

## Chapter

## 1

# UK Academic Career Pathways

The Walport Report in 2005 identified the need to improve the training and fostering of academic clinicians.<sup>1</sup> To this purpose, an *Integrated Academic Training Pathway* (IATP) was designed – a model that has been adopted in various forms throughout the UK (Figure 1.1). More than a decade later, the Academic Foundation Programme (AFP), Academic Clinical Fellowship (ACF), and Academic Clinical Lectureship (ACL) posts remain fiercely competitive.

The IATP proposes a step-based academic progression that is an accompaniment to clinical training rather than a string of academic interruptions. The academic components are built into the clinical training (hence ‘integrated’) model and thus avoid slowing clinical training down. The following situations are two exceptions to this principle: (a) a PhD is typically not built into training and trainees will have to apply for an ‘Out of Programme Research’ (‘OOPR’) status; and (b) some ACF posts (e.g. some of those offered in general practice) and ACL schemes will slow down (but not stop) the pace of training.

The IATP is somewhat flexible. You can step on and off the academic pathway as per your needs without fear of being left out in the future. Also, there is no one academic post that is a prerequisite for another and you can still obtain higher posts regardless of whether or not you have held one of the earlier posts.

In this chapter, we will discuss the various components of the IATP (the AFP, ACF, and ACL) as well as some other ways of pursuing an academic career.

## 1.1 Academic Foundation Programme

### 1.1.1 What Is the AFP?

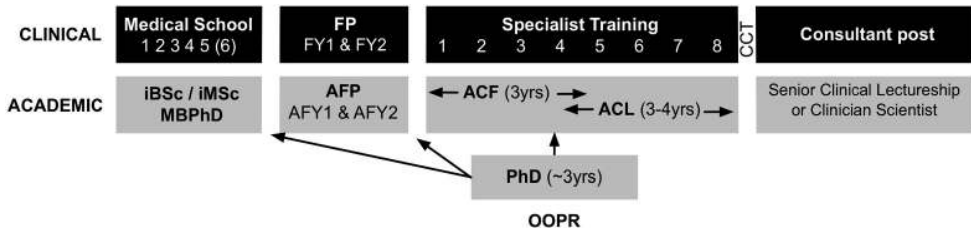
The AFP is a two-year training programme in the UK that offers academic training as an integral part of the clinical Foundation Programme (FP). This usually incorporates dedicated and protected time for the AFP doctor to conduct research or other academic activities.

The AFP is an excellent opportunity towards building a career in academia, but it is by no means a prerequisite towards an academic career and there are many other opportunities in a standard FP to pursue academic work. Nor is the AFP a point of no return for those who

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<sup>1</sup> Medically and dentally qualified academic staff: Recommendations for training the researchers and educators of the future. Report of the Academic Careers Sub-Committee of Modernising Medical Careers and the UK Clinical Research Collaboration March 2005. Available from: [www.ukcrc.org](http://www.ukcrc.org)

## 2 UK Academic Career Pathways



**Figure 1.1** The *Integrated Academic Training Pathway* (IATP) in England. The academic programmes available in Northern Ireland, Wales, and Scotland offer variations on this structure (see Section 1.4.1).

later decide not to pursue academic medicine. On the contrary, the AFP may offer those who are undecided a ‘taster’ opportunity in academia.

There were 562 available AFP posts in the 2019 AFP round, which constituted approximately 8% of the total number of FP jobs in the UK. There was an overall applicant/job ratio of 4.94 and a post fill rate of 99%. A breakdown of the number of AFP jobs previously available in each deanery can be found in Table 1.1.

AFP posts are usually supported by a partnership between the National Health Service (NHS) deanery and the respective affiliated university, allowing shared communication, supervision, and resources between the two.

The allocated academic time for research varies across different deaneries; however, the most common programme structures are (Table 1.2):

- One four-month research block during foundation year 2 (FY2)
- One day release per week for a year (usually during FY2)
- No protected time (e.g. in some programmes in Scotland)

Although most AFP posts focus on research, some AFP programmes offer training in other ‘academic activities’, such as medical education or leadership and management. It is therefore critical to investigate each programme to gain a clear understanding of what you are signing up to, in terms of both the structure of the programme as well as its focus.

Regardless of the programme structure and dedicated research time allotment, an important point to emphasise is that the AFP does not slow down your training and you will be expected to match the clinical competencies of those in the FP. Some of the notorious interview questions, which we will tackle later, are centred on this predicament.

### 1.1.2 Application Process

In the most recent cycles, the AFP application has been made during the same application window as the standard FP (usually a two-week period) using the same portal ([www.oriel.nhs.uk](http://www.oriel.nhs.uk)). Compared to the FP, the AFP application form requires additional evidence including academic achievements (e.g. publications, presentations, prizes, and degrees). The form also includes a separate section for ‘white space questions’ in which the questions vary between those of the different deaneries. The general process for FP and AFP applications is shown in Figure 1.2.

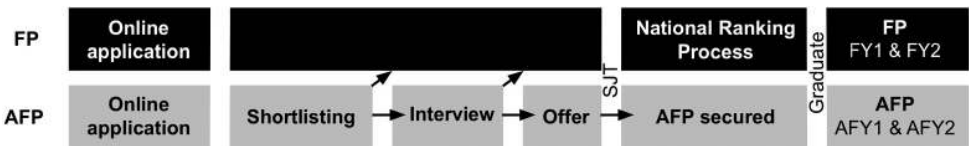
AFP applicants have usually been allowed only to apply to a maximum of two ‘Academic Units of Application’ (AUoA, i.e. body that organises the AFP in each deanery). The AUoAs of each deanery to which you are applying will be blinded from each other.

**Table 1.1** Applicants and posts for the AFP per deanery (AUoA) for the 2018/2019 intake.

Deanery (AUoA)	Posts available	Applicants	Applicant/post ratio
East Anglia – Cambridge	24	170	7.1
East Anglia – Norfolk	12	25	2.1
East Midlands	48	129	2.7
Essex, Bedfordshire, and Hertfordshire	22	108	4.9
London and South East	124	832	6.7
North West of England	57	39	0.7
Northern	21	280	13.3
Northern Ireland	9	79	8.8
Oxford	24	228	9.5
Scotland	60	179	3.0
South West	25	177	7.1
Wales	12	53	4.4
Wessex	13	74	5.7
West Midlands	45	133	3.0
Yorkshire and Humber	66	272	4.1
Total	562	2778	4.94

AUoA, Academic Unit of Application.

Source: Adapted from the UK Foundation Programme 2019: Recruitment Stats and Facts.



**Figure 1.2** The general process for both the FP and AFP applications.

Once the application has been submitted, each AUoA will score the application separately according to its own internal shortlisting criteria and, if the candidate is shortlisted, the applicant will then be invited for a local interview. If applicants fail to meet the shortlisting requirement, they will automatically be enrolled back to the standard FP.

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**Table 1.2** AFP job structure according to the AUoA

Deanery (AUoA)	Allocated and protected academic time
East Anglia (Cambridge)	FY2: 4 months
East Anglia (Norfolk and Norwich)	FY2: 4 months
East Midlands	Mixture of one-day release and 4-month research block across FY1 and FY2
North West	Varies depending on the hospital (FY1: 5-week block, FY2: 4 months or day release)
Northern	FY1 and FY2: 4 months in both FY1 and FY2 (new structure)
Oxford	FY1: one-day release, FY2: either 4-month block or split
Scotland	East: 4 months in FY2 South: no dedicated time West: no dedicated time North: no dedicated time
Severn	FY2: one day release or 4-month block
South West	FY2: 4-month block (with day release for the other 2 × 4-month block)
Thames	FY2: 4 months
Wales	FY2: 4 months
Wessex	FY2: 4 months
West Midlands	FY2: 4 months
Yorkshire and Humber	FY2: 4 months

AUoA, Academic Unit of Application.

Source: Adapted from Ologunde R, Sismey G, Kelley T, et al. The UK Academic Foundation Programmes: Are the objectives being met? *J R Coll Physicians Edinb* 2018;48:54–61.

While there may be some variation in the timeline in the future, an example AFP timeline for 2019/2020 is shown in Table 1.3.

#### Do You Need to Sit the SJT if You Are Applying for the AFP?

Yes! The job offer of an AFP is usually made *after* the SJT exams have taken place (but *before* the SJT results are released); therefore, at the time of the SJT exam, AFP applicants will not be aware of whether they have been appointed to an AFP job. Applicants should therefore strive to do well on the SJT, since those who are unsuccessful in their AFP application will be automatically ranked and allocated FP posts according to their SJT scores. If you have been awarded an AFP position, you will still need to score satisfactorily (i.e. pass a threshold mark, usually >30) on the SJT, but having a close-shave pass versus a high score on the SJT will usually have no bearing on the outcome of the AFP application.

More information is available on the official FP/AFP website: [www.foundationprogramme.nhs.uk](http://www.foundationprogramme.nhs.uk)

**Table 1.3** Timetable for Academic Foundation Programme application for the 2019/2020 intake

Timeline	AFP milestones
19 August 2019	AFP programmes available to view
23 September 2019	Open for registration
30 September 2019	Open for application
11 October 2019	Application deadline
14 October–6 December 2019	Local shortlisting and interviews
15 January–12 February 2020	AFP offers

## 1.2 Academic Clinical Fellowship

### 1.2.1 What Is the ACF?

Following the AFP, the ACF is the next step on the IATP. Although having completed the AFP beforehand will most certainly be beneficial when submitting an ACF application, this is not a requirement and should not dissuade you from applying.

ACF positions are highly competitive, as they guarantee an academic national training number (NTN[A]) in the desired specialty (i.e. run-through training).

The ACF is a three-year (or four-year for general practice) programme that typically offers 25% protected research time alongside clinical training. In theory, this gives ACFs nine months of protected academic time over three years, but practically this may be spliced according to how the programme is managed locally. For example, some programmes offer three months per year for research and the remaining nine months for clinical training while other programmes may offer weekly academic protected time over a longer duration. In most deaneries, however, the distribution of time is flexible and can be customised or negotiated to suit your needs. As for the AFP, the ACF does not slow down the pace of clinical training (with the exception of the general practice ACF) and the same clinical competencies must be met within the duration of the post.

The ACF is a clinical academic training post that was originally designed for candidates without a higher degree such as an MD or PhD. The intention was for ACFs to use their academic time to explore further academic interests, gain experience and research skills, and generate pilot data to prepare for a competitive PhD application. It is not mandatory to pursue a higher degree after the ACF. If an ACF finds that the academic path is not suited for her, she can always move back into the clinical training pathway (she does not typically need to reapply for clinical training because she already holds an NTN).

Most ACFs will pursue a PhD after completion of the ACF programme, but this is flexible. Candidates with PhDs (including MBPhDs) are also eligible to apply for an ACF. For those who already have a PhD, the dedicated academic time in the ACF may be used to ensure there will be no large breaks in research activity and without having to extend clinical training. Most post-PhD ACFs will use the protected research time to generate more data to put forth an application for an ACL position. On the face of it, candidates with a PhD may seem to be at an advantage compared to candidates without a PhD because of their more extensive research experience. We would argue, however, that your research aptitude and

productivity will be weighed against how many research opportunities you have had. A pre-PhD candidate who has been productive without as much dedicated research time is equally impressive as a candidate who already holds a PhD.

The ACF is run slightly differently between deaneries, but there will usually be an academic training school or organisation (e.g. Oxford University Clinical Academic Graduate School [OUCAGS] in Oxford, or Clinical Academic Training Office [CATO] in Cambridge) that supports the ACFs. Support may come in the form of designation of an ACF programme supervisor, a mentorship scheme, academic forums, or structured courses. ACFs are usually given a modest academic bursary, usually somewhere in the region of £1,000 per academic year. Some programmes allow ACFs to pursue a part-time master's degree alongside the three-year ACF programme and often will provide some funding opportunities towards this degree (e.g. up to £2,000 for the Cambridge ACF and up to £4,500 for the Imperial ACF).

## 1.2.2 Application Process

ACF positions are usually offered as three-year posts (or four years for general practice) and are usually offered at the CT1/ST1, CT2/ST2, or ST3 level. The ACF may be offered to a particular grade or may be open to a range of grades.

Approximately 250–300 National Institute for Health Research (NIHR) ACF positions advertised each year in the UK,<sup>2</sup> plus others from non-NIHR funding streams. The number of posts available in each region are somewhat dependent on funding and capacity within the host institution. While in any one region or year there may be some posts dedicated to a particular specialty, on other occasions the funding for a post may be open to competition between multiple specialties (e.g. one ACF position at IMT/ST 1 level for gastroenterology, nephrology, or cardiology).

For an ACF post starting in August, the online application portal opens around October the year before, and similarly to the AFP, the application is usually opened for a few weeks. The application itself contains a series of matter-of-fact questions (e.g. personal details, qualifications, and prior employment), 'white space questions' and requires other 'supporting information'.

Unlike for the AFP, there are *no restrictions* in the number of ACF positions a candidate can apply for. Those seeking an ACF post will apply directly to a specific deanery. If shortlisted, they will then be invited to attend the ACF interview at that deanery. Applications have previously been made through the online platform (currently the Oriel platform; [www.oriel.nhs.uk](http://www.oriel.nhs.uk)) and the submission portal usually becomes available in mid-October and closes around four weeks later.

An important aspect to note is that, at least historically, under the 'supporting information' section of the ACF form, the applicant may be asked to choose whether she is applying for an:

- ACF programme only or
- ACF and clinical programme

<sup>2</sup> NIHR website: [www.nihr.ac.uk/explore-nihr/academy-programmes/integrated-academic-training.htm](http://www.nihr.ac.uk/explore-nihr/academy-programmes/integrated-academic-training.htm)

Applicants who choose the ‘ACF programme only’ should already have their NTN (i.e. applying for ACF ST1 as an ST1 having already secured an NTN at ST1 e.g. obstetrics, paediatrics, GP or run-through surgical specialties or applying for an ACF ST3 having already secured an NTN at ST3 level) or be within their core medical or surgical posts. Applicants without an NTN (i.e. those applying for ACF ST1 as a FY2, or those applying for ACF ST3 as an IMT or CST), must choose the ‘ACF and clinical programme’ option, which involves applying for the ACF position, as well as the clinical (non-academic) training pathway. Applying to the ‘ACF and clinical programme’ is important, because, if a candidate is offered an ACF job, she will need to attend ‘clinical benchmarking’ (described in Section 1.2.3), but you are allowed to attend the benchmarking only if you apply to the ‘ACF and clinical programme’. It is important to note that if a candidate who requires ‘clinical benchmarking’ but applied to the ‘ACF programme only’, should she be shortlisted for the ACF interview, she will not be eligible to attend the interview. The following are examples of situations requiring either an ‘ACF and clinical programme’ or ‘ACF programme only’ (*Note: Due to the recent introduction of the three-year IMT training in the year 2019/2020, it is not yet entirely clear if ACF positions will be offered at the IMT3 level. In prior years, ACF positions were available at both CMT1 and CMT2 level*):

- Applying for an ACF IMT1/CST1/ST1 as an FY2: You will be required to apply to the ‘ACF and clinical programme’. Since you have not yet secured an IMT1/CST1/ST1 position. If you were to apply to the ‘ACF programme only’, should you be shortlisted for the ACF interview, you will not be eligible to attend the interview (bear this in mind, as this was an actual mistake made by an ACF candidate in 2019).
- Applying for an ACF IMT2/CST2/ST2 as an IMT1: You will be required just to apply for the ‘ACF programme only’, since you are already in training.

The ACF interviews usually take place between December and January, and offers are typically issued by the end of January. For those applying for an ACF during their AFP post, interview questions will likely focus on what you are doing with your AFP project. Since the ACF interview often takes place around December to January, only a third of candidates would have completed their four-month AFP block. We would argue, however, that there is no clear advantage of having already completed the four-month academic rotation prior to the ACF interview. On the contrary, for candidates who have already completed their research rotation, the pressure is on, since you will need to defend the good work you have just finished doing! If it turns out, however, that you have not generated much output from your academic rotation, then this can reflect badly on you. Candidates who have just started, or are yet to start their AFP rotation, need to have at least an outline of what they will be working on or have at least an idea of specific skills or techniques that they would like to acquire during their research block. Planning ahead and having an idea of what you want to do will reflect well on you.

Candidates who miss out on the first round of offers may be placed on the reserve list, and subsequent offers will be given out one to two weeks later to those on the list depending on whether other candidates accept or reject their initial offers. So, do not give up even if you miss out on an offer during the initial period.

If at first you are unsuccessful, be aware that there will be a second round of ACF positions available (depending on job uptake and funding distributed from the first round) and the advertisement will go out around mid-February or later. Be sure to look out for



these jobs, as many applicants may not be aware of this second round of job advertisements, and competition may be less stiff than during the first round.

### 1.2.3 Clinical Benchmarking

Candidates who are offered an ACF position will still need to reach a threshold mark at the national selection interview for the specialty that they are applying to, to be considered ‘appointable’.

For training programmes that are already ‘run through’ (i.e. no further interview for ST3 once you get a number at ST1), the process is relatively straightforward. If you are applying for an ACF at ST1 level (i.e. you do not yet have an NTN) then you need to pass the clinical benchmark, but if you already have an NTN then you do not (your NTN will be converted to an NTN[A]).

The process is a little more complex for the IMT and Core Surgical Training (CST) training programmes. Due to the recent introduction of the three-year IMT programme, which replaces the two-year CMT programme, the ACF IMT application is slightly more confusing. In this section, we try to describe the ACF IMT application to the best of our current understanding, although we appreciate that the IMT process is new and at the time of writing this book, many academic institutions are still in the process of figuring out how to accommodate the additional IMT3 year within the curriculum. In the following examples, we use ‘ST’ for specialist training (i.e. those with a run-through position which comes with a training number in your specialty) and IMT/CST for non-run-through jobs (i.e. without training number). The following are a few scenarios that illustrate this point:

1. **Applying for an ACF ST1 from FY2 (or those without a training number, i.e. those taking a year out after FY2).** For example, let us say you are an FY2 who applies for an ACF in gastroenterology at ST1. This post will come with a run-through NTN in gastroenterology. Note that this ‘run through’ NTN[A] in gastroenterology means that no further interview is required between IMT3 and ST4. If you were successful and were offered the ACF at ST1 level, the offer is conditional on your passing of the clinical benchmarking for IMT. This means you will still need to attend the ‘national selection interview for IMT’ and will be required to achieve a threshold pass mark to be deemed appointable. If you fail to reach this threshold then you will be deemed not appointable and you will not be allowed to take up the ACF position. For example, if you are applying for an ACF in Cambridge, but also applied for the usual IMT (non-academic) position for which you ranked the *London deaneries* as your top choice, should you do well in the ACF interview and be offered a conditional offer, you still need to attend your clinical benchmarking interview, which will take place in *London (not Cambridge)*, and you are required to ‘pass’ the interview. In this situation, ‘pass’ just means that you need to reach a specific threshold pass mark for the specialty you are applying for.
2. **Applying for an ACF at ST3 or ST4 level from IMT2, IMT3 position or CST2 level.** If you are an IMT2 and are applying for an ACF at ST3 level in group 2 specialties (i.e. specialties which do not require dual training in internal medicine such as allergy, haematology, immunology, clinical genetics, etc.) and you are awarded a conditional offer for the ACF ST3, you will need to attend the ‘Clinical Benchmarking’ interview for the ST3 level (i.e. registrar level benchmarking interview) for that particular specialty because you are already in IMT training. If you are an IMT 3 and are applying for an



ACF at ST4 level in group one specialties (i.e. specialties which require dual accreditation in internal medicine, such as cardiology, gastroenterology, neurology, renal medicine, respiratory, rheumatology, acute internal medicine, endocrinology, geriatric, palliative care, clinical pharmacology) similarly, you will need to attend the ‘Clinical Benchmarking’ interviews at the ST4 level (i.e. registrar level benchmarking interview). For surgical trainees at the CST2 level applying for ACF at ST3 level, similarly, you will have to attend the ‘Clinical Benchmarking’ interview at the ST3 level (i.e. registrar level benchmarking interview).

- 3. Applying from IMT1/CST1.** If you are currently an IMT1 and you are awarded an offer for an ACF at ST2 level in nephrology, you are *not* required to attend the ‘Clinical Benchmarking’ interview for IMT, as you would have already passed the IMT interview. Note that in this circumstance you would also *not* need to attend the national selection for nephrology and can proceed straight into registrar training in nephrology following completion of IMT.
- 4. Applying as a registrar.** If you are a non-academic ST4 with an NTN in respiratory medicine and are applying for an ACF academic ST4 (yes, you can apply for an academic ST4 even if you have started an ST4 position, although some specialties may not allow this), you are not required to demonstrate clinical benchmarking a second time because you would have already passed the ST4 interview. Your NTN would turn into an NTN[A].

Essentially, clinical benchmarking just refers to the ‘national selection interview’ that all applicants, academic or not, must attend and meet the threshold of appointability before being considered appointable for their desired higher training positions.

## 1.3 Academic Clinical Lectureship

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### 1.3.1 What Is the ACL?

An Academic Clinical Lectureship (ACL), alternatively named a Clinical Lectureship (CL), is a post within the *Integrated Academic Training Pathway* that offers the candidate up to 50% protected time on research. The remaining 50% of the post is spent on clinical training, during which clinical competencies must be met. This significant reduction in clinical time has implications on the pace of clinical progression, making it an important point to consider in terms of timing of application.

Applicants for an ACL are not required to have previously completed a clinical academic position (AFP or ACF), although having completed these academic positions may be beneficial when applying. However, applicants for an ACL must have completed a higher research degree such as an MD or PhD or nearing completion with the thesis submitted. An additional requirement is that candidates must have an NTN at the time of application (i.e. already enrolled in a higher training programme), which will be converted to an NTN[A] on securing the post.

ACL posts are usually funded by the NIHR (about 100 annually for medicine and 10 for dentistry), local universities, or partner institutions, typically for a maximum of four years

or until the individual acquires their Certification of Completion of Training (CCT) (with the possibility to apply the grace period like any other higher specialty trainee).

The ACL is designed to provide the opportunity for an individual to continue her academic development alongside her clinical training and to encourage candidates to emerge as independent researchers with a strong interest in academic medicine. The expectation is that most ACLs will apply for a post-CCT research fellowship, e.g. an Intermediate Fellowship, a Clinician Scientist award (funded by NIHR, Medical Research Council [MRC], or Wellcome Trust), a personal fellowship, or other research grants on completion of her training.

ACL jobs are highly competitive and should be applied for by dedicated academics who wish to pursue an academic career. Remember that spending 50% of your higher specialty training on research necessarily means that you are unlikely to be able to develop other skills in that training programme that might influence your future career or trajectory as a clinician. An example of this in gastroenterology would include being unable to spend time doing advanced endoscopy if your research focuses on the use of stem cells in treating pancreatitis.

As part of higher specialty training, an ACL will often be expected to partake in educational activities such as medical student teaching as well as gaining leadership and management skills. Most programmes these days do not expect ACLs to do this specifically within the remit of their ACL, unless the ACL position is a position that focuses on management or leadership or education.

All ACLs must be affiliated with a university, which is recognised as their primary employer. Therefore, by definition, ACLs will require an honorary NHS contract where clinical training can be undertaken.

ACL pay scales by the university mirror the NHS pay scales for higher specialty trainees, including any on-call supplement which is typically paid by the lead employer (the university) and charged back to the NHS clinical site. The annual leave arrangements also mirror those for higher specialty trainees.

In general, ACLs will be enrolled on the Universities Superannuation [pension] Scheme (USS), unless they opt to not do this and remain paying into the NHS pension scheme – you need to anticipate this and act accordingly.

An ACL is also usually entitled to an academic bursary of about £1,000 (varies across deaneries), but applicants should enquire whether this is to support clinical or academic activity or both.

### 1.3.2 Application Process

The application process for the ACL is similar to the that for the AFP and ACF, and involves an online application which includes the white space questions (see Chapter 3). Unlike for the ACF, however, the release dates for the application varies, and depends on whether there is a vacancy that has appeared (e.g. a previous ACL has vacated the position and has become a consultant elsewhere, or a previous ACL has attained higher funding [e.g. an intermediate fellowship] and therefore vacated their ACL post). All ACL positions will be advertised both locally and nationally; therefore be sure to look out for them. For an ACL post, it is often a prerequisite that the candidate approaches the head of department before applying because most shortlisted ACL candidates are often predetermined, and the institution may already know who they want to appoint or interview.