Pilot Study Characterizing the Hematology-Oncology Fellow Job Search Process: Tools Used and Identification of Potential New Resources

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Abstract

While the search for post-fellowship employment is an essential part of early career development, little is known about the tools and techniques fellows use during their job search and the specific challenges they face during the process. In this pilot survey study of hematology-oncology (HO) fellows at a large academic training program, the majority of 20 respondents (43% of all fellows) reported a plan to specialize in medical oncology, and most planned to practice in an academic setting. Fellows who had started the job search process reported using several tools/techniques including online job centers and email distribution lists, word of mouth, prior connections with other institutions, and their HO fellowship program leadership, and most reported that their current institution provided help for their job search in at least one way. Job search challenges included learning about available positions, lack of mentorship on the process, lack of sufficient time for the process, and lack of preparation for negotiation. Fellows suggested additional resources that could be helpful to future job searchers including access to information about prior HO fellowship graduates, training in negotiation and interviewing, and career development mentorship. We plan to use this information to expand our own Career Development program for fellows enacting many of these suggestions, and we encourage the use of this information as pilot data for the development of larger studies across other medical and surgical specialties.

Keywords Fellowship · Job · Career

Introduction

Hematology-oncology (HO) fellows, especially those in the latter years of their training, are faced with the task of finding post-fellowship employment. This process is often referred to as the “job search” or “career search.” Finding a first post-fellowship job is an essential step in career development and future job satisfaction. However, little is known about the tools and techniques HO fellows utilize in the job search, the challenges they face during the process, and resources that

fellows do not currently have access to but may have found helpful during their job search.

We therefore undertook a survey-based study of HO fellows with two aims. Our first aim was to classify job search tools and techniques most commonly utilized by HO fellows and explore which of these tools/techniques fellows felt were most helpful. Our second aim was to identify additional tools/techniques that fellows felt would be helpful in the job search process which were not readily to available to them, in an attempt to identify interventions which may be made to improve the job search process for HO fellows in the future.

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Methods

This study was deemed Exempt by the Mayo Clinic Institutional Review Board (IRB). All current HO fellows (including categorical and advanced fellows) at the Mayo Clinic Rochester were invited by email to participate in an electronic survey available in Google Forms regarding job search tools and techniques. Survey participation was voluntary and responses were anonymous; no individual

identification or protected health information was collected. No remuneration was provided for participation.

Survey questions ([Supplement](#)) were developed by the Program Director and Associate Program Director of the Mayo Clinic Rochester HO categorical fellowship and questions were submitted to a test set of two current fellows for comment and feedback prior to distribution. The survey contained a mix of Likert-scale questions and open-ended questions and remained open for a duration of two weeks, with weekly reminder emails (total of two). The survey included questions about demographics, job search tools/techniques currently used by fellows, and their perception of which tools/techniques were most helpful, and also asked fellows to identify additional tools/techniques that would potentially have been helpful in the job search process but were not available to them.

Responses were analyzed using Google Forms and quantitative results were described using basic statistical methods (mean, percentage, median). Qualitative results were described using quotes and basic thematic analysis to identify themes most common amongst responses.

Results

Demographics

The survey invitation was extended to 46 fellows and 20 responded (43% response rate). Of those responding, 3 (15%) were in their first year of fellowship, 8 (40%) in their second year, 7 (35%) in their third year, and 2 (10%) in their fourth or later year (in our program, fellows may extend their training beyond three years with extra time for either research or an Advanced Fellowship in a subspecialty of hematology-oncology such as bone marrow transplant, coagulation medicine, and lymphoma). Ten respondents (50%) reported a plan to specialize in medical oncology, 4 (20%) planned to specialize in malignant hematology, 4 (20%) planned to practice a mix of hematology and oncology, and 2 (10%) reported that their career plans were not sure yet or depended on Visa needs. No fellows reported a plan to specialize in non-malignant hematology alone. Eleven (55%) of fellows reported planning to practice in an academic setting, 5 (25%) planned to practice in a community setting with an academic affiliation, 3 (15%) planned to enter private practice, and 1 (15%) was not yet sure.

Job Search Basics

Ten (50%) respondents reported having started a job search at the time of the survey. For those who reported having started a job search, most started late during their second year whereas some started either early second year or late third year; none

had started during first year. Eighty-five percent reported at least one constraint limiting their job search (respondents could choose more than one limitation). Limitations included 10 reporting spouse/significant other employment opportunities, 8 reporting Visa constraints, 6 reporting geographic constraints, 4 reporting family constraints separate from those related to their spouse (i.e., parents or children), and 1 reporting income constraints (need to make a certain salary level or above).

Job Search Resources and Challenges

Fellows reported using a number of tools and techniques in their job search including online job centers and society mailing lists such as the ASH Job Center and ASCO Career Connection (13 fellows), word of mouth from leadership and/or peers (10 fellows), prior connections to other institutions (5 fellows), and current HO fellowship program leadership (3 fellows). Fellows reported that online job centers and mailing lists were the most helpful resource. Seventy-five percent of fellows reported that their current institution helped in some way with their job search including: passing on information about potential jobs (11 fellows), advocating for a position at the current/home institution (4 fellows), and/or writing a letter of recommendation (4 fellows). In response to an open-ended question about challenges faced during the job search process ([Table 1](#)), fellows reported a variety of challenges including: learning about available positions, lack of mentorship regarding the job search process, sufficient time to conduct the search and interview process, lack of preparation for contract negotiation, Visa restrictions, and the current COVID-19 pandemic.

Potential Future Job Search Resources

Fellows were asked (via an open-ended question) to describe what tools and techniques they thought would have been helpful but that they did not have access to. The most common recommendation was access to a list of prior HO fellowship graduates from the institution with information about their current jobs and contact information. Fellows also recommended the addition of contract negotiation training and mock interviews as well as the opportunity to meet with lawyers about Visa pathways. Fellows discussed that direct pairing with career development mentors to discuss the specifics of the job search process would also be helpful.

Discussion

In this survey study of current HO fellows, most planned to specialize in medical oncology, and over half planned to practice in an academic setting. Of those who had started the job

Table 1 Themes regarding challenges faced during the job search

Theme	Quotes
Learning about available positions	<p>“Getting to know that a position is available”</p> <p>“Noncommittal/nonspecific [information] where employment is sought, uncertainty about what roles will really look like”</p> <p>“Finding real ‘open’ positions”</p> <p>“Knowing what options are available...”</p> <p>“Community with academic option jobs aren’t advertised as well and are harder to make connections compared to academic positions”</p>
Mentorship	<p>“Deficient of mentorship on career path leading to blurred vision on long-term career plans”</p> <p>“I have not received much advice regarding when or how to go about searching for a job”</p>
Time for search/interview process	<p>“The search required arranging numerous phone calls...time investment required many nights and weekends”</p>
Preparation for contract negotiation and/or interviews	<p>“I anticipate I will be underprepared to negotiate contracts and understand different models of payment”</p> <p>“Timing of negotiation uncertainty”</p> <p>“Do not know how to prepare for a job interview”</p>
Visa restrictions	<p>“Negotiating visa situation to find an ideal job is challenging”</p> <p>“Trying to find a place that sponsors waiver position for J1 visa”</p>

search process, most started late during their second year. Fellows reported a variety of constraints limiting the process including opportunities for spouse/significant other, Visa issues, and geographic constraints. Fellows used several tools/techniques including online job centers, word of mouth, prior connections, and their HO fellowship program leadership, and most reported that their current institution provided help in at least one way. Job search challenges fellows reported included learning about available positions, lack of mentorship and sufficient time, and lack of preparation for negotiation. Fellows suggested additional resources that could be helpful to future job searchers included access to information about prior HO fellowship graduates, training in negotiation and interviewing, and career development mentorship.

Fellows’ reported intent to practice medical oncology or a mix of hematology and medical oncology rather than hematology (either malignant or non-malignant) as a primary focus, as well as fellows’ intent to practice in academic sites, is similar to that reported in other studies [1–3]. Given the lack of prior studies in the literature specifically regarding the job search process for graduating HO trainees, it is somewhat difficult to compare these results to other studies within the specialty itself. Our findings are generally in accordance with the literature in non-HO fields. Regarding challenges faced during the job search, a survey of graduating pediatric urology fellows similarly found that issues regarding identification of available positions and contract negotiation were commonly cited during the job search process [4]. In pathology, international medical school graduates reported greater difficulty in finding and accepting positions, similar to the Visa issues

faced by fellows in our study [5]. Regarding new tools/techniques and recommendations for improvement, a study of critical care fellows found that less than half of trainees received formal guidance from mentors or training programs regarding post-fellowship employment, but that the vast majority felt it would be important to have formal training programs in the job search and interview process [6]. A survey of recent endocrine surgery fellow graduates noted that fellows cited increased mentor involvement with the job search process and training in job search strategies as areas for fellowship program improvement [7]. One difference between our study and a study of radiation oncology trainees was that while a minority of radiation oncology fellows found jobs through the American Society for Radiation Oncology Career Center [8], our fellows reported that their most-utilized resource was society-run online job centers such as the American Society of Hematology Job Center [9] and American Society of Clinical Oncology Career Center [10].

Although limited by the small number of respondents and the resulting potential for bias on the part of those who responded, we consider that the unique nature of this study is a major strength. The response rate of 43%, while not ideal, is similar to or higher than that of other survey-based studies published in the education and career development literature [2, 11]. We also acknowledge that this survey was conducted with a small number of fellows at an academically focused program, and that the high percentage of graduates who opt to pursue academic careers may limit the broad generalizability to all HO fellowship programs, particularly community-based programs. However, we do feel these results are generalizable

in the context of other top-tier academic training programs across the USA and we view this as an important pilot study for further exploration of the job search process amongst HO trainees. We advocate for larger studies both within HO (with expansion to include both academic as well as community-based programs) and studies in other specialties as a way to expand knowledge, compare the process across specialties, and develop innovative ways to assist fellows with the job search process. These studies could be conducted using in-person interviews and a grounded theory approach.

As leaders invested in our fellows and their career development and future success, we plan to use the results of this pilot study to make changes within our own HO fellowship program. We will develop a database of recent fellowship graduates containing information on their current position and contact information, and hope to invite several recent graduates for a panel discussion on their own experiences with the job search process and suggestions they have for current fellows. We also plan to develop more formalized sessions on contract negotiation and Visa assistance as part of our ongoing Career Development curriculum. We also see a role for large specialty societies such as the American Society of Hematology and American Society of Clinical Oncology to provide additional resources and training opportunities for fellows undergoing the job search process. Overall, this study highlighted for us several ways that we could improve our current guidance to fellows and we hope that other HO fellowship programs and professional societies also find this information helpful in informing their career development programs in the future.

Conclusion

The job search process is an essential part of HO fellow career development. HO fellows report using a variety of tools and techniques to find post-fellowship employment and report a variety of challenges during the job search process. Fellows had several suggestions for new tools/techniques that should be explored by training programs in an effort to improve the job search process for future HO fellows.

Supplementary Information The online version contains supplementary material available at <https://doi.org/10.1007/s13187-021-01967-7>.

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Data Availability Data available upon request.

Code Availability Not applicable (no coding used for this study).

Declarations

Ethics Approval This study was granted Exempt status by the Mayo Clinic IRB.

Consent to Participate Not applicable (waived given Exempt status).

Consent for Publication Not applicable (waived given Exempt status).

Conflict of Interest The authors declare no conflicts of interest.

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