ACS/Civilian/Military Collaboration

- Civil War – Samuel Gross
- WWI – Franklin Martin
- WWII – Churchill, DeBakey, and many others
- V.A. hospital system – Major General Hawley
World War I

• 1918 - Cannon
  
  "The injection of a fluid that will increase blood pressure has dangers in itself. Hemorrhage may not have occurred to a marked degree because the blood pressure has been too low to overcome the obstacle offered by a clot."

• “Pop the Clot”

“with this method of blood transfusion, I know that at this hospital we have saved lives by its use which would otherwise have been lost....
Lieutenant A. M. Hansen to Dr. Cannon 1918
World War II

• 1943 - Churchill- Harvard
  – “Plasma not a blood substitute”
• Described over zealous shock resuscitation
• Pushed for blood with great personal political risk
Research in trauma has suffered from the lack of recognition of trauma as a major public health problem. “The most significant obstacle at present [to trauma research efforts] is the lack of long-term funding.”

**Recommendations:**

“**Increased federal and voluntary financial support** of basic and applied research in trauma.”

“**Expansion within the U.S. Public Health Service** of research in shock, trauma, and emergency medical conditions, with the goal of establishing a **National Institute of Trauma**.”


ACS: Trauma Systems Model

1. Standards
2. Build Infrastructure
3. Measure performance – data
4. Verification- public assurance

- Paramedic Training
- Regional EMS systems
- 911 - Access
- ATLS – Evidence based
- Trauma Care standards
- Verification
- National Trauma Data Bank

Population Disease Management Model ➔ Payer Blind
Vietnam War

- Vietnam – Resuscitation, transfusions, rapid transport, ARDS, systems, burns, coagulopathy
Injuries constitute one of our most expensive health problems, costing $75-$100 billion a year directly and indirectly, but research on injury receives less than 2 cents out of every federal dollar for research on health problems.

“Funding for injury control is disproportionately low and discontinuous, in comparison with that for cancer, heart disease, and other major health problems.”

Recommendation:
“The committee recommends that funding for research on injury be commensurate with the importance of injury as the largest cause of death and disability of children and young adults in the United States.”
"The vast personal, societal, and fiscal consequences of injury demand a much greater commitment to research into prevention, treatment, and rehabilitation – injury control in its broadest sense – than is in place today."

**Recommendations:**

“**Creation of an Office of Trauma Research at NIH reporting to the Director of NIH** and, in addition, to Congress and the President on an annual basis. The purpose of the Office would be to update the national plan for trauma research and to ensure that this agenda is being addressed and funded.”

“If the goals and research priorities outlined here are not being substantially addressed ... then the establishment of a **National Institute of Trauma Research** should be pursued.”
The nation’s current investment in injury research is not commensurate with the magnitude of the problem.

Recommendations:

“The committee supports a greater focus on trauma research and training at NIH and recommends that the National Institute of General Medical Sciences elevate its existing trauma and burn program to the level of a division.”

“Trauma research should receive a higher share (compared with current allocations) of increases in the NIH budget, and funding outside NIH for extramural research in all aspects of injury prevention and treatment should be increased.”
2003

NIH Trauma Working Group

**ROC:** Resuscitation Outcomes Consortium

- Expand Basic, Translational, and Applied Focused Research
- **Trauma Working Group - July 14\textsuperscript{th} - 15\textsuperscript{th}, 2003**
- **NHLBI, NIGMS, NINDS, NICHD**
  - Cosponsored by ACS COT, DOD, CDC, FDA, AAST
- Scope:
  - 70 scientists and clinicians
  - Gaps/frontiers in basic science of injury
  - Areas ready for translational research

**Goals:**
1) National Center for Resuscitation Research
2) Build a multicenter network for clinical trials
“[There is] a widening gap between the quality of emergency care Americans expect and the quality they actually receive.”

“The current uncoordinated approach to organizing and funding emergency and trauma care has been inadequate. There are well-defined emergency and trauma care research questions that would benefit from a coordinated and well-funded research strategy.”

**Recommendation:**

“The Secretary of HHS [should] conduct a study to examine the gaps and opportunities in emergency and trauma care research, and recommend a strategy for the optimal organization and funding of the research effort. This study should include...improved research coordination through a dedicated center or institute.”
A small share of available research dollars is directed to emergency and trauma care, and even less to prehospital care in particular.

“A host of critical clinical questions remain unanswered because of limited federal research support.”

Recommendation:

“The committee recommends that federal agencies that fund emergency and trauma care research target additional funding at prehospital emergency medical services research, with an emphasis on systems and outcomes research.”
2003 - Present

- Iraq Conflict started 2003
- Discussion with Norm Rich & COT
- Discussion with Dr. Woodson / Dr. Elster
- MOU written – strategic partnership
- IOM, NAM – Commissioned
- Report released August 2016