



# Injury Biomechanics & Traffic Crash Reconstruction

Add a new perspective to your reconstructions! Discover the physiological effects of impacts on the human body.

## COURSE CONTENT:

- History of injury trauma & biomechanics
- Automotive safety systems, including seatbelts & airbags
- Mechanism of injury, methods, analyses & tolerances for head injury, neck injury & lumbar injury
- Upper & lower extremity biomechanics
- Vehicle-vs.-vehicle & vehicle-vs.-pedestrian impacts

Injury biomechanics explores the physical and physiologic responses to force. This popular three-day course offers an in-depth examination of injury biomechanics for investigators, reconstructionists, and other professionals involved in vehicle crash investigation. Each topic discusses mechanism and method of injury, analysis, and tolerances. The thorough curriculum also covers vehicle-vs.-vehicle and vehicle-vs.-pedestrian collisions, the injury investigation, and advanced procedures for matching injuries to vehicle collisions. To further examine injury patterns, case studies are paired with lecture material specific to vehicle-vs.-vehicle crashes (front, side, and rear) and pedestrian-vs.-vehicle collisions.

## COURSE INSTRUCTOR

*Dr. Shimada earned a doctorate (Ph.D.) from the School of Health and Rehabilitation Sciences from the University of Pittsburgh in 1998, and a second MS degree in Bioengineering from the university in 2000. Both of Dr. Shimada's degrees from the University of Pittsburgh were in the field of biomechanics. Currently he is the President of Biomechanical Consultants, a forensic biomechanics and engineering firm based in California, Nevada, and Oregon. His primary area of consulting and research is focused on identifying, determining the likelihood, and prevention of brain and spinal cord injuries. Dr. Shimada has authored over 70 peer-reviewed journal, conference proceedings, and abstracts in the field of biomechanics, medical, and engineering. He has presented and conducted several research studies at meetings and conferences such as the Association for the Advancement of Automotive Medicine, International Society of Biomechanics, American Society of Biomechanics, and Biomedical Engineering Society journal articles.*

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24 ACTAR CEUs

### TUITION

\$595 per person

### REGISTRATION

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