

## **ITCC Fellowship Training Centre Application**

The North of England Principal Treatment Centre for Children and Young People with cancer based at the Great North Children's Hospital Newcastle upon Tyne is offering fellowship training in Early Phase Clinical Trials. The training experience on offer is fully comprehensive with learning opportunities to a very high standard in all of the clinical services required for paediatric oncology and a very high quality and range of preclinical research services. The comprehensive scope and high quality of this training opportunity will be difficult for any other centre to match.

We are the only children and Young Peoples cancer centre in the North of England and provide all services for a population of 3 million. We provide all routine care for patients up to the age of 18 and for some older young adults. In the UK there are 19 such Principal Treatment Centres. We provide a comprehensive range of expert services for solid tumours, neuro-oncology and haematological conditions. We have an exclusive 20 bed inpatient facility and a dedicated day care and out patient service both of which are fully staffed with Specialist and paediatric nurses, therapy services, psychology, social work and play services. We have comprehensive surgical services including neurosurgery, all aspects of sarcoma surgery, paediatric surgery, Cardiothoracic and Hepatobiliary. We have a specialist Photon radiotherapy service but refer our patients to one of 2 sites for Protons. We have an 8 bed Bone marrow transplant service and a busy programme of allogeneic and autologous stem cell transplantation as well as a busy Chimeric Antigen Receptor T cell programme. There are 12 consultants covering a comprehensive range of expertise, 7 are full time NHS and 5 are Academic appointments. 5 are chief investigators for trials, 10 are principal investigators. There are usually 8 junior medical trainees.

We see strong virtue of offering training to overseas colleagues and more than 30 colleagues who have trained with us are in consultant posts outwith the UK.

The paediatric oncology trials unit was established 30 years ago but substantially enlarged from 10 years ago. In addition to the consultant and trainee investigators it includes 2 senior nurses, 4 research nurses, 1 clinical trial associate, 2 data managers and 3 clinical trial co-ordinators. We have a current portfolio of 13 phase 3 trials and 6 early phase. A further 7 early phase trials are preparing to open. We jointly lead a network for the North of Britain and Ireland which comprises Northern England, Scotland, Northern Ireland and the Republic of Ireland – a population of 15 million. We hold weekly teleconferences to identify trial opportunities for patients within this network and enable travel between the centres for trial entry.

The Great North Children's Hospital offers a comprehensive range of general and specialty paediatric services including Paediatric Intensive care and Paediatric Cardiothoracic intensive care with ECMO. It is housed in the Royal Victoria Infirmary campus within the 19000 staff Newcastle Hospitals. We benefit from a full range of support and diagnostic services but particularly through close links with the very large and busy adult early phase clinical trials service at the Sir Bobby Robson Clinical Trials Unit. We collaborate with this service to make trials accessible as appropriate across all ages.

We have always had close integration between our clinical service and preclinical research within Newcastle University. All of our consultant staff hold University contracts and 5 are principally pre-clinical researchers. We have 4 major research areas and groups. Each of these have a strong track record of supporting and training clinical and scientific trainees. We have a very strong record of successful PhD completion.

Our largest research group is in the field of nervous system tumours lead by Prof Steve Clifford and Prof Simon Bailey. Their main focus is Medulloblastoma and they have played the leading role in the molecular classification of Medulloblastoma. Dr Becky Hill has established her own group within this area with particular focus on the biology of relapsed Medulloblastoma. Another sub group under Dr Dan Williamson has focus on Rhabdoid tumours. Prof Deb Tweddle leads a group studying neuroblastoma and is the head of the UK Paediatric Oncology tissue bank. The group is associated with grant funding of more than £23 million in the last 5 years.

Another large research group focuses on Malignant Haematology. The Leukaemia Research Cytogenetics Group (Prof Harrison and Prof Moorman) has led the genetic and genomic characterisation of childhood ALL and AML patients in UK clinical trials for several decades. Dr Van Delft studies T-cell leukaemia and Dr Bomken High Grade Non-Hodgkin Lymphoma. The group is associated with grant funding more than £8 million.

The long established Paediatric Oncology Pharmacology Service at Newcastle University (Prof Gareth Veal) has world leading experience in Pharmacokinetics and Pharmacogenetics in childhood cancer. In addition to its research portfolio the unit provides a national and international for Pharmacokinetics and personalised medicine. It is an invaluable resource for training.

In addition we have a survivorship research programme (Prof Skinner) and Epidemiology research programmes (Prof Sharp and Dr McNally).