

Strategies to Optimize International Collaboration in Emergency Care Research

@neumar_robert

Robert W. Neumar, MD, PhD

Department of Emergency Medicine
Department of Molecular & Integrative Physiology
University of Michigan

neumar@umich.edu

Disclosures

- No Financial Disclosures
- Co-Chair: International Liaison Committee on Resuscitation (ILCOR)
- President and Board Chair: SaveMiHeart
- Research Funding: NIH, DOD, AHA, Laerdal Foundation
- Research Equipment: BrainCool





Outline

- Why do we need international EM research collaboration?
- Barriers and strategies

Emergency

Medicine

Examples of work-in-progress







Why Research?



Create new knowledge to improve patient care and outcomes





Why Emergency Care Research?



SEVENTY-SIXTH WORLD HEALTH ASSEMBLY Agenda item 13.1

WHA76 2 30 May 2023

Integrated emergency, critical and operative care for universal health coverage and protection from health emergencies¹

"Over half of deaths and over a third of disability in lowand middle-income countries could be addressed by the implementation of effective emergency and critical care."

CALLS FOR timely additional efforts globally to strengthen the planning and provision of emergency, critical and operative care services as part of universal health coverage, so as to meet population health needs, improve health system resilience and ensure public health security; 1



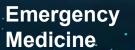
Medicine



Why International Collaboration in Emergency Care Research?



- Limited research workforce
- Limited research training infrastructure
- Limited research funding
- Limited progress





Transition from Competition to Collaboration





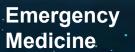


Barriers to International Research Collaboration

- Communication Barriers
- Cultural Differences and Trust Issues
- Regulatory and Ethical Differences
- Intellectual Property and Data Ownership
- Funding Mechanisms
- Logistical Challenges
- Language and Training
- Bureaucratic and Administrative Hurdles
- Political and Economic Instability









Strategies to Optimize International Research Collaboration

- Building Strong Partnerships
 - Binary, Networks, Network Coalitions
 - Face-to-face time
- Effective Communication & Coordination
 - Manage time zone and primary language differences
 - Regular virtual meetings
 - Electronic group communication
- Harmonizing Research Protocols
 - Standardized protocols
 - Guidelines for comparable data
 - Engage local ethical boards early







Strategies to Optimize International Research Collaboration

- Resource & Data Sharing
 - Equitable Resource Allocation
 - Open Data Initiatives
 - Managing Data Privacy
- Fair IP Agreements
- Multinational Funding Coalitions
- Engage International Organizations
 - IFEM
 - WHO





Examples of Work-in-Progress



- Michigan-Warwick Clinical Trials Partnership
- **Emergency Medicine Education &** Research by Global Experts (EMERGE)
- TRANScontinental Cardiac Arrest **Experimental Network for Discovery** (TRANSCEND)
- International Resuscitation Clinical Trial Network Consortium

Emergency

Medicine









MEMORANDUM OF UNDERSTANDING
FOR ACADEMIC AND SCIENTIFIC COOPERATION
BETWEEN
THE REGENTS OF THE UNIVERSITY OF MICHIGAN
ON BEHALF OF ITS
MEDICAL SCHOOL
AND
THE UNIVERSITY OF WARWICK MEDICAL SCHOOL

Purpose

The purpose of this Memorandum of Understanding ("MOU") is to promote cooperation in medical education and scientific research between the Regents of the University of Michigan, a Michigan Constitutional corporation, on behalf of its Medical School, located in Ann Arbor, Michigan, United States of America, and The University of Warwick Medical School located in Coventry, UK.











HOME | RESEARCH | FUNDING PATHWAYS

Supporting interdisciplinary, co-designed projects that drive impact

The Center for Global Health Equity offers comprehensive, wrap-around support for an extensive array of interdisciplinary projects with the potential for high impact. Understanding that successful initiatives require more than just financial backing, we provide an experienced team of seasoned project managers dedicated to guiding you through every step of your project journey. Together, we empower transformative scholarship that addresses the world's most pressing health challenges.

Seed Grants

Open to teams that are co-led by U-M faculty and global collaborators.

Seed Grants support exploratory projects that catalyze novel ideas and collaborations and build a case for larger-scale or more expansive projects that will help people live healthier and longer lives. Open to U-M faculty and global collaborator teams.

- Grant amount: up to \$35,000
- Project duration: up to 12 months



Emergency Medicine



Michigan-Warwick Clinical Trials Partnership

Building an International Platform for Collaborative Clinical Trials in Prehospital, Emergency, Perioperative, and ICU Care.



Strategies to Innovate EmeRgENcy
Care Clinical Trials Network



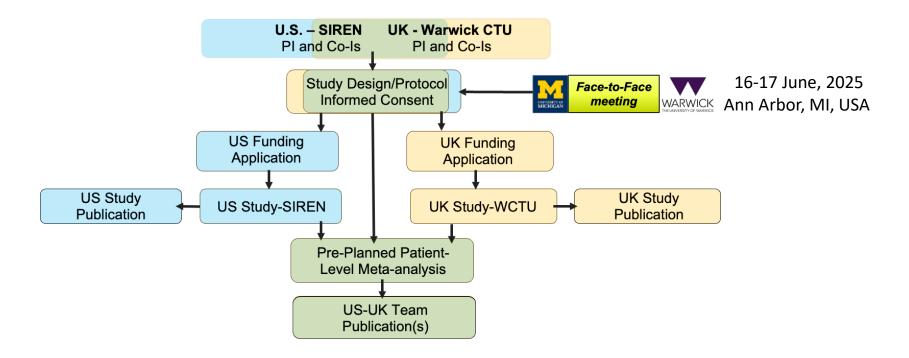
Clinical Trials Unit







Transatlantic Collaborative Pre-Hospital and ED Clinical Trials Model









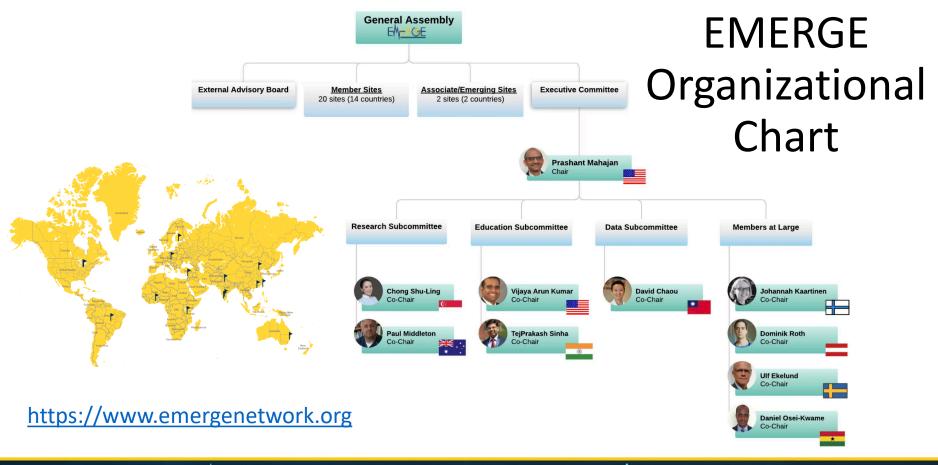


EMERGE is a network of experts in Emergency Departments who have come together to collaborate in research and share emergency medicine research related education. University of Michigan's emergency research team along with its international steering committee is striving to build EMERGE network.















Global Perspectives on Innovations in Emergency Care during the COVID-19 Pandemic: A Mixed Methods Study

EMERGE Publications

Timothy Visclosky^{1,2}, Tara Funk², Chinonso Agubosim¹, Chung-Hsien Chaou³, Prashant Mahajan^{1,2}

Departments of ¹Emergency Medicine and ²Pediatrics, University of Michigan, Ann Arbor, MI, USA, ³Department of Emergency Medicine, School of Medicine, Chang Gung University, Taoyuan City, Taiwan

ORIGINAL RESEARCH

A Global Survey of Emergency Department Responses to the COVID-19 Pandemic

Prashant Mahajan, MD, MPH, MBA*
Chong Shu-Ling, MD, MBBS, MRCPCH, MCI, MPH*
Camilo Gutierrez, MD¹
Emily White, MS¹
Benjamin A.Y. Cher, MS¹
Elizabeth Freiheit, PhD⁵
Apoorva Belle, MA, MHA¹
EMERGE NETWORK²
Authors continued at end of article

*University of Michigan, Departments of Emergency Medicine and Pediatrics, Ann Arbor, Michigan

[†]KK Women's and Children's Hospital, Department of Emergency Medicine, Singapore

[‡]George Washington University School of Medicine and Health Sciences, Departments of Emergency Medicine and Pediatrics, Washington, District of Columbia

Suniversity of Michigan, SABEI University of Michigan Medica University of Michigan EMER Medicine, Ann Arbor, Michigar See supplemental file for full a

The Emergency Medicine Education and Research by Global Experts (EMERGE) Network: Challenges and Lessons Learned

Prashant Mahajan, MD, MPH, MBA* Shu-Ling Chong, MBBS, MRCPCH, MCI, MPH† EMERGE Network‡

- *University of Michigan, Department of Emergency Medicine, Ann Arbor, Michigan
- [†]KK Women's and Children's Hospital, Department of Emergency Medicine, Singapore
- *University of Michigan, Emergency Medicine Education and Research by Global Experts (EMERGE) Network, Ann Arbor, Michigan (See full list of authors at the end of the article)

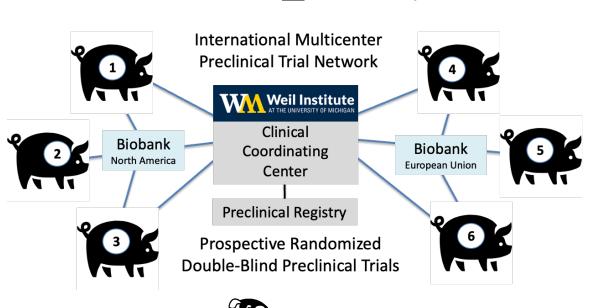
Global emergency medicine research priorities: a mapping review

Erin Kim^a, Prashant Mahajan^a, Chris Barousse^a, Vijaya A. Kumar^b, Shu-ling Chong^c, Apoorva Belle^a and Dominik Roth^d





<u>TRANS</u>continental <u>Cardiac Arrest Experimental <u>Network</u> for <u>Discovery</u> (TRANSCEND)</u>



_aerdal

Foundation

























International Resuscitation Clinical Trial Network Consortium



















MacArthur Foundation

100&Change

A competition for a \$100 million grant to fund a single proposal that promises real and measurable progress in solving a critical problem of our time.

#100andChange

Overview

Strategy

Timeline

Award Recipients

FAQs

Perspectives

News





Emergency Medicine

EM-ACP PERC Research Day, March 24, 2025







Emergency Medicine



Questions







