

# **Richard H. Gregg**

# **Professional Specialization**

Expertise includes analysis and research related to automotive restraint systems, including seat belts, air bags, seats, and child restraints; forensic investigations of vehicles and restraint systems for accident reconstruction and impact biomechanics analysis; performing surrogate/exemplar studies for analysis of restraint use or non-use, and occupant kinematics; and managing demonstrations and impact testing with vehicles and anthropomorphic test devices.

Past experience includes using biofidelic human body models and biomechanical force models to analyze and design vehicle packages and seats for improved safety and comfort; and consulting to manufacturers with respect to seat comfort, accommodation, and compliance with various Federal Motor Vehicle Safety Standards.

## **Education**

Ph.D. Candidate (Biomedical Engineering), Wayne State UniversityM.S. (Biomedical Engineering), Wayne State UniversityB.S. (Mechanical Engineering), Kettering University (formerly GMI)Traffic Accident Reconstruction, Northwestern University Traffic Institute

## **Professional Background**

## Senior Engineering Consultant

Design Research Engineering, Novi, Michigan 2022 – present

Senior Project Engineer

Design Research Engineering, Novi, Michigan 2011 - 2022

# **Project Engineer**

Design Research Engineering, Novi, Michigan 2008 - 2011

#### Manager

Ergonomics Research Laboratory, Lansing, Michigan 2005 - 2008

# **Biomechanical Engineer**

Ergonomics Research Laboratory, Lansing, Michigan 2000 - 2005

#### Engineer

M. P. Holcomb Engineering, Rochester Hills, MI 1995 - 2000

# **Engineer (Co-op Student)**

CSX Transportation, Jacksonville, FL 1993 - 1995

#### **Professional Affiliations**

Member, Association for the Advancement of Automotive Medicine (AAAM) Member, Society of Automotive Engineers (SAE) Member (In-training), North American Spine Society (NASS) Technical Paper Reviewer:



SAE Occupant Restraints and Biomechanics SAE International Journal of Transportation Safety SAE International Journal of Commercial Vehicles

## **Publications**

"Assessment of Collision Markings on Non-Used Vehicle Seat Belt Restraint Systems," SAE International Journal of Advances and Current Practices in Mobility, 2(4):2092-2106, 2020, doi:10.4271/2020-01-0975 (with K. Petroskey)

## **Presentations**

- "Physical Evidence of Seat Belt Use, Misuse, and Non-Use during Motor Vehicle Collisions," Invited Lecturer, Wayne State University, Biomedical Engineering 8070, February 2, 2022.
- "Physical Evidence of Seat Belt Use, Misuse, and Non-Use during Motor Vehicle Collisions," Invited Lecturer, Wayne State University, Biomedical Engineering 8070, October 19, 2021.
- "Physical Evidence of Seat Belt Use, Misuse, and Non-Use during Motor Vehicle Collisions," Invited Lecturer, Wayne State University, Biomedical Engineering 8070, April 7, 2021.
- "Biomechanics of Car Crashes and Seat Belt Use," National Autopsy Assay Group, Webinar, December 10, 2020.