

PLANNING AND PREPARATION

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Much of this chapter is taken from Davis C, Krogh C, Pust R, *Preparing for International Health Electives; A Mini-Guide to Resources*, International Health Medical Education Consortium (IHMEC).

There are a number of basic questions asked by almost everyone interested in participating in an international health elective. This chapter provides a Question and Answer format to the process of developing such electives. Included at the end of this chapter is a suggested timeline for students, residents, and their advisors as they proceed through the process.

Q. WHAT is an international health elective?

International - While there are many definitions, most IHMEC activities - and this Guide - focus on clinical and community health in developing nations. Many "International Health" lessons can also be learned and applied in our own cross-cultural and medically underserved settings.

Elective - a student's or resident's training abroad is almost never part of the requirements of a conventional medical curriculum.

Q. WHY spend elective time doing an international health elective?

International health often provides experience, perspective and insight which, like any profound experience of learning or growth, are primarily *within* one's self and

not easily measured. Nevertheless, there are several compelling reasons to consider an international health elective.

The range of illnesses and services in North America are fairly atypical of the world as a whole. An international elective can provide broader perspectives on health, illness, and health care.

Clinical and community health skills may be sharpened through applying them to unfamiliar problems and settings.

New knowledge may be gained and disseminated through focused research.

A student or resident may find upon returning home that familiar things are now also seen from a fresh and more complete perspective.

The host community may benefit from the student's or resident's elective (although this is not always the case).

Q. WHAT are the most common types of international health electives?

Clinical electives offer exposure to an expanded range of clinical conditions, usual manifestations of common illnesses, new or unfamiliar or low-tech diagnostic and treatment options, and the provision of care in the context of society and culture.

Community health electives usually involve participation in one or more of five "classic" steps: (1) identification of a community health need; (2) determination of what resources already exist to meet the need; (3) by subtraction of the above, determination of the *unmet need*; (4) meeting some or all of the unmet need, and (5) monitoring outcomes. Generally such projects are beyond the scope of a short elective, but a student or resident may gain much by participating in ongoing projects.

Research projects typically include one or more of the following steps: (1) defining a

population; (2) defining variables to be studied and how they may be measured; (3) looking at distributions of those variables in that population (epidemiology); (4) developing hypotheses as to why those patterns exist, and (5) testing hypotheses with specific studies. In many settings the student or resident may find that even the first step in this scheme - defining and characterizing the population - has never been done.

Q. GIVE ME AN EXAMPLE of an international health elective.

After extensive planning and exploration of options with an advisor has led to selecting an elective, a student or resident travels with eleven other students and residents along with three faculty members to a village in Latin America. In the village, each student is assigned to live in the home of a local family. Meals are shared with this family. After becoming familiar with the new setting, actual projects begin. Work "in the field" is done in the cool early morning, late afternoon and evening hours. Some classes are conducted in hot lat mornings and mid-afternoon (after siesta). Projects are developed by students, residents, and faculty members in conjunction with ongoing community development health work. Projects might include community health and resource surveys directed by elders, foot and eye care clinics for persons with diabetes, or identification and cleanup of contaminated wells. The student participates in wrap-up sessions before returning home where s/he submits a brief - but structured - report for credit. Combinations of these types of experiences are often possible and desirable.

Q. HOW do students and residents identify international elective sites?

Students and residents select sites by country, by language, or because of a particular project. However, it may prove

most satisfactory to first identify a *person* who is in a position to arrange an experience tailored to a particular student; the choice of country and project are then somewhat predetermined.

Traditionally, students have searched for international experiences from printed lists or word-of-mouth recommendations. One significant source is the IHMEC listserv organized for pooling resources with colleagues at medical schools around North America. Faculty contacts may facilitate exchanges with their counterparts at developing country clinical sites, and act as advisors to students throughout the process.

Q. WHEN in medical school or residency is the best time to go?

It is generally agreed that an international experience can be of value at any stage of medical school or residency training. And it is possible to do a community health or research elective in the second or third year. However, medical students should have completed the required clerkships and have basic clinical skills, both for their own benefit and for the benefit of the people at the site, before participating in a clinical elective. Sometime during the fourth year of medical school when there is flexible elective time is the most common time to go. Fourth year students should not plan to be abroad during the announcement of the residency Match which generally occurs on the second week of March in the student's final year. For preparing for the experience see the appendix at the end of this chapter *A Suggested Timeline to Prepare for an International Elective Experience*.

Q. WHAT is the role of a faculty advisor?

An international training experience often involves a number of elements that are unfamiliar to the student or resident yet impact greatly upon his/her experience. The faculty advisor plays a crucial role in

SUGGESTED BENEFITS FROM TAKING PART IN INTERNATIONAL HEALTH ELECTIVE EXPERIENCES

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- **Familiarization with geographic and travel medicine.** Developing familiarity with medical and social conditions unique to regions has become increasingly important as growing numbers of travelers visit countries that still harbor endemic diseases virtually unknown in the U.S., and require preventive and sometimes curative attention.
- **Improve the quality of medical education for ethnic populations within the United States.** Health care providers are increasingly faced with the challenge of diagnosing and treating global diseases in new immigrants, as well as dealing with acute and chronic illnesses in the context of cultural patterns unfamiliar to the provider. Also, many new immigrants have been traumatized by war, displacement into refugee camps, or even torture, and present unique psychosocial challenges not commonly seen in the domestic population.
- **Gain an appreciation of the need to promote global equity in health care.** Equity in health care distribution demands that, as world citizens, health care providers from more prosperous countries consider responsibility to medically underserved populations, both in their own country and in those of developing nations.
- **Develop a global network of relationships with other health care providers and students.** There is much that can be learned from ongoing exchanges of information, research, and medical practice with other countries.
- **Develop a population-based perspective of health care.** Grouping populations and communities into managed care panels is now forcing North American practitioners to consider health status of defined populations rather than only those of individuals or families. This population-based approach to medical care has been practiced for decades in countries such as Chile, Great Britain, and Cuba. Much can be learned from those experiences.
- **Promote personal attitudinal changes.** Permanent changes in perspective, attitudes, and practice patterns are often noted by those who participate in international health activities, especially in resource constrained environments. As economic issues increasingly distract medical practice in the U.S., attention to the needs of poor and underserved populations of both the U.S. and the rest of the world may engender a greater sense of purpose and humanism in the medical profession.

assisting students and residents clarify reasons for seeking such experiences, and in setting clear educational objectives. If possible, faculty arranged electives with ongoing communication with on-site counterparts are the best situations. Even with the best planning, the quality of the experience can be unpredictable. The role of the advisor is discussed extensively in *International Health: A Manual For Advisors and Students*, available online on the web site of the International Committee

of the Society of Teachers of Family Medicine (STFM), www.rushu.rush.edu/familymed/stfm.

Q. WHAT clinical electives will best prepare students and residents for international work?

An excellent grounding in physical diagnosis is probably the fundamental requirement for an international clinical

experience. The best experiences are those that provide extensive well supervised opportunities for history taking and performance of physical examinations, in a body systems and in patients of all ages and sexes. Also valuable are those experiences that allow students to learn fundamental clinical procedures, such as lumbar punctures, venipuncture, or surgical closure.

The following electives have been described by returning clinicians and medical students as being particularly useful in international work:

Rural Family Practice, Pediatrics, or Medicine. Rural electives provide experience in many issues often encountered in developing countries, such as trauma injuries, transportation and referral to sub-specialists, and primary care in a community setting.

Anesthesiology. In many settings, an anesthesiologist is not available, and if one does not have the capacity to control pain, it may be impossible to do anything else. An open fracture can be managed if pain control can be achieved; in the absence of pain control, appropriate care may be virtually impossible. In addition, anesthesiology may be an excellent rotation on which to learn fundamental procedures, such as venipuncture, lumbar puncture, and intubation, which an intern is expected to perform.

Surgery. Conditions requiring surgery will undoubtedly be encountered in any setting. A familiarity with basics of surgery, including cleansing, opening, closing, wound care, and postoperative management, may render a student invaluable.

Orthopedics and Rheumatology. Trauma and musculoskeletal pain are encountered everywhere. If x-ray facilities are not available, one's diagnostic and management skills in orthopedics and in rheumatology become crucial.

Dermatology. Dermatologic complaints

may be the single largest category one encounters in developing countries.

Unfortunately, many tropical conditions are not seen often in training in the United States, so much may depend on learning basic skills of describing and investigating unknown conditions and on learning the treatments locally available.

Infectious Disease. Conditions, which are common in the United States, may be fatal abroad; some conditions uncommon in the States are likewise ominous abroad. In other words, an infectious disease elective may be excellent preparation for international experience; and international experience, in turn, is an excellent complement to infectious disease training.

Ophthalmology. Eye complaints are ubiquitous - whether due to refractive errors, allergy, bright sun, environmental irritants, cataracts, glaucoma, or retinal or vascular disease. Many can be diagnosed if one is proficient at ophthalmologic examination.

Dentistry. Medical students learn to examine and manage illness in every body system except the teeth. However, many dental faculty are more than willing to teach medical students the basics of dental diagnosis, management and preventive care.

Q. HOW else can students and residents prepare for international health electives?

If available, an international health course is often the best preparation because faculty mentors and students interact, learning and planning together.

A number of IHMEC member institutions offer international health short courses which they make available to students and faculty from other institutions. These courses are relevant for health care professionals who plan to work in a developing country primary health care setting. Courses are designed to orient students to clinical and community problems they may encounter in a developing country

PLANNING AN INTERNATIONAL HEALTH ELECTIVE *

Suggested Timeline

YEAR IN MEDICAL SCHOOL																	
	2nd Year		3rd Year **				4th Year ***										
	MONTHS		MONTHS				MONTH										
	6	6	3	3	3	3	July	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
TWO YEARS BEFORE DEPARTURE																	
Consider the following:																	
When in medical school is best?	<----->																
When is match day?																	
When is graduation?																	
Consider a summer elective																	
Identify an advisor	<----->																
Assess your motives for elective																	
Assess your learning style																	
Identify possible sites/request information	<----->																
Estimate program costs	<----->																
Identify a possible funding source	<----->																
Assess language requirements	<----->																
Study a foreign language	<----->																
ONE YEAR BEFORE DEPARTURE																	
Select a site	<----->																
Begin research on the countries culture/customs	<----->																
Determine your role/advisors role in contacting the site	<----->																
Select elective dates	<----->																
Get department approval for your plan	<----->																
Arrange to get academic credit	<----->																
Determine total cost of your program	<----->																
Start raising money	<----->																
SIX MONTHS BEFORE DEPARTURE																	
Confirm department approval	<----->																
Explore specific details of the elective:	<----->																
Is there a letter of agreement from the site?																	
Identify an on-site advisor																	
Who will evaluate you and how?																	
Where will you live?																	
How can you be reached?																	
Inquire about airline schedules/costs	<----->																
Reassess your funding/budget	<----->																
THREE MONTHS BEFORE DEPARTURE																	
Apply for a passport	<----->																
Apply for a VISA if necessary	<----->																
Schedule immunizations	<----->																
Arrange for insurance (health & medical evacuation)	<----->																
ONE MONTH BEFORE DEPARTURE																	
Recontact on-site host or supervisor	<----->																
Send travel schedule to on-site supervisor	<----->																
Make on-site housing-arrangements if possible	<----->																
Begin packing clothing, supplies, medication	<----->																
Complete travel documents (passport, VISA, tickets)	<----->																
Attend orientation sessions with advisor	<----->																
"Culture shock"																	
Gender issues																	
Adjustment to environment																	
Your journal/project																	
Other on-site issues																	
ONE WEEK BEFORE DEPARTURE																	
Reconfirm flights	<----->																
Obtain travelers checks	<----->																
AFTER YOU RETURN																	
Anticipate a let down/reverse culture shock																	
Prepare your report																	
Complete your medications																	
Thank your on-site host																	
Share your experience																	

*This checklist was developed by Carole Davis from information found in International Health: A Manual for Advisors and Students by Chris Krogh, MD, MPH with Ron Post, M.D. For an indepth discussion of these issues, please consult this manual.

**All basic clerkships are completed during the third year.

***An international health elective may be completed any time during the fourth year. This example is based on taking such an elective in year four.

Please refer to the IHMEC web site at ihmec.org, as well as the chapter on Curriculum for more detailed information about courses of this type.

However, each person may have a different process of self-preparation. Opportunities to prepare for international work may be found in one's own school or community. For example, it is possible to become familiar with diverse cultures and beliefs by getting to know foreign students studying at one's own school. Work on projects to assist

medically underserved or multi-cultural populations in the community - cross-cultural settings will most likely be encountered in one's own backyard. These types of contacts may also help explore motivations for international work.

Additionally, a number of references and other resources are listed throughout this Guide that students may use for preparation, either individually or in consultation with an advisor.

ADVICE FOR ADVISORS ASSISTING STUDENTS AND RESIDENTS WITH PREPARATION COURSES

Kevin Chan, MD, University of British Columbia

- **Set a learning timetable** – Help students prepare a timetable of issues to be learned before they go overseas. Some topics may be covered on a weekly basis, whereas others may require a weekend to work through. The role of a faculty advisor is to facilitate the learning process, not to direct it. As examples from medical schools in Ottawa and Vancouver, Canada, weekend orientation sessions are organized by students and former students, with faculty members providing meeting locations such as personal homes, and acting as participants in the orientation (but not as directors.)
- **Use participatory techniques** – Students may learn best when allowed active participation in learning cycles. Participatory techniques encourage sharing perspectives, necessary to building a holistic understanding of health issues. This leads to meaningful action and the basis of new knowledge and understanding.
- **Facilitate** – be prepared, exude energy, encourage humor, think positively, be clear, remain sensitive to special needs
- **Encourage teamwork** – Even if a student is traveling alone, it is important to learn interaction skills in potentially uncomfortable and unfamiliar situations – these situations are realities of international health work. It may assist students grasp complex concepts, and encourages creativity.
- **Encourage work in disadvantaged communities at home** – a good way to learn about international health work abroad is to work “internationally” at home first. Encourage this participation.

PUBLICATIONS

1. The American Medical Student Association (AMSA) has published several guides intended primarily as resources for medical students planning overseas experiences. The majority are available in full text online at www.amsa.org/gh.html:

- *International Health Electives for Medical Students*
- *Creative Funding for International Electives*, published in collaboration with IHMEC
- *Linking International and Domestic Health Care: Starting an International Health Curriculum at Your School*
- *Bringing International Health Home*

Available in hard copy only:

- *A Student's Guide to International Health and Funding Guide*
 - *Cross-Cultural Medicine: What to Know Before You Go*
2. Adomat R (ed.) *Overseas Clinical Elective: A Survival Guide for Healthcare Workers*. Oxford, England: Blackwell Science Ltd, 1997.
 3. Chan K, Hillman E, Hillman D. *The International Workbook Guide for Students and Residents*. Ottawa: Centre for International Health and Development, 1996.
 4. Wotton K *et al.* *Basic Concepts in International Health*. Ottawa: Canadian University Consortium for Health in Development, 1994.
 5. Wotton K, Cosway N. *Orientation Guide for International Health Electives*. Ottawa: Canadian Society for International Health, 1995. 1105-One Nicholas St., Ottawa, Ontario, CANADA K1P 2V2.
 6. *Lonely Planet Guide* of the country or area to be visited for general background information
 7. Community Health Resource Units
 8. Briefing and debriefing sessions at USAID/CIDA?

Web Sites

Following is a list of web sites that may be of direct benefit for medical students, residents, and health professionals preparing for work abroad. A more comprehensive listing has been prepared by Tom Hall, DrPH, of the University of California San Francisco, currently available online on the web site of the International Health Medical Education Consortium (IHMEC), ihmec.org.

1. American Medical Student Association (AMSA) International Programs – www.amsa.org/gh.html
2. International Healthcare Opportunities Clearinghouse, University of Massachusetts Medical School - www.library.ummed.edu/ihoc.
3. International Federation of Medical Students' Associations – www.ifmsa.org.
4. International Committee, Society of Teachers of Family Medicine (STFM), www.rushu.rush.edu/familymed/stfm, with full text of Krogh C, Pust R. *International Health: A Manual for Advisers and Students*.
5. Canadian International Health Education Network (CIHEN) – www.cihen.cstudies.ubc.ca. Includes *The International Workbook Guide for Students and Residents*.
6. Global Health Council – www.globalhealth.org
7. Canadian Society for International Health – www.csih.org.
8. American Society of Tropical Medicine and Hygiene (ASTMH) – www.astmh.org
9. Centers for Disease Control and Prevention (CDC) - www.cdc.gov, includes the annually updated “yellow book” *Health Information for International Travel*.
10. World Health Organization (WHO) – www.who.org, includes the annual *World Health Report*, and monthly *Bulletin of the World Health Organization*.
11. United Nations Children's Fund (UNICEF) – www.unicef.org, includes the annual report *State of the World's Children*.
12. Joint United Nations Programme on HIV/AIDS – www.unaids.org.

13. United Nations High Commission for Refugees (UNHCR) - www.unhcr.ch, includes the monthl *Refugees*.

14. Pan American Health Organization (PAHO) – www.paho.org, includes the full length text of the quadriennial *Health Conditions in the Americas*.

15. Teaching Aids at Low Cos – www.talcuk.org.

16. Healthlink – www.healthlink.org.uk/index.html

17. Hesperian Foundation – www.hesperian.org

18. Oxfam – www.oxfam.org

19. Christian Medical and Dental Society, www.cmds.org

20. Doctors Without Borders/ Médecins Sans Frontières – www.dwb.org, www.msf.org.

21. World region and individual country background information is available online in concise form from the publisher of the *Lonely Planet* series of travel guides – www.lonelyplanet.com.