Application to become BSET Training Centre

1. **Name of Institution:** Glenfield Hospital, Leicester

2. **Names of Vascular Surgeon and Vascular Radiologist:** Mr. Mark J McCarthy PhD FRCS and Dr. Guy Fishwick FRCR

3. **Statement of Collaboration between radiology and vascular departments**

The Vascular Surgery Unit at Glenfield Hospital is one of the best known in the United Kingdom. It has been at the forefront of the development of endovascular therapy over the last two decades with participation in landmark trials such as UKSAT, EVAR 1 and EVAR 2 and pioneering techniques such as subintimal angioplasty. The Unit is comprised of six Consultant Vascular Surgeons and four Consultant Vascular Radiologists.

The Leicester Vascular Unit prides itself on close co-operation between the radiological and surgical staff and embraces the team approach to successful working, training, learning and the treatment of patients both in the elective and emergency setting.

There are twice weekly multidisciplinary meetings covering both peripheral endovascular work and our endovascular aortic aneurysm programme. All aortic aneurysms being considered for intervention are considered at length by all members of the collaborative team, thus all decision making is made jointly between the radiology and surgical staff. All endovascular aortic aneurysm repairs are performed in theatre with a consultant vascular radiologist and consultant vascular surgeon present. Increasingly, there is a crossover of the roles, with surgeons learning and teaching endovascular skills and radiologists performing surgical techniques for vessel access and repair.

4. **Record of training in endovascular surgery**

Leicester has a proven track record in training vascular surgical and radiological trainees endovascular skills in both the elective and emergency setting. These skills are taught both in the operating theatre and angiography suite.

For all infrarenal endovascular aortic aneurysm repairs, radiological and surgical trainees perform the procedure under close guidance. This equates to approximately 30 EVAR procedures performed per year per trainee. Surgical trainees are encouraged to learn endovascular techniques whilst the radiological trainees are encouraged to embrace surgical skills. We feel that this is the natural progression for the training of endovascular surgeons/radiologists of the future.

There are also dedicated slots for vascular surgical trainees in the angiography suite, where they are trained in wire and catheter based skills and are allowed to perform peripheral angioplasty and stenting. Our trainees are also taught on how to use and interpret various imaging modalities such as duplex and CT and in the pre-operative planning for EVAR.

Both consultant vascular surgeons and radiologists alike are keen to teach trainees from both disciplines, not only the technical skills involved in endovascular surgery but also, and probably more importantly, how this can be achieved in a closely knit team working environment.

5. Number of indexed endovascular procedures in 2017

In 2017 there were the following procedures performed at the Leicester Vascular Unit:

a. 125 iliac PTA's
b. 550 infrainguinal PTA's
c. 95 endovascular infrarenal aortic aneurysm repairs
d. 5 fenestrated EVAR's
e. 8 thoracic aortic EVAR's

No branch grafts have been performed as yet but cases are scheduled for 2008.

6. Statement of endovascular training to be offered in Leicester

In Leicester, all consultant vascular surgeons and consultant vascular radiologists welcome these fellowships and all are committed to deliver endovascular training. The BSET training fellow will complete the fellowship in Leicester having gained extensive experience in endovascular surgery and will be educated in the benefits of a team working environment.

We will provide tailored training, depending on the needs of the individual trainee, which will be free of service commitments, the precise nature of which would depend on the background of any individual fellow taking up the fellowship.

At the beginning of the fellowship, each fellow will be assigned an educational supervisor/mentor and his training needs will be indentified. Based on this, a learning agreement will then be formalised and distributed to all consultant vascular surgeons and radiologists. The trainee will then enter into an educational contract with the Leicester Vascular Unit. There will be no summative assessment but surgical DOPS for EVAR will be used as part of a formative assessment. In addition, there will be monthly meetings between the fellow and his mentor.

It is envisaged that the fellow will have priority over other trainees to at least two EVAR theatre sessions per week and two sessions in the angiography suite

Irrespective of the prior experience of the fellow taking up the post, at the completion of six months training, we would expect them to have the following core proficiencies:

- Angiographic access techniques
- Basic iliofemoral angioplasty
- Endovascular planning for abdominal aortic aneurysm repair, including CT interpretation and device selection
- Endovascular stent deployment including intra-operative angiography
- Clinical follow up of endovascular abdominal aortic aneurysm repair and the principles of endoleak management
- Surgical access to the femoral and iliac artery

In addition to the core proficiencies above we would expect to provide experience in thoracic aortic endovascular repair, subintimal angioplasty, ultrasonographic guided treatment of false aneurysms and surgical access techniques for vessels other than common femoral.

We believe the proposed fellowship structure is flexible enough to accommodate trainees from either radiology or surgical backgrounds. We would expect the fellow to have performed 50-100 interventions in the angiography suite and approximately 20-30 endovascular aneurysm repairs. Our unit is large enough to easily accommodate this fellowship without having to require the fellow to undertake any service commitment

7. Schematic timetable for fellowship

The fellow would achieve the above proficiencies by participating in the following unit activities on a regular (weekly) basis, however, there may be differences to this timetable due to the flexible working of the unit.

	Monday	**Tuesday**	**Wednesday**	**Thursday**	**Friday**
AM	Ward based patient assessment	Theatre	Research	CT session	Theatre
PM	EVAR clinic	Research	Angiography suite	Angiography suite	Aortic MDT

The above timetable accounts for 80% of the fellow's timetable. It is expected that any fellow would also participate in the ongoing research projects of the unit and/or undertake their own research during the remaining time available