***Devin R. Berg: Biosketch***

***A. Professional Preparation****:*

University of Wisconsin-Madison (Madison, WI). *Mechanical Engineering, B.S.* 2008.  
University of Minnesota (Minneapolis, MN). *Mechanical Engineering, M.S.* 2011.   
University of Minnesota (Minneapolis, MN). *Mechanical Engineering, Ph.D.* 2013.

***B. Appointments****:*

* April 2015-Present: Program Director, B.S. Mechanical Engineering, University of Wisconsin-Stout.
* January 2014-Present: Program Director, B.S. Manufacturing Engineering, University of Wisconsin-Stout.
* August 2012-Present: Assistant Professor, Engineering & Technology Department, University of Wisconsin-Stout.
* January 2012-May 2012: Adjunct Faculty, Department of Mechanical Engineering, University of St. Thomas.
* September 2008-May 2012: 3M Science and Technology Fellow, University of Minnesota.

***C. Selected Products:***

**Berg, D.R.**, Li, P.Y., and Erdman, A.G. (2012) Achieving Dexterous Manipulation for Minimally Invasive Surgical Robots Through the Use of Hydraulics. *Proceedings of the ASME Dynamic Systems and Control Conference*, Fort Lauderdale, FL.

**Berg, D.R.**, Kinney, T.P., Li, P.Y., and Erdman, A.G. (2011). Determination of Surgical Robot Tool Force Requirements Through Tissue Manipulation and Suture Force Measurement. *Proceedings of the Design of Medical Devices Conference,* Minneapolis, MN.

J. Schmidt, **D. R. Berg**, L. Ploeg, and H. L. Ploeg (2009). Precision, Repeatability and Accuracy of Optotrak Optical Motion Tracking Systems. *International Journal of Experimental and Computational Biomechanics,* 1(1):114-127.

**Berg, D.R.**, Carlson, A., Durfee, W.K., Sweet, R.M., and Reihsen, T. (2011). Low-Cost, Take-Home, Beating Heart Simulator for Health-Care Education. *Proceedings of Medicine Meets Virtual Reality 18,* Newport Beach, CA.

**Berg. D.R.** (2015). Use of a Rube Goldberg Design Project for Engineering Dynamics. *Proceedings of the ASEE Annual Conference,* Seattle, WA*.*  
  
***D. Other Significant Products:***

**Berg. D.R.** (2015). The Relationship between Class Size and Active Twitter Participation in the Engineering Classroom. *Proceedings of the ASEE Annual Conference,* Seattle, WA*.*

**Berg. D.R.** (2014). Evaluation of Student Learning Outcomes Due to Self-Guided Engineering Analysis of Surroundings. *Proceedings of the ASEE Annual Conference,* Indianapolis, IN*.*

**Berg. D.R.** (2013). Experiences with Inquiry-Based Learning in an Introductory Mechanics Course. *Proceedings of the ASEE North Midwest Section Conference,* Fargo, ND

Z. G. Liu, **D. R. Berg**, V. N. Vasys, M. E. Dettmann, B. Zielinska, and J. J. Schauer (2010). Analysis of C1, C2, and C10 through C33 Particle-Phase and Semi-Volatile Organic Compound Emissions from Heavy-Duty Diesel Engines. *Atmospheric Environment,* 44(8):1108-1115.

Z. G. Liu, **D. R. Berg**, T. A. Swor, and J. J. Schauer (2008). Comparative Analysis on the Effects of Diesel Particulate Filter and Selective Catalytic Reduction Systems on a Wide Spectrum of Chemical Species Emissions. *Environmental Science and Technology,* 42(16):6080-6085.

***E. Synergistic Activities:***

1) Pioneering Implementation of New Educational Software: Early adopter of a new educational software for engineering courses to better serve students of diverse learning styles.

2) Pursuing Open Access Education: Building a collaborative online repository for engineering information and sample problems geared towards engineering students.

3) Contributing as External Reviewer: Reviewer of conference proceedings for the ASEE Annual Conference and the ASME Dynamic Systems and Control Conference.

4) Developing Hands-On Classroom Tools: Design and fabrication of in-class tools for demonstrating engineering concepts consistent with the concept of experiential learning.

5) Promoting K-12 Outreach: Exploring new methods for generating interest in engineering and technology among K-12 aged school children.

***Collaborations & Other Affiliations:***

(10 individuals) Franco Capaldi (Merrimack College), Lucas Harder (Heart Leaflet Technologies), Andrew Carlson (Novo Engineering), Timothy Kinney (Ridgeview Medical Center), Adam Gladen (U. of Minnesota), Jerry Liu (Cummins Emission Solutions), James Schauer (U. of Wisconsin – Madison), Heidi-Lynn Ploeg (U. of Wisconsin – Madison), Jill Schmidt (U. of Wisconsin – Milwaukee), Tim Kowalewski (U. of Minnesota)

***Graduate Advisors:***

(2 individuals) Perry Y. Li, U. of Minnesota and Arthur G. Erdman, U. of Minnesota

***Current Graduate and Postdoctoral Advisees:***

Not applicable.