INTERNATIONAL HEALTH PATHWAY FOR PEDIATRIC AND MEDICINE/PEDIATRIC RESIDENTS AT CHILDREN'S HOSPITAL OF MICHIGAN

As pediatricians we at Children’s Hospital share the vision that some day all of the world’s children will have an equal opportunity to achieve their life potential. Moreover, in the past few decades, the boundaries between third world countries and developed countries have become porous, an increasing number of people from developed countries are visiting developing countries, a substantial number of individuals are immigrating to the U.S., and a large number of children are being adopted in the U.S. from third world countries. It is also clear that the changes in the health of people in one corner of the world can quickly impact on the well-being of people in other parts of the world. Examples of this include the recent SARS epidemic and the tsunami, both of which had health, psychological, physical, economical and social consequences in the West. Travelers who had been regular blood donors in the past are now excluded because of concerns about exposure to diseases endemic to some areas of the world. Thus, it is becoming increasingly important for our clinicians to be trained in recognizing and managing diseases not routinely seen in the U.S. Including a curriculum of international medicine in residency training programs is an important step in developing such educational initiatives for our clinical trainees. In response to our vision and the shrinking globe, the department of pediatrics at the Children’s Hospital of Michigan, therefore initiated the International Health Pathway for our pediatric and medicine/pediatric residents in June of 2004.

AIMS AND OBJECTIVES

This pathway was established so that our residents can a) develop a knowledge base regarding the health care problems of children in developing countries, b) recognize how social, cultural and economic factors influence health outcomes in children, and c) realize how these factors can be taken into account to improve the overall well-being of children all over the world. Thus we have three specific objectives for this pathway: 1) To increase the awareness of the importance of international child health care among pediatric and medicine/pediatric residents, 2) to encourage residents to explore the field
of international child health as a career focus, and 3) to foster clinical competence in international medicine, while pursuing scholarly activity.

**COMPONENTS OF INTERNATIONAL PATHWAY**

There are three components to this pathway: a) Didactic lectures b) Clinical experience and c) Research. Residents who elect the international track are expected to participate in all 3 components.

**a) Didactic lectures:**

A core lecture series has been developed and incorporated into the residency curriculum. These lectures are given biweekly by our own faculty at the Children’s Hospital of Michigan (CHM) as well as invited speakers from other institutions. Topics to be included are as follows.

**Infectious Diseases**

1. Malaria
2. HIV in developing countries
3. Tuberculosis
4. Salmonella infections and typhoid fever
5. Rabies
6. Tetanus
7. Dengue fever
8. Leptospirosis
9. Neurocysticercosis
10. Schistosomiasis
11. Diseases transmitted by animal bites
12. Leprosy

**Travel medicine**

13. Evaluation and management of a child who is ill after international travel
14. Counseling families with children for international travel
15. Vaccines for international travel
16. Screening of immigrants and internationally adopted children
17. Travelers diarrhea

**GI and Nutrition**

18. Marasmus and Kwashiorkar
19. Vitamin Deficiencies
20. Intestinal parasitic infestations
21. Gastroenteritis and dehydration: Oral Rehydration Solution

**Other**

22. Hematological problems in developing countries
23. Transfusion medicine in developing countries
24. Critical care in developing countries
25. Ethical Issues in Research in developing countries
26. Immunizations in developing countries
27. Culture and values in medical setting
28. Alternate Medicine as practiced in developing countries

b) Clinical Experience:

We have initiated collaborations with the Children’s Hospital at Nanjing University, Nanjing, China and the Princess Margaret Hospital, Bahamas through which residents in our program participate in clinical and research activities at these institutions. The department of pediatrics pays for the air-fare and lodging expenses when our residents visit these sites.

Residents participating in this pathway work with faculty at our collaborating international institutions. This includes working in outpatient clinics, rounding on pediatric in-patient floors, in pediatric intensive care units, neonatal intensive care units and emergency departments. Our residents are also encouraged to learn how health care policies in developing countries are implemented, and how governmental regulations influence the health care delivery system. The participating residents are expected to prepare and present clinical case discussions at grand rounds or other conferences at our institution and publish their findings in one of the pediatric journals.

c) Research

Under the mentorship of faculty members, residents develop research projects which are conducted at the international sites. The development of the research projects is as follows:

(i) Residents present their research concepts during our biweekly meeting.
(ii) The committee comprised of faculty members select the research concepts best deemed to be worthy of further pursuit.
(iii) With the help of a group of residents participating in this pathway, the resident who proposed that concept develops a complete hypothesis driven proposal.
(iv) This proposal is sent to our collaborating international institutions for their input as well approval from their Institutional Review Board (IRB).
(v) Following receipt of IRB approval and other relevant documents from our collaborating institutions, the resident applies for IRB approval from Wayne State University.

(vi) These research projects are completed by the group of residents during their stay at the international sites.

(vii) It is expected that the resident (or resident group) participating in the research project present/s their research findings at grand rounds and also submit a manuscript for publication.

**Evaluation**

A written evaluation of the resident’s performance on the international track is prepared by the faculty supervisor/mentor at the international site. A pre-test is administered in July before we begin our didactic lecture series to all the residents who are participating in this pathway and a post test is administered in June after completion of all the didactic lecture series.

**Pre-requisites**

It is expected that residents will attend 70% of the international medicine lecture series during their PL1 year and also secure “good” in-training scores during second and third year. It is the responsibility of the residents to obtain passport and arrange for visa (if required) to visit one of the international sites. It is also required that they receive all the vaccinations and prophylaxis to visit our international sites as recommended by the Centers for Disease Control and Prevention.

More information about this program can be obtained by contacting Dr. Deepak Kamat (dkamat@med.wayne.edu)