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PART 1 – WHY IS IT IMPORTANT?

This is the first article in a three-part series on how to choose a fellowship programme for specialty training. In this section, the importance of a good fellowship and how to get started in your search for one is highlighted.

Introduction

Among all the professions, a medical specialist probably has one of the longest training journeys. Depending on the country, field and subspecialty, it can take up to ten or more years of gruelling training before one can be considered an "expert". This stretches up to 20 years or more particularly in some of the more complex surgical subspecialties, as surgical disciplines often require more time for an adequate "hands-on" experience to allow stepwise progression of surgical skills and to overcome multiple learning curves.^{1,2} This is in stark contrast to other professions and occupations in which most will become experts in their field after three to five years.^{3,4,5} In many cases, the fellowship serves as the last phase of this marathon. Much has been written about the state and evolution of the medical education and residency system but in contrast, little has been written about this crucial period of fellowship.6,7 One would expect this important "finishing school" to be well researched and written about. However, as compared to other professions and fields, there is scanty literature on the process of how one can get into a good fellowship programme.

There are several ways to achieve this and one will encounter many processes. There is a variety of factors one will need to consider, decide on and work towards in this effort of optimising their chances of success in getting into their fellowship programme of choice. The thought processes, suggestions and solutions at each phase may be helpful.

This is a perspective piece on the intricacies of securing a position in a good fellowship programme written as a three-part series. This is drawn from the collective experience of the authors, their colleagues, mentors and friends. Obtaining a choice fellowship position is as much an art as a science, and maybe also luck. Many factors, some more obvious and objective, some softer and more subtle, can all influence the outcome in one way or another. We aim to share our collective experience and the process in various steps by asking important questions and detailing the things that can be done.

Why is it important?

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Subspecialisation has become more of the norm than an exception, parallel with the decline of general

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1. Dr Lee with his Grand-Mentor in Memorial Sloan Kettering Cancer Center (MSKCC), Dr Leslie Blumgart – one of the fathers of liver surgery 2. MSKCC Fellows vs Attendings' Annual Softball Tournament in Central Park, New York City. An honoured tradition in the summers. FYI, the Fellows won

surgery.⁸ The practice of medicine has evolved tremendously; it is no longer enough to be a general specialist without a subspecialty or even a "super-subspecialty", especially in tertiary centres or academic medical institutions.^{9,10} More and more often, fellowship has become a common and basic requisite of applications for an attending or consultant position at many centres worldwide. Necessity is the mother of invention; in fact, many have suggested that the introduction and flourishment of fellowships is borne from the inadequacies of the residency system.⁸ In a large North American survey of fellowship programme directors, there is a sentiment that most of the general surgery residency graduates were not well trained enough or ready for fellowship.11

Without dismissing the importance of basic medical education and training, I would argue from a specialist's point of view that in this day and age, a fellowship is probably as important, if not more, as a residency or medical school education. It is the skills that one hones during this penultimate training phase that one will need the most when practising as a specialist.¹² Besides these skill sets, this is also when one acquires the experience and clinical maturity required to treat complex conditions or tackle procedures with narrow margins of error.^{10,13} Moreover, it is this role that many specialists will be fulfilling on a daily basis in the latter 20 to 30 years of their professional life. The fellowship is the single most definitive period to prepare oneself for that.

Despite the growing consciousness of the importance of fellowships,



glaringly little has been written about how one can get into one.¹⁴ A guick search on Google will reveal that most information on the search term "how to get into a good fellowship" is hidden in informal blogs and forums rather than in mainstream validated information databases such as PubMed or Google Scholar. The selection process for fellowship is far less organised and more complex than the established processes for medical school and residency worldwide.¹⁵ There is a complex interplay of objective and subjective factors that goes in the minds of fellowship directors and selection committees during every cycle.^{15,16,17,18} We shed light on some of these based on our experience.

How to get started?

It's never too late to think about it and plan for it, if one has not done so already. A mentor once told me: "Decide on who you want to be; you can't and won't be training forever." Decide or come to understand what your passion is and more importantly, what you are good at. Simply put, you are more likely to fall in love with something you have a talent or aptitude for than something you don't excel in. Notwithstanding generalisations, if you prefer to work with your hands or have been good with it since young, it's more likely you will like and do well in surgery compared to someone who hated carpentry classes in school and prefers mathematics or subject matters dealing with theories and solving equations. Decide on what makes sense and where your final destination is. Using Hepato-pancreatobiliary (HPB) surgery as an example: Do you want to be just a general surgeon

with an interest in HPB (ie, one who does simple gallbladder and liver surgery), a HPB generalist, a HPB surgical oncologist, a HPB/liver transplant surgeon or a HPB minimally invasive surgery (MIS) surgeon? The permutations can go on. Does your dream job include doing some research as a clinical researcher or a clinician-scientist, or running a laboratory full-on and writing grants while doing the occasional surgery? Are you good in teaching or do you like to teach? If so, what would be your preferred workplace? Is it an academic institution, a community hospital or private practice? If an academic setting is your goal, then choosing a reputable academic institution for fellowship will put you in good standing for the next job and will also provide networking opportunities for future collaborations.^{19,20} Similarly, a fellowship with "big names" or well-known hospitals will provide you with some clout and "branding" to get the private practice job. On the other hand, for those who wish to serve in the community and in non-tertiary establishments, a broadbased fellowship may serve you better in terms of the appropriate skills and experience in the long term.

Do your homework and research. Talk to experts in the field about the future of the field you wish to embark in. The last thing you want to do is to blindly, foolhardily and over-enthusiastically plunge into a sunset industry. If one insists on doing so, one should dive in with eyes open. A good start will be by talking to seniors in the field and asking for their insight and opinions of the particular subspecialty and its future. Read widely, and just as importantly, write and publish in and around the field of interest of your destined or desired specialty. A mentor once said: "If you write enough, you do not need to read." Attend, present and participate in conferences, meetings and courses - these serve well to broaden one's perspective. These are also great platforms that highlight where the cutting edge lies and allow a sharp eye to catch a glimpse of the future; take note of where these innovations or good work are being developed. These meetings also provide an opportunity to talk and listen to the thought leaders and know the industry's "who's who", so to speak. Put aside potential future personal achievements; choose a fellowship based on your own insight on your abilities, aptitude and passion, that will help you contribute the most to the field - this will be ideal.

Forums and blogs are also great resources and contain a wealth of information from people with similar interests and questions, but like everything on the internet, the accuracy of the information is only as accurate as the source. One should read it with some perspective and exercise sound judgement. Lastly, if time and finances permit, visit the programmes or institutions you have in mind at least a cycle before the application opens, as this will allow you to have a first-hand account and experience of the place, its culture and most importantly, its people. Information gained from being on the ground is golden. Besides the programme directors and attending staff, interact with the current fellows, residents and various members of the

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team, if the opportunity arises, and hear what they have to say. You will be surprised what useful information you may garner during an informal social setting, like over coffee or a couple of drinks. Regardless of whether these are good or bad bits of information – they may help you make a more informed decision. Also, if you are able to obtain the permission to do so, attending the weekly meetings (eg, mortality and morbidity conferences, and fellow teaching sessions), observing their operating theatres or sitting in for their clinic sessions can be very valuable experiences. These visits will better

provide you with the "feel" of the place and enable you to see if you would be a "good fit". Additionally, it will display your sincerity and genuine interest in the programme. We feel that these unofficial ad-hoc interactions and casual conversations may hold more weight in decision-making on both ends than a formal interview where everyone is more guarded and it is difficult to obtain a sense of the working environment.

This concludes the first part of the series. Stay tuned for the second part, in which we elaborate further on the options one needs to and should consider in deciding where to go. In other words, how does one choose? ◆

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