



# 2008 RESNA Awards Ceremony



Sunday  
June 29, 2008



# Agenda

- Student Design Competition Awards - *Mark Bresler*
- Student Scientific Paper Awards – *Susan Johnson Taylor, OTR/L*
- International Appropriate Technology Design Competition Awards - *Jon Pearlman*
- RESNA Awards - *Dave Jaffe*

# Student Design Competition

- Chair – Mark E. Novak, BSEE, PE
- Host – Mark Irwin Bresler, MBME, PE, ATP
- Thanks to all the reviewers!
- Special thanks to our generous sponsor –  
*National Science Foundation*



# Judges

- *Maureen Linden, MS, BME*
- *Doug Gayton, ATP*
- *Kirk Siqveland*
- *Aimee J. Luebben, EdD, OTR/L, FAOTA*
- *Mark Irwin Bresler, MBME, PE, ATP*

# Final Round Competitor

**Integrated Functional Electrical Stimulation - Ankle Foot Orthosis Training System**

Jennifer Hadley, Jonathan Steer, and Kristi Tanouye

Washington University in St. Louis  
Department of Biomedical Engineering

# Final Round Competitor

Karaoke Trainer

Swarna Solanki and Omar Awan

University of North Carolina - Chapel Hill

# Final Round Competitor



Trace-Aid: A Device to Improve Fine Motor Control  
among Children with Autism

David Zilber and Elliot Greenwald

University of North Carolina at Chapel Hill

# Final Round Competitor

**DYNASIT: An Assistive Seating System that Controls Sitting Posture and Regulates Body Load Associated with Sitting Related Mobility Problems**

Paul van Geffen and Jasper Reenatda

University of Twente

Department of Engineering Technology

Laboratory of Biomechanical Engineering

# Final Round Competitor

**The iGait: Providing Motivational Feedback for Gait Improvement**

Roseanne Warren, Nydia Cardenas, Whitney King, and Obinna Emenike

Stanford University

Department of Mechanical Engineering

# Top Five Winner



**The Figure-Eight Drive: A Two-Speed Drivetrain for Handcycles in the Developing World**

Mario Boffini

Massachusetts Institute of Technology  
Department of Mechanical Engineering



# Top Five Winner

**The CU Walker: A Walker Trainer for Transitioning to Independent Walking**

Gregory Briggs, Joshua Gelser, Drew Hackney,  
Scott Miller, Joshua Petrel, William Van Dyke, and  
Richard Young

Cedarville University  
Engineering Department



# Top Five Winner

**Diabetes Management for the Disabled: Assistive Device for Patients with One Functioning Arm**

Eileen Hayden, Ross Budacki, Kim Kontson,  
Melissa Ong, Andrew Richart, and Amanda Scott

The Pennsylvania State University  
Department of Bioengineering



# Top Five Winner

**Cradle to Grave Design of a Sip Actuated Leg Bag Valve**

Matthew Heidt, Tim Ponshock, Chris Esser, and  
Robert Bradford

University of Wisconsin - Madison  
Mechanical Engineering



# Top Five Winner



**Shoe Helper**

Andy Huang, John Perkins, and Alyx Rosen

Duke University  
Biomedical Engineering

