



How to apply for the academic foundation programme

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ABSTRACT

The UK Academic Foundation Programme (AFP) is a two-year foundation programme that includes an additional “academic theme” undertaking work in research, management/leadership, or education and teaching activities. The limited number of AFP places makes the AFP application a highly competitive process. This article outlines points to consider when applying for the AFP and successful application strategies. Reviewed by successful AFP applicants, this article provides specific insight into applications to the London Academic Unit of Application (deanery).

1. Introduction

The Academic Foundation Programme (AFP) is an attractive opportunity for many final year medical students applying for their foundation year jobs in the United Kingdom. UK Foundation training is a two-year training programme for doctors, undertaken after medical school. It is usually composed of six, four-month rotations across medicine, surgery and general practice. Completed over the same period, the AFP offers an additional “academic theme”.

This “academic theme” is dedicated to the undertaking of academic research, management/leadership, or education and teaching activities. These activities are either spread throughout the two years (one day a week) in “integrated programs” or timetabled as a four month “block” during the second foundation year [1]. In most academic placements, foundation doctors organise a project, which can vary in nature from laboratory-based research, to clinically-focused quality improvement projects (QIP) [1]. Projects are overseen by a dedicated Academic Supervisor, who acts in addition to the foundation doctor's Educational Supervisor. AFP doctors will also be involved to varying degrees with teaching undergraduate students, attending training, departmental activities and with ongoing clinical commitments [2]. There are a limited number of AFP places, comprising of 5% of all FP posts in a given year [1]. Application is highly competitive. This article outlines some strategies to consider when applying for the AFP, with specific insight from AFPs across London.

1.1. Assessing suitability for the AFP

The first thing to consider is whether the AFP is something you really desire. There are numerous pros and cons to applying for the AFP and evaluation of these is crucial to develop a genuine answer to: “Why do you want the AFP?”.

Attractions of the AFP include:

- The AFP offers protected time to explore areas of interest in greater depth; this may attract those with personal interests in research, teaching or management. Receiving invaluable supervision and guidance from leading experts [1], within the infrastructure of a supporting institution, could become lifelong sources of inspiration. Since academic placements are usually coordinated through universities, a variety of resources will be accessible, including teaching on research methodologies and statistics, libraries and electronic journals.
- The AFP can be highly productive leading to achievements which could increase your personal value in the competitive job market. Examples of these are listed below:
 1. An academic project may lead to valuable practical research experience, a scientific publication, national or international oral and poster presentations
 2. Opportunities to attend and network at conferences
 3. A QIP may lead to improvements in patient care
 4. Teaching-focused AFPs can lead doctors to develop teaching

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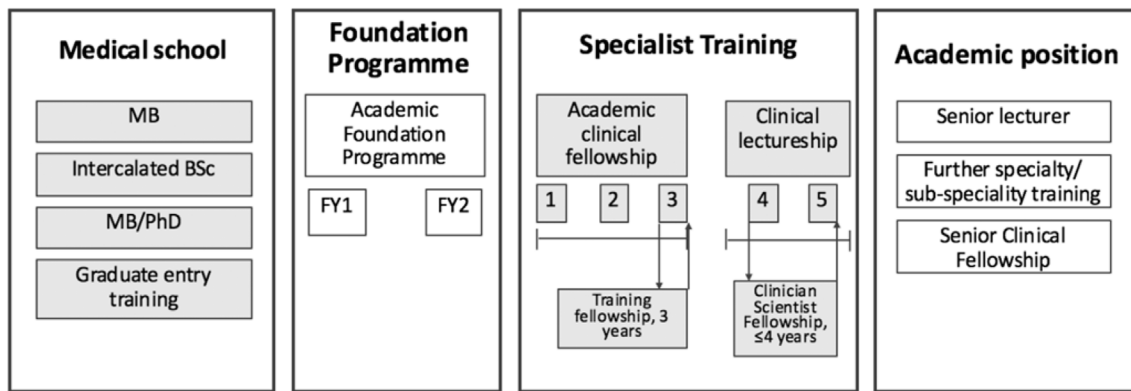


Fig. 1. The integrated academic training pathway, redrawn from Ref. [13].

courses for medical students

- The AFP can be a stepping-stone towards a given career (Fig. 1). Or simply, it is an opportunity to assess whether a future academic, teaching-focused or management-focused career is desired.
- Even if academic careers are not continued beyond AFP, many transferable skills may be learnt, including time management, information technology, writing and teaching. These are invaluable across a range of medical careers, and help with the consultation of patients [6]. There are often opportunities to teach clinical and pre-clinical students in every AFP, which are often reported to be enjoyable and rewarding [6]. Doctors in the AFP develop specific skills in experimental techniques, literature review and statistics, which can expand horizons beyond medicine [2].
- The AFP jobs offer stability. For example, in the London deanery, both foundation years of the AFP are in London-based hospitals. FP positions, however, have both near and far placements over the two years.
- The Situational Judgement Test (SJT) is a test, which assesses approaches to situations encountered in the workplace, undertaken by all final year medical students before foundation years. It is a major contributor to a medical student's rank when applying for the FP. FPs do not attend an interview. The AFP job positions are subject to satisfactory completion of the SJT, yet the SJT score is not used for ranking purposes. Rank is instead based on academic achievements and interview score.
- Therefore, the AFP is also one of the rare times early in medical careers for individuals to have a formal medical interview. The preparation towards this interview also offers ample opportunity for developing skills in answering interview questions, which can enhance success at future interviews, including those for speciality and core medical or surgical training.
- The opportunity to practice the self-reflection, organisation and preparation required for AFP applications will help harness the skills ultimately required for all future jobs in a medical career and can develop and realise career aspirations. The AFP job results are published a few months before the FP jobs.

There are many reasons why the AFP is not so attractive, however:

- Applicants on the FP spend a larger amount of time in clinical practice. This provides more opportunity to develop clinical competencies and to ensure all necessary achievements are met, which will build the foundation of future clinical practice within a given speciality. Some applicants may prioritise building clinical competencies over pursuing academia.
- AFP applicants often have less choice over other hospital rotations if positions are chosen based on the academic rotation. The combination of clinical rotations in FPs may be more tailored to individual preferences than those in AFPs. There are very few jobs that offer

three surgical rotations, for example. For those pursuing a career in surgery, larger surgical exposure in foundation years may be preferable.

- Research is difficult [7]. Academic projects may lead to frustrations when ambitious goals are not met and is stressful if supervisors have unrealistic expectations [2]. Applying for ethical approval and recruiting sufficient samples for studies can be difficult, and often administrative tasks fall on the junior members of a research team [6].
- There may be little flexibility of choice in academic work undertaken and there is a possibility of being allocated a project that is not of core interest. Autonomy and choice are key to maintaining academic motivation [8,9] and it is often cited as the best thing about pursuing academic careers [2].
- The AFP application is more time-consuming than the FP application, and will need to be completed in the final year of medical school. This may be at the expense of clinical skills practice and additional learning opportunities.
- The academic block can also be un-banded, resulting in reduced pay for AFP doctors.

1.2. The AFP application

- There are two parts to the AFP application:
 - Part 1 - The written application done through a standard national application form via an on-line portal: the "Foundation Programme Application System" (Oriel: <https://www.oriel.nhs.uk/Web/Account/LandingPage>)
 - Part 2 - An interview
- On-line applications begin around October in each year and are done in parallel to the standard FP applications through the same application window.
- Before the on-line applications begin, UK medical schools will nominate eligible candidates and submit each applicant's "medical school performance score" (comprised of their class and decile rank in year) to Oriel. Non-UK medical school graduates, or already-graduated medical students, need to submit documentation direct to the United Kingdom Foundation Programme Office's (UKFPO) Eligibility Office for an assessment of their eligibility.
- All applicants then need to register and confirm their applications on Oriel.
- The UKFPO website publishes comprehensive guidance and information on the AFP selection process [11].

1.3. Part 1 – the written application

1.3.1. Choosing a deanery

- Part 1 of the AFP application is the point at which there is most

competition. In 2016, for AFP jobs starting in 2017, there were 551 AFP posts advertised and 2169 AFP applications were submitted by 1444 individuals [12].

- The written application is done online with around 12 days for completion.
- Each individual may apply for a maximum of two (of 15) geographic regions, termed as ‘deaneries’ or ‘Academic Units of Application’ (AUoA).
- AUoAs include, for example, the Northern and Severn [11]. London, unlike in the FP applications, is considered as one AUoA. AUoAs differ in the AFPs that are offered, in terms of the topic of focus (academic, research or management), and structure (integrated or block-based). Most commonly AFP posts are block-based [13], which are reported to be good for laboratory-based projects whereas integrated programs can be better suited to clinical and educational projects [3]. Some AUoAs, like London, offer restricted research projects or themes, and others, such as Oxford, allow for more freedom of choice. Each applicant should consider personal preference for a given structure, area of focus, and geographical location.
- AUoAs undertake local selection and short-listing of candidates according to local scoring criteria.
- AFP programmes are published by each AUoA around two months in advance of the opening of the on-line applications. Applicants are required to rank the AFP jobs within each AUoA at the point of application, a further deviation from the FP application. This is different to FP, as AFP applicants apply to specific AUoAs from the offset.

1.3.2. Listing educational achievements

- The online AFP applications require applicants to submit additional information which may contribute to their final AFP “score”.
- Scores for AFP constitute different components. In London, for example, as with FP “scores”, the AFP score is partly based on each applicant’s “Educational Performance Measure (EPM)”. There is a maximum of 50 points in the EPM score. EPM points are awarded for: decile ranking in medical school (1st decile = 43 points, 2nd = 42 points etc., 34 points for the 10th decile); further degrees (PhD = 5 points, MSc/first class honours = 4 points, etc.); and publications (maximum of 2 points for PubMed Indexed publications). Scoring criteria for AFP will vary across AUoAs.
- For FP, points are awarded for additional degrees and publications. The key difference between the FP and AFP final “scores” is the opportunity to receive additional points for further educational achievements (posters, prizes, presentations) in AFP applications. The exact number of points awarded for additional achievements depends on local marking criteria of each AUoA. The supplementary material applicants can submit to support applications will therefore vary for each AUoA, but generally applicants are asked to submit evidence to support publications, oral or poster presentations, prizes, degree certificates. CV’s are no longer required. Supplementary material is advised to be prepared in advance of application, as this can take time. The Academic Prospectus of each AUoA can provide guidance in this regard in advance of applications.

1.3.3. Whitespace questions

- “Whitespace” questions are the final part of the online application, and the first opportunity for applicants to add anything beyond the achievements already listed.
- Whitespace questions, however, are not included in all AFP applications and in fact, will not be used in the selection process for AFPs in London in 2018.
- Whitespace questions are unique to each AUoA and are only

available for viewing once applications are open, meaning there are only 12 days to create and submit answers.

- The questions centre around similar topics year-to-year and between AUoAs. Broadly, candidates are asked to provide examples of research, teaching, and/or management experience, examples of team-work, contributions to academic life at medical school and motivations for the AFP. Answers to questions focused on the topics, therefore, can be prepared well in advance.
- Conversations with current AFP doctors, Applicant Handbooks and Person Specifications prepared by each AUoA as well as the General Medical Council’s guidance on “Good Medical Practice and the Duties of a Doctor” are information sources that can help to understand what the whitespace questions might be testing. Generally, ideal candidates have good clinical skills, consistently high academic achievement, an understanding of the principles of ethical medical research and the importance of effective teaching.
- There are many frameworks that can help structure answers to different types of questions [14]. For example, the “STAR” framework which stands for: situation; task; action; result/reflection, can be used for competency-based questions [14].
- Once answers are drafted it may be useful to ask for feedback from clinical or academic supervisors, doctors, academics and previously successful AFP applicants.

Once online applications are completed candidates are scored and shortlisted by local AUoAs and applicants are either offered an interview, put on the waiting list or are unsuccessful.

1.4. Part 2 – the interview

The second part of AFP applications involves the applicant being able to demonstrate to a panel of interviewers his or her possession of the necessary qualities to become an ideal AFP doctor. Being offered an interview is a big achievement, and the odds of subsequent success are then much greater than they were for Part 1. The exact odds differ for each deanery. In the London deanery in 2016 the interview ratio for AFPs was 2:1 [15]. Some AUoAs require candidates to choose an interview slot from a range of times, dates, and locations. The timing probably makes little difference to interview success and the best advice would be to choose the time and location of most convenience.

From experience in London, the interviews are generally split into two parts: an academic and a clinical part. The different interview parts may be conducted in different rooms by separate interviewers, who have different objectives, and who are looking for different skills. On the interview day, 30 min before the interviews begins, applicants are presented with two clinical scenarios and one abstract. This offers time for the applicant to read the scenarios and abstract, and structure and plan answers. This time can be used very effectively with adequate preparation. The preparation for the interview should start well before interviews are even offered. Preparation can be fun and invigorating, a chance for in-depth self-reflection to understand motivations and career aspirations, as well as a greater understanding of research principles and statistics. Many interview preparation books offer helpful mnemonics to structure answers [14]. Interview scores are used to allocate AFP jobs, and are a composite score of interview performance and educational performance from the written application.

“One important key to success is self-confidence. An important key to self-confidence is preparation” - Arthur Ashe

In the clinical interview, it is essential to demonstrate knowledge and ability to handle any medical emergency to the level of a competent foundation year doctor. Questions focus on the management of the clinical scenarios presented, which typically describe common medical emergencies. The acute management of all medical emergencies should be learnt by heart, for the AFP and for work as a foundation year doctor. Safety is a key element that should always be addressed in answers. The

aim is to convince interviewers that four months' less clinical exposure will not disadvantage or compromise patient safety. The 'SPIES' framework, which stands for: seek information, patient safety, initiative, escalate, support, is a useful framework to adopt when structuring answers on clinical dilemmas. Some clinical scenarios have an ethical element, or may be focussed on assessing softer human skills. For ethical scenarios, it can be useful to start answers by recognising and outlining the ethical principles that are in conflict (non-maleficence, autonomy, beneficence, justice). This demonstrates understanding of ethical awareness.

The academic interview is composed of questions that centre around the abstract, and those that enquire into personal academic (or teaching/management) interests. The abstract questions often ask applicants to summarise the abstract, and test understanding of the statistics used and its contribution to the literature. It is important to prepare for the abstract questions by critically reading abstracts under time-pressure, succinctly summarising their key messages, and comfortably discussing the statistics used and relevance to literature. Frameworks such as "PICO" (population, interventions, comparisons, outcomes) can help structure abstract summaries in answers in the 30 min up to interview.

Knowledge of the following should be thoroughly understood and easily explained upon questioning:

- common statistical tests and concepts: confidence intervals, p-values, relative and absolute risk
- concepts such as the 'counterfactual-idea' and 'clinical equipoise'
- understanding different study types
- sources of bias
- Basic statistical papers can easily be found on Google Scholar, and basic statistical books such as Trisha Greenhalgh's "How to read a paper" [16] are also useful resources
- Responses to personal questions asked as part of the academic interview provide an opportunity for individuals to sell themselves and highlight the achievements and strengths beyond what can be described in a CV. Motivations for undertaking the AFP and familiarity with individual achievements are crucial. The 'STAR' framework is again a useful guide the structure of answers when asked about skills and competency. It is also important to be familiar with the training pathway for a clinical academic career (Fig. 1). The integrated academic training pathway was designed to bring structure and coherence by combining academic and clinical training at each stage of a medical career [13].
- Introduction of the AFP was seen to act as a structured entry into an academic career. The AFP can be the first step towards becoming an Academic Clinical Fellow (Fig. 1). This is a specialist training post where 25% of time is spent in academic training or research. Alternatively, the AFP allows pursuit of a career in medical education or medical management.

The interview is a test of both knowledge and communication. Practising regularly with colleagues who are also preparing for their own AFP interviews can be incredibly useful. Each individual can prepare and test colleagues on abstracts, clinical scenarios, academic and personal questions, providing critical feedback to answers provided. This gives insight into skills examiners are seeking, and how these can be best presented. Practising is also a way of simulating the stress of the real day.

In answering questions, it is crucial to maintain eye contact, smile, speak slowly and clearly. Questions should be answered directly showing structure and thought. The delivery of answers is as important as their content. These are skills that can be developed in interview practice. It is advised to minimise the use of filler words such as "um" and "so" in answers. Practising with different people enables different skills to be learnt from people with different perspective. It is also worthwhile to ask senior colleagues who have had medical interviews

themselves, or those experienced in business interviews like parents, for advice and feedback.

Often universities host interview practice events, and if not, start one. There are also AFP and interview courses, but many applicants have succeeded without attending a single course. The majority of what constitutes a successful application comes from motivation, research and practice.

On the actual interview day respite can come from knowledge that the majority of work has already been achieved in the months leading up to this day. Ensure there is the least amount of stress possible by being prepared, on-time and well dressed. Look the part, be the part and feel the part. Dressing comfortably, professionally and like a clinical academic can help interviewers see applicants this way.

1.5. If the AFP application is unsuccessful

"It's only those who do nothing who make no mistakes" - Joseph Conrad

An unsuccessful application is no reason to despair. A career is not successful unless there are set-backs and failure along the way [17], and the concept of 'failure' is a perception. The process of the application is immensely valuable in itself. The hours of practice, preparation and self-discipline from application preparation to interview-skills practice will be extremely useful for all future job applications. Most importantly, if an interest in academic research was motivation to apply for the AFP, not being part of the AFP is no restraint in pursuing other academic endeavours. Whilst they may not have time reserved for research, many trainees will be active in research during foundation years. An AFP is not a pre-requisite for a research fellowship or an academic post.

"Success consists of going from failure to failure without loss of enthusiasm" - Winston Churchill

2. Conclusion

Regardless of an individual's current position in their medical career, the following factors will increase the likelihood of a successful application:

Factors that will increase the likelihood of a successful AFP application:

- 1 A high EPM score
 - 2 Published papers
 - 3 Oral/poster publications
 - 4 Prizes
 - 5 A previous or intercalated degree
 - 6 Roles of responsibility that can help with the whitespace questions
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The AFP is a competitive process but the journey to making an AFP application is a rewarding and informative experience. The self-knowledge that can be gained and the preparation and organisation skills required to make the application are enabling for any future medical career.

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