

#### **General Information**

JOB TITLE: Clinical Fellow in Functional Neurosurgery

GRADE: MT04

HOURS: 40 with a potential for on-call commitment

RESPONSIBLE TO: Prof. K. Ashkan/ Mr. R. Selway

ACCOUNTABLE TO: Prof. K. Ashkan/ Mr. R. Selway

TENURE: 12 months

# **Background**

## King's Health Partners Academic Health Science Centre (AHSC)

King's Health Partners is a pioneering collaboration between King's College London, Guy's and St Thomas', King's College Hospital and South London and Maudsley NHS Foundation Trusts.

This unique combination brings together one of the world's leading research-led universities and three of London's most successful NHS Foundation Trusts.

The driving purpose behind King's Health Partners is to continually seek and bring about swifter and more effective improvements in health and well-being for patients and people everywhere, by combining the best of basic and translational research, clinical excellence and world-class teaching to deliver ground-breaking advances in physical and mental healthcare.

King's Health Partners (KHP) is one of only five Academic Health Science Centres in the UK accredited by the Department of Health. This followed a selection process carried out by a panel of internationally renowned clinicians and researchers. Further information on KHP can be found on its website www.kingshealthpartners.org

#### King's College Hospital

King's College Hospital is one of the largest and busiest in London, with a well-established national and international reputation for clinical excellence, innovation and achievement. Two thirds of the clinical activities of the hospital are in support of the socially and economically diverse communities of the boroughs of Southwark and Lambeth. As both a healthcare provider and a major employer with over 7,000 staff, King's plays an important part in helping reduce local, social and health inequalities. The hospital provides a broad range of secondary services, including specialist emergency medicine (e.g. trauma, cardiac and stroke). It also provides a number of leading edge tertiary services, such as liver transplantation, neurosciences, haemato-oncology, foetal medicine, cardiology and cardiac surgery, on a regional and national basis.

King's College Hospital has an enviable track record in research and development and service innovation. In partnership with King's College London the Trust has recently been awarded a National Research Centre in Patient Safety and Service Quality. It is also a partner in two National Institute for Health Research biomedical research centres. The first is a Comprehensive centre with King's College London and Guy's and St Thomas' NHS Foundation Trust and the second is a Specialist centre with the South London and Maudsley NHS Foundation Trust and the Institute of Psychiatry. King's College Hospital has also recently strengthened its research and development infrastructure in order better to support clinical researchers across the organisation.

The hospital is principally located on a single site, with approximately 900 beds, but has a number of important outlying satellite services including dialysis, foetal medicine, cardiac diagnostics, and outpatient outreach clinics in other locations. It works in close collaboration with other health providers in South East London, including Primary Care Trusts, to ensure the sustainability and excellence of services across the area. In recent years, there has been substantial investment in both the facilities and resources of the hospital, which has transformed the quality of care that it now delivers.

Further information about King's can be found on its website, www.kch.nhs.uk.

The Trust has an annual income in excess of £570m, the majority of which is derived from Primary Care Trust commissions. However, education and research are also important sources of income, currently contributing around 8% of the total. The Trust is embarking on a strategy to achieve greater diversification of its income, with growth anticipated in tertiary referrals, research and commercial services activities. There is also a developing fund raising partnership with the King's College Hospital Charity."

### **Departmental Description/information**

#### **NEUROSCIENCES**

In July 1995, the Regional Neurosciences Unit from the Brook General Hospital and the Neurosurgical Unit of the Maudsley Hospital merged to form the King's Neurosciences Centre. The population served is over 3.2 million and includes the population of the County of Kent as well as the Lambeth, Southwark & Lewisham (LSL), Bromley and Bexley & Greenwich Health Authorities populations.

The Centre includes the departments of Neurosurgery, Neurology, Neuroradiology, Neurophysiology, Clinical Neuropsychology, Neuro Rehabilitation and Neuropathology. The constituent departments lie in close proximity to each other on either side of Denmark Hill, some in King's College NHS Foundation Trust, some in Mapother House on the Maudsley Hospital Site and some in the Institute of Psychiatry. The Institute of Psychiatry is a post-graduate institute of the University of London. At present there are 63 neurosurgical beds which include 12 HDU beds. A 10 bed (4 HDU) paediatric neurosurgical ward is situated within the Variety Club Children's Hospital. Ventilated beds are available in the general ITU with both elective and emergency cases. Outpatient clinics are conducted in an Outpatient Department in The Golden Jubilee Wing. Paediatric Clinics are held in accommodation especially provided in the Variety Children's Club Hospital.

Housed within the Neurosurgical Unit is a 5-bed telemetry unit, which is used by Neurosurgery, Neurology and Neuropsychiatry. In addition there are 15 beds for Neuro Rehabilitation.

There are 4 fully equipped dedicated neurosurgical operating theatres, with separate Neurosurgical theatre staff and neuroanaesthetic teams for elective work and emergency cover. The theatres are adjacent to ITU and Neuroimaging.

The Neurosciences Care Group has major Service Level Agreements contracts with Local Health Authorities and other Health Authorities in the South East of England. Since the transfer of the service in July 1995, the workload through the unit has steadily grown. The current workload of the unit is 800 elective adult cases p.a., 1,200 emergency adult cases p.a. and 350 paediatric cases p.a.

The Paediatric Neurosurgical Unit works in conjunction with the large Department of Paediatric Neurology at Guy's and St. Thomas's Hospital. The unit is supported by two Paediatric Neurologists who have join appointment with Guy's, and a Neuro-Paediatrician.

A significant proportion of the department's work both with adults and children is high specialised and attracts referrals form across the country.

King's College Hospital NHS Foundation Trust, together with King's College London, the Guy's and St. Thomas's Hospital, the Maudsley Hospital and the Institute of Psychiatry form an

Academic Health Sciences Centre (King's Health Partners), one of only five such institutes in the UK demonstrating commitment to excellence in both clinical medicine and research.

### **Clinical Organisation or Key Relationships**

# **The Functional Neurosurgeons:**

Prof Keyoumars Ashkan Consultant Functional Surgeon: Movement disorders/ pain

Mr Richard Selway Consultant Functional Surgeon: epilepsy

#### **NEUROSURGICAL STAFF**

#### **Consultant Staff**

There are 17 Consultant Neurosurgeons with a variety of interests, who provide both the general neurosurgical service as well as their special interests. There is a wide range of expertise within the Department, which is further improved by cross-referral and sub-specialisation.

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1. Mr David Bell Complex spinal surgery

Mr Sinan Barazi
 Mr Konstantinos Barkas (locum)
 Mr Sanj Bassi
 Pituitary surgery and skull base
 Complex spinal and skull base
 Paediatric neurosurgery

**5.** Mr Ranj Bhangoo Neuro-oncology

6. Mr Peter Bullock7. Mr Chris Chandler7. Paediatric and neuro-oncology

**8.** Mr Richard Gullan (part time) Neuro-oncology

9. Prof Ashkan Keyoumars
 10. Mr Irfan Malik
 11. Mr Richard Selway
 Functional and neuro-oncology.
 Complex spinal / epilepsy surgery
 Functional and epilepsy surgery

**12.** Mr Nick Thomas Pituitary, skull base

13. Mr Christos Tolias14. Mr Daniel WalshVascular neurosurgery, Brain injuryVascular neurosurgery, VHL, NF

15. Mr Bassel Zebian Paediatric neurosurgery16. Mr Gordan Grahovac (locum) Complex spinal surgery

**17.** Mr Fransesco Vergani (locum) Neuro-oncology

## There are currently 6 neurosurgical fellowships offered at King's:

Functional, vascular, neuro-oncology, skull base, spinal and paediatric. The fellows are all senior trainees at the end of their training or having completed it with FRCS (Neuro.Surg) or equivalent. As well as their in-depth involvement and training in their subspecialty of interest they provide a 1 in 6 senior (tier 2) cover for the registrars on call out of hours.

There is a wide range of expertise within the Department, which is further improved by cross-referral and sub-specialisation. The neuron-oncology service at King's College Hospital is one of the biggest in the UK with designated weekly MDMs and MDT clinics. There is a full range of stereotactic and neuron-navigational equipments available. Functional imaging in the form of fMRI, DTI and PET are available and regularly used.

# **PURPOSE OF THE JOB**

For the purposes of this job description this clinical fellowship is intended to allow an experienced neurosurgical trainee to obtain experience over one to two years in a subspecialist interest within neurosurgery. This post will provide experience sufficient to allow a successful fellow to offer himself/herself for appointment to a consultant position

involving a substantial commitment to this specialist area of neurosurgery. To achieve this the trainee will be given experience in the following broad areas.

- 1. The assessment and investigation of patients undergoing functional neurosurgery in particular those with movement disorders, intractable pain and epilepsy, and experience of the operative techniques involved in treating these patients. Experience will be obtained in both adult and paediactric cases.
- 2. The opportunity to conduct research into functional neurosurgery and publish research papers in peer reviewed journals.
- 3. The participation in a multi-disciplinary team consisting of functional neurosurgeons, neuroradiologists, neurologists, psychologists, psychologists and specialist nurses.
- 4. The fellow will be expected to assist and in time perform (depending on his/her level of experience) the majority of the functional neurosurgical cases.
- 5. The fellow will also be expected to attend one or two national/ international meetings each year and present abstracts.

We believe that in a small speciality like neurosurgery, where the luxury of a Consultant locum, especially for short periods is rare, surgeons preparing to work as consultants must be intimately involved with the running of the neurosurgical service and in providing some element of continuity of care for the patients since this will be an integral part of their practice as consultants. The Fellow will therefore participate in the general neurosurgical rota, and will also be expected to share responsibility for the neurosurgical patients in their area of sub specialist interest outside of strict rota commitments.

There is a wide range of expertise within the Department, which is further improved by cross-referral and sub-specialisation. Mr. Selway has extensive experience in resective surgery for epilepsy, intracranial monitoring and vagal nerve stimulation. He also has a major interest in paediatric movement disorders. Prof. Ashkan has wide experience in deep brain stimulation for adult and paediatric movement disorder. He also has major interest in neuromodulation for pain including deep brain stimulation, spinal cord stimulation and occipital nerve stimulation. He has published extensively in these fields.

### **ACADEMIC AND TRAINING FACILITIES**

Although there is a formal training program for the regular SpRs, the details of which are set out below, there will be no obligation for the Fellow to participate in this program although it may be to the fellow's advantage, or to the program's benefit, for him/her to do so from time to time.

There is a joint Academic Department of Clinical Neurosciences between Guys, King's and St Thomas's School of Medicine and the Institute of Psychiatry. All of the Consultant Neurosurgeons are members of the section of Neurosurgery in this department. The department organises an academic morning for all Neurosciences staff on Friday from 8.30am and there is a regular Neurosurgical slot at the end of this session. This is also the starting point of a 4 hour neurosurgical teaching module which continues with Radiological and audit sessions, ending with a tutorial or other activity intended to prepare candidates for the FRCS in Neurosurgery. In addition, there are regular neuropathology review sessions each week. All the Consultant Neurosurgeons have connections with clinical or basic research programes within the Neurosciences Centre which Registrars are invited to join.

In addition to the teaching sessions described, the Fellow will normally have one half day per week free for private study and research. They may be expected to supervise the teaching of SHOs and participate in the teaching of undergraduate medical students from Guys, King's and St Thomas' School of Medicine.

There is funding for study leave by application through the appropriate channels. There are excellent library facilities available. There is a good medical library in KCHMDS with CD Rom search facility. The library in the Institute of Psychiatry contains most of the common Neurosciences journals. The department has a quiet room and library facilities.

# **DUTIES**

The Fellow's duties will comprise assistance with the care of patients on the wards, assistance in the operating theatre, attendance at appropriate clinics and review of appropriate literature and clinical data. A timetable for these activities is set out below. In addition, the Fellow will be given an opportunity to take part in the general neurosurgical activities, and will contribute to the SpR duty rota.

# PERSON SPECIFICATION

# **Functional Neurosurgery Fellowship**

# **Regional Neurosciences Centre**

# KING'S COLLEGE HOSPTIAL

# Requirements

	ESSENTIAL	DESIRABLE
-	20021111112	320
Education/Qualifications	Eligible for registration with the GMC	<ul> <li>PhD, MD (original research)</li> </ul>
	MB BS (or equivalent)	• CCT
	FRCS (Neurosurgery)	
Previous experience	Substantial experience in general neurosurgery	Exposure to functional neurosurgery
	At least close to completion of CCT	Commitment to a career in functional neurosurgery
	Experience in trauma neurosurgery	
Skills/Knowledge/Ability	<ul> <li>Knowledge and experience in elective and emergency neurosurgery</li> <li>Ability to prioritise clinical</li> </ul>	Previous publications/ presentations
	need	
	Ability to organise oneself     & own work	
	Evidence of participation and active involvement in an audit project/ research	
	Experience and ability to work in multi-professional teams-	
	Understanding of clinical risk management	