



**Department of Engineering
Seminar Program
Wednesday, November 5, 2014
Shanahan Teaching and Learning Center
Lecture Hall 1430, 4:10pm**

**Lasers, Beer, and the Ongoing Revolution in Photonic Sensors
Ben Ver Steeg (Engineering '98)
Co-Founder and Vice President of Engineering at Tru Touch Technologies**

Summary:

Optical based measurements are continuing to be the method of choice for noninvasive / nondestructive sensing. This lecture will discuss some of the recent advances in this area along with a detailed discussion of the technology developed by TruTouch Technologies to quantitatively measure alcohol in people via NIR tissue spectroscopy. The recent trends in mobile health technologies and the Quantified Self movement will also be discussed in terms of their likely impact on this growing field.

Bio:

Ben Ver Steeg is the Co-Founder and Vice President of Engineering at TruTouch Technologies, the leader in noninvasive alcohol detection. At TruTouch, Ben led the technical team that invented, developed, and sold the world's first optical, noninvasive system for alcohol detection in humans.

Ben Ver Steeg graduated with an engineering degree from HMC in 1998 and has spent the last 16 years working in the field of noninvasive optical diagnostics using NIR spectroscopy. In addition to alcohol detection, Ben has had the opportunity to work on multiple applications including Glucose monitoring and automated Cancer screening. TruTouch is currently developing new applications in alcohol sensing and healthcare diagnostics. Ben continues to be active in the technology development at TruTouch and has been an author on 10 peer-reviewed publications and holds 12 US and International patents.

After the seminar there will be an informal dinner and conversation with the speaker in the Mitchell Room at Hoch-Shanahan Dining Hall. If you are not on the meal plan, we will have a signup sheet. If you are interested in attending, please RSVP with Sydney Torrey at storrey@hmc.edu.