Visiting scholarships in cardio-thoracic surgery: a valuable experience for fostering collaboration

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Abstract: Visiting scholarships to other institutions have a rich history in medicine and are an exciting opportunity to exchange ideas, learn new clinical techniques and form collaborative relationships for research advancements. Such experiences are also important in fostering a well-rounded surgical education. In this article we reflect on the valuable nature of international collaboration and provide a few guidelines to optimize the experience.

Keywords: Global health; visiting scholarships; observership; international collaboration; exchange scholar

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Introduction

At the 25th European Conference on General Thoracic Surgery, the award for best performance by a trainee member in the postgraduate course Master's Cup competition was a unique opportunity for an international observership at Guangzhou Hospital in China. As a preamble to the visit, this perspective piece will focus on the rising importance of international collaboration in surgery in order to improve clinical outcomes, progress in research and provide well rounded surgical training.

International travelling scholarships in surgery is not a recent concept. As early as the 19th century North American surgeons were participating in overseas observerships which included the legendary Dr. William Halstad (in Germany) (1). Such early collaborations have evolved into formalized exchange fellowships by various surgical societies in the modern era such as the American College of Surgeons. In thoracic surgery, we have the example set by Professor Griff Pearson of the University of Toronto. At the beginning of his illustrious career, he was awarded the McLaughlin Traveling Fellowship where he visited Sir Ronald Belsey (Frenchay Hospital in Bristol, UK), Eric Carlens (Karolinska Institute in Stockholm, Sweden) and Viking Bjork (Uppsala, Sweden) (2). It

was during this visit that he was introduced to cervical mediastinoscopy (3). He mastered this procedure and brought it back to North America where it became a gold standard in lung cancer staging.

Impact on clinical research

International observerships often culminate into collegial collaboration which is crucial to the production of clinical research. The American College of Surgeons (ACS) reported in a 2003 survey of exchange scholars that 35% of respondents had publications resulting from their traveling scholarship. But international collaboration extends beyond publications, it needs to expand to clinical registries and trials. Clinical trials in surgery are often plagued by low number of study subjects leading to difficulty in achieving power and poor quality. This has led to the recognition that international collaboration can lead to higher recruitment volume, better funding and better generalizability of results. Soreide and colleagues provide a detailed guide to improve the quality of clinical research through strong international partnership (4). When surgeons interact at this level, the gain brought about by the understanding of each other's healthcare system realities can better contextualize their clinical outcomes and research findings.

Impact on clinical outcomes

It naturally follows that better clinical research translates into better clinical outcomes. International exchange results in exposure to novel techniques and different health care systems. Something as simple as obtaining consensus on definitions of acute pancreatitis can impact diagnosis, management and prognosis greatly as demonstrated by a project that brought together 1,000 physicians from 77 countries to form precise new definitions for acute pancreatitis (5). By involving diverse stakeholders, not only does this promote larger study numbers and better clinical generalizability, but it also ensures wide adoption of the terminology in this case. Such large-scale collaborations begin at the individual surgeon level when surgeons expand their horizons through encounters with colleagues aboard.

Impact on surgical education

"Global surgery" programs focus on developing surgical programs and providing health care in developing nations. Global surgery has become a prominent component of surgical education in residency programs, being offered as extra training (global surgery fellowships) or integrated in the clinical portion of training (6). Recently, traveling fellowships for residents is also being recognized as an important component in training the next generation of the well-rounded surgeon to develop leadership skills, promote future research collaboration and foster collegiality. In addition to the ESTS-AME award in this case, the thoracic surgery residents association (TSRA) and the Resident and Associate Society-American College of Surgeons (RAS-ACS) are few examples that offer visiting scholarships on a competitive basis.

In commemoration of one of their earlier thoracic surgery luminaries, OT Clagett, the Mayo Clinic cardiothoracic training program integrates a 1-week visiting fellowship to any leading institution in the world in the chief (final) resident year. Visiting scholarships involve significant resources including coordination, finding a welcoming host institution, practical administrative aspects such as visa and funding. However, their lasting impact on the senior level trainee and the host institution is considerable and a valuable experience in the final years of training for residency programs.

Optimizing the visiting experience

Such experiences are often brief due to obvious clinical constraints therefore detailed planning beforehand on the part of the scholar and host will ensure the most out of the visit.

Firstly, the scholar needs to reflect on his/her goals for the visit; similarly, the host institution/leader needs to provide its unique highlights. Goals would span three general areas that include clinical aspects, research and possibly patient flow/efficiency. Clinical aspects would span learning new and unique technical skills (would requiring scheduling cases well in advance). Research could include outcomes presentation and discussion, participation in host's research meeting and finding aspects for future collaboration. Increasingly the surgeon is emerging as a leader in improving effectiveness and increasing efficiency in patient care in and out of the operating room. This provides another aspect for ideas exchange and can range from discussion of quality maximizing operating room mechanics to enhanced recovery after surgery (ERAS) protocols.

The author (M Sudarshan) will be completing a visiting fellowship at the First Affiliated Hospital of Guangzhou Medical University in China with several objectives for this unique opportunity. Her interests for clinical practice include minimally invasive complex lung resections and her training at the Mayo Clinic has provided experience in video-assisted thoracoscopic surgery (VATS) and robotic approaches to lobectomies, chest wall resections and airway surgery. Given the significant volume of lung cases performed at Guangzhou hospital, her goals will be to learn unique aspects of minimally invasive lung surgery (MIS) at the host institution, discussion of interesting and challenging cases, and outcomes. High volumes require efficiency and effective post-operative management which is of particular interest to the author and will be another goal for observation and dialogue. During the visit, on request of the host institution, the author will also be presenting grand rounds on the evolving North American training paradigm in cardiothoracic surgery drawing on her experience as education chair for the TSRA and interest in improving resident education. Finally, the author also aims to develop initiatives for multi-institutional research collaboration.

The overall goal of this visiting scholarship would be an exciting exchange of ideas in thoracic surgery, learning about unique management models at the First Affiliated Hospital of Guangzhou Medical University, research collaboration, discovering the local cultures and forming lasting transcontinental collegiality.

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Footnote

Conflicts of Interest: The authors have no conflicts of interest to declare.

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