

## Can A Biomechanics Expert Opine on Specific Injury Causation?

The Connecticut appellate court released a decision entitled **JEFFREY F. GOSTYLA v. BRYAN CHAMBERS** released on September 19<sup>th</sup>, 2017 (AC 38943) addressed this question. Since this specific issue had not been addressed in Connecticut prior to this decision it should be of great interest to Connecticut attorneys representing clients in low-mid impact collisions; the types of cases that we tend to see these biomechanical experts being used most.. I'll briefly summarize the decision and discuss some of the considerations and remaining issues that you may encounter.

In brief, this case involved a low speed collision resulting in the plaintiff sustaining multiple injuries. A video deposition by a biomechanical expert included an opinion that the injuries sustained by the plaintiff were not causally related to the collision. Plaintiff counsel's motion in limine was denied by the lower court judge. After a defendants verdict the case was appealed to the Appellate Court.

The Appellate Court found that the trial court abused its discretion by admitting the causation testimony by the biomechanical expert. The Appellate Court found that a biomechanical engineer may provide an opinion regarding forces generated by a collision and the likely types of injuries expected from that amount of force. However, the court concluded that biomechanical experts are not medical doctors and do not possess the reasonable qualifications to offer a medical opinion regarding the cause of specific injuries to a particular plaintiff, The appellate decision further states that the fact that the expert formulated his opinion in part through reviewing a subset of the plaintiff's medical records and other documents related to the accident did not alter the analysis because the record did not reflect that the biomechanist possessed the medical training necessary to identify the plaintiff's individual tolerance level and preexisting medical conditions, both of which could have had an effect on what injuries resulted from the accident.

I encourage you to download and read the entire decision (<https://www.jud.ct.gov/external/supapp/Cases/AROp/AP176/176AP454.pdf>). As there was no prior Connecticut case law, the appellate court looked at decisions from other states to formulate its decision. The verbiage from the other courts is helpful in understanding the wisdom of this decision. It also offers insight into strategies that may be used when the biomechanical expert may be permitted to testify, despite this decision.

The timing of this appellate decision is fortuitous as I recently published a 4 part newsletter series on biomechanics that provided the tools to rebut the full scope of biomechanical engineer opinions. In those



---

**A MEDICAL-LEGAL NEWSLETTER FOR PERSONAL INJURY ATTORNEYS BY DR. STEVEN W. SHAW**

---

newsletters I addressed the issues surrounding the science of biomechanics as well as its application to individual patients. This is a landmark appellate decision that will be used by Connecticut plaintiff attorneys for years to come and will assist in preventing causation opinions being presented by biomechanics experts. However, it does not fully address the use of biomechanics experts in the areas that they are qualified to testify and that may be prejudicial to a judge or jury, if allowed to testify.

If allowed to testify within the scope of their expertise and to offer general opinions about forces and human tolerances the prejudicial effect can be harmful. Therefore, I encourage you to familiarize yourself with the topics covered in my prior 4 newsletters. You should be familiar with the misapplication of science and math that is often attempted by biomechanical experts to support their opinions on behalf of their client's interests. Common misapplications or misrepresentations include:

- Using absolute accelerations rather than ranges of accelerations
- Using average accelerations rather than peak accelerations
- Using vehicle accelerations rather than occupant accelerations
- Discounting occupant and non-occupant factors in injury potential (PDOF, positioning, preparedness, multiple impacts, road conditions, head restraint position, seat back angle, pre-morbid conditions, etc)
- Not considering restitution (elastic versus plastic) in low speed collisions

I could go on but suffice to say that the information you need is available in my prior 4 newsletters. Alternatively you can call me directly to discuss your specific case and the biomechanical expert's opinions. More often than not, there are important factors that are not considered in those reports and there are opinions that are the result from the omission of important data.