Consultant Clinical Oncologist and Director of Cancer Division	Lung cancer, upper GI, thymoma, mesothelioma (Addenbrookes and Papworth Hospital)
Dr D Gregory MRCP FRCR Consultant Clinical Oncologist	Gynaecological cancer (Addenbrookes and Peterborough District Hospital)
Dr S Harden MA DM MRCP FRCR Consultant Clinical Oncologist	Lung cancer, upper GI, thymoma, mesothelioma (Addenbrookes and Papworth Hospital)
Dr H Hatcher PhD MRCP Academic Consultant & Hon. Consultant Medical Oncologist	Teenage & young adult cancers, sarcoma, ovarian cancer
Dr G Horan MB BMedSci MRCP FRCR Consultant Clinical Oncologist	Urology, Paediatric Radiotherapy, sarcoma (Addenbrookes and Kings Lynn)
Dr L Hughes-Davies PhD MRCP FRCR Consultant Clinical Oncologist	Breast cancer
Dr S Jefferies PhD FRCR MRCP Consultant Clinical Oncologist	Head and Neck cancer, CNS tumours, thyroid cancer (Addenbrookes)

Dr C R Jephcott MRCP FRCR Consultant Clinical Oncologist	Colorectal , breast and upper GI (Addenbrookes and Peterborough District Hospital)
Dr D Mazhar MA PhD MRCP Consultant Medical Oncologist	Urology, Germ cell (Addenbrookes)
Dr K F McAdam MB BS FRCP Consultant Medical Oncologist	Breast , upper GI & colorectal malignancy, hepatobiliary, neuroendocrine, and unknown primaries. (Addenbrookes and Peterborough District Hospital)
Dr A M Moody MRCP FRCR Consultant Clinical Oncologist	Breast , lymphoma, and colorectal malignancy. (Addenbrookes and West Suffolk Hospital)
Dr C Palmer BM BCh MRCP Consultant Medical Oncologist	Colorectal, pancreatic and hepatobiliary , breast (Addenbrookes and Hinchingbroke)
Dr S Russell MRCP FRCR Consultant Clinical Oncologist	Urological Cancer , breast (Addenbrookes and Hinchingbroke)
Dr S Smith MRCP FRCR Consultant Clinical Oncologist	Ovarian , breast, colorectal
Dr L T Tan MD MRCP FRCR Consultant Clinical Oncologist	Gynaecological oncology, Interstitial radiotherapy , colorectal (Addenbrookes, Hinchingbroke and Peterborough District Hospital)
Dr R J Thomas MRCP MD FRCR Consultant Clinical Oncologist	Breast; colorectal; urology; prostate brachytherapy . (Addenbrookes and Bedford)
Dr R Wade MRCGP	Palliative Care
Dr K Waite MRCP FRCP Consultant Clinical Oncologist	Lung cancer, mesothelioma, and urology. (Addenbrookes and Kings Lynn)
Dr M V Williams MD FRCP FRCR Consultant Clinical Oncologist	Teratoma, lymphoma; paediatric oncology and radiotherapy for haematological malignancy . (Addenbrookes)
Dr C B J H Wilson MD MRCP FRCR Consultant Clinical Oncologist	Breast cancer; colorectal tumours and other gastrointestinal malignancy . (Addenbrookes)
Dr C Woodward MRCP FRCR Consultant Clinical Oncologist	Urological cancer ; breast (Addenbrookes and West Suffolk Hospital)

Trainee Medical Staff	
Academic Clinical Lecturers	4
Academic Clinical Fellows	4
Specialist Registrars	Medical Oncology 5; Clinical Oncology 20.
NTNA (pre-UKCRC/MMC/IATP)	1
FY2 and ST1/2 (CMT)	5
Pre-registration House Officers (FY1)	None

Details of current clinical research staff and activities for each cancer site can be provided to applicants at their request. Also see www.oncology.cam.ac.uk

3.2 The Anglia Cancer Network

Addenbrooke's, in conjunction with Papworth, is a Cancer Centre working in close collaboration with 5 associated Cancer Units which formerly constituted the West Anglia Cancer Network:-

Peterborough Hospitals NHS Trust, Peterborough

Queen Elizabeth Hospital, Kings Lynn
 West Suffolk Hospital, Bury St Edmunds
 Bedford Hospital, Bedford
 Hinchingbrooke Hospital, Huntingdon

The East of England Strategic Clinical Network (SCN) replaced the Anglia Cancer Network in March 2013. The SCN covers the geographic area of the old Anglia Cancer Network (Norfolk, Suffolk, Great Yarmouth and Waveney, Bedfordshire, Cambridgeshire and Peterborough), Essex Cancer Network and Mount Vernon Cancer Network.

The SCN aims to promote excellent leading edge equitable cancer care, working in close collaboration with the University of Cambridge Department of Oncology based at Cambridge University Hospitals NHS Foundation Trust, CRUK and other research, academic and educational organisations.

A video and audio conference network enables remote participation in network multi-disciplinary team meetings (MDTs). Each MDT consists of core members with expertise in the relevant disciplines including medical oncology, clinical oncology, surgical oncology, pathology and radiology.

Serving a core population of 1.3 million, Addenbrooke's has an extended catchment area of 2-4 million for some highly specialised services including:-

- Sarcomas and tumours of adolescents
- Paediatric malignancy
- Haematological malignancy and BMT
- Brain tumours
- Skull base malignancy
- Cancer genetics

Cambridge serves an acute population of 320,000, Peterborough 300,000, with the remainder of the associated Cancer Units serving populations of approximately 200,000. The area served is mainly rural with no large conurbations and the majority of the Cancer Units are situated approximately 30 to 45 miles from the Cancer Centre. By car or ambulance this equates to a maximum travelling time of 1½ hours. The Network has therefore adopted a systematic approach to the delivery of cancer care as near as possible to the patient's home. A series of joint Consultant Medical/Clinical Oncology appointments have been made between the Cancer Centre and individual Units. This enables most systemic therapy, the management of complications, supportive care and follow up to be delivered locally, thus preventing patients having to make long and unnecessary journeys to the Cancer Centre.

In order to enhance the co-ordinated approach to cancer management, the Oncology Centre has set aside Tuesday mornings for a weekly audit and academic session.

3.3 Clinical Facilities in Cambridge

3.3.1 Systemic therapy

There is a systemic therapy day unit with full integrated sterile intravenous therapy preparation unit. Day care therapy is provided and staffing is adequate to cover infusions lasting up to 10 hours. The day unit is open Monday- Friday, situated within the clinical oncology centre, delivers systemic therapy and supportive treatment to haematology and cancer patients. It has an emergency bed for cancer patients to be reviewed by medical staff, before a decision to admit is made, and provides a clinic bed where diagnostic investigations can be carried out

following consultation. Over the years this unit has expanded as treatments have developed. It comprises;

- 14 dedicated treatment chairs
- 8 chairs allocated to drug treatment or supportive therapy dependent on need
- 6 bed spaces.

3.3.2 Radiotherapy

The department has a full range of radiotherapy equipment;

Linear accelerators:

- 2 x matched 6 MV photon Varian units + PI (no MLC)
- 2 x matched Siemens Primus 6MV + 15 MV + PI & MLC (+ Electrons)
- 1 x 6MV Siemens Primus + PI & MLC
- 2 x Siemens Oncor 6MV + 15 MV + MLC & PI (+ McMLC)
- Dedicated IGRT Unit

Tomotherapy Unit

Orthovoltage and Superficial: Pantak (calibrated 75, 100, 150, 260 kV)

Pre Treatment: Dedicated GE Multi slice CT scanner
Toshiba Wide Bore CT Scanner
Prosoma Virtual simulation

Treatment Planning Systems ARPs (in house system)
Xio
Konrad

Brachytherapy: Iridium wires
Nucletron HDR unit
Prostate Brachytherapy Seeds

Unsealed sources: Usual availability

Specialised techniques: Total body irradiation
Paediatric radiotherapy
Stereotactic radiotherapy
Stereotactic radiosurgery
Conformal radiotherapy
IMRT
IGRT

3.3.3 Radiology

The Department has close links with the Department of Diagnostic Radiology such that ultrasound and CT facilities (both diagnostic and planning) are readily available. Three MRI scanners and PET scanning services are available. A collaboration with Merck led to the installation of a PET-CT scanner, mainly for clinical research purposes, which became operational in 2009.

3.3.4 Inpatient and TYA Cancer Facilities

The Department is supported by a bed complement of 34. Neuro-oncology patients are accommodated in designated beds within one of the neurosurgery wards. Two side rooms are also available for the administration of unsealed sources.

The Trust has opened an in-patient unit for Teenagers and Young Adults together with the Teenage Cancer Trust www.teenagecancertrust.org. The unit is purpose built and comprises both out-patient and in-patient accommodation with 10 beds.

In September 2009 The Oasis was opened in Abingdon House, Addenbrooke's Hospital and provides a place for teenagers to go for advice, support and be with people of their own age. It provides facilities for parents and family members from 9am – 11am every day and from 11am - 5pm it is a parent free zone. Visit the website at www.cforward.org.uk

There is an 8-bedded Oncology Hostel situated close to the ward block. Facilities for haematological oncology are fully integrated within the Centre and have been fully refurbished as part of the development of a separate 14-bedded specialist Bone Marrow Transplantation Unit and ward based day unit. The necessary facilities are available to provide high quality inpatient intensive therapies for leukaemia, lymphoma and myeloma.

3.3.5 Ward Service

The Department operates a consultant rota for ward cover of all oncology patients. This consists of one week on the ward every 4 months, with at least two formal ward rounds per week and daily availability and consultant responsibility for all admissions for systemic therapy and emergency admissions. The ward consultant works with a ward registrar supervising 5 junior staff. The responsibility of the ward consultant is the day-to-day care of the patients, liaising with the various multidisciplinary teams.

3.3.6 Palliative Care

In 1998, Dr Sara Booth, Macmillan Consultant in Palliative Medicine, was appointed to set up a multi-professional team and fully fledged service for the Trust as it was recognised that there were huge unmet needs. The service now comprises 5.2 wte Clinical Nurse Specialists plus associated secretarial support. The team receives over 800 referrals a year from all directorates of the hospital. It has an active programme of research and education. A consultant psychologist joined the team in 2008. The service has close links with the locality, the network and other Palliative Care providers.

3.4 Research in Cambridge

The Cambridge Cancer Centre (<http://www.cambridgecancercentre.org.uk/>) combines the research activities of both University and NHS staff with the clinical facilities of the Hospital. We expect this to be equal to the best in Europe or the USA. The NHS Trust and the University are fully supportive of the plans for the expansion of cancer research and have made cancer a 'flagship' area for the future.

Cambridge is particularly well-suited to the conduct of translational research and excellent links between the clinical and scientific parts of the department are therefore crucial. Summarised below are descriptions of the existing laboratory and clinical research and an outline of planned developments over the next few years with the specific aim of fostering translational research.

3.4.1 Laboratory research

Approximately £70 m has been committed to new laboratory buildings, and £150 m to research funding over the next 5 years, by Cancer Research UK, the University and private donors.

The CRUK Cambridge Research Institute (CRI), which opened in November 2006, is the major new development in cancer research in the UK [<http://science.cancerresearchuk.org/cri/>]. The new Institute has space for over 300 researchers. Together with the Hutchison/MRC Research Centre and the Strangeways Centre for Genetic Epidemiology, [www.hutchison-mrc.cam.ac.uk; www.srl.cam.ac.uk] and other research groups including haematological oncology in the Cambridge Institute for Medical Research, there are now something over 500 cancer researchers on site.

Research in the CRI is organized around 3 areas - (1) basic cell and molecular biology and mouse models; (2) research with 'enabling' technologies, to include molecular imaging, genomics, and bioinformatics and biomolecular computing, and (3) clinically-related research, which includes several programmes focussed on specific cancers including lung, breast and prostate cancers. Links between the Institute and the clinic are strongly encouraged and there is a particular emphasis on early phase trials using pharmacodynamic endpoints based on Institute science to explore mechanisms of resistance and response. Examples include the incorporation of intensive genomic analysis and imaging endpoints into clinical trial design.

3.4.2 Clinical research

A key criterion for the success of investments in laboratory research is the extent to which the results of the research are taken to the clinic. Accordingly, the research funders and NHS have agreed that the Institute development should be linked with a package of support for clinical research infrastructure. This package, amounting to over £2M per year includes (but is not limited to) investment in the Cambridge Cancer Trials Centre (CCTC). – support for core activities of tissue collection, clinical data collection and management, support for trials; plus programme specific support for the cancer-site specific research which links between laboratory and clinics.

The CCTC (Director: Prof Duncan Jodrell) is a CRUK, University and NHS collaborative facility supporting the conduct of cancer trials. It has a staff of 100, including research nurses, data managers, administrative staff, statisticians and pharmacy technicians. The CCTC supports research at all phases of clinical drug development and co-ordinates major multi-centre studies such as AVAST-M, COUGAR, Neo-TANGO, ProTECT and ProMPT. The CCTC has an outstanding record of recruitment to clinical studies, which has grown consistently over the last 8 years. In 2012/3, the CCTC recruited over 3000 patients to clinical studies. We have increasingly emphasised early phase and translational research, whilst maintaining our excellent late phase recruitment record.

Addenbrooke's has 6 associated cancer units in Bedford, Bury St Edmunds, Hinchingsbrooke, Kings Lynn, Papworth and Peterborough. Accrual into NCRN clinical studies has consistently met and exceeded national targets, with recruitment currently around 58% of all new cancer cases against a national average of 18%. The trial portfolio is wide-ranging, including strong support for rarer cancers. While recruitment into randomised trials is a strength, there is significant support for genetic epidemiology, screening and prevention trials.

In 2008, Duncan Jodrell was appointed as Professor of Experimental Therapeutics, to lead development of early phase clinical trials. There is now a strong early phase clinical trials team including 4 early phase trials medical oncology consultants.

Cambridge is as a Biomedical Research Centre and an Experimental Cancer Medicine Centre (ECMC). The Cambridge ECMC (CECMC) is directed by Prof. Carlos Caldas and funds 5 research nurses, a clinical trials QA manager, as well as support for 3T MRI molecular imaging. The aim of the CECMC is to translate the strong basic science in Cambridge through to clinical applications and to initiate new areas of fundamental research based on observations derived from clinical material. The CECMC is developing its programmes around the following themes:

- Better use of currently available treatments by pharmacogenetics, pharmacogenomics and functional imaging approaches
- Experimental therapeutics with pharmacodynamic (PD) and imaging endpoints and integrated pharmacogenetics/pharmacogenomics
- Molecular imaging of targets, drugs or surrogates of clinical response, closely integrated with the above themes
- Molecular diagnostics and prognostics
- Genetic predisposition and identification of high-risk groups as leads for screening and prevention studies and for stratifying patient groups for molecular imaging

A seminar series designed to be of interest to both clinicians and scientists began in March 2007. The post holder will be expected to play a full part in this series.

3.5 Teaching

Tuesday mornings are currently set aside for the whole Department to join in academic, audit and management activities.

There is a strong Academic Department (rated 5* at the last RAE) linked to the research facilities outlined in Section 4.4. A major goal of the Department is to build the interface between laboratory and clinic. The weekly seminar programme contains slots specifically designed to make clinical issues accessible to scientists, and scientific research to clinicians. Ad hoc teaching series are organised on demand. Half day retreats for scientists and clinicians around specific topics can be proposed and organised by any member of the Department; they are held in a College and subsidised by Department.

3.6 Future developments in the Clinical Department

Our recently appointed Head of Department and Director of the Cambridge Cancer Centre, Professor Richard Gilbertson, will lead the centre as a Cancer Research UK Major Centre (one of three in the UK). In addition there are plans under development for a new clinical Cancer Centre build within the Hospital, driven primarily by service needs but incorporating facilities for research.

SECTION 4 General Information

4.1 Addenbrooke's Hospital in profile

Addenbrooke's is a thriving, modern NHS hospital based in Cambridge England.

The hospital fulfils a number of important functions. It is the local hospital for people living in the Cambridge area, it is a specialist centre for a regional, national and international population, it is the teaching hospital for the University of Cambridge, and it is a world-class centre for medical research.

Addenbrooke's is now a flagship NHS hospital having achieved NHS Foundation Trust status in July 2004. It is also working in partnership with the University and other major scientific and charitable organisations, and bidding to become The Cambridge Biomedical Campus, an enhanced biomedical centre for research and scientific development.

The hospital already shares its site with a range of other organisations including the University Clinical School, the National Blood Authority, and laboratories funded by the Medical Research Council (MRC), the Wellcome Trust and Glaxo SmithKline. Building is currently underway on the University of Cambridge Hutchison/Cancer Research UK (CRUK) Cancer Centre, which will house 30 research groups using the latest techniques to target cancer.

Addenbrooke's commitment as part of the wider health community is to re-examine, re-evaluate and explore new ways of working: with our partners in health services, social care, and the city; with each other as colleagues; and with patients and the public. The agenda for modernisation drives this commitment; modernisation is not perceived as a separate issue, but rather as something that informs the whole structure, thinking and culture of the Trust.

Our commitment to our patients and our community is as an open, accountable and responsive organisation that fosters patient and public involvement, which we consider is crucial to the development of a modern hospital fit for the 21st century.

We pride ourselves on the teamwork, energy and commitment of our excellent staff – they are our most important assets. Recognising this, we have taken a positive approach to supporting them in their work through schemes to help work-life balance, improvements in the working environment and initiatives to make it easier for staff to explore new career opportunities and to develop professionally and personally.

Addenbrooke's hospital provides:

- accessible high-quality healthcare for local people
- specialist services for people in the east of England and beyond
- support for education and training in all healthcare staff, and a workplace where all staff have access to continuing learning and personal development
- support for research and development generating new knowledge, leading to improvements in population health and in healthcare delivery
- a contribution to economic growth, sustainable communities and a good quality of life for those we serve

4.2 Addenbrooke's in detail

Addenbrooke's provides emergency, surgical and medical services, and is a centre of excellence for specialist services for liver transplantation, neurosciences, renal services, bone and marrow transplantation, cleft lip and palate reconstruction, treatment of rare cancers, medical genetics and paediatrics. The Trust also includes the Rosie Hospital, which provides a full range of women's and maternity services.

The hospital has 32 operating theatres, five intensive care units, 14 clinics and 42 wards.

In 2006/07 there were 65,113 inpatients, 75,713 people attended accident and emergency, and there were 422,362 visits to outpatient clinics.

Addenbrooke's medical staff hold clinics in 14 different regional hospitals so that patients do not have to travel to Cambridge. Nearly 100 Addenbrooke's consultants hold some form of joint appointment with a dozen neighbouring hospitals.

Addenbrooke's is a teaching hospital for medical undergraduates and postgraduates, nurses and students in other clinical professions and has a variety of initiatives to encourage life-long learning'. Many training schemes are in place in our National Vocational Qualification Centre, Postgraduate Medical Education Centre and Learning Centre. Training schemes include cadet schemes in nursing, office technology, science, modern apprenticeships in clinical engineering and supporting training placements for biomedical scientists.

Addenbrooke's Hospital has:

<ul style="list-style-type: none"> • more than 6,800 staff • An income in excess of £393 million • Around 1,000 beds • 32 operating theatres 	<ul style="list-style-type: none"> • five intensive care units • 14 clinics • 42 wards
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4.3 Addenbrooke's history

Addenbrooke's was one of the first provincial, voluntary hospitals in England. The Hospital opened its doors in 1766 with 20 beds and 11 patients. Dr John Addenbrooke, a fellow and former Bursar of one of the Cambridge Colleges, left just over £4500 in his will "to hire and fit up, purchase or erect a small, physical hospital in the town of Cambridge for poor people".

In 1540, two centuries before Addenbrooke's was founded, the Regius Professorship of Physic in the University of Cambridge was founded by Henry VIII. Medical training on a modest scale developed at Addenbrooke's during the late 1700s, and in 1837 (the year of Queen Victoria's accession to the throne) the hospital became a recognised school of medicine.

Addenbrooke's grew rapidly during the 19th and early 20th centuries, as medical science developed. By the 1950s, the hospital was having difficulty accommodating the expansion generated by the introduction of the National Health Service.

In 1959, building began on a new 66-acre site south of Cambridge, and the first phase of the Hospital was opened by Her Majesty the Queen in May 1962. Work continued to provide the majority of Addenbrooke's as we know it today, with a fully-fledged Clinical School being established in 1976.

History

- 1766 Addenbrooke's Hospital was opened in Trumpington Street
- 1847 The first general anaesthetic using ether at Addenbrooke's was carried out two weeks after it was first used in the USA
- 1918 Addenbrooke's welcomed its first female medical student
- 1962 New site on Hills Road was officially opened by the Queen
- 1966 The first kidney transplant in the NHS was carried out at Douglas House Renal Unit
- 1968 Professor Sir Roy Calne carried out the first liver transplant in the NHS
- 1975 The first open heart surgery was carried out at Addenbrooke's
- 1981 Addenbrooke's first whole body scanner opened by Prince of Wales
- 1983 The Rosie Hospital was opened on the Addenbrooke's Campus
- 1984 Last patient left the 'old' Addenbrooke's Hospital site in Trumpington Street
- 2004 National Centre for pancreatic surgery was opened
- 2007 Opening of the CRUK Cambridge Research Institute
- 2009 Designation of Cambridge as an Academic Health Sciences Centre
- 2013 Astra Zeneca announces that it will move its global headquarters and main research facility to the Addenbrooke's campus in 2016

Positioning for the future

Cambridgeshire is one of the fastest growing counties in the UK and it is estimated that the number of people over 45 years of age will rise by 55% over the next 20 years, and the county will see the continued expansion of research, business and high-tech industries.

Planning is already well advanced for additional capacity to meet this growing local demand. But it is not just a matter of providing extra beds and recruiting extra staff. The hospital needs to ensure high standards of patient care by supporting training and education for staff, and work closely with NHS partners and others to ensure that care is tailored to the needs and expectations of users. This will involve developing some alternatives to hospital-based care.

Another challenge will be to ensure that improvements in clinical facilities keep up with the rapid pace of research investment, and that processes and governance support this growing research activity, some of which involves sensitive ethical, legal and social issues.

Addenbrooke's contributes to the economic strength of the greater Cambridge area as a major employer and, with our research partners, to the biotechnology sector. As a public benefit corporation, the new NHS Foundation Trust will work in partnership with other local bodies, primarily local authorities and education providers, to support sustainable economic development in the locality.

4.4 Research and development - working for tomorrow's medicine

Cambridge medical research enjoys an international reputation for excellence, a reputation that extends from the laboratory to the bedside.

A great deal of research is carried out within the hospital. Over 1,000 projects and 400 clinical trials are run by Addenbrooke's staff. Much of the research is clinical and translational, turning basic science into new drugs and new therapies to improve patient care.

Research activity is supported by the Cambridge NHS Research and Development Consortium consisting of Addenbrooke's Hospital, Papworth Hospital, the Cambridgeshire Mental Health Partnership NHS Trust and Primary Care Trusts, with representation from the Institute of Public Health.

There is continuing significant growth in research of international excellence in cancer, diabetes, heart disease, neurosciences and mental health. Two new cancer research buildings

are planned, which together will house more than 450 scientists in cell and molecular biology. A new centre will study the interaction between genes and environment in the cause of cancer and how this might be applied to screening and prevention.

Addenbrooke's Clinical Research Centre was opened in 1999 and provides dedicated facilities for clinical investigation.

Over the next 20 years the hospital site will develop as The Cambridge Biomedical Campus, an enhanced international biomedical centre for research and scientific development.

The Addenbrooke's campus covers 66 acres. Over the next 20 years the site will double in size, creating an international biomedical campus

4.5 University of Cambridge School of Medicine

The University Of Cambridge School of Clinical Medicine on the Addenbrooke's site is a major centre for biomedical research and education of world leading quality. In the most recent University Funding Council Research Selectivity Exercise Cambridge shared the highest score for any Medical School in the country. Whilst the University of Cambridge has granted medical degrees since at least 1363, the university could not offer undergraduate clinical education until the Clinical School was formally established in 1975 with purpose built accommodation at Addenbrooke's. In addition to these facilities comprising lecture theatres, seminar rooms and first class medical library, a postgraduate education centre was opened in the Clinical School building in 1980. The most recent HEFC teaching quality assessment of the undergraduate clinical education judged the learning facilities and the teaching in the clinical school to be of the highest quality.

The Clinical School admits 145 students annually for the clinical component of their medical education. Student teaching is organised in each department by an Attachment Director, often an NHS consultant, who is responsible to the Clinical Dean for the educational effort of that unit. The majority of students follow a 3 year clinical course with a strong emphasis on bedside clinical skills as well as clinical science. In September 1989 the first MB PhD programme in any UK medical school was established in Cambridge, in which selected students complete both their medical degree and a PhD in a 5 - 6 year course. A further 20 students per year undertake an accelerated four-year medical course for graduates.

Members of the consultant staff at Addenbrooke's Hospital are expected to participate in teaching of clinical students under the guidance of the Director of Medical Education and Clinical Dean and with the appropriate Attachment Director. Consultants will be encouraged to demonstrate that they have received adequate training in teaching.

NHS Consultants who make a significant contribution to teaching will be considered for appointments as Associate Lecturers in the Faculty of Clinical Medicine. Associate Lecturers who are not graduates of the University may supplicate for the degree of Master of Arts after holding the office of Associate Lecturer for three years.

4.6 General Information

Cambridge is one of Britain's smallest cities but also one of the fastest growing. The Arts Theatre within Cambridge is thriving and there are many musical activities to enjoy. The Fitzwilliam Museum is world famous.

For those with children of school age, there is a full range of public and private education institutions covering all age groups.

Communications with the rest of England have much improved in recent years. Cambridge is served by the national motor way network and regular train services to London King's Cross or London Liverpool Street have a journey time of less than one hour.

Within Addenbrooke's, the **main concourse** offers excellent shopping facilities; an advice centre; Bank; café; clothes boutique; dry cleaners; financial advisory services; florist; hairdressing salon; mini-market; newsagent; The Body Shop; gift shop; solicitor and travel agents. There is a Food Court which offers "fast-food", as well as conventional options 24 hours a day.

In addition the **Frank Lee Leisure Centre** provides comprehensive facilities for swimming, squash, a multi-sports hall, a floodlit outdoor multi-sports facility and the Profiles Fitness Suite.

The Cambridge University Postgraduate Medical Centre has catering and bar facilities as well as the library, lecture theatres and seminar rooms.

Within the **University of Cambridge**, there is an unrivalled range of educational facilities, diverse cultural, sporting and other leisure activities.

SECTION 5	Application Information
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Visits

These should be arranged through Mala Jayasundera, secretary to Dr Simon Pacey (academic lead)

Email: mj319@medschl.cam.ac.uk

Telephone: 01223 769480

Clinical Lead: dansh.mazhar@addenbrookes.nhs.uk

For further information please visit [NIHR TCC website](#)

For email enquiries - [Health Education East of England](#)