Welcome to the 11th Annual Health & Humanitarian Logistics (HHL) Conference

Share The Conversation #HHL2019 or #HHLConf
8:45 AM
Conference Introduction

Dr. Pinar Keskinocak
Co-founder and Director, Center for Health & Humanitarian Systems (CHHS)
William W. George Chair and Professor, School of Industrial & Systems Engineering
Georgia Institute of Technology

Dr. Julie Swann
Co-founder, Center for Health & Humanitarian Systems (CHHS)
Department Head & Professor, Department of Industrial and Systems Engineering
NC State University
Conference Objectives

• Strengthen supply chains and related activities to better meet human needs

• Facilitate dialogue across organizations & sectors to:
  – Articulate challenges and successes
  – Identify opportunities for new practices, research, or technology solutions
  – Identify priorities for strategies, policies and investments
Co-Chairs

• Özlem Ergun, Mechanical and Industrial Engineering, Northeastern University
• Jarrod Goentzel, Humanitarian Response Lab, MIT
• Pinar Keskinocak, Center for Health & Humanitarian Systems (CHHS), and School of Industrial and Systems Engineering, Georgia Tech
• Julie Swann, Fitts Department of Industrial and Systems Engineering, NC State University
• Luk Van Wassenhove, Humanitarian Research Group, INSEAD

Co-Organizers

• Liz Igharo, The International Association of Public Health Logisticians (IAPHL)
• Dominique Zwinkels, People that Deliver (PTD)

Host

• University of Rwanda Regional Centre of Excellence
Conference Objectives

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A brief history of the Health & Humanitarian Logistics (HHL) Conference

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Conference Agenda Overview

• Plenary panels
• Interactive workshops
• Oral presentations
• Poster sessions
• Zipline & DP World tours

And many opportunities for exchanging ideas and networking during coffee breaks, lunch, and reception!
A Global Conference: Partner Organizations & Hosts

2019: 

2018: 

2017: Georgia Tech Health & Humanitarian Systems

2016: unicef

2015: Gordon Institute of Business Science University of Pretoria

2014: Tecnológico de Monterrey

2013: MALAYSIA INSTITUTE FOR SUPPLY CHAIN INNOVATION

2012: KLU

2009-2011: Georgia Tech Health & Humanitarian Systems
2019 HHL Program Committee

- Laila Akhlaghi – John Snow, Inc. (JSI)
- George Fenton – Humanitarian Logistics Association
- Inès K. Gege Buki – USAID
- John W. Fitzsimmons – PAHO/WHO
- Paul Molinaro – World Health Organization (WHO)
- Paulo Gonçalves – Università della Svizzera italiana
- Joe Ruiz – The UPS Foundation
- David Sarley – Bill and Melinda Gates Foundation
- Alexis Strader – People that Deliver
- Prashant Yadav – Bill & Melinda Gates Foundation
Special Thanks to...

• Georgia Tech staff and students
  – Joscelyn D. Cooper
  – Julie Smith
  – Jin Noh
  – Andy Haleblian

• University of Rwanda Regional Centre of Excellence
  – Stany Banzimana
  – Regis Hitimana
  – Stephen Karengera
  – Jean d'Amour Habagusenga
  – Kayumba P.Claver
  – Philip Cotton

• Rwanda Conventions Bureau
  – Valence Gitera
  – Eric Kimenyi

• Rwanda Ministry of Health
  - Zacharie Gahungu
  - Annette Gakwerere

• Student Volunteers
  - University of Rwanda
  - University of Global Health Equity
  - Strathmore University
  - INSEAD

• 2019 Program Committee

• Speakers and Attendees
Extra Special Thanks to...

Joscelyn Cooper
The size of the circles represents the percentage of attendees from each country. The larger the circle, the larger the number of attendees.
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<thead>
<tr>
<th>Organization/Company</th>
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<td>106 Organizations and Companies Represented!</td>
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<td>- Kasha</td>
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<td>- Kenya Ministry of Health</td>
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<td>- Kuhwe Logistics</td>
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<td>- LLamasoft</td>
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<td>- Logenix International</td>
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<td>- LOGIVAC CENTER</td>
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<td>- Management Sciences for Health</td>
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<td>- Massachusetts Institute of Technology (MIT)</td>
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<td>- Mbeya Referral Hospital</td>
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<td>- MEBS Global Reach</td>
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<td>- Medecins Sans Frontieres</td>
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<td>- MEDICAL ACCESS UGANDA LIMITED</td>
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<td>- Mozambique Ministry of Health</td>
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<td>- NACP/Ghana Health Service</td>
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<td>- NC State University</td>
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<td>- Nexleaf Analytics</td>
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<td>- Nigeria Ministry of Health</td>
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<td>- Nnamdi Azikiwe University</td>
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<td>- Northeastern University</td>
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<td>- Pamela Steele Associates Limited</td>
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<td>- Queen's University</td>
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<td>- Republic of South Africa</td>
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<td>- Rwanda Ministry of Health</td>
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<td>- Rudi Health Care</td>
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<td>- Sclair Consulting</td>
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<td>- Samsung</td>
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<td>- Shipment Essentials Communications</td>
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<td>- Singha</td>
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<td>- Smith &amp; Nephew</td>
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<td>- South African Airways</td>
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<td>- South African Post Office - Delta</td>
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<td>- Stryker</td>
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<td>--Taiwan Ministry of Health</td>
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<td>- The Carter Center - Ethiopia</td>
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<td>- The Global Fund</td>
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<td>- The Liberian National Public Health Institute (NPHIL)</td>
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<td>- Transaid</td>
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<td>- UN Iran</td>
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<td>- UNDP Istanbul</td>
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<td>- UNDP Zimbabwe</td>
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<td>- Universidad de Antioquia</td>
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<td>- University of Global Health Equity</td>
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<td>- Zimbabwe Ministry of Health and Child Care</td>
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<td>- Zipline Rwanda</td>
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The 2019 conference organizers would like to especially thank

The UPS Foundation

for its ongoing support of the Health & Humanitarian Logistics Conference for the 11th year

2009-2019
The 2019 conference organizers would like to especially thank

**Logenix International**

for the new support and engagement with

2019 Health & Humanitarian Logistics Conference

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2019
The 2019 conference organizers would like to especially thank

University of Rwanda – Regional Centre of Excellence

for hosting and organizing 2019 Health & Humanitarian Logistics Conference

2019
Thank you to our 2019 HHL Conference Sponsors!
DAY 1: Wednesday, July 10th

• 8:45 – 9:15  CONFERENCE INTRODUCTION & AIM
• 9:15 – 9:30  WELCOME ADDRESS
• 9:30 – 11:00 SPECIAL KEYNOTE PANEL
  *Ministering Health- The Role of Supply Chain Policy and Collaboration*
• 11:00 – 11:30 POSTER SESSION/COFFEE BREAK
• 11:30 – 12:30 PRESENTATIONS/WORKSHOPS – SESSION 1
• 12:30 – 13:30 LUNCH
DAY 1: Wednesday, July 10th

• 13:30 – 14:45  PLENARY PANEL 1
  Implementation of Resilience in Supply Chains: Perspectives, Pitfalls, and Winning Strategies

• 14:45 – 15:45  PRESENTATIONS/WORKSHOPS - SESSION 2

• 15:45 – 16:15  POSTER SESSION/COFFEE

• 12:30 – 13:30  LUNCH

• 16:15 – 17:30  PLENARY PANEL 2
  Private Sector Engagement in Health and Humanitarian Supply Chain Management and Logistics

• 17:30 – 19:30  EVENING COCKTAIL
Special Activities

Zipline Tour & DP World Tour

Available on Friday

*Zipline tour check-in at 8 a.m. (shuttle leaves at 8:30 a.m.)
*DP World tour check-in at 9 a.m. (shuttle leaves at 9:30 a.m.)

If you did not sign up in advance, see registration table during break to get on the waitlist
Challenge to You

- What knowledge can I take away for myself and/or my colleagues?
- What action will I take when I return?
- What action will I ask others to take when I return?
Welcome Address

Dr. Diane Gashumba,
Rwanda Minister of Health
on behalf of His Excellency,
President Paul Kagame
9:30-11AM
Special Keynote Panel

Dr. Diane Gashumba, Minister of Health - Rwanda

HE Mohamed Said Abdilahi, Deputy Minister of Health - Somalia

Dr. Francis N. Kateh, Deputy Minister of Health - Liberia

Prof. Philip Cotton, Vice-Chancellor, University Of Rwanda, Moderator
Panelist Remarks

Special Keynote Panel
The Role of Policy and Collaboration
Ministering Health

Francis N. Kateh, MD, MHA, MPS/HSL, FLCP
Deputy Minister for Health Services,
Chief Medical Officer,
Republic Of Liberia
## Liberia: Country and Health Context

<table>
<thead>
<tr>
<th>Health Condition</th>
<th>Data</th>
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<td><strong>TB</strong></td>
<td>Estimated deaths from TB 3,200 and rising (2015)</td>
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<td><strong>HIV/AIDS</strong></td>
<td>HIV prevalence 2.1% and 28,652 People living with HIV (2014)</td>
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<td><strong>Malaria</strong></td>
<td>Entire population at risk 4.6 million (2016)</td>
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<td><strong>Maternal Mortality</strong></td>
<td>Maternal mortality rate 1,072 per 100,000 live births (2014)</td>
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<tr>
<td><strong>Child Mortality</strong></td>
<td>Under-five mortality rate 94 per 1,000 live births (2013)</td>
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### Key Figures:

- **Total Population (UN):** 4.6 million
- **Population Growth Rate (UN):** 2.6%
- **Human Development Index Rank (UN):** 177/188
EVD Logistics Platform

EVD logistics pipeline for Liberia

- Logistics Hub
- Downstream Pipeline Management
- Upstream Pipeline
- Port Hub
- Partner Warehouses Monrovia/Upcountry
- Remote Counties:
  - FLB Buchanan
  - FLB Harper
  - FLB Voinjama
  - FLB Gbarnga
  - FLB Zwedru
  - 32 x 10 METERS at:
    - Grand Cape Mount
    - Gbarpolu
    - Bomi
    - Margibi
  - Montserrado County:
    - CCCs Monrovia/Upcountry
    - Ebola Treatment Units Monrovia/Upcountry
    - County Medical Stores (Last mile to be provided by govt)
- DONATIONS
- PROCUREMENT
- Rapid Response
- County Stores (last mile to be completed by govt)
- ETUs
- CCCs/Rapid Response

Airport Hub

32 x 10 METERS at: Rivercess
Sine
Nimba
Grand Kru
River Gee

9 other Counties

Monrovia/Upcountry
Essential Health Supply Chain

Manufacturers

NDS Monrovia

Procurement Services
Storage
Distribution

Health Care Facility Montserrado

NDS Cross Dock Depots

Procurement Plan

SCMU/ MOHSW

Program Units

Health Care Facility SE

LMIS DASHBOARD

Community Health Volunteers

Community Health Volunteers
The Supply Chain System support the vision of the Ministry of Health to deliver quality health services to the people of Liberia: “Dedication to equitable, accessible and sustainable health promotion, and protection and the provision of comprehensive and affordable healthcare.”

The Initial Supply Chain Master Plan (SCMP) developed 2010 and later revised 2015: This serves as the overall strategy for medical supply chain management in Liberia with clear roles and responsibilities of all key stakeholders in the chain.

The Supply Chain Transformation Plan (SCTP) developed in 2018: This provides clear guidance in the implementation of the Supply Chain Master Plan through six work streams that are now aligned to four cover all aspect of supply chain systems strengthening including governance and leadership.
The Key to Better Outcome in Health and Humanitarian Logistics

- Proper Planning
- Appropriate Prepositioning
- Efficient Accessibility
Liberia has a new pharmaceutical warehouse (Central Medical Stores). All health products are integrated in the warehouse.

The MoH is currently working with the international partners and donors to set up a Warehouse Management Information System (WMIS) at this Central Medical Stores (CMS).

The MoH intends to link the SCMU, LMHRA and CMS platforms in order to speak to one another through the supply chain system.
PICTORIALS OF ACHIEVEMENTS
Improved health infrastructure from make-shift structures to standard clinics

• Improved housing facilities for health workers
Challenges

- Limited Budgetary Allocation to cover appropriate plans and policies
- Draw down on donor funding, hence stagnation to some of the programs

Frequent stock out of essential medicines at public health facilities due to inadequate funds and health financing policy

Limited public health facilities in rural communities with no maintenance plan

Health financing not matching the “free health care policy”
Movement into remote Communities for Service Provision

THANKS FOR THE INVITE
Ministering Health- The Role of Supply Chain Policy and Collaboration

Special Keynote Panel
11:00 AM

POSTER SESSION/COFFEE BREAK

30 minutes

Return by 11:30 AM

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