

RICHARD ALTON WATSON

CURRICULUM VITAE

EDUCATION

MS	Biomedical Engineering UT Health Science Center San Antonio/ University of Texas at San Antonio	2014
BS	Mechanical Engineering University of Texas at San Antonio	2005

POST GRADUATE STUDIES

LSDYNA Training, Livermore, CA.	2010
EDC Simulations Training Course, Northridge, CA	2007
Traffic Accident Reconstruction I & II Northwestern University Traffic Institute, Evanston, IL	2006
MADYMO Advanced Training Course, Detroit, MI	2006
MADYMO 6.1 Training Course, Detroit, MI	2005

PROFESSIONAL EXPERIENCE

Technical Director Biodynamic Research Corporation San Antonio, TX	2010-Present
Engineer Biodynamic Research Corporation San Antonio, TX	2005-2010
Engineering Intern Biodynamic Research Corporation San Antonio, TX	2003-2005

Aircraft Mechanic 1998-2000
Able Engineering
Phoenix, AZ

Flight Engineer 1994-1998
United States Army
Ft. Campbell, KY

PROFESSIONAL REGISTRATIONS

Accredited Traffic Accident Reconstructionist (#2188) 2009-Present
Accreditation Commission for Traffic Accident Reconstruction

PROFESSIONAL AFFILIATIONS

The International Society of Air Safety Investigators 2007-Present

Society of Automotive Engineers 2002-Present

ACADEMIC AFFILIATIONS

Clinical Adjunct Professor, USAF School of Aerospace
Medicine – San Antonio, TX 2010-Present

COURSES/SEMINARS

CTH Shock Physics Training August 2012
Sandia National Labs
Albuquerque, New Mexico

ARAS360 December 2011
Advanced 3D Computer Diagramming and
Animation for Incident Reconstruction
San Antonio, Texas

PEER-REVIEWED JOURNAL PUBLICATIONS

Bonugli, E., Watson, R., Freund, M., and Wirth, J., “Expanded
Characterization of Force-Deflection Properties of Vehicle-to-Vehicle

Systems,” SAE Technical Paper 2017-01-1417, 2017, doi: 10.4271/2017-01-1417.

Van Arsdell, W., Weber, P., Stankewich, C., Larson, B. et al., “Load-Limiters Effect on Occupant Restraint System Performance,” SAE Technical Paper 2016-01-1505, 2016, doi:10.4271/2016-01-1505.

Watson R, Gray W, Sponsel WE, et al. Simulations of porcine eye exposure to primary blast insult. 2015;4(4):8, doi:10.1167/tvst.4.4.8.

Funk JR; Watson RA; Cormier JM; Guzman H, and Bonugli E. Kinematics and kinetics of vigorous head shaking. *J Appl Biomech.* 2015; Ahead of Print.

Sherwood D; Sponsel WE; Lund BJ; Gray W; Watson R; Groth SL; Thoe K; Glickman RD, and Reilly MA. Anatomical manifestations of primary blast ocular trauma observed in a postmortem porcine model. *Invest Ophthalmol Vis Sci.* 2014; In Press.

Funk JR, Cormier JM, Bain CE, Wirth JL, Bonugli EB, and Watson RA, “Factors Affecting Ejection Risk in Rollover Crashes,” *Annals of Advances in Automotive Medicine.*, 56:203-211, 2012.

PEER-REVIEWED CONFERENCE PUBLICATIONS

Funk JR, Wirth JL, Bonugli EB, Watson RA, and Asay A. “An Integrated Model of Rolling and Sliding in Rollover Crashes,” *Society of Automotive Engineers (SAE) World Congress*, Paper 2012-01-0605, 2012.

Funk JR, Watson RA, Cormier JM, Bain CE, Guzman HM, and Bonugli EB. “Neck Muscle Strength Measured During Vigorous Head Shaking,” *Proceedings of the ASME 2011 Summer Bioengineering Conference*, SBC2011-53193, 2011.

SCIENTIFIC PRESENTATIONS

Banks, R.D.; Watson, R.A. Analysis of Complex Crash Events in Air and Space, FAA CAMI Injury Workshop, Oklahoma City, OK, November 3-5, 2015.