Global health as a field is complex, ever-changing and involves a diverse set of skills that spans across disciplines, including: clinical knowledge & skills, advocacy & communication, 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.

TARGET AUDIENCE
The target audience for this course are healthcare professionals (MD/DO/PA/MSN/RB/PharmD) who are engaged or planning engagement in global pediatric clinical work.

COURSE DIRECTORS
Michelle Niescierenko, MD, MPH, Christiana Russ, MD, DTMH, and Lisa Morrissey, MPH, MSN, RN, CPHON

COURSE COORDINATOR
Tony Tran, BS  ton.tran@childrens.harvard.edu

TUITION FEES

<table>
<thead>
<tr>
<th></th>
<th>Physicians, Physician Assistants, Nurses, &amp; Pharmacists</th>
<th>Residents &amp; Fellows in Training</th>
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</thead>
<tbody>
<tr>
<td>Ultrasound Course</td>
<td>$600.00</td>
<td>n/a*</td>
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<tr>
<td>Helping Babies Breathe Course</td>
<td>$100.00</td>
<td>$50.00</td>
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<tr>
<td>Helping Babies Breathe Course w/ Training Kit**</td>
<td>$300.00</td>
<td>$250.00</td>
</tr>
<tr>
<td>Clinical Core Topics in Global Health</td>
<td>$150.00</td>
<td>FREE</td>
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</table>

*Residents and Fellows are not eligible to enroll in the Ultrasound Course

**HBB Training Kit includes (1) NeoNatalie Newborn Simulator and (1) Helping Babies Breathe Facilitator Flipchart
REGISTRATION
Registration by credit card can be made at by clicking register button above. Registration by check (draft on a United States bank): please make payable to Boston Children’s Hospital and contact Lesley Niccolini Lesley.niccolini@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.

REFUND POLICY
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
Boston Children’s Hospital is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to provide continuing medical education for physicians. Boston Children's Hospital designates this live activity for a maximum of 35.50 AMA PRA Category 1 Credits™. Physicians should claim only the 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.

REGISTER HERE
Ultrasound Course
Course Capacity = 18 students

TIME & LOCATION
Day 1 - Monday, August 1, 2016 @ 8:30–4:00pm
Day 2 - Tuesday, August 2, 2016 @ 8:30–4:00pm

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

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

Rachel Rempell, MD, RDMS
Instructor in Pediatrics, Harvard Medical School;
Assistant in Medicine, Director of Emergency Ultrasound,
Department of Emergency Medicine, BCH

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. Be familiar with the basic applications of point-of-care ultrasound in the diagnosis and treatment of diseases and conditions common in resource-limited settings
2. Be proficient in image acquisition and interpretation
3. Understand both the clinical utility and limitations of point-of-care ultrasound

SCHEDULE
Day 1 - Monday, August 1, 2016
8:30 – 9 a.m. REGISTRATION | BREAKFAST Introduction to Ultrasound
9 – 9:30 a.m. 9:30 – 10:30 a.m. 10:30 – 12 p.m. 12 – 1 p.m. 1 – 2:30 p.m. 2:30 – 4 p.m.
9:30 – 10:30 a.m. FAST Hands-on Session LUNCH Lung, Renal & Bladder Hands-on Session
10:30 – 12 p.m. Hands-on Session
12 – 1 p.m. LUNCH
1 – 2:30 p.m. Lung, Renal & Bladder
2:30 – 4 p.m. Hands-on Session

Day 2 - Tuesday, August 2, 2016
8:30 – 9 a.m. REGISTRATION | BREAKFAST Cardiac, Soft Tissue & Musculoskelet.
9 – 10:30 a.m. 10:30 – 12 p.m. 12 – 1 p.m. 1 – 2:30 p.m. 2:30 – 4 p.m.
10:30 – 12 p.m. Hands-on Session LUNCH
12 – 1 p.m. Abdomen & Vascular Access
1 – 2:30 p.m. Hands-on Session
2:30 – 4 p.m. Hands-on Session
Helping Babies Breathe Course
Course Capacity = 40 students

TIME & LOCATION
Wednesday, August 3, 2016 @ 8:30–5:45pm

Center for Life Science, 12th floor Conference Room
3 Blackfan Circle, Boston, MA 02115

INSTRUCTORS
Kim Wilson, MD, MPH
Assistant Professor of Pediatrics, Harvard Medical School;
Director, Global Pediatric Fellowship, Assistant in Medicine,
Division of General Pediatrics, BCH

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

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

George Little, MD
Co-Chairperson & Editorial Board Member,
Helping Babies Breathe Global Implementation Task Force;
Active Emeritus Professor of Pediatrics,
Dartmouth School of Medicine

Alexis Schmid, MSN, RN
Global Nursing Fellow, Case Coordinator,
Department of International Health Services,
Staff Nurse II, Department of Emergency Medicine, BCH

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. Identify and mitigate delivery risks for mothers and newborns
2. Demonstrate resuscitation techniques for newborns struggling to breathe in the first minute after birth
3. Be able to teach newborn resuscitation skills to other providers

SCHEDULE
8:30 – 9 a.m. REGISTRATION | BREAKFAST
9 – 9:45 a.m. Welcome, Introduction, Pre-course Baseline Evaluations
9:45 – 10 a.m. Dialogue – Causes of Neonatal Death, Opening visualization
10 – 10:45 a.m. Preparation for a Birth
10:45 – 11 a.m. BREAK
11:00 – 12 p.m. Routine Care
12 – 12:45 p.m. The Golden Minute (clear airway and stimulate breathing)
12:45 – 1:30 p.m. LUNCH
1:30 – 2:30 p.m. The Golden Minute (ventilation)
2:30 – 3:30 p.m. Continued Ventilation with Normal and Slow Heart Rate
3:30 – 3:45 p.m. BREAK
3:45 – 4:45 p.m. Participant Evaluations – Mastering the Action Plan
4:45 – 5:45 p.m. Continued Learning in the Workplace; Course Evaluations

GLOBAL PEDIATRIC CLINICAL SKILLS COURSE - Registration Link: www.tiny.cc/skillscourse
Core Clinical Topics in Global Health
Max Capacity = 40 students

TIME
Day 1 - Thursday, August 4, 2016 @ 7:30–5:15pm
Day 2 - Friday, August 5, 2016 @ 7:30–5:15pm

Location TBD

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.

SCHEDULE
Day 1 - Thursday, August 4, 2016
7:30 – 8 a.m. REGISTRATION | BREAKFAST
8 – 8:15 a.m. Introduction | Russ
8:15 – 8:45 a.m. Acute Malnutrition | Niescierenko
8:45 – 9:45 a.m. Newborn Care | TBD
9:45 – 10 a.m. BREAK
10 – 11 a.m. HIV | Stulac
11 – 12 p.m. Tuberculosis | TBD
12 – 1:00 p.m. SUGAR Simulation | LUNCH
1:30 – 3:30 p.m. SKILLS WORKSHOP
Group A: Trauma & Emergencies
Group B: Pediatric Sedation
Group C: Lines, Tubes & Wounds
Group D: Medication Safety

3:30 – 3:45 p.m. BREAK
3:45 – 5:45 p.m. SKILLS WORKSHOP
Group B: Trauma & Emergencies
Group A: Pediatric Sedation
Group D: Lines, Tubes & Wounds
Group C: Medication Safety

6:00 – 8:00 p.m. SOCIAL EVENT

Day 2 - Friday, August 5, 2016
7:30 – 8 a.m. REGISTRATION | BREAKFAST
8:00 – 9:00 a.m. Parasites | Maguire
9:00 – 9:30 a.m. Climate Change | Bernstein
9:30 – 10:00 a.m. Mosquito-borne Infect. | Ganapathi
10:00 – 10:15 a.m. BREAK
10:15 – 11:15 a.m. IMCI & Acute Resp. Infect. | Russ
11:15 – 12:15 p.m. Malaria | Dvorin
12:15 – 1 p.m. TRIVIA | LUNCH
1:30 – 3:30 p.m. SKILLS WORKSHOP
Group C: Trauma & Emergencies
Group D: Pediatric Sedation
Group A: Lines, Tubes & Wounds
Group B: Medication Safety

3:30 – 3:45 p.m. BREAK
3:45 – 5:45 p.m. SKILLS WORKSHOP
Group D: Trauma & Emergencies
Group C: Pediatric Sedation
Group B: Lines, Tubes & Wounds
Group A: Medication Safety

* Learners will be divided into 4 groups (A, B, C, and D) and rotate between the 4 workshops
DIDACTIC SESSION: CORE CLINICAL TOPICS IN GLOBAL HEALTH

SPEAKERS

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

James Maguire, MD, MPH
Professor of Medicine, Harvard Medical School;
Senior Physician, Division of Infectious Diseases,
Brigham and Women’s Hospital

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

Aaron Bernstein, MD, MPH
Instructor in Pediatrics, Harvard Medical School;
Associate Director, Center for Health and the Global
Environment, Harvard T.H. Chan School of Public Health;
Assistant in Medicine, Division of General Pediatrics, BCH

Sara Stulac, MD, MPH
Instructor in Medicine, Harvard Medical School;
Deputy Chief Medical Officer, Partners In Health;
Associate Physician, Div. of Global Health Equity, BWH;

Lakshmi Ganapathi, MD
Clinical Fellow in Pediatrics, Harvard Medical School;
Clinical Fellow, Division of Infectious Diseases, BCH

Jeffrey Dvorin, MD, PhD
Assistant Professor of Pediatrics, Harvard Medical School;
Associate in Medicine, Div. of Infectious Diseases, BCH

TBD - Speakers for Newborn Care and Tuberculosis

LEARNING OBJECTIVES

Upon completion of this course, learners will:
1. Gain evidence-based, setting-specific knowledge in the epidemiology, diagnosis, and treatment of common illnesses and tropical diseases affecting children in developing countries
2. Obtain practical suggestions for utilizing local resources for optimal clinical care

SKILLS WORKSHOP I: TRAUMA & EMERGENCIES

INSTRUCTOR

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

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

SKILLS WORKSHOP II: PEDIATRIC SEDATION

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. Identify pediatric patients appropriate for sedation
2. Demonstrate techniques for procedural sedation in resource limited settings
3. Demonstrate techniques for mitigating the risk of procedural sedation
SKILLS WORKSHOP III: LINES, TUBES & WOUNDS

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

Marilyn Moonan, MSN, RN, CPN
Global Nursing Fellow,
Education Coordinator, Surgical Programs, BCH

Alexis Schmid, MSN, RN, CPNP
Global Nursing Fellow,
Case Coordinator, Dept. of International Health Services,
Staff Nurse II, Dept. of Emergency Medicine, BCH

Kathryn Barrandon, MPH, BSN, CPN
Global Nursing Fellow,
Staff Nurse I, 9 East, General Medicine, BCH

Michele Morin, MSN, RN
Global Nursing Fellow,
Clinical Nurse Specialist, Dept. of Emergency Medicine, BCH

LEARNING OBJECTIVES
Upon completion of this course, learners will:
1. Describe the principles of pediatric intravascular access
2. Review strategies for effective cannulation of peripheral IV’s in children
3. Discuss complications specific to venous access, and identify appropriate interventions.
4. Discuss diagnoses associated with impaired skin integrity
5. Identify strategies to promote optimal skin integrity and promote wound healing
6. Review skin assessment and wound care techniques in low resource settings
7. Describe indications, management and potential complications of pediatric chest tubes
8. Demonstrate techniques for chest tube maintenance in low resource settings

SKILLS WORKSHOP IV: MEDICATION SAFETY

INSTRUCTORS
Shannon Manzi, PharmD
Director, Clinical Pharmacogenomics Service
Manager, ICU and Emergency Services, BCH

Jessica White, PharmD
Clinical Pharmacist, BCH

LEARNING OBJECTIVES
Upon completion of this course, learners will:
1. Calculate IV drip rates without an infusion pump
2. Prepare IV admixtures and serial dilutions safely
3. Use a pediatric dosing tape correctly
4. Identify at least three alternative options for oral and inhalation delivery