Alberta Health Services

Hospital

Research, Innovation & Technology Development

"Joining State-of-the-Art Research with State-of-the-Art Care"



Recent Publications

Yu H, **Dennison CR**. (2019) A Laboratory Study on Effects of Cycling Helmet Fit on Biomechanical Measures Associated with Head and Neck Injury and Dynamic Helmet Retention. *ASME Journal of Biomechanical Engineering*, 141(1), 011007.

Azar A, Bhagavathula Baradwaj K, Hogan J, Josey T, Ouellet S, Satapathy S, **Dennison CR**. (2018) An Optical Fiber Transducer for Measuring Kinetics of Skull-Brain Interaction in a Surrogate Model of the Human Head Subjected to Blast Overpressure. *IEEE Sensors Journal*, 19(2), 554-559.

Knowles BK, MacGillivray SR, Newman JA, **Dennison CR**. (2017) Influence of Rapidly Successive Head Impacts on Brain Strain in the Vicinity of Bridging Veins. *Journal of Biomechanics*, doi:10.1016/ j.biomech.2017.05.016.

Christopher Dennison, PhD

- Associate Professor, Mechanical Engineering, University of Alberta
- Research Affiliate, Glenrose Rehabilitation Hospital

Dr. Dennison's current research focus is on biomechanics of injury and surrogate physical models.

Clinical Implications of Research:

An understanding of the mechanics of injury can be translated to changes in policy such that likelihood and severity of traumatic injuries can be reduced.



