With the aging of the U.S. population, traumatic injury in older adults is expected to reach epidemic levels and has already created a major impact on trauma systems. At our Level I Trauma and Regional Burn Center, falls surpassed motor vehicle crashes as the leading cause of trauma deaths for the first time in 2006. The mean age in this group of patients was 69 years old. Approximately 10% of burn patients admitted to our institution are over 60 years of age, but they account for 45% of hospital deaths. Appropriate treatment strategies are therefore critical in order to improve outcomes for injured older adults.

Older Adults’ Responses to Traumatic Injury
We seek to better understand why outcomes in older injured adults remain far inferior to those of younger patients. Although trauma centers deliver superior care for the injured, a recent national study found that patients ≥ 55 years did not similarly benefit. Thus, better stratifications of outcomes and improved understanding of aged responses to injury are necessary to develop effective treatment strategies. We have analyzed the National Burn Repository (NBR) to assess risks for complications and excess resource utilization in older adults with burns. Our most recent study highlighted the importance of co-morbidities over chronological age in pneumonia development in older adults with burns. Our ongoing projects focus on practice variations in the care of older patients and post-injury outcomes.

Infections in Critically Ill Burn and Trauma Patients
Lung and bloodstream infections represent common nosocomial infections in mechanically ventilated patients in the Burn and Surgical Intensive Care Unit. Many tools and guidelines developed for the general ICU population remain to be studied and validated in the injured patient population. Our burn center is a participating site in the American Burn Association/Department of Defense-funded study on early detection of *Staphylococcus* sepsis in burn patients using the polymerase chain-reaction technique (PCR). This study
Our recent study highlighted the importance of comorbidities over chronological age in pneumonia development in older adults with burn injuries.

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