

**International  
Conference on  
Disaster Medicine  
& Hurricane  
Resiliency**



**March 8-11  
St. Maarten  
Caribbean**

# **2019 International Conference On Disaster Medicine & Hurricane Resiliency**



American University of the  
Caribbean School of Medicine  
Caribbean Center for Disaster Medicine

**For more information:**



[ccdm.aucmed.edu](http://ccdm.aucmed.edu)



[ccdm@aucmed.edu](mailto:ccdm@aucmed.edu)



# 2019 International Conference On Disaster Medicine & Hurricane Resiliency

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Caribbean island of St. Maarten

## Conference Sessions

### Friday, March 8

#### Registration

12:30 pm - 7:30 pm | Auditorium Foyer

#### Opening Ceremony & Reception

5:30 pm - 8:00 pm | Auditorium

**Heidi Chumley, MD, MBA**

Executive Dean, American University of the Caribbean  
School of Medicine

**His Excellency Eugene Holiday**

Governor, Sint Maarten

**Leona Romeo Marlin**

Prime Minister, Sint Maarten

**Erica Wheeler, PhD**

PAHO / WHO Representative, Trinidad and Tobago, Aruba,  
Curacao, Sint Maarten, Bonaire, St. Eustatius and Saba

*\*Shuttles will depart AUC at 8:00 pm*

### Saturday, March 9

#### Breakfast

7:30 am - 8:30 am | Auditorium Foyer

#### Welcome & Introductions

8:30 am - 9:00 am | Auditorium

**Heidi Chumley, MD, MBA**

Executive Dean, American University of the Caribbean  
School of Medicine

**Mark Quirk, EdD**

Senior Associate Dean for Medical Education, American  
University of the Caribbean School of Medicine; Executive  
Director, Caribbean Center for Disaster Medicine

| Plenary

#### Disasters and Healthcare

9:00 am - 9:30 am | Auditorium

**Gregory Ciottone, MD, FACEP, FFSEM**

Associate Professor, Harvard Medical School; Director, Division  
of Disaster Medicine at Beth Israel Deaconess Medical Center;  
Senior Advisor, Caribbean Center for Disaster Medicine

#### Break

9:30 am - 9:45 am | Auditorium Foyer

| Presentation

#### Hurricanes, Medical Schools, and Social Accountability

9:45 am - 11:00 am | Auditorium

**Yocasta Brugal, MD**

President and Dean, San Juan Bautista School of Medicine  
Puerto Rico

**Mark Quirk, EdD**

Senior Associate Dean for Medical Education, American  
University of the Caribbean School of Medicine; Executive  
Director, Caribbean Center for Disaster Medicine

| Panel

#### St. Maarten/St. Martin Experiences of Hurricane Irma: Healthcare and Public Health Perspectives

11:00 am - 12:00 pm | Auditorium

**Earl Best, MD**

Inspector General, Sint Maarten Ministry of Public Health,  
Social Development, and Labor

**Felix Holiday, MD**

Medical Director, Sint Maarten Medical Center

**Louis Jeffry, MD**

Medical Director, Louis Constant Hospital

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## Lunch

12:00 pm - 1:15 pm | Covered Patio

| Panel

## Perspectives on the Impact of Climate Change on Risk of Major Hurricanes

1:15 pm - 2:15 pm | Auditorium

**Mark Keim, MD, MBA**

Chief Executive Officer, DisasterDoc, LLC; Faculty Member,  
Beth Israel Deaconess Medical Center Fellowship in Disaster  
Medicine; Adjunct Professor, Rollins School of Public Health  
at Emory University

**Ulric Trotz, PhD**

Deputy Director and Science Advisor, Caribbean Community  
Climate Change Center

| Plenary

## A Global Perspective on Disaster Medicine

2:15 pm - 3:00 pm | Auditorium

**Gavin MacGregor-Skinner, BVSC, MSC, MPH, MRCVS**

Assistant Professor, Department of Public Health Sciences,  
College of Medicine, Penn State University; Director of  
Strategic Partnerships, Beth Israel Deaconess Medical  
Center Fellowship in Disaster Medicine

## Break

3:00 pm - 3:15 pm | Auditorium Foyer

| Presentation

## Rebuilding Community Healthcare after Catastrophe: The Post Katrina Experience

3:15 pm - 4:00 pm | Auditorium

**James Aiken, MD, MHA, FACEP**

Clinical Associate Professor of Emergency Medicine and  
Public Health, Co-Chair of the Division of Disaster Medicine  
and EMS, LSU Health Science Center New Orleans, LA

| Panel

## Disaster Response Coordination

4:00 pm - 6:00 pm | Auditorium

**Brad Newbury, MPA, NRP, I/C**

Associate Director of EMS, Beth Israel Deaconess Medical  
Center Fellowship in Disaster Medicine; President and CEO,  
National Medical Education & Training Center

**Robert Obernier**

Deputy Director of Field Operations & Training, Team  
Rubicon Global

**Cylred Richardson, RN, MscN, MPH**

Head of Emergency Medical Services, Sint Maarten Ministry  
of Public Health, Social Development, and Labor

**Margje Troost, MSc**

Policy Advisor, Sint Maarten Ministry of Public Health, Social  
Development, and Labor

## Short Oral Presentations

4:00 pm - 6:00 pm | Multi-Purpose Room

Animals, People, and Disasters: Why Veterinarians  
Should Have a Seat at the Emergency Management  
Table

**Christa Gallagher, DVM, CCRP, MPH, DACVPM**

Ross University School of Veterinary Medicine



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## Short Oral Presentations (Cont.)

4:00 pm - 6:00 pm | Multi-Purpose Room

Attitudes of Emergency Medical Services  
Stakeholders in Barbados: A Convergent Parallel  
Mixed-Methods Study  
**Hezedean A. Smith, CFO, CEMSO, CPM, CHSE, MIFireE, PMD**

*Assistant Chief, Orlando Fire Department, Florida  
Chief Operating Officer, Global Emergency Services  
Consulting Group, LLC*

Epigenetics of Posttraumatic Stress and  
Pharmacological Interventions

**Gautam Ullal, MBBS, MAMS, PhD**

*Department of Neuroscience, American University of the  
Caribbean School of Medicine*

Hurricane Maria 2017: Dominica's Experience  
(Survivor's and Emergency First Responders)

**Earl Hernandez, EMDM, Dip EM, NREMTP, CCEMTP, PNCCT**

*Tobago Emergency Management Agency*

The Convergence of Public Health and Medicine:  
Lessons Learned In the Field & Career Pathways

**Natasha Massoudi, MPH**

*American University of the Caribbean School of Medicine*

Implementing Disaster Preparedness Programs:  
Addressing the Impact of Disasters on the Health  
of Vulnerable Populations, Mitigating Costs,  
Building Resiliency, and Strengthening  
Communities

**Kathryn Booth, RN, MSN, CNL**

*Rush University College of Nursing*

**Constantine Kanakis, MS, MLS, ASCP**

*American University of the Caribbean School of Medicine*

## Poster Exhibit Hall

4:00 pm - 6:00 pm | Auditorium Foyer

## Reception

6:15 pm - 8:00 pm | El Zafiro, Simpson Bay

*\*Shuttles will depart for El Zafiro at 6:00 pm*

## Sunday, March 10

## Breakfast

7:30 am - 8:30 am | Auditorium Foyer

| Presentation

## Telemedicine, Behavioral Health and Disaster Medicine

8:30 am - 9:30 am | Auditorium

**Arlene Jeffry, LCP**

*Clinical Psychologist and Psychotrauma Coordinator, St.  
Martin – St. Barth*

**Deanna Larson**

*CEO, Avera eCare*

**Dean Smith, MD, MBI**

*Chief Medical Information Officer and Senior Vice President  
of Government Relations, GlobalMed*

**Gigi Sorenson, RN, MSN**

*Chief Clinical Officer and Vice President of Operations,  
GlobalMed*

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| Panel

## Developing an Inter-Professional Education Program in Disaster Medicine

9:30 am - 11:15 am | Auditorium

**Wesley Bissett, PhD, DVM**

*Director of Veterinary Emergency Team and Associate  
Professor of Emergency Medicine, Texas A&M Veterinary  
Medicine and Biomedical Sciences*

**Mark Quirk, EdD**

*Senior Associate Dean for Medical Education, American  
University of the Caribbean School of Medicine; Executive  
Director, Caribbean Center for Disaster Medicine*

**Selwyn Mahon, MD**

*AUC Disaster Medicine Fellowship Co-Director and Medical  
Director, Caribbean Center for Disaster Medicine*

**Ritu Sarin, MD**

*Instructor in Emergency Medicine, Harvard Medical School;  
Associate Director, Beth Israel Deaconess Medical Center  
Fellowship in Disaster Medicine*

**Tener Goodwin Veenema, PhD, MPH, MS, RN, FAAN**

*Professor of Nursing and Public Health, Johns Hopkins  
School of Nursing and Johns Hopkins Bloomberg School of  
Public Health*

| Plenary

## Hurricane Mortality and Morbidity: A Lesson from Maria in Puerto Rico

11:15 am - 12:00 pm | Auditorium

**Satchit Balsari, MD, MPH**

*Assistant Professor in Emergency Medicine, Harvard Medical  
School, and Fellow, Harvard FXB Center for Health and  
Human Rights*

## Lunch

12:00 pm - 1:15 pm | Covered Patio

| Presentation

## Disaster Management in Hospitals and Health Systems: Lessons from Hurricane Katrina and Ochsner Health System

1:15 pm - 1:45 pm | Auditorium

**Jennifer Couvillon, RN-BC, PhD, CNE**

*Campus President, Chamberlain University New Orleans-  
Ochsner Campus*

| Presentation

## Hazard Vulnerability Analysis for Acute Care Hospitals

1:45 pm - 2:15 pm | Auditorium

**Douglas Romney, MD, NREMT**

*Instructor in Emergency Medicine, Harvard Medical School;  
Attending Emergency Physician, St. Luke's Hospital (Ohio)*

| Presentation

## Disaster Relief: Getting to the Recovery Stage

2:15 pm - 3:15 pm | Auditorium

**George W. Contreras, MEP, MPH, MS, CEM, FAcEM,  
EMTP**

*Assistant Director, New York Medical College Center for  
Disaster Medicine*

**Robert Obernier**

*Deputy Director of Field Operations & Training, Team  
Rubicon Global*



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| Workshop

## Data Collection and Analysis for Decision-Making in a Disaster

2:15 pm - 3:15 pm | Multi-Purpose Room

**Miguel Marrero Medina, PhD, MPH**

*President, Puerto Rico Public Health Association*

**Himilce Velez-Almodovar**

*Consultant, J and M Global*

## Break

3:15 pm - 3:30 pm | Auditorium Foyer

## Research Paper Presentations

3:30 pm - 5:05 pm | Auditorium

Analysis of Emergency Healthcare Workforce and  
Service Readiness for a Mass Casualty Event in the  
Republic of Ireland

**Tener Goodwin Veenema, PhD, MPH, MS, RN, FAAN**

*Professor of Nursing and Public Health, Johns Hopkins  
School of Nursing and Johns Hopkins Bloomberg School of  
Public Health*

Immediate Death Rate During Atlantic Hurricanes is  
Associated with Island Terrain Inclination

**Caleb Dresser, MD**

*Beth Israel Deaconess Medical Center*

Pandemic Risks

**Colin Michie, FRCPCH**

*American University of the Caribbean School of Medicine*

Impact of Multi-Drug Resistant Bacteria In Disaster  
Response Efforts Including Hurricanes and Potential  
Mitigation Strategies

**Kathrine Robnett**

*Pennsylvania State University*

## Poster Exhibit Hall

3:30 pm - 5:30 pm | Auditorium Foyer

| Workshop

## Health System Resiliency through Interactive Preparedness

3:30 pm - 4:30 pm | Multi-Purpose Room

**Kristin Stevens, MS, CEM**

*Director of Preparedness and Disaster Risk Reduction,  
Americares*

| Presentation

## Technology and Disaster Medicine: Teaching and Practice

5:15 pm - 6:00 pm | Auditorium

**Vincent Bounes, MD, PhD, SAMU 31**

*Toulouse Hospital and Toulouse University*

**Laurent Gout, MD, SAMU 31**

*Toulouse University Hospital*

| Workshop

## Simulation, Gaming and Interactive Teaching models for Interprofessional Education

4:45 pm - 6:00 pm | Multi-Purpose Room

**David Adelstein, DO**

*Assistant Professor of Clinical Medicine, American University  
of the Caribbean School of Medicine*

**Teri Boese, DNP, RN**

*Director of Simulation, American University of the Caribbean  
School of Medicine*

**Gregory Plochocki, MD**

*Professor and Chair Emeritus of Behavioral and Clinical  
Medicine, American University of the Caribbean School of  
Medicine*

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*\*Shuttles will depart AUC at 6:15 pm*

**Monday, March 11**

## Breakfast

7:30 am - 8:30 am | Auditorium Foyer

| Plenary

## Establishing a Healthcare Response Coalition

8:30 am - 9:15 am | Auditorium

**Mary Russell, EdD, MSN**

*Emergency Nurse, Boca Raton General Hospital; Past Chair, Healthcare Emergency Response Coalition of Palm Beach County*

| Demonstration and Discussion

## Telemedicine and Disasters

9:15 am - 9:45 am | Auditorium

**Dean Smith, MD, MBI**

*Chief Medical Information Officer and Senior Vice President of Government Relations, GlobalMed*

**Gigi Sorenson, RN, MSN**

*Chief Clinical Officer and Vice President of Operations, GlobalMed*

| Presentation

## Developing an Assessment, Training, Planning, and Coordination Program for Healthcare Coalitions

9:45 am - 10:15 am | Auditorium

**David Wallace, DVM**

*Director, Center for Disaster Healthcare Preparedness, University of South Alabama*

## Break

10:15 am - 10:30 am | Auditorium Foyer

| Panel

## Caribbean Center for Disaster Medicine: A Global Interdisciplinary Approach

10:30 am - 11:45 am | Auditorium

**Vincent Bounes, MD, PhD, SAMU 31**

*Toulouse Hospital and Toulouse University*

**Gregory Ciottone, MD, FACEP, FFSEM**

*Associate Professor, Harvard Medical School; Director, Division of Disaster Medicine at Beth Israel Deaconess Medical Center; Senior Advisor, Caribbean Center for Disaster Medicine*

**Mark Quirk, EdD**

*Senior Associate Dean for Medical Education, American University of the Caribbean School of Medicine; Executive Director, Caribbean Center for Disaster Medicine*

**Erica Wheeler, PhD**

*PAHO / WHO Representative, Trinidad and Tobago, Aruba, Curacao, Sint Maarten, Bonaire, St. Eustatius and Saba*

## Closing Ceremony

11:45 am - 12:00 pm | Auditorium

| Special Panel for AUC Students

## Career Pathways in Disaster Medicine

12:30 pm - 2:00 pm | Multi-Purpose Room

**Ricardo Barranon**

*Student, American University of the Caribbean School of Medicine*

**Doug Romney, MD, NREMT**

*Instructor in Emergency Medicine, Harvard Medical School; Attending Emergency Physician, St. Luke's Hospital (Ohio)*

**Ritu Sarin, MD**

*Associate Director, Beth Israel Deaconess Medical Center Fellowship in Disaster Medicine*



# Scientific Posters

## **A Rapid Needs Assessment of Pharmaceutical Preparedness in the Wake of Hurricane Irma in the Country of Sint Maarten**

Jonathan Davidow ; Sonia Mia Diaz ; William Velasquez ; Colin Michie, FRCPCH FRSA FRSPH ; Gavin Macgregor-Skinner, BVSC MSC MPH MRCVS

*American University of the Caribbean School of Medicine*

*Beth Israel Deaconess Medical Center Fellowship in Disaster Medicine*

## **Air Sea Rescue: An Experience in the Gulf of Mexico**

Brandon Watkins

*American University of the Caribbean School of Medicine*

## **Attitudes of Emergency Medical Services Stakeholders in Barbados: A Convergent Parallel Mixed-Methods Study**

Hezedeon A. Smith, CFO, CEMSO, CPM, CHSE, MIFireE, PMD

*Orlando Fire Department, Global Emergency Services Consulting Group*

## **Comparing Medical Responses of the 2013 Boston Marathon Bombing and the 2017 Westminster Bridge Attack**

Krishna Patel; Patricia Henegan

*American University of the Caribbean School of Medicine*

## **Emotional and Behavioral Impact of Hurricane Irma on the AUC Community**

Carolina Ferreira; Desiree Nieves-Adorno

*American University of the Caribbean School of Medicine*

## **Investment: A Key Component of Caribbean Disaster Preparedness**

Soubhi Alhayek; Natalie Karapetians; Ashley Khanna; Abdullah Najdat

*American University of the Caribbean School of Medicine*

## **Local NGOs as Essential Components for Resilience Development after Disasters: Lessons from Hurricane Maria in Puerto Rico**

Himilce Velez-Almodovar; Miguel Marrero-Medina, PhD, MPH

*J and M Global; Puerto Rico Public Health Association*

## **Medical Care at Deep Run Mobile Disaster Hospital following Hurricane Florence Flooding**

Eric Golike, MD, MPH; Benjamin Smith, MD; James Winslow

*University of North Carolina at Chapel Hill; North Carolina Office of EMS*

## **Orientation by Irma: A Category 5 Hurricane During My First Week of Medical School**

Manpreet Mahal; Moe Ameri; Jorge Granados; Julie Taylor, MD

*American University of the Caribbean School of Medicine*

## **Personal Reflection on How Established Protocols Influence Decision-Making by Public Safety Telecommunicators During Emergencies and Disasters**

Sonia Mia Diaz

*American University of the Caribbean School of Medicine*

## **Preparations for the 2018 Hurricane Season: Did Living Through Irma Influence Student Awareness and Actions?**

Moe Ameri, MBS; Luis Suarez; Heather Langner; Justin Becker, MPH, NRP; Colin Michie, FRCPCH

*American University of the Caribbean School of Medicine*

## **Student Government in Disaster Response**

Ricardo Barranon

*American University of the Caribbean School of Medicine*

## **Taking Care of Your Community and How to Evacuate with Limited Options**

Jason J. Henry

*AeroMD/St. Croix Rescue*

## **The Role of Collaborative Policies in Student Mental Wellness Support as an Important Factor in Disaster Preparedness and Response**

Adrianna Gatt; Soubhi Alhayek; Sean Clayton; Kimberly Kirkland, PsyD

*American University of the Caribbean School of Medicine*

## **The Use of Herbal Medicine Following Hurricane Irma on Sint Maarten**

Moe Ameri, MBS; Luis Suarez; Jordan Timmer; Nima Kamalpour;

David Gruen; Moyosore Oluleye; Nicole DiTommaso; Yassin Nayel;

Miguel Garcia; Colin Michie, FRCPCH

*American University of the Caribbean School of Medicine*