

2009-2010 Graduate Seminar Series

The Department of Mechanical Engineering – Engineering Mechanics

Proudly Presents

Professor Linda Ng Boyle
University of Washington



Professor Boyle joined the University of Washington (UW) in the Fall 2009 as an associate professor. Prior to this appointment, she was an associate professor at the University of Iowa and a senior researcher at the U.S. Department of Transportation – Research and Innovative Technologies Administration (RITA). She has an extensive background in examining driver behavior and performance based on crash records, controlled simulator experiments, and on-road and naturalistic driving studies. She has a PhD in Civil and Environmental Engineering and a MS in Industrial Engineering, both from the U. Washington. Her BS is in Industrial Engineering from the State University of Buffalo in New York. She is also the recipient of the NSF Career Award.

Thursday, Feb. 11, 2010 3:00 – 4:00 p.m. Room 112, ME-EM Bldg.

Mitigating the effects of driver distraction

Driving involves complex interactions between the driver, vehicle, and environment. The introduction of in-vehicle and carried-in devices (e.g., cell phones, and mp3 players) raise concerns that the demands of such systems may conflict with the demands of driving. Appropriate feedback can help diminish both the impact and the amount of risk-taking behavior and can help drivers better modulate their distracting activities. In a series of driving simulator studies, feedback is provided to drivers in real time and at the end of the trip based on information from the roadway and driver state. Both feedback types can provide benefits but each has limitations that are examined. Results showed that a combination of real-time and post-trip feedback resulted in significantly longer glances on the road than on the in-vehicle device. The results suggest that various feedback types have potential to improve immediate driving performance and driver engagement in distractions. This presentation goes over some of the ongoing and forthcoming projects to help drivers mitigate their risk taking behavior.