

Introduction

The following technical briefs were submitted, peer reviewed, and accepted for presentation at the 2016 University of Minnesota's Design of Medical Devices (DMD) Conference (www.dmd.umn.edu) held on April 11–14, 2016 at The Commons Hotel and McNamara Alumni Center in Minneapolis, MN. The conference had another successful year with attendance reaching over 1200 and raised \$135,000 from 37 sponsors. The money raised will support medical devices education at the University of Minnesota, the University of Minnesota Medical Devices Center, and the Design of Medical Devices Conference expenses.

Each year, this leading international forum invites high-quality technical submissions from the academic, clinical, and/or industry medical device community. This September issue consists of accepted papers in the following technical scientific poster session tracks: Computer Modeling and Simulation, Orthopedics, Neuroengineering, Surgical Tools, and Rehabilitation.

Several of the papers in this issue and the previous issue were among the top ten contributed papers that described medical devices with commercial potential. The authors of these papers were given the opportunity through the DMD Conference's 3-in-5 Competition to pitch their projects to leading medical technology innovators. The winners were:

[“A Muscle-Powered Counterpulsation Device for Tether-Free Cardiac Support: Form and Function”](#)—by Dennis R. Trumble
Presented by Dennis R. Trumble, Department of Biomedical Engineering, Carnegie Mellon University, Pittsburgh, PA

[“A Device for Enabling Placement of Intra-Osseous Infusion Tools”](#)— by Steven D. Reinitz, Alexander H. Slocum, Jr., Christopher J. Magoon, and Douglas W. Van Citters

Presented by Steven D. Reinitz, Senior Innovation Fellow, Medical Devices Center, University of Minnesota, Minneapolis, MN

[“Design of an Ergonomic Wheelchair Drive System for Improved Shoulder Biomechanics”](#)—by Stuart Fairhurst, Eric Nickel, Steve Morin, Gary Goldish, and Andrew Hansen

Presented by Gary Goldish, Minneapolis VA Health Care System, University of Minnesota, Minneapolis, MN

One of the primary goals of the DMD conferences is to provide a neutral forum to bring medical device designers, manufacturers, researchers, and representatives from the public sector together to share their perspectives on medical device design. We very much appreciate the authors for submitting their work to the *Journal of Medical Devices*.

Congratulations to all the authors for acceptance of your papers!

Matthew Johnson
Contributed Papers Chair

Arthur Erdman
Conference Chair

William Durfee
Conference Co-Chair

Paul Iaizzo
Conference Co-Chair