Boston Children's Hospital
Global Health Program

GLOBAL PEDIATRIC
Clinical Skills Week
October 23–27, 2017

Global health as a field is complex, ever-changing and involves a diverse set of skills that spans across disciplines, including: clinical knowledge & skills, communication & advocacy, systems-based knowledge, teaching skills, problem-solving, critical thinking, and cultural sensitivity.

Though many health professionals have strong clinical skills as applied in their home settings, they lack the clinical experience and knowledge to successfully apply those skills in a resource-limited setting.

This course aims to improve the knowledge and skills of healthcare professionals engaged or planning engagement in pediatric clinical work in low or middle income countries. High-yield clinical topics and skills will be taught using an interactive curriculum of didactics, technical skill sessions, workshops, simulation, and hands-on training.

Register now: www.bostonchildrens.org/skillsweek2017

Learners may select one or a combination of the following 3 courses:

Oct 23–24 | Mon & Tues

Clinical Core Topics in Global Health

This two-day course is a combination of didactic and case-based teaching, and hands-on skills workshops. Our multidisciplinary faculty will present evidence-based guidelines for the management of common illnesses and tropical diseases affecting children in developing countries. A series of workshops will provide learners with the opportunity to gain practical skills training using case-based simulations & hands-on skills stations.

Climate Change • Dengue • HIV • IMCI • Malaria • Malnutrition • Newborn Care • Parasites • Respiratory Infections • Tuberculosis • Trauma & Emergencies • Sedation • Lines, Tubes & Wounds • Medication Safety

Oct 25–26 | Wed & Thu

Ultrasound Course

This interactive two-day course will provide the foundation for integration of ultrasound into clinical practice with a focus on use in resource limited settings. The course provides an overview of basic ultrasound physics, machine use, and a review of point-of-care ultrasound applications. Each lecture will be reinforced by practical hands-on skills sessions with adult & pediatric models, allowing learners to develop comfort with scanning basics and recognition of anatomy.

Machine Basics & Image Acquisition • Focused Assessment with Sonography in Trauma (FAST) • Cardiac, Soft Tissue & Musculoskeletal • Abdomen & Vascular Access • Lung, Renal & Bladder

Oct 27 | Fri

Helping Babies Breathe™ Master Trainer Course

Helping Babies Breathe (HBB) is an evidence-based curriculum using the train-the-trainer model to teach neonatal resuscitation in resource limited areas. The "Golden Minute" is the key concept of HBB. It implies that by one minute of age, the newborn baby should start breathing on his or her own, or should be ventilated with a bag and a mask. The course methodology focuses on hands-on practice using a simulator mannequin.

Preparation for Birth • Routine Care • The Golden Minute • Bag & Mask Ventilation • Adult Learning Principles • Implementation of HBB • Localization & Adaptation • Monitoring & Evaluation

Questions? globalhealth@childrens.harvard.edu

Target Audience

Health care professionals engaged or planning engagement in pediatric clinical work in resource-limited settings

Tuition Rates

	Early Bird Rate *before June 20*	Regular Rate *after June 20*
Clinical Core Topics in Global Health		
Physician, Nurse, Pharmacist, or Allied Health	$ 400	$ 500
Resident, Fellow, or Pre-Health Student	$ 200	$ 250
Ultrasound Course		
Physician, or Nurse	$ 700	$ 800

★ Residents & Fellows must request approval prior to registration. Please e-mail: globalhealth@childrens.harvard.edu

Helping Babies Breathe™ Master Trainer Course		
Physician, Nurse, Pharmacist, or Allied Health	$ 150	$ 200
Resident, Fellow, Pre-Health Student	$ 75	$ 100

★ HBB training materials will be available for purchase on course day (NeoNatalie mannequins, flip charts, & learner workbooks)

Learning Objectives

Upon completion of this course, participants will be able to:

1. Recognize evidence-based, setting-specific knowledge in the epidemiology, diagnosis, and treatment of common illnesses and tropical diseases affecting children in developing countries
2. Describe practical suggestions for utilizing local resources for optimal clinical care
3. Demonstrate an initial organized approach to trauma
4. Demonstrate the placement of pigtail catheters and surgical thoracostomy tubes
5. Demonstrate techniques for procedural sedation in resource limited settings
6. Demonstrate techniques for mitigating the risk of procedural sedation
7. Describe the principles of pediatric vascular access and practice cannulation techniques
8. Review strategies to minimize skin injury and promote wound healing
9. Discuss indications, management & potential complications of pediatric chest tubes in low resource settings
10. Calculate IV drip rates without an infusion pump & prepare IV admixtures and serial dilutions safely
11. Identify at least three alternative options for oral and inhalation delivery
12. Understand both the clinical utility and limitations of the basic applications of point-of-care ultrasound for diseases and conditions common in resource-limited settings
13. Preform point-of-care ultrasound image acquisition and interpretation
14. Demonstrate resuscitation techniques for newborns struggling to breathe 1 minute after birth
15. Show newborn resuscitation skills to other providers

1-2: Clinical Core Topics in Global Health
3-4: Workshop: Trauma & Emergencies
5-6: Workshop: Pediatric Sedation
7-9: Workshop: Lines, Tubes & Wounds
10-11: Workshop: Medication Safety
12-13: Ultrasound Course
14-15: Helping Babies Breathe Course

Refund Policy

Registration by credit card can be made online. Registration by check (draft on a United States bank): please make payable to Boston Children's Hospital and contact CME Department at cmedepartment@childrens.harvard.edu to discuss payment. Telephone or fax registration is not accepted. Registration with cash payment is not permitted. Upon receipt of your paid registration, an email confirmation from the Boston Children's office will be sent to you. Be sure to include an email address that you check frequently. Your email address is used for critical information, including registration confirmation, evaluation and certificate.

Fifty-percent (50%) refunds will be issued for all cancellations received prior to the start of the course. Refund requests must be received by postal mail, email or telephone. "No shows" are subject to the full course fee, and no refunds will be issued once the conference has started.

Accreditation

In support of improving patient care, Boston Chilren's Hospital is jointly accredited by the Accreditation Council for Continuing Medical Education (ACCME), the Accreditation Council for Pharmacy Education (ACPE), and the American Nurses Credentialing Center (ANCC), to provide continuing education for the healthcare team.

Physician: Boston Children's Hospital designates this live activity for a maximum of 18.25 *AMA PRA Category 1 Credits™*. Physicians should claim only credit commensurate with the extent of their participation in this activity. AAPA accepts AMA category 1 credit for the PRA from organizations accredited by ACCME.

Nurse: Boston Children's Hospital designates this activity for 18.25 contact hours for nurses. Nurses should only claim credit commensurate with the extent of their participation in the activity.

Disclosure Policy

Boston Children's Hospital adheres to all ACCME Essential Areas, Standards, and Policies. It is Boston Children's policy that those who have influenced the content of a CME activity (e.g. planners, faculty, authors, reviewers, and others) disclose all relevant financial relationships with commercial entities so that Boston Children's may identify and resolve any conflicts of interests prior to the activity. These disclosures will be provided in the activity materials along with disclosure of any commercial support received for the activity. Additionally, faculty members have been instructed to disclose any limitations of data and unlabeled or investigational uses of products during their presentations.

Global Pediatric Clinical Skills Week | October 23–27, 2017

Boston Children's Hospital Global Health Program

October 23–24, 2017 | Clinical Core Topics in Global Health

Tuition Rate	by June 20	after June 20
Physician, Nurse, Pharmacist or Allied Health	$400	$500
Resident, Fellow or Pre-Health Student	$200	$250

Day 1 - Monday, October 23rd

7:30–8 am	**Registration | Breakfast**
8–8:15 am	**Introduction** | Christiana Russ
8:15–8:45 am	**Acute Malnutrition** | Michelle Niescierenko
8:45–9:45 am	**Newborn Care** | TBD
9:45–10 am	**Break**
10–11 am	**HIV** | TBD
11–12 pm	**Tuberculosis** | TBD
12–1:00 pm	**SUGAR Simulation | Lunch**
1:30–3:30 pm	**CLINICAL SKILLS WORKSHOP – Session #1**
	Group A: **Trauma & Emergencies**
	Group B: **Pediatric Sedation**
	Group C: **Lines, Tubes & Wounds**
	Group D: **Medication Safety**
3:30–3:45 pm	**Break**
3:45–5:45 pm	**CLINICAL SKILLS WORKSHOP – Session #2**
	Group B: **Trauma & Emergencies**
	Group A: **Pediatric Sedation**
	Group D: **Lines, Tubes & Wounds**
	Group C: **Medication Safety**

Day 2 - Tuesday, October 24th

7:30–8 am	**Registration | Breakfast**
8:00–9:00 am	**Parasites** | TBD
9:00–9:30 am	**Climate Change** | TBD
9:30–10:00 am	**Mosquito-borne Infect.** | TBD
10:00–10:15 am	**Break**
10:15–11:15 am	**IMCI & Acute Resp. Infect.** | Christiana Russ
11:15–12:15 pm	**Malaria** | TBD
12:15–1 pm	**Trivia | Lunch**
1:30–3:30 pm	**CLINICAL SKILLS WORKSHOP– Session #3**
	Group C: **Trauma & Emergencies**
	Group D: **Pediatric Sedation**
	Group A: **Lines, Tubes & Wounds**
	Group B: **Medication Safety**
3:30–3:45 pm	**Break**
3:45–5:45 pm	**CLINICAL SKILLS WORKSHOP– Session #4**
	Group D: **Trauma & Emergencies**
	Group C: **Pediatric Sedation**
	Group B: **Lines, Tubes & Wounds**
	Group A: **Medication Safety**

October 25–26, 2017 | Ultrasound Course

Tuition Rate	by June 20	after June 20	
Physician or Nurse*	$700	$800	*Residents & Fellows must request approval prior to registration: globalhealth@childrens.harvard.edu

Day 1 – Wednesday, October 25th

8:30–9 am	**Registration | Breakfast**
9–9:30 am	**Introduction to Ultrasound**
9:30–10:30 am	**FAST**
10:30–12 pm	**Hands-on Session**
12–1 pm	**Lunch**
1–2:30 pm	**Lung, Renal & Bladder**
2:30–4 pm	**Hands-on Session**

Day 2 – Thursday, October 26th

8:30–9 am	**Registration | Breakfast**
9–10:30 am	**Cardiac, Soft Tissue & Musculoskeletal**
10:30–12 pm	**Hands-on Session**
12–1 pm	**Lunch**
1–2:30 pm	**Abdomen & Vascular Access**
2:30–4 pm	**Hands-on Session**

October 27, 2017 | Helping Babies Breathe Course

Tuition Rate	by June 20	after June 20
Physician, Nurse, Pharmacist or Allied Health	$150	$200
Resident, Fellow or Pre-Health Student	$75	$100

8:30–9 am	**Registration | Breakfast**
9–9:45 am	**Introduction, Baseline Evaluations**
9:45–10 am	**Dialogue – Causes of Neonatal Death, Opening visualization**
10–10:45 am	**Preparation for a Birth**
10:45–11 am	**Break**
11:00–12 pm	**Routine Care**
12–12:45 pm	**The Golden Minute**
12:45–1:30 pm	**Lunch**
1:30–2:30 pm	**The Golden Minute (ventilation)**
2:30–3:30 pm	**Continued Ventilation with Normal and Slow Heart Rate**
3:30–3:45 pm	**Break**
3:45–5:45 pm	**Mastering the Action Plan; Continued Learning; Course Evaluations**

CLINICAL CORE TOPICS IN GLOBAL HEALTH

Monday & Tuesday | October 25-26, 2017

Location TBD

MONDAY, OCTOBER 25th		
DIDACTIC SESSION		
07:30 – 08:00	Registration | Breakfast	
08:00 – 08:15	Introduction - *Christiana Russ, MD, DTMH*	
08:15 – 08:45	Acute Malnutrition - *Michelle Niescierenko, MD, MPH*	
08:45 – 09:45	Newborn Care - *TBD*	
09:45 – 10:00	Break	
10:00 – 11:00	HIV - *TBD*	
11:00 – 12:00	Tuberculosis - *TBD*	
12:00 – 01:00	Lunch | SUGAR Simulation - *Christiana Russ, MD, DTMH*	
CLINICAL SKILLS WORKSHOP – SESSION #1		
01:30 – 03:30	A: Trauma & Emergencies B: Pediatric Sedation	C: Lines, Tubes & Wounds D: Medication Safety
CLINICAL SKILLS WORKSHOP – SESSION #2		
03:45 – 05:45	B: Trauma & Emergencies A: Pediatric Sedation	D: Lines, Tubes & Wounds C: Medication Safety

TUESDAY, OCTOBER 26th		
DIDACTIC SESSION		
07:30 – 08:00	Registration | Breakfast	
08:00 – 09:00	Parasites - *TBD*	
09:00 – 09:30	Climate Change - *TBD*	
09:30 – 10:00	Dengue Fever - *TBD*	
10:00 – 10:15	Break	
10:15 – 11:15	IMCI & Acute Respiratory Infections - *Christiana Russ, MD, DTMH*	
11:15 – 12:15	Malaria - *TBD*	
12:15 – 01:00	Lunch | Trivia - *Global Pediatric Fellows*	
CLINICAL SKILLS WORKSHOP – SESSION #3		
01:30 – 03:30	C: Trauma & Emergencies D: Pediatric Sedation	A: Lines, Tubes & Wounds B: Medication Safety
CLINICAL SKILLS WORKSHOP – SESSION #4		
03:45 – 05:45	D: Trauma & Emergencies C: Pediatric Sedation	B: Lines, Tubes & Wounds A: Medication Safety

DIDACTIC SESSION

OVERVIEW

This two-day course will feature a combination of didactic and case-based teaching, and hands-on skills workshops. During the morning sessions, through lecture and case discussion participants will gain evidence-based, setting-specific knowledge in the epidemiology, diagnosis, and treatment of common illnesses and tropical diseases affecting children in developing countries. During the afternoon workshops, participants will receive practical, hands-on training in clinical skills commonly used in resource-limited settings.

LEARNING OBJECTIVES

Upon completion of this course, learners will:

1. Recognize evidence-based, setting-specific knowledge in the epidemiology, diagnosis, and treatment of common illnesses and tropical diseases affecting children in developing countries
2. Describe practical suggestions for utilizing local resources for optimal clinical care

SPEAKERS

Christiana Russ, MD, DTMH
Instructor in Pediatrics, Harvard Medical School;
Associate Medical Director, Intermediate Care Program, Div. of Medicine Critical Care, BCH

Michelle Niescierenko, MD, MPH
Instructor in Pediatrics and Emergency Medicine, Harvard Medical School;
Director, Global Health Program & Assistant in Medicine, Div. of Emergency Medicine, BCH

CLINICAL SKILLS WORKSHOP: "TRAUMA & EMERGENCIES"

OVERVIEW

- Didactic: Surgical and catheter (pigtail) chest tubes
- Hands-on Session w/ Simulation Model: Surgical and catheter (pigtail) chest tubes
- Didactic: Pediatric trauma
- Trauma simulation case scenarios using high fidelity simulation

LEARNING OBJECTIVES

Upon completion of this course, learners will:

1. Demonstrate an initial organized approach to trauma
2. Demonstrate the placement of pigtail catheters and surgical thoracostomy tubes

INSTRUCTOR

Michelle Niescierenko, MD, MPH
Instructor in Pediatrics and Emergency Medicine, Harvard Medical School;
Director, Global Health Program & Assistant in Medicine, Div. of Emergency Medicine, BCH

CLINICAL SKILLS WORKSHOP: "PEDIATRIC SEDATION"

OVERVIEW

- Basic airway management session
- Hands-on Session: Monitoring, bag valve mask skills, basic airway equipment
- Didactic: Pediatric sedation
- Sedation simulation case scenarios using high fidelity simulation

INSTRUCTOR

Craig McClain, MD, MPH
Assistant Professor of Anaesthesia, Harvard Medical School;
Director, Global Anesthesiology Fellowship &
Senior Associate in Perioperative Anesthesia, Dept. of Anesthesiology, BCH

LEARNING OBJECTIVES

Upon completion of this course, learners will:

1. Demonstrate techniques for procedural sedation in resource limited settings
2. Demonstrate techniques for mitigating the risk of procedural sedation

CLINICAL SKILLS WORKSHOP: "LINES, TUBES & WOUNDS"

OVERVIEW

- Didactic: Introduction/overview of nursing care in resource limited settings
- Skills Station 1: Vascular access
- Skills Station 2: Skin and wound care
- Skills Station 3: Chest tube management

LEARNING OBJECTIVES

Upon completion of this course, learners will:

1. Describe the principles of pediatric vascular access and practice cannulation techniques
2. Review strategies to minimize skin injury and promote wound healing
3. Discuss indications, management &potential complications of pediatric chest tubes in low resource settings

INSTRUCTOR

Lisa Morrissey, MPH, MSN, RN, CPHON
Director, Global Nursing Fellowship & Nurse Leader,
Dana-Farber/BCH Cancer and Blood Disorders Center;

CLINICAL SKILLS WORKSHOP: "MEDICATION SAFETY"

OVERVIEW

- Administration of IV medications and fluids
  - Dosing tape use
  - IV fluid preparation
  - Antibiotic preparation and administration
  - Monitoring IV infusions: drip rates, compatibility, dilutions
  - Drug availability/common meds in resource limited settings
- Medication administration/documentation: The "five rights"
- Oral medications and inhalers

LEARNING OBJECTIVES

Upon completion of this course, learners will:

1. Calculate IV drip rates without an infusion pump & prepare IV admixtures and serial dilutions safely
2. Identify at least three alternative options for oral and inhalation delivery

INSTRUCTOR

Jessica White, PharmD
Global Pharmacy Fellow & Clinical Pharmacist, BCH

ULTRASOUND COURSE

Wednesday & Thursday | October 25-26, 2017

Simmons College – LaFavour Hall, 4th Floor, Board Room
2 Avenue Louis Pasteur, Boston MA 02115

WEDNESDAY, OCTOBER 25th		THURSDAY, OCTOBER 26th	
08:30 – 09:00	Registration | Breakfast	08:30 – 09:00	Registration | Breakfast
09:00 – 09:30	Introduction to Ultrasound; FAST	09:00 – 10:30	Cardiac, Soft Tissue & Musculoskeletal
10:30 – 12:00	▸ Hands-On Session	10:30 – 12:00	▸ Hands-On Session
12:00 – 01:00	Lunch	12:00 – 01:00	Lunch
01:00 – 02:30	Lung, Renal & Bladder	01:00 – 02:30	Abdomen & Vascular Access
02:30 – 04:00	▸ Hands-On Session	02:30 – 04:00	▸ Hands-On Session

OVERVIEW

This interactive two-day course will provide the foundation for integration of ultrasound into clinical practice with a focus on use in resource limited settings. The course provides an overview of basic ultrasound physics, machine use, and a review of point-of-care ultrasound applications including (FAST, lung, vascular access and other high yield topics). The course will feature a combination of didactic teaching sessions with small-group hands-on training sessions. Case discussions and image review will provide learners with the opportunity to learn abnormal findings and their implications in clinical care. Hands-on sessions will utilize adult & pediatric models, allowing learners to develop comfort with scanning basics and recognition of normal anatomy.

LEARNING OBJECTIVES

Upon completion of this course, learners will:

1. Understand both the clinical utility and limitations of the basic applications of point-of-care ultrasound for diseases and conditions common in resource-limited settings
2. Preform point-of-care ultrasound image acquisition and interpretation

INSTRUCTORS

Cynthia Adams, MD, RDMS
Instructor in Pediatrics, Harvard Medical School;
Assistant in Medicine, Div. of Emergency Medicine, BCH

HELPING BABIES BREATHE

Friday | October 27, 2017

1 Autumn Street, Auditorium B (basement)
Boston, MA 02115

08:30 – 09:00	Registration | Breakfast
09:00 – 09:15	**Introduction**
09:15 – 10:45	**Provider Workshop**
10:45 – 11:00	Break
11:00 – 12:15	**Provider Workshop (continued)**
12:15 – 12:45	**Evaluation**
12:45 – 01:45	Lunch
01:45 – 03:30	**Facilitator Workshop**
03:30 – 03:45	Break
03:45 – 04:30	**Plan & Evaluate Courses**
04:30 – 04:45	**Presentation Of Certificates & Course Evaluation**

OVERVIEW

Helping Babies Breathe (HBB) is an evidence-based curriculum in basic neonatal care and resuscitation for use in resource-limited settings. The "Golden Minute" is the key concept of HBB. It implies that by one minute of age, the newborn baby should start breathing on his or her own, or should be ventilated with a bag and a mask. The "Golden Minute" also identifies the steps that a birth attendant should take immediately after birth to evaluate and stimulate breathing. Emphasis is placed on the assessment of each baby, providing temperature support, providing the baby with stimulation to breathe and assisted ventilation, all within a minute of birth. The course methodology focuses on hands-on practice using a simulator mannequin.

LEARNING OBJECTIVES

Upon completion of this course, learners will:

1. Demonstrate resuscitation techniques for newborns struggling to breathe 1 minute after birth
2. Show newborn resuscitation skills to other providers

INSTRUCTOR

Kim Wilson, MD, MPH

Assistant Professor of Pediatrics & Affiliate, Div. of Global Health and Social Medicine, Harvard Medical School; Attending, Div. of General Pediatrics & Director, Global Pediatric Fellowship, BCH