

# JOSEPH



# LAB



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**Michelle Joseph**  
**MBBS BSc MSc PhD FRCS**

**Clinical Area:** orthopaedic trauma surgeon, interested in ortho-plastics and limb salvage.

**Research Area:**

- Trauma Systems
- Civ-Mil Engagement
- Health Equity

**Countries & Institutions:**

- **Haiti**
- **Mexico**
- **University of Global Health Equity, Rwanda**
- **World Health Organisation**
- **Uniformed Services University/Walter Reed**
- **King's College London**
- **Naval War College**
- **Center for Global Surgery, Loma Linda University**

**Partnerships:**

- Country leads in trauma, surgery, emergency medicine, public health, Deans (Haiti & Rwanda) and MOH (Haiti)
- Civilian & military surgeons - Sri Lanka, Jordan, Philippine, UAE, UK, USA, South Africa, Mexico
- Institution leads in geospatial mapping, equity

*Welcome to the Joseph Lab! Take a look at the following projects, and if you have any questions I'll be happy to hear from you :)*

*The learning opportunities for each research area, and where applicable, wider participation opportunities, are listed in the left-hand column. The general skills to either acquire or further develop are listed on the final page, and are applicable to all research areas. For each of the projects, you will undergo a full orientation. This will include meeting our country and institutional partners in dedicated introductory meetings, access to the folders, and designated tasks. We will have an initial 1-2-1 meeting to establish our mutual expectations and your aspirational goals. Regular check-ins will be scheduled to ensure you are on track for having a productive time at PGSSC!*

*MJ*

## Learning Opportunities

### Research Methodologies:

- Quantitative Analysis
- Qualitative Analysis
- Scoping Review
- Delphi Technique
- Abstracts & Presentations
- Manuscript preparation
- Project Management
- Grant Writing

## TRAUMA



### PROTHA STUDY

*Haiti*

Quality Improvement & Implementation

- **PRO**ject Trauma **HA**iti - multifacility pilot of a complex intervention package: Triage, Primary Trauma Care, WHO Trauma Registry and Morbidity & Mortality meetings. Three phase study: pre-implementation, implementation, post-implementation. GIS mapping trauma patients.
- Collaborators: ASHAC, CT, SHAMUC, FMPUEH, MSPP, NAAHPUSA, Loma Linda University
- Dates: present - 2024
- **Open Positions: 2 Research Fellows and 2-3 Visiting Graduate Students (formerly known as Research Associates)**



### MSK TRAUMA INDEX

*Global*

Framework & Index Development

- MSK Trauma Care Quality Performance and Equity Framework and Index Development. Scoping review complete and submitted. Second phase of study is the Delphi Technique. Expert panelist have been selected to identify the most important indicators to be included in the framework. The first survey has been sent.
- Collaborators: Kiran Agarwal-Harding & Myles Dworkin, Harvard Global Orthopaedic Collaborative, Charlie Mock, Emmanuel Makasa
- Dates: present - February 2022
- **Open Position: 1 Visiting Graduate Student**



### TRAUMA BURDEN

*LA & Caribbean*

Scoping Review

- Scoping review assessing the epidemiological burden of traumatic injuries reported in Latin America and Caribbean. Study is at the stage of data extraction.
- Collaborators: Professor Arturo Cervantes, Anahuac University, Mexico; two Anahuac researchers
- Dates: present - October 2021
- **Open Position: 1 Visiting Graduate Student**

## Learning Opportunities

### Research Methodologies:

- Quantitative Analysis
- Qualitative Analysis
- Mixed-Methods
- Scoping Review
- Framework Development
- Abstracts & Presentations
- Manuscript preparation
- Project Management

## CIVILIAN - MILITARY

### IMPACT STUDY

*Global*

#### Feasibility & Framework Development

- The Integrated Military Partnerships And Civilian Trauma systems study is an innovative project that aims to first, understand the function and capabilities of military trauma systems through dissemination of a multinational survey to the six WHO regions, assessing the level of integration that may exist with civilian trauma systems. The survey has been designed by the multi-collaborative study group and the IRB is pending. This data will provide evidence for the feasibility of developing a framework to guide integration at policy level.
- Collaborators: Uniformed Services University/Walter Reed; King's College London; Royal Medical Services of the Jordanian Armed Forces, Army Hospital Colombo, Peruvian Navy, Asian Collaboration for Trauma
- Dates: present - November 2023
- **Open Position: 1 Research Fellow and 1 Visiting Graduate Student**

### INTEGRATED SYSTEMS

#### Scoping Review

*Global*

- An assessment of civilian and military trauma systems in peacetime, conflict and disaster. The first preliminary search has been performed. Assessment for accuracy prior to full multidatabase search is required.
- Collaborators: Dr Tamara Worlton, Uniformed Services University, eight military researchers
- Dates: present - December 2021
- **Open Position: 1 Visiting Graduate Student**

### HAITI EARTHQUAKE

*Global*

#### Scoping Review & Qualitative Analysis

- Lessons learned from the Haiti Earthquake civilian and military response. Scoping review is at the stage of data extraction. The qualitative component is the next component.
- Collaborators: Professor Dave Polatty, Naval War College, Dr Tamara Worlton, Uniformed Services University, eight military researchers
- Dates: present - December 2021
- **Open Position: 1 Visiting Graduate Student**

## Learning Opportunities

### Research Methodologies:

- Quantitative Analysis
- Qualitative Analysis
- Mixed-Methods
- Scoping Review
- Framework Development
- Abstracts & Presentations
- Manuscript preparation
- Project Management

## HEALTH EQUITY



### CONFERENCE EQUITY

*Global*

#### Framework & Index Development

- Multistudy project designed to inform the development of a framework and index that will measure how equitable global health conferences are in terms of access, inclusion and active engagement. We have completed three studies so far - one published (BMJGH), one submitted, and one in data analysis phase. The next study is a mixed methods analysis.
- Collaborators: Dean Bekele, Professor Binagwaho, Tsion Yohannes, UGHE; Barnabas Alayande
- Dates: present - June 2022
- **Open Positions: 1 Research Fellow and 1 Visiting Graduate Student**



### RACIAL HEALTH EQUITY

*Global*

#### Framework Development

- While health disparities are often studied through the lens of race, there is no single comprehensive racial equity framework. This study consists of a scoping review, which is at the data extraction phase and community participation interviews. The latter qualitative component requires a protocol and IRB submission.
- Collaborators: Dr Erica Reaves DrPH, Dr Candice Carpenter MD MPH MBA. Anissa Saylany
- Dates: present - January 2022
- **Open Position: 1 Visiting Graduate Student**



### ANTIRACISM CURRICULUM

*PGSSC*

#### Internal

- Internal curriculum, first piloted August 2020 - May 2021. Consists of four semesters, approximately five sessions per semester. Building off the first year, the curriculum team will aim to further develop the curriculum material, invite guest lecturers and work as part of the wider ARWG.
- Senior Fellows: Rashi Jhunjunwala, Isioma Okolo, Rennie Qin
- Dates: July 2021 - May 2022
- **Open Positions: 2 Research Fellows and 2 VGSs**



### RESEARCH CURRICULUM

*Haiti*

#### Pilot

- Research curriculum in partnership with MOH, InfoCHIR (Haitian peer-reviewed journal), UMREP. Alexis Bowder devised the curriculum and will transition to include MCW partnership
- MCW Supervisors: Christopher Dodgion MD MSc MBA, Libby Schroeder MD & Alexis Bowder
- Dates: June 2021 - December 2021
- **Open Positions: 1 Research Fellow and 1 VGS**

## Participation Opportunities

### Advocacy:

- Antiracism Target Portfolio
- Trauma Webinar Series
- Instagram Live Sessions
- Podcast Interviews
- Editorials

## General Skills Development

### Writing:

- Scientific writing
- Study protocols
- Ethics submissions

### Online:

- Covidence
- STATA/R
- Wordpress

### Offline:

- Biostatistics Course
- Antiracism Curriculum

## PGSSC WORKING GROUPS



### ANTI-RACISM WG

- [Anti-racism statement](#)
- Civic engagement and advocacy targets are the priorities of the ARWG. Joining this team will require committing to achieving the targets.
- Team: Senior Fellows, Bethany Hedt-Gauthier, Robert Riviello
- Date: July 2021 - July 2023
- **Open Positions: 2-3 Junior Research Fellows and 2-3 Visiting Graduate Students**



### TRAUMA & INJURY WG

- Following the success of our Road Traffic Injuries Webinar, we will launch a series. Next three topics: **Mental Health & Trauma; Youth & Trauma; Gun violence**. Tasks of the team include concept note design, multimedia dissemination and use. Opportunities for active participation and leading social media sessions.
- Team: Trauma Faculty - Robert Riviello, Nakul Raykar, Geoff Anderson, Kavitha Ranganathan, Tato Uribe Leitz, Wendy William; Senior Fellow - Rashi Jhunjhunwala, Barnabas Alayande
- Date: July 2021 - July 2023
- **Open Positions: 2 Junior Research Fellows and 3 Visiting Graduate Students**

## Countries & Institutions:

- **Haiti**
  - ASHAC
  - CT
  - SHAMUC
  - FMPUEH
  - MSPP
- **Mexico**
  - Anahuac University
- **University of Global Health Equity**
- **World Health Organisation**
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  - Center for Global Health Engagement
- **King's College London**
  - Centre for Defence Healthcare Engagement
- **Naval War College**
- **Center for Global Surgery, Loma Linda University**