

DISTINGUISHED SEMINAR SERIES

Turning Concepts Into Realities: A High-Speed Slide & Video Review of 40 years of R&D Projects in the Colleges of Engineering & Medicine



Stephen Jacobsen, PhD

Emeritus Distinguished Professor
Director, Center for Engineering Design
Mechanical Engineering, University of Utah

Friday, Sept. 6th, 2013, 3:00 pm

Warnock Engineering Bldg. (WEB) 2230

Reception to follow at 4:00 pm

Abstract: The Center for Engineering Design at the University of Utah has collaborated for 40 years with commercial companies to turn concepts into real systems and meet tough client-defined objectives. The center focuses on the integration of skills and knowledge in the areas of engineering, science, business, and art in order to generate innovative ideas and successfully develop advanced products. They also focus on preparing their staff and students to overcome barriers that continually emerge.

During its years of operation the center completed approximately 359 projects, worked with 101 clients, generated numerous products, and nine spinoff companies. This presentation will review several of the projects spanning the fields of medicine, entertainment, military and R&D.

Key discussion points will include:

- How the projects began
- How product targets were defined via interactions between clients and staff
- How complex projects were dynamically adjusted to meet planned objectives against schedule and budget targets

Bio: Prof. Jacobsen received his MS in Mechanical Engineering from the University of Utah in 1970 and his PhD in Mechanical Engineering from MIT in 1973. He has held the rank of distinguished professor in Mechanical Engineering since 1996, research professor for the Department of Bioengineering since 1983 and research professor for the Department of Computer Science since 1992. He was the director for the Center for Engineering Design between 1973-2007. He has 170 technical publications, 276 technical invited presentations, over 200 patents issued in the U.S., 123 foreign patents, approximately 200 patents in process and 50 trademarks issued. Prof. Jacobsen is the founder of nine companies (Sterling Research Corp., Raytheon Sarcos, Sarcos Research Corp., Micro-Drugs, Inc., Eye-Port Corp., Motion Control, Inc., IOMED, Inc., MicroJect Corp., Precision Vascular Systems, Inc.).