

# **An International Perspective on Extremity Injury Secondary to Gun Violence: Optimizing Care and Outcomes**

Organized by:

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 **Thursday 3 March & Friday 4 March 2022**

 **The University of Chicago Center in Paris  
6 rue Thomas Mann, Paris 13e**

## Thursday 3 March - 13:00-17:00

13:00 Welcome/Introductions/Overview – **J. Wolf, J. Strelzow, L. Mathieu**

13:30 Setting the Stage – Gunshot Trauma – **J. Strelzow**

Adult and pediatric data

Intentional trauma only

14:00 Pre-Hospital Care of the Gunshot/Trauma Patient - International Perspectives  
(10 min talks each)

**Shai Luria** – Israel

**Yann Daniel** – France

**Jason Strelzow** – US

**Scott Tintle** – US Military

Panel Discussion

15:30 Break

16:00 Acute Care of Ballistic Trauma – Military vs Civilian (10 min)

**K Wilson** – Life vs limb – the general surgery perspective

**L. Mathieu** – Military – Stabilization differs

**J. Wolf** – Civilian Care – Open vs Ballistic Closed Injuries - definitions

**Shai Luria** – Ballistic/terrorist injuries – how are these different?

17:00 Wrap-up

## Friday 4 March - 9:00-15:30

9:00 Secondary Care after Gunshot Wounds  
Surgical Next Steps – **Ken Wilson** and **Jason Strelzow**  
Transport and Stabilization – **Scott Tintle**  
Therapy and Rehabilitation – **Stéphanie Truffaud**  
Psychological Impacts – **Stephanie Vandentorren**  
PTSD & Interdisciplinary Care /Patient Shared Decision-Making – **Marie Boussard**

10:30 Break

11:00 Panel Discussion (30 min each topic)  
Mental Impacts and PTSD **Vandentorren/Boussaud**  
Trauma System Differences **Luria/Tintle/Mathieu/Wilson**

12:00 Break

12:30 – 1pm KEYNOTE PRESENTATION  
**Chris Moran** (Professor, Trauma Surgery, Univ of Nottingham, UK)  
Systems not Surgeons Save Lives

13:00 Interventions – How to Improve Outcomes in Gunshot Victims?  
Optimized Timing: Tonight or tomorrow? Damage control or definitive care  
**Jennifer Wolf** - tomorrow  
**Laurent Mathieu** - tonight

Orthoplastic reconstruction/vascularized bone graft for segmental injuries  
**Scott Tintle**

How to identify acute mental impacts. Can you prevent/mitigate PTSD?  
**Stephanie Vandentorren** - identifying PTSD in time  
**Marie Boussard** – pre-conditioning early medical treatment

Managing nerve injuries – medicine/surgery/therapy?  
**Jason Strelzow**

Resources & ethics – what do we need to be most effective?  
**Ken Wilson** - Resource planning & optimal care protocols  
**Shai Luria** – who to take care of first?

15:30 Wrap-up & Next Steps **(Wolf, Strelzow, Mathieu)**

## **Narrative**

The University of Chicago Hospital recently opened a Level I adult trauma center, resulting in subsequent increases in the number of patients presenting with trauma due to the gun violence from the neighborhoods surrounding the UChicago campus. Since the trauma center opened, it has quickly become one of the busiest centers in the city of Chicago, as well as the nation. As orthopaedic surgeons, we are treating injuries to the upper and lower extremities secondary to gunshot injuries, including bone fractures and major nerve injuries. Evidence for optimal care of these unique injuries is primarily based on limited historic studies. Additionally, little is known about interventions that can impact physical and psychological outcomes. In North America, victims of gun violence are transported to trauma centers for stabilization, while in Europe, advanced stabilization occurs in the field prior to transfer for hospital level care. In addition to addressing gunshot injuries, care modalities, and interventions, there is a severe lack of data regarding post-traumatic stress disorder (PTSD) secondary to gun violence in the US and Europe.

We propose a first of its kind international conference centered on urban ballistic extremity injuries, treatments, and outcomes. This conference would be facilitated primarily between the University of Chicago and Ecole du Val-de-Grâce, Paris, France; however, experts from North America, the Middle East, France, and Croatia will be invited to the Center in Paris to participate in discussions around novel treatments and share professional experiences. The focus of this collaborative conference will be on the epidemiology of ballistic trauma, interventions to improve nerve recovery, and mental health after gunshot violence.

## **Specific Aims**

- 1) Learn whether advanced pre-hospital care of gunshot injury patients is correlated with improved functional outcomes in extremity injuries.
- 2) Explore the role for surgical timing and options for treatment of nerve injuries in gunshot injuries.
- 3) Discuss the psychological effect of ballistic injuries on victims and potential differences in management with improved social and victim recovery programs.
- 4) Evaluate differences in epidemiology of fracture type and nerve trauma between urban civilian ballistic injuries (Chicago) and military/terrorist ballistic injuries (Europe, Africa).
- 5) Address differences in epidemiology and outcomes in children vs. adults.