



Results of the 2006-2007 RERC on Accessible Medical Instrumentation Senior Design Competition

Twenty-five teams from sixteen universities submitted entries into the competition in three areas: Accessible Home Vital Signs Monitoring System, Accessible Infusion Pump Interface, and Accessible Power-Assist Hospital Bed Back Angle Controller. Details of the competition are listed at <http://www.rerc-ami.org/ami/projects/d/2/2/year4/>.

Universities involved in the competition include: Binghamton University, Columbia University, Indiana-Purdue University at Indianapolis, LeTourneau University, Marquette University, Milwaukee School of Engineering, Saint Louis University, San Diego State University, Temple University, Texas A&M, Trinity University (San Antonio, TX), University of Akron, University of Connecticut, University of Rochester, University of Wisconsin-Madison, Vanderbilt University. The websites for all of the projects in the competition are posted at the RERC website.

Ten judges from government, industry and academia participated in the competition, with three to four judges evaluating each entry. Each team received up to \$2000 in reimbursement for design costs. First prize: \$1000, Second prize: \$750, Third prize: \$500.

Overall Winner of the Competition

University of Connecticut's Accessible Adjustable Back Angle Controller. Team Members: Alaena DeStefano, Steven Frisk, Raymond Pennoyer. Faculty Advisor: Dr. John Enderle. Web Address: <http://www.bme.uconn.edu/sendes/Spring07/Team8/index.htm>.

Within each area, the following teams received awards in the competition:

Accessible Home Vital Signs Monitoring System

First Place -- Trinity University Project Title: Accessible Home Vital Signs Monitoring System Project Title: Accessible Medication Dispensing Device. Team Members: Michael Giese, Katherine Avakian, Matt Bardwell, Kevin Wallof. Faculty Advisor: Dr. Farzan Aminian. Web Address: http://www.trinity.edu/student_org/thetatau/

Second Place - Columbia University. Project Title: Accessible Home Vital Signs Monitoring System. Team Members: Brett Chung, Ashraf Fawzy, Maggie Jan, Jordan Muraskin. Faculty Advisors: Drs. Elisa Konofagou & Gordana Vunjak-Novakovic. Web Address: <http://www.columbia.edu/~af2123>.

Third Place – Marquette University. Project Title: B26: Accessible Home Vitals Monitoring System. Team Members: Steve Bushman, Andrew Okabe, Daniel Lomo-Tetty. Faculty Advisor: Dr. Jack Winters. Web Address: www.eng.mu.edu/rehab/b26/.

Accessible Infusion Pump Interface

First Place -- University of Rochester. Project Title: Inf-U-Tech: Accessible Home Infusion Pump. Team Members: Mitchele Au, Brian Duffy, Justin Goldstein, Joseph Lust. Faculty Advisor: Dr. Scott Seidma. Web Address: <http://mail.rochester.edu/~mau/RERC/Index.html>.

Second Place – Binghamton University. Project Title: Infusion Pump Interface. Team Members: Ruslan Boyko, Mario Fantini, Alex Huang, Jianzhuang Huang, Libo Zhu. Faculty Advisor: Dr. Vladimir Nikulin. Web Address: <http://bingweb.binghamton.edu/~jhuang5>.

Third Place – University of Connecticut. Project Title: Accessible Infusion Pump User-Interface. Team Members: Hassam Sultan, Kevin Golebieski, Michael Cahill. Faculty Advisor: Dr. John Enderle. Web Address: <http://www.bme.uconn.edu/sendes/Spring07/Team2/index.htm>

Accessible Power-Assist Hospital Bed Back Angle Controller

First Place -- University of Connecticut. Project Title: Adjustable Back Angle Controller. Team Members: Alaena DeStefano, Steven Frisk, Raymond Pennoyer. Faculty Advisor: Dr. John Enderle. Web Address: <http://www.bme.uconn.edu/sendes/Spring07/Team8/index.htm>.

Second Place – Milwaukee School of Engineering. Project Title: Hospital Bed Controller (Standing Assist and Back-raise Device). Team Members: Ron Covert, Scott Gillis, Brian Remick, Andrew Barry. Faculty Advisor: Dr. Subha K. Kumpaty. Web Address: <http://myweb.msOE.edu/~kumpaty/RERConAMI/indexX.html>.

Third Place – University of Wisconsin-Madison. Project Title: Accessible Power-Assist Hospital Bed Back Angle Controller. Team Members: Brenton Nelson, Ibrahim Khansa, Katy Reed, Shikha. Faculty Advisor: Dr. Willis J. Tompkins Web Address: <http://homepages.cae.wisc.edu/~bcnelson/>.