Global Health Research in Narrative: A Qualitative Look at the FICRS-F Experience

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Abstract. For American professional and graduate health sciences trainees, a mentored fellowship in a low- or middle-income country (LMIC) can be a transformative experience of personal growth and scientific discovery. We invited 86 American trainees in the Fogarty International Clinical Research Scholars and Fellows Program and Fulbright–Fogarty Fellowship 2011–2012 cohorts to contribute personal essays about formative experiences from their fellowships. Nine trainees contributed essays that were analyzed using an inductive approach. The most frequently addressed themes were the strong continuity of research and infrastructure at Fogarty fellowship sites, the time-limited nature of this international fellowship experience, and the ways in which this fellowship period was important for shaping future career planning. Trainees also addressed interaction with host communities vis-à-vis engagement in project implementation. These qualitative essays have contributed insights on how a 1-year mentored LMIC-based research training experience can influence professional development, complementing conventional evaluations. Full text of the essays is available at http://fogartyscholars.org/.

INTRODUCTION

Since 2003, the Fogarty International Center (FIC) of the US National Institutes of Health (NIH) has supported international clinical research training for doctoral-level health science students and post-doctoral fellows.¹ Most participants are medical students, but the group also has participants from other fields, including biology, epidemiology, public health, and anthropology.

International training opportunities for health science students have existed for over half a century.² In that time, medical educators have posited that international clinical rotations and research experiences benefit trainees by deepening understanding of the complex social, cultural, and economic factors that shape poor physical and mental health among underserved populations in low- and middle-income countries (LMICs) as well as the United States.³ ⁴ Although data to support this assertion are limited, medical students who completed a rotation in an LMIC have reported increased cost-consciousness, cultural competency, and public health awareness.⁵ Additionally, the data indicate that such experiences can enhance both clinical skills (when the trainee is a clinician and has worked in a clinical setting) and intention to work with underserved populations in primary care specialties in the trainees’ home countries or LMICs.⁶ ⁷ ⁸

In these ways, experiencing the global aspects of clinical research and care enhances scientific training and better prepares future trainees for the essential and complex task of improving our own healthcare systems.⁹ Here, we attempt to enrich the literature around the value of international research training opportunities by reporting themes identified as important by one cohort of such trainees.

METHODS

In the final full year of the Fogarty International Clinical Research Scholars and Fellows Program (FICRS-F),¹⁰ two medical student–scholars (one FICRS-F Scholar [A.C.] and one recipient of the linked Fulbright–Fogarty Fellowship in Public Health [B.B.]) undertook a qualitative study to assess the impact of the program on participants’ personal and professional growth, harvesting self-reported experiential insights of scholars (usually professional or doctoral students) and fellows (post-doctoral fellows).

This collaborative initiative was born out of the project coordinators’ desire to understand the experiences of other fellows in similar positions around the world and connect with and learn from other members of their cohort. Our goal with this publication is to provide a window into the experience to students and scholars who are thinking about undertaking international research training fellowships and explore the themes that they choose to discuss when given a broad opportunity to reflect on their experiences.

Furthermore, this peer-led project was not managed by either the FICRS-F Support Center at the Vanderbilt Institute for Global Health or the NIH FIC.

Data collection. In the spring of the 2011–2012 research year, the following writing prompt was constructed by the two project coordinators and distributed to the current class of American scholars and fellows. Contributors were encouraged to select one or more of these perspectives to focus on in their essays. Essays were all written retrospectively, regardless of focus.

(1) Pre-departure perspective. What specific interests and aptitudes do you have that make you passionate about addressing global health problems? How did you come to know that you wanted significant international health research experience? What did you expect to learn (about yourself or a specific area of interest)?

(2) Mid-fellowship insights. What are some mistakes that you have made during your fellowship? How might you have

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avoided them, or why were they unavoidable? How did these missteps hamper, complicate, or improve your fellowship experience? What are your practical and impractical suggestions for prospective global health trainees?

(3) Lasting impact. How have your experiences shaped what you are hoping to do after your fellowship period? What skills have you learned/are you learning that will help you in future endeavors? Would you do it again if the opportunity presented itself?

Importantly, these essays should be distinctly and intensely personal, replacing broad observations with specific insights and illustrative stories.

Essays had a suggested limit of 750–1,000 words. All essays were edited lightly for format, style, and clarity of message before being coded thematically. Each project coordinator independently analyzed the essays for major themes, and using an inductive, iterative approach in keeping with common qualitative analysis methods and increasing importance in the biomedical evidence base, our analysis was shaped by themes as they emerged over several readings of the essays. Discrepancies in understanding of essays were resolved with discussion between coders. Final themes were agreed on by both coders.

This process helped us determine what aspects of the international clinical research experience were emphasized by many or all submissions or unique to specific individuals. A single theme was deemed important enough to report if both coders agreed that it represented a major idea emphasized by a single essayist. Themes emphasized in more than one essay were thought to be more pervasively important to the cohort. The goal in coding was to comprehensively identify themes thought by contributors to be important enough to include in an essay of this length, with a focus on both variety and diversity of perspective as well as frequency of thematic recurrence.

Because the prompt was designed to elicit a broad and creative range of responses, personal interpretation of the prompt by contributors was desired, and therefore, pre-testing of the prompt was not deemed necessary.

**Ethics.** Essayist permission was sought and received to see their essays analyzed and reproduced in the public domain.

**RESULTS**

Nine individuals in the FICRS-F submitted essays to the project (Table 1). Full text of the essays is available at http://fogartyscholars.org/. Individual themes addressed by the contributors are summarized in Table 2. All contributors addressed more than one theme, and all themes related either directly or indirectly to the writer’s interaction with the host community and personal and professional growth as a result thereof. The greatest number of contributors addressing any one theme was four.

Four essayists reflected on living in the fellowship country for a limited time during the period of their research fellowship. This theme was often addressed regarding the pressure to achieve one’s research goals within these limits and the difficulties encountered in trying to justify or explain term-limited projects to people from the host country. Representative quotations are listed below.

_I live in a world of countdowns. As a perpetual student, I’ve ticked away the years from high school to college to medical school. Now, during my time in Kampala, Uganda, I find that expatriates nearly all carry an invisible alarm clock, set to the day they are leaving this place. I started with 10 months on the clock, then one month, and now only days until the hills of Kampala will roll into memory._ –MD candidate, Uganda

_As I look at the calendar, I catch myself doing the thing that many a mzungu [Kiswahili word for foreigners] … does on occasion: count my months spent here as an expatriate._ –PhD post-doctoral fellow, Zambia

_I had come with expectations that I thought were realistic for a year … However, as I began to look around, it seemed that everything occurred too slowly for my liking—the movement of lines at the grocery store, the speed of the traffic, the bandwidth of the internet and so much more._ –MD candidate, Malawi

_The message is, ‘Go away, and let us help our own country, in our own way. We, who will be here next year and until we die … Your good intentions don’t matter here. You don’t understand, and by your own admission, you aren’t even staying long enough to try.’_ –MD candidate, Tanzania

**Table 1**

<table>
<thead>
<tr>
<th>Country of training</th>
<th>Trainee age (years)/sex</th>
<th>Stage of training</th>
<th>Academic focus</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bolivia</td>
<td>28, female</td>
<td>Post-doctoral PhD and current MD candidate</td>
<td>Medicine and microbiology</td>
</tr>
<tr>
<td>India</td>
<td>29, female</td>
<td>Post-doctoral PhD</td>
<td>Anthropology</td>
</tr>
<tr>
<td>Malawi</td>
<td>27, male</td>
<td>MD candidate</td>
<td>Medicine</td>
</tr>
<tr>
<td>South Africa</td>
<td>28, male</td>
<td>MD candidate</td>
<td>Medicine</td>
</tr>
<tr>
<td>Tanzania</td>
<td>29, female</td>
<td>MD candidate</td>
<td>Medicine</td>
</tr>
<tr>
<td>Tanzania</td>
<td>33, female</td>
<td>Post-doctoral MD</td>
<td>Medicine</td>
</tr>
<tr>
<td>Uganda</td>
<td>26, male</td>
<td>MD candidate</td>
<td>Medicine</td>
</tr>
<tr>
<td>Zambia</td>
<td>28, male</td>
<td>MD candidate</td>
<td>Medicine</td>
</tr>
<tr>
<td>Zambia</td>
<td>28, female</td>
<td>Post-doctoral PhD</td>
<td>Immunology</td>
</tr>
</tbody>
</table>

**Table 2**

<table>
<thead>
<tr>
<th>Theme</th>
<th>Contributors addressing the theme</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fellowship experiences shaped skills/future plans</td>
<td>5</td>
</tr>
<tr>
<td>Limited time spent in the fellowship country</td>
<td>4</td>
</tr>
<tr>
<td>Continuity of research and research infrastructure</td>
<td>3</td>
</tr>
<tr>
<td>Community interaction during project implementation</td>
<td>2</td>
</tr>
<tr>
<td>Cultural relativism</td>
<td>2</td>
</tr>
<tr>
<td>Suffering and empathy</td>
<td>1</td>
</tr>
<tr>
<td>Poverty and healthcare</td>
<td>1</td>
</tr>
<tr>
<td>Research ethics</td>
<td>1</td>
</tr>
</tbody>
</table>
Three contributors focused on continuity of research infrastructure at their Fogarty fellowship sites. These fellows describe standing on the shoulders of previous researchers and/or setting the groundwork for future progress at their international sites. The essayists clearly identified themselves as contributors to a greater body of work and reflected on the importance of that position as research trainees. Quotations representative of this theme are listed below.

I have found that it is important to understand that our work is built on the drive and passion of those who came before us. At the same time, we should appreciate that our contribution is not just the results we produce. Rather, it is evident in our relationships with those we serve, and in the foundation we build for the next generation of researchers. There is no countdown, only a continuum to which each of us contributes. —MD candidate, Uganda

There is a tremendous energy surrounding the [university] HIV/AIDS testing program, and after the successes of our pilot project, we have been granted funding by the university to continue to provide our services at the current campus, and perhaps extending these programmatic gains to other campuses of the same university in coming months. —MD candidate, South Africa

My most fulfilling moment this year occurred when I transitioned out of the Bench Supervisor role to allow for a Zambian Research Associate to step in. —PhD post-doctoral fellow, Zambia

Five contributors reflected specifically on how the experience of an international fellowship shaped their future career plans, problem-solving skills, and clinical practice.

Doctors here truly practice the ‘art’ of medicine that the vast majority of first-world physicians have forgotten. They know how to diagnose tuberculosis without an x-ray, and bring a patient back to life without a defibrillator. As more than one Bolivian physician has told me, ‘We perform miracles every day with the few materials we have available.’ —PhD post-doctoral fellow and MD candidate, Bolivia

Watching these scenes influences the way I identify and solve problems in a local context in my work. —MD candidate, Zambia

As women and men of privilege—with doctoral training in social science and medicine, and fellowships that bring us around the world to learn and grow—we must consider the importance of how we deal with inequalities, based on gender and class, within global health research. Indeed, such inequalities—between men and women, the rich and poor, and even high-income and low-income countries—are at the center of our research, and for some the drive behind their work. We must recognize that... we are cultural ambassadors who can make a difference not only in what we write, but also in our everyday actions that can transform the ways people understand gender, power, and equality in the context of global health. —PhD post-doctoral fellow, India

In retrospect, it’s fascinating to trace the evolution of the concept of pang’onopang’ono [or ‘slowly, slowly’ in Chichewa] within my mind from an initial annoyance to a powerful philosophy that reminds me to slow down, live within the moment and give attention to those around me, as they deserve. Now that I’ve returned home to the United States it’s rare that I wait long for anything. However, when I do, I remember how Malawi allowed me to regain appreciation for that time and reminded me of why I sought a career as physician scientist in the first place. —MD candidate, Malawi

My perspective has changed because I am no longer satisfied with having made the best scientific decision according to the most recent evidence. I instead find solace in a day when no mothers or babies die, despite the evidence. I have started to say ‘at least no one died today.’ And I am saddest, but perhaps also proudest, to say that my fear has dissipated and my confidence has increased. This because the compromise is ever-present, the options are suboptimal and the outcomes unpredictable. Therefore, I cannot live in constant fear of the unknown. And my confidence is in God, knowing that I do my best with the resources available and the resilience of people who have lived with far more suffering that I will ever know. —MD post-doctoral fellow, Tanzania

Two essayists looked more outwardly, focusing on how their projects interfaced with the communities in which they were living during the fellowship period. Their research experiences caused them to reflect on community engagement as an element of successful project design, which is shown by the following quotations.

Witnessing these market scenes, I have come to view them as metaphors for the best and the worst aspects of public health research... In the organized chaos of research, understanding the demands of participants and potential beneficiaries makes all the difference between simply using what’s available and adapting the system to respond to constantly changing interests. —MD candidate, Zambia

I see [my research] as an updated—and community-facing—version of the ‘bench-to-bedside’ translational science model. There are many steps and potential modifications required to bring a basic science finding from the laboratory into the community at scale; even when an intervention is scientifically valid, if implementation of this strategy is unpopular, unfeasible, or unacceptable to the community, it will likely fail... What I find most appealing about Implementation Science, and one of the reasons I am pursuing work in this field, is the requirement for explicitly acknowledging and prioritizing the needs of a particular community before moving forward. —MD candidate, South Africa

Two other essayists specifically addressed cultural differences as an important area of tension during their research year. These essays specifically wrestled with the problems
of attempting to work in a society where certain values, important to the trainee, have not been fully adopted by the host country’s culture.

[The senior Indian Doctor] first looked to my male colleagues and shook their hands. They spoke graciously and showered him with thanks for meeting with them. He glanced at me and pivoted to the other side of the circle, where our male research assistants sat. He shook their hands. Then, he turned to make his way to his desk. I cleared my throat, smiled, looked him right in the eye, and extended my hand. He reluctantly shook it, then extended his hand to my female research assistant standing next to me. –PhD post-doctoral fellow, India

The realities of working closely with peers—with the same education level and age, but different gender and culture—brought to light some troubling characteristics of working cross-culturally in societies where the feminist movement did not institute a path of relative equality for women. –PhD post-doctoral fellow, India

At the beginning of my time in Lilongwe, everything seemed too slow for me: the movement of lines at the grocery store, the speed of traffic on both the roads and the Internet. People were late for meetings and late for work. It was like nothing I had experienced back in the United States. I found myself wondering if the quantification and precise measurement of time was simply a Western concept that we had forced upon other cultures, with varying success, through the physical and structural violence of the prior colonial era. –MD candidate, Malawi

In addition to greater themes addressed by more than one essayist, several individuals reflected on unique ideas not discussed by others. These ideas still emphasized the greater overarching pattern of observation of the host community and the researcher’s interaction with it. They are listed below.

1. Observations of suffering in the host community and reflection on the researcher’s empathetic response to it.

   I never got a chance to ask the mother if she was happy just to have delivered a live baby who was destined to die. Would she have been happier if the baby had never been born alive? Is the grief any different? Does her suffering have a different quality? If I had had the chance to ask, would I really have asked such a question? –MD post-doctoral fellow, Tanzania

2. The effects of poverty on the quality of healthcare.

   Like most health care facilities in Bolivia, this hospital survives day to day on the meager funds that the government can provide it, and it is furnished with inadequate medical equipment . . . Doctors working in this hospital find themselves writing out lists of only the barest treatment essentials that the patient and/or his family must scramble to purchase. –PhD post-doctoral fellow and MD candidate, Bolivia

3. Observations about the ethics of research conducted by foreigners in a resource-limited setting.

[Development work can be a gamble. Over many years, the failed gambles have instilled fear and skepticism in many when it comes to any kind of intervention being conducted by foreigners in a low-resource setting . . . Testing our theories is, after all, the only way to know what the chances are that our gambles will pay off in the end, but . . . sometimes, despite excellent monitoring and informed consent [it] can be harmful. In this way, research can be scary, and engender mistrust. –MD candidate, Tanzania]

DISCUSSION

We found the perspectives and themes of the American graduate student health science trainees overseas to be diverse, but there were important recurring themes. All study participants revealed a rich learning and training experience in the varied international settings, consistent with prior examinations of global health training experiences. Essays addressing similar themes often approached these subjects differently, reflecting their local context and the personal observations of the author.

The most frequently shared themes were the strong continuity of research and infrastructure at Fogarty fellowship sites, the time-limited nature of this international fellowship experience (perceived by multiple contributors as a countdown), and the ways in which this fellowship period was important for shaping future career planning. We think that these themes are instructive regarding the importance of this 1-year experience (often just 10 months overseas) for participants and reflected in the significant rate of return to the program; 17 scholars (students) in the FICRS-F came back as FICRS-F fellows in later years for additional training in international clinical research, and an additional 40 scholars (13% of all program participants) extended their fellowships for 1 or more additional years. It has also been possible for individuals in FICRS-F to receive funding to return to their research sites later to continue projects or present findings at national and international conferences.

Although vivid descriptions of and/or commentaries on the host site suffused all the essays, cultural relativism and cultural competency were only addressed directly by two authors, one of whom was also the only contributor whose prior degree (PhD in anthropology) was in a field outside of medicine or biomedical science. This trainee, perhaps because of her unique training compared with the rest of the cohort, gleaned different lessons and perspectives than most of the medical and biological scientists. We believe that this highlights the potential benefits of cross-disciplinary dialogue between social scientists and biomedical scientists.

We also note that mentorships or relationships with research mentors were not a prominent theme addressed by any of the contributors. It was mentioned in a few essays but only as an aside. Because mentorship is a well-cultivated aspect of the FICRS-F and the Fulbright–Fogarty Program, its absence in the writings of the contributors was remarkable to us. We speculate that this absence may be reflective of the focus of the writing prompt or taking for granted the mentorship relationships that were inherent in their scientific research. It may be that contributors favored descriptions of other more unique aspects of their international clinical
research experiences or that potential political implications of directly addressing the mentorship relationship in a public forum kept contributors from writing about it.

In general, we acknowledge that, because essayists were aware that one goal of the project was publication of essays in the public domain, it may have skewed the issues that they chose to address and the language that they chose, particularly in discussing mistakes or personal growth experiences. This may have also contributed to the small number of submissions (10% of the cohort). Other potential reasons for the low number of submissions may have been the time involved in writing and revising a 750- to 1,000-word piece, a perceived lack of relevance of the project to the participants’ research projects, a lack of preference for the style (narrative or reflective) solicited, and the time of year in which they were solicited, when many scholars and fellows may have been pressed for time as their fellowship years began to draw to a close.

Our study has several limitations. This qualitative assessment was a creative approach to program evaluation and trainee reflection on the experience. Our methods were not as rigorous as would be expected in a formal qualitative research study (e.g., small sample size and no transcription); however, they provide insight into an understudied area that can have great implications for global public health research, programs, policy, and leadership in the future. Additionally, our small sample size and limited scope of evaluation do not allow for the findings to be generalized to other programs, other years of training, or this cohort’s fellows who did not provide essays. Nevertheless, we believe that this exploratory study of trainee experiences provides insight into what important ways this fellowship can benefit American students in the health sciences and social sciences. It would also be beneficial in a future study to review experiences of scholars who participated in this study as foreign scholars who returned to their own country to work in concert with the US scholars.

Although the new Fulbright–Fogarty Fellowship continues unchanged, the FICRS-F has been ended in favor of the new Fogarty Global Health Program for Fellows and Scholars. The principal differences in the new program compared with the FICRS-F are as follows: five consortia of four US institutions each in lieu of a centralized Support Center; fewer US institutions (20) engaged compared with the prior program (72), although the current number of 20 will grow with time as candidates are selected from outside the consortia; a 20% cap on the proportion of foreign nationals trained as opposed to the 48% proportion in the FICRS-F; and a 20% cap on support of graduate and professional students rather than clinical or post-doctoral fellows (graduate students were the preponderance of FICRS-F trainees). The principal modification of the new program is introducing a continuum of training, such that prospective fellows can plan and even begin the research well before and after the year abroad itself, because the institutions are pre-selected for receipt of support and know that positions will be available in the future. This transformation aligns with our qualitative finding that scholars and fellows found the 1-year timeframe difficult to reconcile with a desire to make a significant and lasting impact on the host site. The disadvantages of the new program are the difficulty faced by trainees in universities that do not belong to one of five consortia securing overseas research positions, the paucity of funds for students, and the shift in emphasis from parity of LMIC trainees to US trainees.

In light of the interesting and valuable insights of our contributors to this small-scale project, we would recommend that periodic personal reflection be integrated into the new Fogarty Global Health Fellows Program and that these reflections be studied with rigorous qualitative methods to further explore the personal and professional value of these experiences to the scholars and fellows. Furthermore, the medical education literature supports the value of personal reflection as a tool for professional development as well—it is posited to improve self-awareness, efficiency, creativity, and overall learning. We believe that the FIC, the Fulbright Program, and similar efforts (e.g., the Doris Duke International Clinical Research Fellowship) provide invaluable experiential learning for US graduate-level health science students and post-doctoral fellows who wish to engage in global health research. Given the rapid growth of interest by trainees and strategic investment by training organizations in this area, the continued support and expansion of such programs are needed to train a new generation of American leaders in global health research and prime future health science trainees for a more global understanding of increasingly dynamic and interconnected health systems.
REFERENCES


