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Trainee Section

Additional Postgraduate Training: When to Draw the Line?

Jacinthe Leclerc, RN, MSc, PhD(c),[a] and Erin Rayner-Hartley, MD, FRCPC[b]

[a] *Faculté de Pharmacie, Université Laval, Québec City, Québec, Canada*

[b] *Division of Cardiology, University of British Columbia, Vancouver, British Columbia, Canada*

After residency or postgraduate research programs, trainees have the option of pursuing additional specialization by doing fellowship training. Subspecialty training can be attractive, but is it really a requirement to reach our personal and career goals? Even with readily available postgraduate training opportunities, where will these extra years of fellowship take us? Is it an essential stage in our career? Whether in clinical practice or research, these questions will arise at some point in time for any graduate trainee. The focus of this article is to highlight key questions regarding the decision process of pursuing additional training: what, where, when, and most importantly, why? This is by no means an exhaustive evidence-based approach but rather is based on our personal experiences to date. We are Canadian trainees who have asked ourselves these difficult questions regarding fellowship training.

Clinical Perspective

After completion of a cardiology residency program, as trainees we are faced with the option of starting practice or, alternatively, doing additional years of subspecialty training. This exciting, yet often stressful, stage in our careers requires self-reflection, goal setting, and reaching out to mentors who can shed light on the process. In this section, we suggest steps that may help trainees during this important process.

Working backward—where do I see my career and myself in 10 years?

One way to come up with a career plan is to map out what you envision your typical week/month/year to look like as a staff physician. Do you enjoy research, administrative work, education, or a combination? Free word association and brainstorming exercises often help. It is also useful to connect with mentors who have a practice and lifestyle you can envision for yourself. Another important consideration is training in a speciality with projected job availability. Networking and researching will allow trainees to avoid training in subspecialties with saturated job markets and to focus on fields with upcoming possibilities. This is often the "information gathering" stage of the decision-making process—deciding on your personal goals and learning about the reality of practice from mentors and senior trainees to whom you relate.

Community practice vs academic practice?

Doing a fellowship by no means excludes trainees from pursuing a community practice; however, in many centres, not doing a fellowship makes obtaining an academic position challenging. In fact, many community centres are now recruiting general cardiologists with advanced skills in echocardiography, heart failure, and cardiac rehabilitation, to name a few. Another consideration is whether you choose a fellowship according to the needs of your centre or city of choice or, alternatively, pursue training in the field that interests you the most, with a flexible job destination once finished. There is definitely no "one size fits all model" to approach this decision! It takes time and a considerable amount of reflection.

Where should I do my fellowship?

Depending on the subspecialty, incredible opportunities exist for fellowships across Canada, the United States, and overseas. Gathering information from mentors is an excellent step in finding the right program for you. This is another stage at which a considerable amount of research and networking is required. Senior trainees and fellows at your site can be great resources. They often can offer insight into which programs have experiences for which you are looking. Many logistics come into play, such as family commitments or the trainee's partner's availability to relocate, or both.

What is the timeline required for fellowship planning?

Regarding planning, the earlier the better! The application process is unique to the program of interest. In Canada, many postgraduate program positions are acquired by an informal application process facilitated by mentors at the trainee's home institution. In the United States, however, programs may require an application through the Electronic Residency Application Service system. Additionally, trainees considering applying to the United States and abroad will require visa applications, a process that takes time and research. Finally, sources of funding for fellowship training are variable. Some host programs may have funding available, whereas others may require applications for scholarships and grants.

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Is there a light at the end of the tunnel?

The process of applications, taking out of town electives, and matching to programs was very exciting in our early to mid-20s. However, many trainees are in their 30s and have children, mortgages, and elderly parents during this process of the fellowship decision-making. With all there is to consider, time is your friend. Some regulatory and administrative steps may need to be engaged early during graduate training. Connecting early on with mentors and reaching out to colleagues going through similar processes helps immensely. The Canadian Cardiovascular Congress is an excellent opportunity to network and get more information about fellowship opportunities. An exciting and rewarding career is right around the corner!

Research Perspective

After the successful completion of a Doctor of Philosophy (PhD) degree in health sciences, trainees are ready to enter the market as a researcher or research professional through 3 tracks: research in a clinical laboratory, industry, or academia. However, the latter generally requires additional training through completion of a postdoctoral fellowship.

Why should I do a postdoctoral fellowship?

The most common reason to do a postdoctoral fellowship is to work toward a position as a university research faculty member or a tenure-track professor.[1] However, the current job market in academia is limited. Other possible career goals include working in private research laboratories, in industry, or in public services. Again, identifying key mentors and drafting a personalized career plan is a wise way to make strategic and thoughtful choices.

Who should supervise my postdoctoral fellowship?

The choice of a supervisor is obviously important, because this will dictate the location and nature of training. The level of supervision (or independence) should be prioritized as an initial discussion with a potential supervisor, along with access to opportunities for research collaboration. As a future postdoctoral candidate, trainees should clearly express their career goals and timelines as well as personal needs for work/life balance.

What am I going to do during this fellowship?

Specific objectives, tasks, and a preliminary results schedule should be determined before starting a postdoctoral appointment. A supervisor likely has an existing idea for a postdoctoral project; however, trainees are always welcome to bring new ideas to the table along with possibilities to collaborate with other institutions. A trainee's willingness to travel, to present at conferences, and to teach are important to discuss with a potential supervisor. If you can, do not forget to discuss with the trainees at the institution at which you are looking—they will provide great insight regarding the "real life in this place."

How long will this fellowship last?

In health sciences, a Canadian postdoctoral appointment generally lasts 1-3 years.[1] A postdoctoral fellow, along with his or her supervisor, together should find the right balance between project results and teaching responsibilities. A short postdoctoral fellowship risks having insufficient time for the trainee to build new research skills, whereas a prolonged fellowship (4-5 years) may in fact benefit the supervisor more than the trainee, as discussed in the next section.

How much will I be paid?

The median salary of a postdoctoral trainee in the United States is US$43,000, with 65% of postdoctoral appointments in the life sciences.[2] In Canada, it has been reported to be between Can$34,836 and Can$58,011,[3] with a mean salary of Can$43,973 in 2013.[1] Main sources of funding for Canadian postdoctoral appointments in the life sciences are a supervisor's research grant (51.6%), national or provincial scholarships (26.8%), and private foundation scholarships (8.0%).[1] During interviews with a potential supervisor, funds for research, travel, and health benefits should be discussed. A postdoctoral fellow in health research is a highly qualified scientist whose salary is generally less than that of a research assistant. Finally, although this temporary appointment may become quite comfortable, trainees should keep their career goals in sight and gradually prepare to transition to a stable full-time position.

Conclusions

A fellowship is a temporary appointment that allows trainees to acquire additional skills that go above and beyond the core level of postgraduate studies. This journey in decision-making is exciting yet often stressful. A good starting point is to go back to the basic question, "What do I want to be when I grow up?" By reaching out to colleagues and doing the homework required, it does become clear. A decade of commitment has gotten us to this stage, and thoughtful planning will help make these last steps some of the most enjoyable years of training yet.

References

1. Canadian Association of Postdoctoral Scholars and Mitacs. The 2013 Canadian postdoc survey: painting a picture of Canadian postdoctoral scholars. 2013. Available at: https://www.mitacs.ca/sites/default/files/caps-mitacs_postdoc_report-full_oct22013-final.pdf. Accessed July 18, 2017.
2. Powell K. The future of the postdoc. Nature 2015;520:144-7.
3. Payscale. Postdoctoral research associate salary (Canada). 2017. Available at: http://www.payscale.com/research/CA/Job=Postdoctoral_Research_Associate/Salary. Accessed July 18, 2017.