



ALYSSA L DEMARCO
BIOMECHANICAL ENGINEER
INJURY BIOMECHANICS GROUP

MS, Bioengineering, 2000
BS, Mechanical Engineering 1998
Registered Professional Engineer

Alyssa DeMarco is a member of MEA's Injury Biomechanics group. She regularly conducts biomechanical analyses of injury producing events such as automobile collisions, slip/trip and fall and sports injuries. Case analyses involve assessment of the injury mechanics, the loads applied to the body, and investigation into the relationship between the applied loads and the injury.

Prior to joining MEA, Ms. DeMarco worked as a Bioengineering Research Associate and performed orthopedic research focused on the evaluation of several clinical treatments for hip fractures. In this role she also investigated the accuracy of contact pressure measurement systems used in orthopedic research.

Areas of Specialization

- Injury mechanics/causation
- Injury potential
- Motor vehicle collision injury
- Seat belt investigations
- Helmet investigations
- Slip/trip/fall injuries
- Sport injuries

Professional Affiliations

MEA staff are members of various professional organizations. A current listing can be found on our website www.meaforensic.com.

Select Publications

DeMarco AL, Chimich DD, Gardiner JC, Nightingale RW, Siegmund GP (in review). The impact response of motorcycle helmets at different impact severities. Submitted to Traffic Injury Prevention.

DeMarco AL, Chimich DD, Siegmund GP (2006). Brain injuries and airbags: the effect of a seat belt (BIO2006-157544). American Society of Mechanical Engineers 2006 Summer Bioengineering Conference, June 21-25, 2006.

Siegmund GP, Chimich DD, Heinrichs BE, DeMarco AL, Brault JR (2005). Variations in occupant response with seat belt slack and anchor location during moderate frontal impacts. Traffic Injury Prevention, 6(1), pp. 38-43.

Siegmund GP, Heinrichs BE, Chimich DD, DeMarco AL, Brault JR (2005). The effect of collision pulse properties on seven proposed whiplash injury criteria. Accident Analysis and Prevention, 37(2), pp. 275-85.

Contact: alyssa.demarco@meaforensic.com