### Description of ACF Programme:

**Title:** Ophthalmology  
**Duration:** 3 years (ST 1-3)

### Lead NHS Hospital/Trust and contact details:

University Hospital Southampton NHS Foundation Trust  
Tremona Road  
Southampton SO16 6YD  
02380 777222

### Research Institution in which training will take place:

Faculty of Medicine  
Clinical Neurosciences Grouping  
University of Southampton  
University Road  
Southampton  
SO17 1BJ

### Arrangements for protected research time:

The ACF would rotate into a 6-month research post based within the Vision Sciences group at University Hospital Southampton in the first six months of Year 2. They would use their research sessions in year 1 and 3 to attend the Vision Sciences research group and engage in academic research.

### Research Objectives:

1. To undertake the equivalent of 2 years 6 months full time training in Core Ophthalmology in accredited posts on the Wessex Rotation.  
2. To undertake generic research methods training through a programme run by the Faculty of Medicine’s Postgraduate School.  
3. To gain relevant training and experience in research design, methods and data analysis.  
4. To expose the trainee to laboratory based research within the Faculty of Medicine  
5. To pilot a research project (clinical or laboratory-based) in order to generate preliminary data for development of a proposal for a research training fellowship  
6. To submit a competitive application for a research training fellowship to the MRC or the Wellcome Trust.

### Description of research component of programme (up to 500 words):

The vision science group consists of four clinical academics (1 Professor and 3 senior lecturers) and 1 non-clinical lecturer as well as 3 post-docs, 2 research technicians and 5...
DM/PhD students. Grant funding has exceeded £9 million. Current research projects are focused on prevalent causes of blindness such as age related macular degeneration. These include NIHR funded clinical trials, molecular genetic, stem cell and cell biology studies as well as studies of synthetic biology repair.

Prof. Lotery was a first wave NIHR senior investigator. His research was returned in both the 2008 RAE and also in the 2014 REF where he also contributed an impact case study. The Times Higher leagues table of in intensity-weighted GPA placed Southampton 12th position for UoA1 and 10th among medical schools and 8th for intensity-weighted research power. In 2014 he was also awarded the University Hospital Southampton inaugural Innovation award.

In Year 2, the ACF would rotate into the core 6-month research post. The ACF would become familiar with research methodologies employed within the University Department such as studies of cell biology and molecular genetics. There are opportunities to undertake research involving animal models. Over 3 years, the ACF will receive clinical and laboratory research training with senior clinical academic staff, to include trial design, liaison with local research ethics committees and Research and Development units, good clinical practice in research. The ACF would attend appropriate courses in research methodology and basic statistical methods based at the Research Support Unit at Southampton General Hospital.

The ACF would be affiliated to the research programme of senior clinical academic staff and expected to develop a programme of individual research activity according with Academic Unit, Faculty and University strategic objectives. There is considerable scope for research collaboration outside the Faculty of Medicine, principally with academic staff currently based in the School of Biological Sciences. The ACF would be supported in completing an application for a training fellowship, based on an assessment of the interests and competencies of the candidate and local opportunities.

The ACF would be expected to register for postgraduate study leading to a PhD within the University. Provisions would be made for allocation of suitably experienced research supervisors, to attend postgraduate courses based within the Faculty, and for any external training necessary to ensure progression through the period of postgraduate study. All ACF doctors in Southampton have access to a formal taught postgraduate research training programme which includes statistics, trial design, epidemiology, ethics, research governance, and project design. The ACF would be expected to attend Academic Unit joint academic meetings, and to make presentations of research findings at both this and the postgraduate conference, and other scientific meetings relevant to the area of investigation.

In recent years, we have secured 1 MRC clinical training fellowship and 1 new blood NIHR clinical senior lectureship. One of our post-doctoral scientists has secured a prestigious personal fellowship from Fight for Sight. Another PhD student won both the chemistry section and overall prize at the Science, Engineering and Technology conference at the Houses of Parliament.

Recently we were a new NIHR academic clinical lecturer in ophthalmology.

Therefore the successful ACF in ophthalmology will join a cohesive academic training programme with both pre and post doctoral academic posts available in the region.

Description of clinical component of programme (up to 500 words):
The Wessex training scheme in ophthalmology provides excellent training with an emphasis on academic competencies as well as clinical skills. The training programme is approved by the Royal College of Ophthalmology, and includes a range of training posts in Southampton, Winchester, Basingstoke, Bournemouth, Portsmouth, Salisbury and the Isle of Wight. Clinical work in Southampton is hosted within University Hospital Southampton NHS Foundation Trust, which has a formal partnership agreement with the University, and which strongly supports research and training for health professionals.

The rotation of the ACF through training posts would be determined by training needs, identified through regular clinical and educational supervision and at annual ARCP reviews. The ACF would gain experience of inpatient, outpatient and surgical ophthalmology; and would participate in the on-call rota. Detailed job descriptions for each training post are available.

The ACF would attend the local educational programme of post-graduate training; complete the number and range of work-place based assessments (case-based discussions, assessed clinical encounters, etc) needed for career progression within ophthalmology: and take the Part 1 FRCOphth examination and refraction certificate of the Royal College of Ophthalmologists. In addition, the ACF would gain experience of undergraduate teaching, of University of Southampton students undertaking Fourth and Final Year ophthalmology attachments.

Prof Lotery and colleagues hold joint weekly lab meetings in Southampton which the ACF is encouraged to attend when feasible.

Appraisals are provided by an educational supervisor at induction, three and six monthly with the trainee to form an educational agreement and ensure the trainee is meeting their learning objectives. It is envisaged that the trainee will rotate to be close to Southampton in the ST2 period following the 6 month ACF block to enable them to make a competitive application for a training fellowship. The trainee will rotate within the Wessex StR1-3 Programme in Ophthalmology under the guidance and supervision of the Wessex Specialist Training Committee. All posts offer the opportunity to acquire all ST2-3 competencies in ophthalmology in addition to clinical supervision and including appropriate emergency and out of hours experience.

Specific support provided to trainee

Particular research support and opportunities will be provided, depending upon the interests and training needs of the ACF.

Milestones and timing of achievement of academic and clinical competencies

The following milestones will be applied:

| Year 1 |

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<th>Description</th>
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<td>1</td>
<td>Initial training in ophthalmology including Part 1 FRCOphth examination.</td>
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<tr>
<td>2</td>
<td>Attendance at autumn introductory course provided by University of Southampton Postgraduate School of Medicine.</td>
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<td>3</td>
<td>Identification of topic of interest for research project and initial literature review.</td>
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<td>4</td>
<td>Identification of research questions to be addressed in pilot study through an iterative process of discussion and planning with the academic supervisors.</td>
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<td>5</td>
<td>Identification of specific learning needs for the project and appropriate courses.</td>
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### Year 2

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<td>1</td>
<td>6 month research block in vision research laboratories, University Hospital Southampton.</td>
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<td>2</td>
<td>Obtaining ethical committee and NHS Research &amp; Development approval for exploratory project as appropriate and submit research training fellowship to MRC/Wellcome Trust/Fight for Sight charity.</td>
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<tr>
<td>3</td>
<td>Attendance at relevant internal and external training courses and attendance at annual national/international conferences of relevance to the project.</td>
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<tr>
<td>4</td>
<td>Initial data collection for pilot study as appropriate.</td>
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<td>5</td>
<td>Must have passed Part 1 FRCOphth before the end of this year. Must be able to demonstrate adequate progress in ophthalmic surgery including cataract surgery.</td>
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### Year 3

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<td>1</td>
<td>Continuation of Core ophthalmology Programme. Must have passed the Refraction Certificate before the end of this year.</td>
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**How post links in to the NIHR approved Research Training Programme at your locality:**

It is envisaged that a successful fellowship application will lead to a further three years in full-time research, culminating in a PhD. There would then be a natural progression to a Lecturer position within the Faculty of Medicine. In the event of failure to obtain research fellowship funding for the full-time three year research period culminating in a PhD, the research fellow could return to the General ophthalmology specialist training programme within the Wessex rotation.

**Trainee centredness:**

The training will be centered on the trainees’ own needs, identified early during the first year, and by dedicated supervision during the post. The fellowship will be tailored towards achievement of successful external funding.

**Quality assurance of the programme:**

The research methods training will be provided through the established Postgraduate School at the University of Southampton Faculty of Medicine. Academic supervisors have completed the postgraduate research supervision training provided by the University.

**Mentoring Arrangements:**
Mentorship will be provided by the academic and clinical supervisors to the fellow. This will be co-ordinated by Professor Eugene Healy (academic lead). Further mentorship and supervision can be undertaken through the normal governance arrangements for postgraduate research at the University of Southampton Faculty of Medicine. This will include mentorship through supervision of the emerging PhD programme and senior authorship of research fellowship applications to major funding agencies.

### Academic Lead (University) for the IAT Programme:

Professor Eugene Healy  
Professor of Dermatology  
University of Southampton  
Southampton General Hospital  
Southampton SO16 6YD  
Tel 023 8077 7222  
E.Healy@soton.ac.uk

### Academic Supervisor (University) Details:

Professor Andrew Lotery  
Director Clinical Neurosciences Research Group,  
Clinical and Experimental Sciences,  
Faculty of Medicine,  
University of Southampton,  
South Lab and Path Block,  
Mailpoint 806, Level D,  
University Hospital Southampton,  
Southampton SO16 6YD, UK  
Tel: +44 (0) 23 8120 5049  
A.J.Lotery@soton.ac.uk

### Education Supervisor (Trust) Details:

The educational supervisor and clinical supervisor will be dependent on the clinical rotation to which the ACF is allocated.

### Clinical Supervisor(s) Details:

The educational supervisor and clinical supervisor will be dependent on the clinical rotation the ACF is allocated to.

### Deanery Programme Training Director Details:

Mr Nigel Hall  
Consultant Ophthalmologist, Royal Hampshire County Hospital, Winchester SO22 5DG.

### Deanery Programme Manager Details:
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<td>This post will attract a NTN (A)</td>
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