



MCW/CHW Pediatric Global and Community Health Track

***Overview of the supplementary training program
available for Pediatric & Med-Peds residents***





MISSION

Prepare pediatricians to engage in sustainable global and community health endeavors, and improve child health through cultivating academic bidirectional global and local partnerships.



VISION

Reduce pediatric health disparities worldwide through education, research, and clinical collaborations.



GUIDING PRINCIPLES

Collaborate with the MCW Office of Global Health to establish global partnerships to reduce child health disparities, with an emphasis on bidirectional education, research and clinical care. Principles of partnerships include sustainability, commitment, equity, respect, transparency, reciprocity, social justice, credibility, and trust. These same principles will be applied towards local community partnerships.

Pediatric Global and Community Health Track Leadership



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How does the CHW/MCW Pediatric Residency Program approach global and community health education?

- ✓ Apply in August of intern year
- ✓ Noon conferences (6/year x 3 years, available to all residents)
- ✓ Simulation sessions of clinical situations in low-resource settings
- ✓ GH TRAIN sessions (**T**rack **R**esidents **A**s **I**nstructors at **N**oon)
- ✓ Visiting speakers
- ✓ Local projects/partnerships: Refugee Health Literacy Project
- ✓ Global engagement (opportunities include global or local/global health elective, capacity development, & educational initiatives)



GLOBAL HEALTH TRACK COMPONENTS	% Expected participation	PL Year
Participate in the Global Health Noon Conference Series (4 per year)	100% (in person or by video)	1, 2, 3
Attend the Global Health Track monthly sessions (1 st Wednesday of every month)	50%	1, 2, 3
Scholarly requirement: Lead a journal club (TRAIN session)	100%	3
Establish a relationship with a Global Health mentor	Optional if GCHT is your secondary track and you already have a mentor in a different track	1, 2, 3
Prepare for and participate in an elective in a resource-limited setting* (Indian Health Services, resource-limited local setting, or international) This experience includes completion of a pre-trip curriculum, maintenance of an on-site patient log, and debriefing upon return. *Note: This is highly recommended but not required for track completion. We recognize that there are circumstances that could preclude participation in a global health elective (such as illness, safety concerns at the elective site, financial restrictions, etc). Per CHW policy, global health electives are only offered to residents who have enrolled in the Global Health Track as interns and are on track to complete Track requirements by graduation	Required	3 (or 4, for med-peds)
Community engagement: participate in service learning opportunities, including with partners such as the International Learning Center	Optional	1, 2, 3
Educational initiatives: help with the Pediatric Global & Community Health Track curriculum, mentor Global Health Pathway medical students, engage in academic research, participate in Train the Trainer initiatives during global & community health electives	Optional	1, 2, 3
National involvement: become a member of the American Academy of Pediatrics Section on International Child Health; get engaged in national advocacy or educational initiatives	Optional	1, 2, 3

Residents must fulfill minimum expectations in order to achieve track “completion”. Residents who complete a Global or Community health-focused research project during their residency will be awarded “Completion with Distinction”

CHW/MCW Pediatric Global Health Noon Conference Series

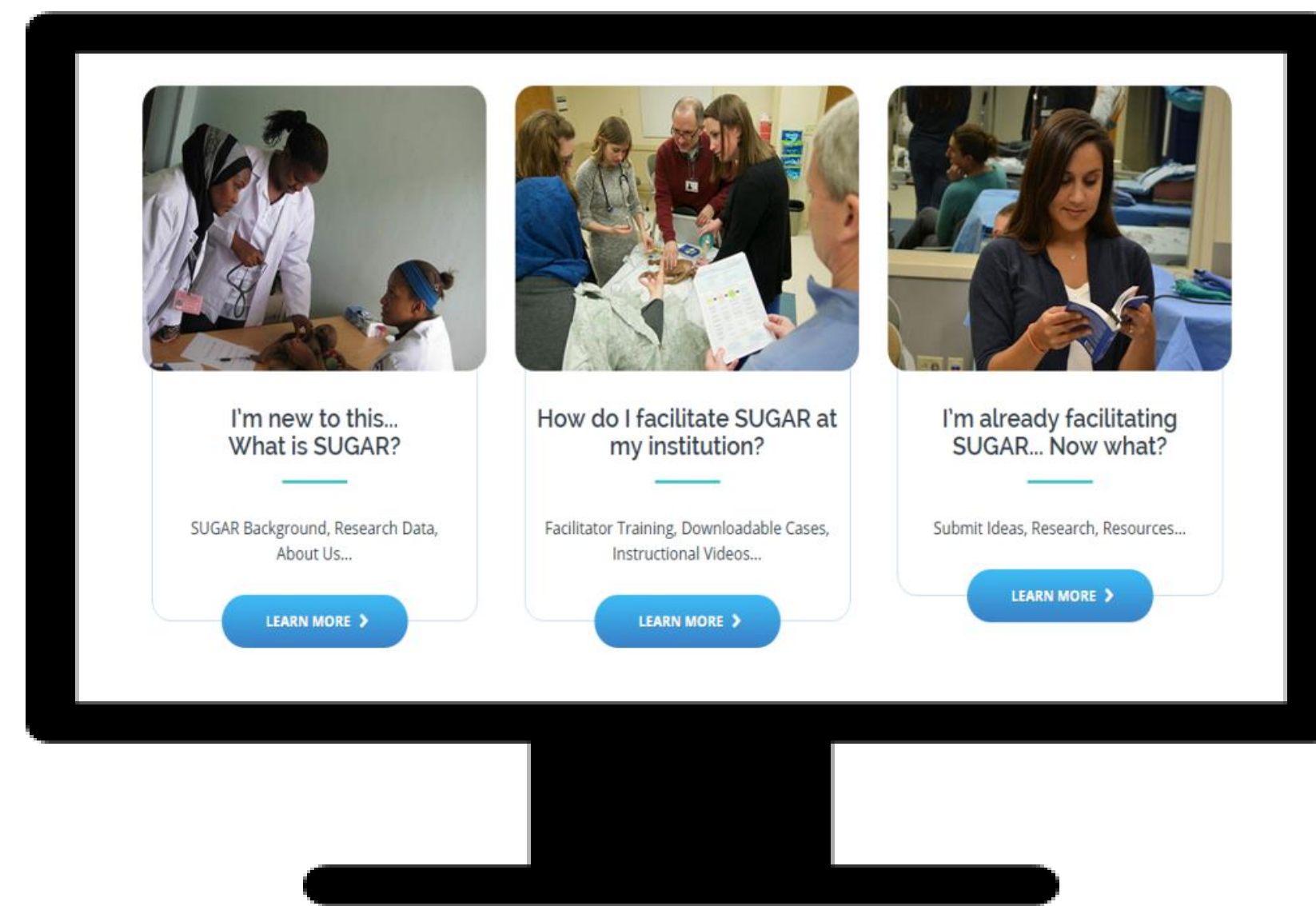
(3 year rolling curriculum available to all pediatric & med-peds residents)

Diagnosis & management of malnutrition in low resource settings	Emergent & intensive care in low-resource settings	Approach to skin abnormalities and burn care in low-resource settings
Diarrhea & dehydration : extending beyond the NS bolus	Infectious diseases in international travelers	Diagnosis & management of tuberculosis
Pediatrics in the tropics (trivia format)	Global Health Jeopardy (trivia format)	International adoption medicine
Diagnosis & management of HIV	Diagnosis and management of malaria	HIV care : neighborhoods to nations
Social and economic influences on child health: local & global perspectives	Maternal, newborn & child health	Injury prevention and management in low resource settings
Report card on adolescent global health	Humanitarian disaster response	Introduction to Native American health

S.U.G.A.R. simulation sessions

(Simulation Use for Global Away Rotations)

Curriculum developers: Mike Pitt, Sabrina Butteris, & the S.U.G.A.R. collaborators



CASE 1A: BACKGROUND

<p>Ideal Emotional Response <u>During</u> Case</p> <p>Frustration: <i>I know what I <u>would</u> do back home to manage this disease, but I <u>don't</u> have the ability to do it here.</i></p>	<p>Ideal Emotional Response <u>After</u> Debriefing</p> <p>Adaptability: <i>I was able to <u>overcome</u> obstacles encountered in a resource-limited environment and ultimately <u>help</u> this patient.</i></p>
<p>Supplies</p> <ul style="list-style-type: none"> • Mannequin or actor • IV equipment • IV fluids (NS or LR) • D50 solution • Regular Insulin • Glucagon • Glucometer and strips • Urine dipsticks 	<p>Ideal Medical Objectives</p> <ul style="list-style-type: none"> • Recognize presentation of <u>Diabetic Ketoacidosis</u> and initiate therapy (fluid replacement+ insulin) overcoming obstacle of not having a fluid pump by using <u>drop count method</u> • Overcome the inability to do insulin drip or monitor frequent labs by determining appropriate use of <u>subcutaneous insulin</u> and determining most important labs to follow • Manage complications encountered while treating DKA including <u>hypoglycemia</u> overcoming obstacle of <u>having to dilute D50 to D10</u>
<p>Keys to Reaching Desired Emotional Response</p> <ul style="list-style-type: none"> • Allow case to mimic <u>slow pace</u> often found in resource-limited medical environments. Case may take <u>over 30 minutes</u> to complete. • Allow ample time for participants to overcome obstacles from <u>lack of resources</u>, <u>resisting prompting</u> in problem solving if at all possible. 	

IDEAL CASE FLOW: Specifics less important than flow – Remember goal is to allow frustration

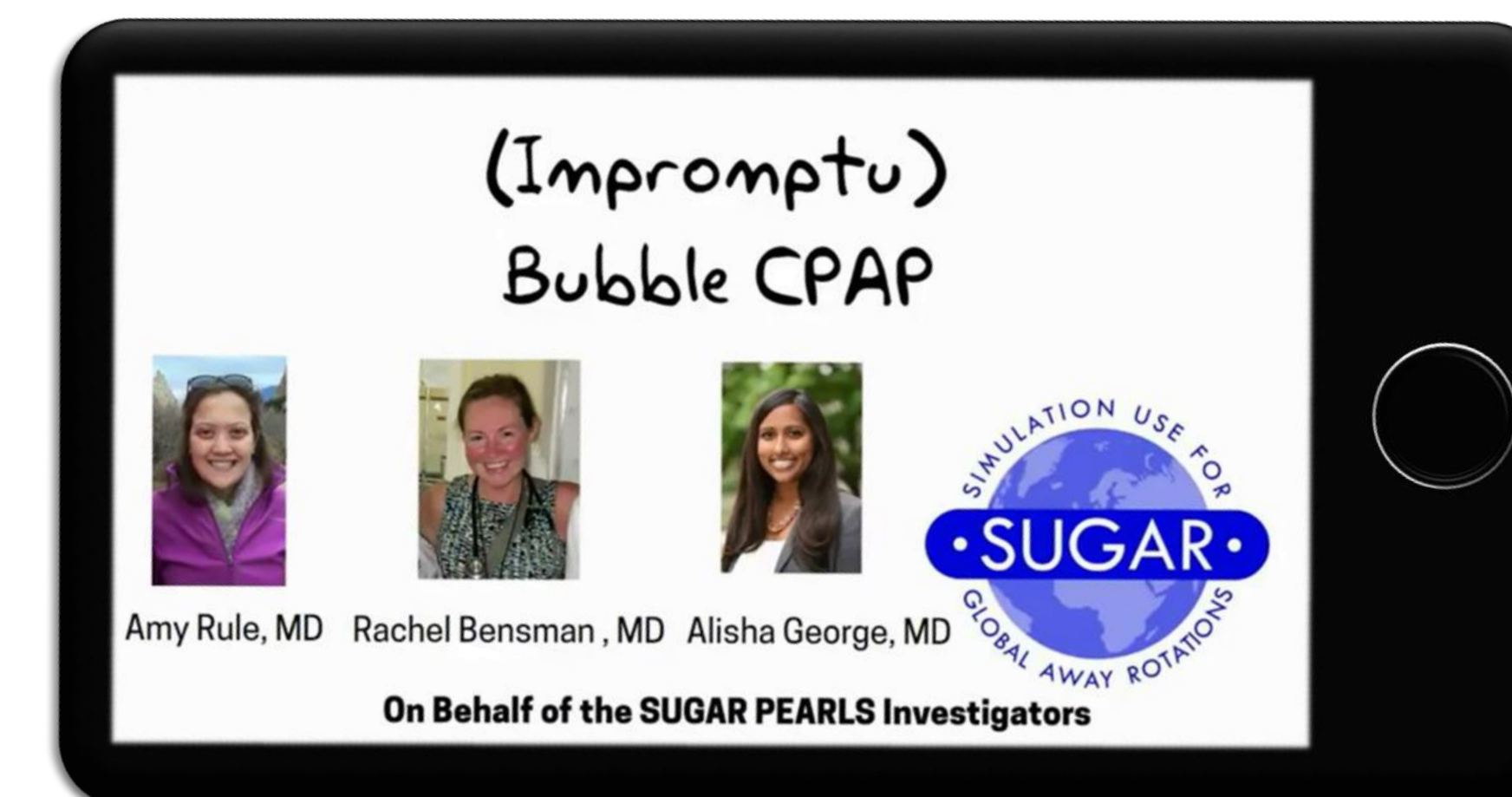
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graph LR
    A["FIRST STATE  
Presentation in DKA  
Lethargic  
Glucose too high to read"] -- "Insulin  
Fluids" --> B["SECOND STATE  
Improved mentation after insulin and fluids"]
    B -- "Artificially Elapsed Time after Insulin" --> C["THIRD STATE  
Hypoglycemic  
Worsening mental status  
Gluc: 1.7 mmol/L"]
    C -- "Glucose or Glucagon" --> D["FOURTH STATE  
Improved mentation after administration of glucose or glucagon"]
    
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KEY MEDICAL MANAGEMENT REMINDERS

<p>SIGNS OF DKA</p> <ul style="list-style-type: none"> • <u>Hypoglycemia</u> (>11 mmol/L) + metabolic acidosis (pH <7.3 or bicarb <15 mEq/L) • Polydipsia/Polyuria • Vomiting/Dehydration • Kussmaul Respirations (labored, deep breaths) • Fruity breath • Signs of Increased ICP (confusion, altered mental status, headache) 	<p>REHYDRATION</p> <ul style="list-style-type: none"> • Start with 10 ml/kg bolus of NS over 1 hr. May repeat. • Replace remainder of deficit over 48 hours. After bolus, start ~1.5 times maintenance of NS +KCL switching to D5 NS + KCL when RBG < 14 mmol/L or glucose decreasing rapidly • Stop IV fluids when patient can drink or tolerate NG • Drop Count Method: (if no pump) 20 drops = 1 ml. Can provide a rate by adjusting rate of drops (i.e. 90 ml/hr = 1,800 drops/hr = 30 drops per min = 5 drops in 10 seconds) 	<p>INSULIN DOSING</p> <ul style="list-style-type: none"> • Ideal would be to start insulin drip at 0.05-0.1 units/kg/hr • Can mix insulin 1:1 in 0.45 NS to make solution of insulin that is 1 unit/ml. Then piggyback with IVF using drop count method (give as close to vein as possible) • If drip not available, can do <u>intermittent SQ dosing</u> as sliding scale. Assume 1 unit/kg/day needed and determine sliding scale with Rule of 1800: 1800/insulin units per day = amount in mg/dL glucose will drop for each unit of insulin 	<p>HYPOGLYCEMIA</p> <ul style="list-style-type: none"> • Treat with <u>dextrose bolus</u> or glucagon. • Rule of 50: Percent dextrose multiplied by the volume to give in ml/kg should equal fifty (i.e. 5ml/kg of D10, 2ml/kg of D25) • Do not give more than D12.5 through peripheral IV • <u>Dilute D50 to D10</u> by mixing 1 part D50 to 4 parts NS • Approximate <u>conversion</u> of mmol/L to mg/dL by multiplying by 18 (i.e. 1.7 mmol/L = 32 mg/dL)
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PROCEED TO CASE PRESENTATION, EXPECTED INTERVENTIONS, AND OBSTACLES
(Midwest Consortium of Global Child Health Educators) Pitt M, Butteris S, Hagen S – Rev 9/21/12



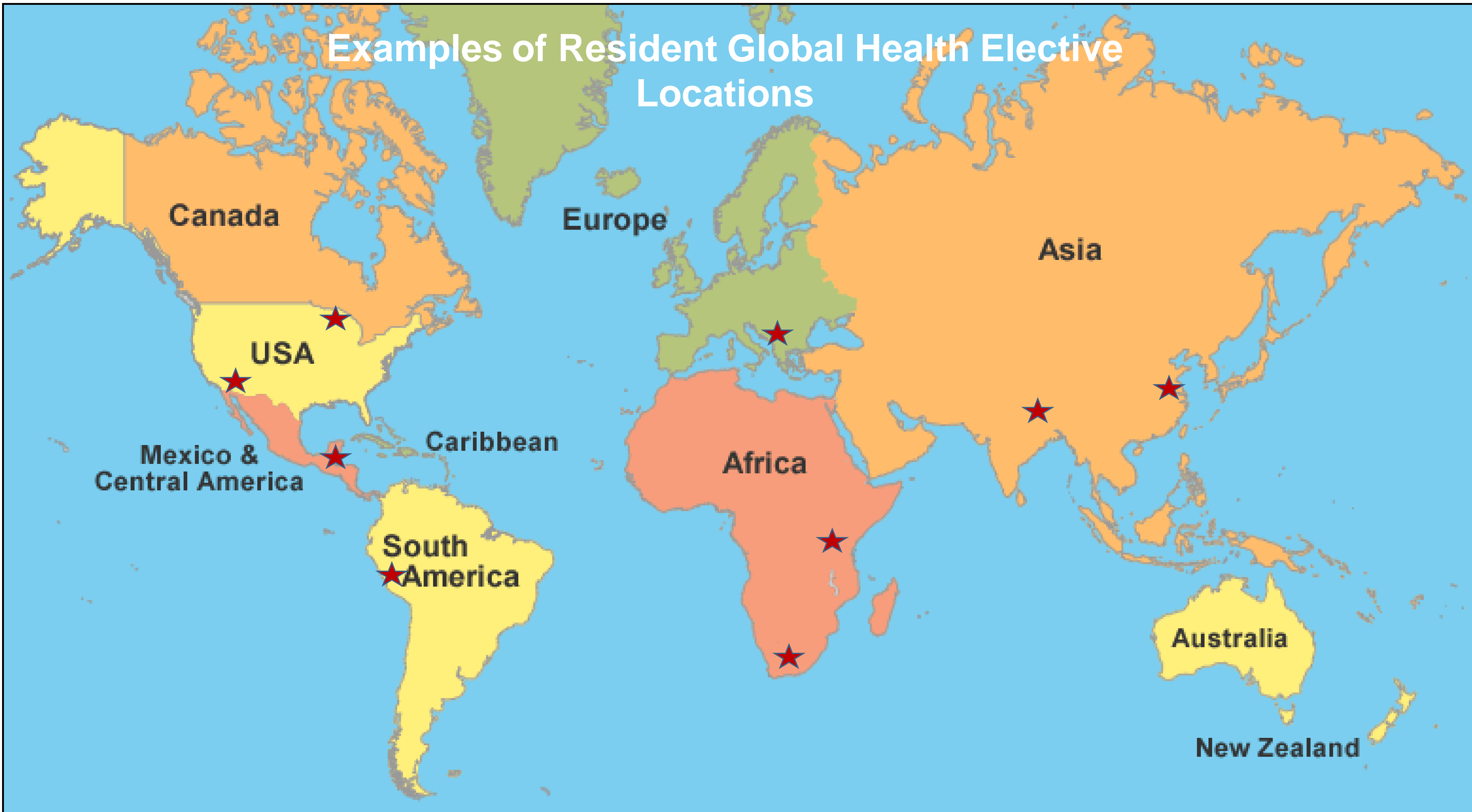
Images from sugarprep.org

Local Community Engagement Opportunities

- Current focus: Partnership with the International Learning Center in Milwaukee to provide a Health Literacy Curriculum for Refugees
 - Monthly educational sessions on health topics presented by trainees to refugee learners
 - Two Mock Medical Visit experiences per year: medical trainees lead the refugee learners through a typical doctor's visit to help familiarize them with our healthcare system



Examples of Resident Global Health Elective Locations



CHW Global health elective policy

Pediatric and Medicine-Pediatric residents can participate in a single, one month-long pediatric* global health elective if they:

- are in good standing with their residency program and are entering their senior year of residency (late PGY-2 or PGY-3 for pediatric residents; PGY-3 or PGY-4 for med-peds residents);
- enrolled in the global health track as interns and are on target to complete the annual global health track requirements as outlined by the training program;
- have chosen an elective that will ensure daily physician preceptorship, is in a safe environment, and is approved by CHW/MCW residency and MCWAH leadership; and
- commit to completion of a patient log and summary of their elective experience.

Residents who meet the above criteria should submit their request to participate no later than May 15th of the academic year preceding the elective to the Global Health Track Directors

- Requests should occur earlier than 5/15 if the elective will be in the summer or early fall, as MCWAH forms need to be submitted **no later than 4 months prior to the start of the elective**
- Deadline for submission of MCWAH forms for late fall/winter/spring electives is **July 1st of the academic year**

Residents who wish to participate in a global health elective should be sure to properly share this preference with the pediatric/medicine-pediatric chief residents on the annual master schedule preference list submission

- It is recommended to make this a high priority preference in your annual master schedule preference list to maximize the likelihood of receiving a global health eligible elective slot during the appropriate block.

**Note: A pediatric global health elective is one that has salary support provided by CHW for the month-long elective. For Medicine-Pediatric residents, they additionally can pursue a salary-supported Froedtert global health elective slot—availability and number of slots may vary annually per the discretion of Froedtert's leadership.*

Global Health Interactive Map

Learn about our faculty efforts around the world.

To begin, click on a continent or select a Department, Category or Health Domain.

If faculty have any updates to existing activities or additions to the map, please complete the [Faculty Global Health Activity Form](#).

Department


Any

Health Category

Any

Health Domain

Any





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MCW Office of Global Health

<http://www.mcw.edu/Office-of-Global-Health.htm>



Clinical Care

Reciprocal exchanges
Simulation training
Department Programs

Education

Global Health Pathway
MPH course
Elective Rotations

Research

IRB development

Community Engagement

Refugee/Immigrant health

Support trainees
Partner with faculty



THANK YOU FOR YOUR INTEREST

