

Division IV

Engineering Student Design Competition REINSTATED

School Awards:

School Awards are granted to recognize the cooperation of student, instructor and department in preparing an award paper. These awards are sent to the department heads listed.

2003 Winners

GONZAGA UNIVERSITY - \$250.00
Best of Program Award - 1 entry

LEHIGH UNIVERSITY - \$500.00
Bronze Award - 2 entries

SAN JOSE STATE UNIVERSITY - \$750.00
Gold Award - 1 entry
Silver Award - 1 entry

SANTA CLARA UNIVERSITY - \$750.00
Silver Award - 1 entry
Bronze Award - 2 entries

STANFORD UNIVERSITY - \$1,000.00
Best of Program - 1 entry
Silver Award - 2 entries
Bronze Award - 1 entry

UNIVERSITY OF ILLINOIS - \$500.00
Gold Award - 1 entry
Bronze Award - 1 entry

2003 Jurors



Mr. Fereidoon Delfanian
South Dakota State
University
Brookings, SD



**Mr. Weislaw
Szydowski**
University of Nebraska
Lincoln, NE

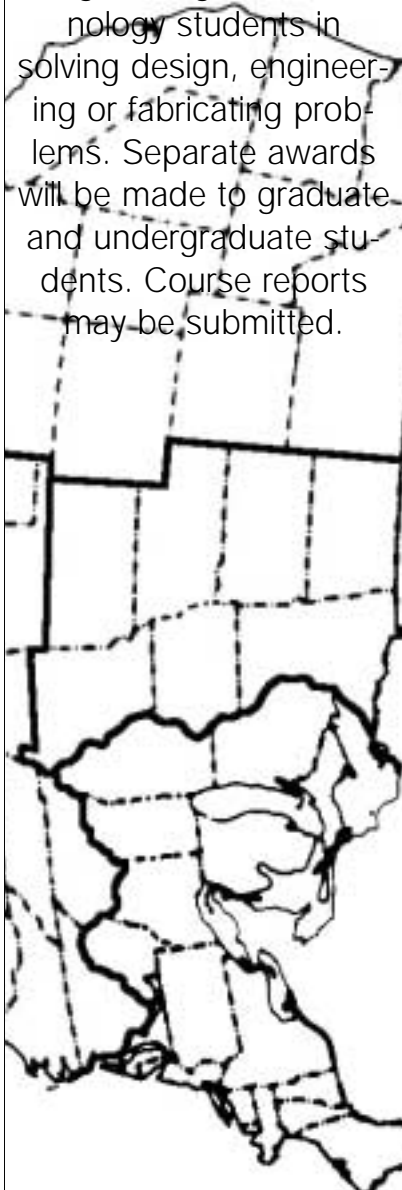


Mr. David Walrath
University of Wyoming
Laramie, WY

Division IV

For Graduate and Undergraduate Students in Engineering or Technology

The Lincoln Foundation sponsors this competition annually to recognize and reward achievement by engineering and technology students in solving design, engineering or fabricating problems. Separate awards will be made to graduate and undergraduate students. Course reports may be submitted.



GRADUATE COMPETITION

Best of Program – \$2,000



Aaron Daub
Stanford, CA



John Morriss
San Francisco, CA



Joel Torres
Alamo, TX

FOR THE ENTRY: *Improved Vascular Access Graft for Hemodialysis*
Stanford University, Professor Thomas Andriacchi

Gold Award – \$1,000



Robert Belt
Mountain View, CA

FOR THE ENTRY: *Design of a Piezoelectrically Actuated MEMS Deformable Mirror with a Continuous Membrane Mirror, High Spatial Resolution*
San Jose State University, Dr. Burford Furman

Silver Award – \$750 Each



Vishav Aujla
Stanford, CA



Sabrina Chang
Cupertino, CA



Emilie Johnson
Encinitas, CA



Evan Linderman
Vernon Hills, IL

FOR THE ENTRY: *The ADVANCE: Pediatric Expandable Limb Preservation Device*
Stanford University, Professor Thomas Andriacchi

GRADUATE COMPETITION

Silver Award – \$750 Each



Philippe Alessandrini
Stanford, CA



Serge Kassardjian
Palos Verdes Estates, CA



Xavier Merlin
France



Eric Wengreen
Stanford, CA

FOR THE ENTRY: *Secondary Suspension System – Innovative Use of MR Fluid in Seats*
Stanford University, Professor Mark Cutkosky

Bronze Award – \$500 Each



Maria Garlock
Princeton, NJ

FOR THE ENTRY: *Design, Analysis & Experimental Behavior of Seismic Resistant Post-Tensioned Steel Moment Resisting Frames*
Lehigh University, Dr. James Ricles



Pedro Cruz
Bethlehem, PA

FOR THE ENTRY: *Seismic Analysis, Design & Evaluation of Post-Tensioned Friction Damped Connections for Steel Moment Resisting Frames*
Lehigh University, Dr. James Ricles



Federico Gutierrez
Gilbert, AZ



Mitul Saha
Stanford, CA

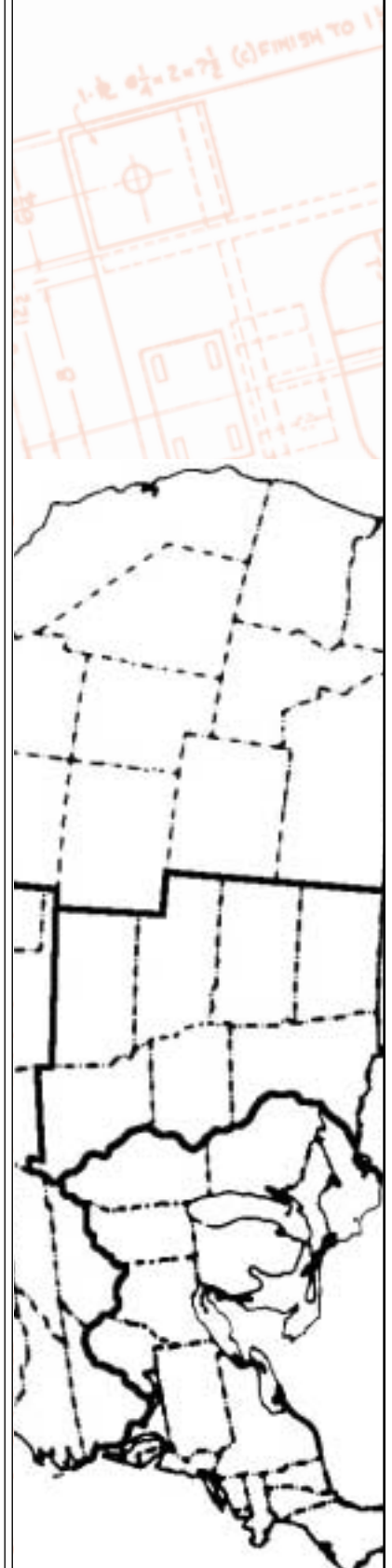


Yong Nam Song
Stanford, CA



Anna Timbie
Chevy Chase, MD

FOR THE ENTRY: *Design of a Preclinical Fluoroscopic Flow Model for Intravascular Device Testing & Training*
Stanford University, Professor Thomas Andriacchi



— UNDERGRADUATE COMPETITION —

Best of Program – \$2,000



Jess Cornaggia
Spokane, WA



Gregory McFadden
Richland, WA



Steffen Lilly
Spokane, WA



Christopher Shogan
Spokane, WA

FOR THE ENTRY: *A Tramp Metal Detection & Removal System for Use with Mining Conveyance Equipment*
Gonzaga University, Professor Thomas Zysk

Gold Award – \$1,000



Patrick McGough
Elk Grove Village, IL



Nathan Sis
Darien, IL



Caleb Wiza
North Riverside, IL

FOR THE ENTRY: *Solo Cup: Thermoforming Air Pressure/Vacuum Analysis (NDA required)*
University of Illinois, Harry Wildblood

Silver Award – \$750 Each



Ian Dixon
Albany, CA

FOR THE ENTRY: *Mini Baja Transmission*
San Jose University, Dr. Furford Furman



Whitney Armbrust
Anchorage, AK



Kevin Murray
Eugene, OR



Mike Nicholson
Santa Clara, CA

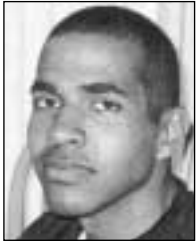


Kenneth Pirozzoli
San Rafael, CA

FOR THE ENTRY: *SHARP Reentry Vehicle Prototype*
Santa Clara University, Professor Timothy Hight

— UNDERGRADUATE COMPETITION —

Bronze Award – \$500 Each



John Mack
San Diego, CA



Matt Marino
Redmond, WA



Wei-Hung Teo
Singapore



Collin Thornber
Redmond, WA



Patrick Weber
Spokane, WA

FOR THE ENTRY: *O-RESCU – Optimization of Renewable Energies at Santa Clara University*
Santa Clara University, Professor Timothy Hight



Christopher Paetsch
Sunnyvale, CA



Michael Neumann
Crescent City, CA



Shelley Schilz
Medford, OR



Daniel Schuet
Sunnyvale, CA

FOR THE ENTRY: *Big Blimpin': Development of an Advanced Control Airship*
Santa Clara University, Professor Timothy Hight



Cameron Croft
Crystal Lake, IL

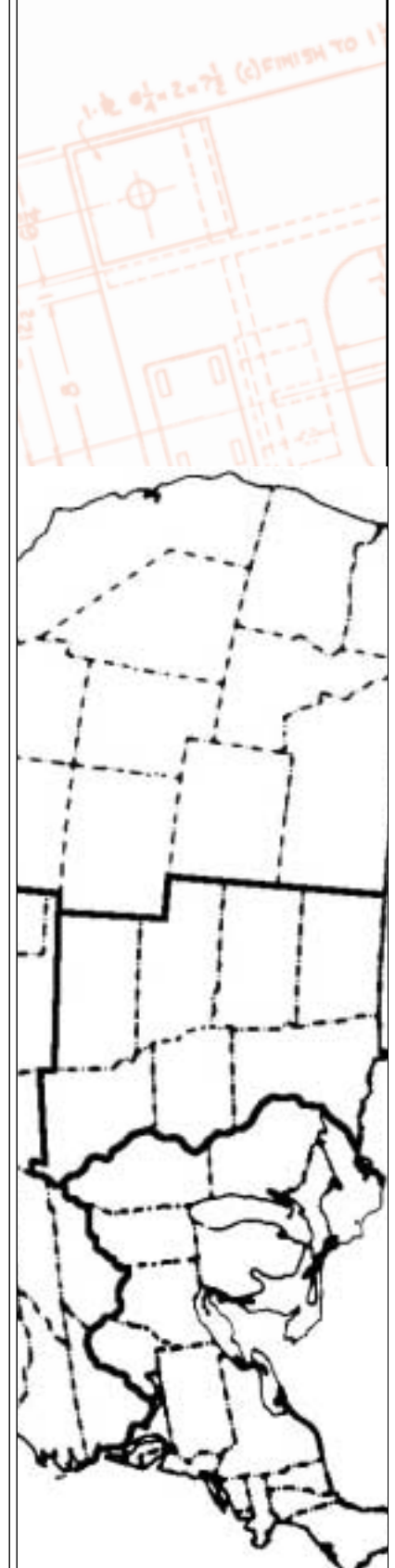


Robin McGowen
Belleville, IL



Obinna Orjih
St. Louis, MO

FOR THE ENTRY: *Krupp Gerlach: Forging Flash Reduction*
University of Illinois, Professor Henrique Reis



Division IV Graduate & Undergraduate

2003 Merit Awards – \$250 each

Graduate Competition

Tom Covington, Stanford, CA
Xinru Page, Piedmont, CA
Nick Romceovich, Palo Alto, CA
Jesse Thomas, Stanford, CA
FOR THE ENTRY: *Haptic Interface for Navigational Systems in the Automobile Cockpit*
Stanford University, Mark Cutkosky

Kyung Sik Lee, Bethlehem, PA
FOR THE ENTRY: *Seismic Behavior of Structures with Dampers Made from Ultra High Damping Natural Rubber*
Lehigh University, Richard Sause/James Ricles

Sebastien Chanard, Sainte Croix, France
Apratim Dixit, Cupertino, CA
Mithun Vora, San Jose, CA
Michael Williams, Stanford, CA
FOR THE ENTRY: *Activity Monitor Device*
Stanford University, Thomas Andriacchi

Samuel Tan, Daly City, CA
FOR THE ENTRY: *Use of Steel Cables to Prevent Progressive Collapse of Existing Buildings*
University of California-Berkeley, Abdhassan Astaneh-Asl

Andrew Dryden, Vancouver, WA
David Gilbert, Palo Alto, CA
Howard Kwon, Walnut, CA
Charles Keimoth, Stanford, CA
FOR THE ENTRY: *Innovative Trunk Loading System for Company X Sport Utility Vehicle*
Stanford University, Mark Cutkosky

Undergraduate Competition

Ryan Blocker, Gilberts, IL
Michelle McClendon, Chicago, IL
Hwa Tsu, Naperville, IL
FOR THE ENTRY: *Dentsply: Dental Needle Redesign (NDA Required)*
University of Illinois, Harry Wildblood

Brandon Holm, Pescadero, CA
Eric Kumar, Morgan Hill, CA
Kevin Lynch, Morgan Hill, CA
Joseph Moore, Morgan Hill, CA
FOR THE ENTRY: *SCU Mini Baja 2003*
Santa Clara University, Timothy Hight

Jeff Bernath, Loveland, OH
Matthew Slate, Lockport, NY
Jeffrey Sowards, (no address available)
FOR THE ENTRY: *Weld Solidification Cracking Susceptibility of Nickel-Based Filler Metals*
The Ohio State University, John Lippold/Dave Farson

Jacob Carnow, Wilmette, IL
Peggy Ho, Oak Brook, IL
William Nitekman, Highland Park, IL
FOR THE ENTRY: *Life Fitness: Treadmill Off-Tracking Analysis (NDA Required)*
University of Illinois, Edward Kuznetsov

Jeannie Austin, Lodi, CA
Melissa Fong, Baton Rouge, LA
Dustin Harder, Mill Valley, CA
Travis Richards, Redwood City, CA
Lacey Walker, Great Falls, MT
FOR THE ENTRY: *Golden Gate Bridge Moveable Median Barrier*
University of California-Berkeley, Gregory Fenves

Yen Shi Hoe, Baltimore, MD
Stanley Huang, Baltimore, MD
I-Jean Khoo, Philadelphia, PA
William Tam, Baltimore, MD
FOR THE ENTRY: *Clinical Force – Sensing System*
The Johns Hopkins University, Dr. Robert Allen

Jonathan Dame, Oak Park IL
Bradley Gillette, Aurora, IL
Michael Kearney, Naperville, IL
FOR THE ENTRY: *Pelstar: Balance Beam Scale Redesign (NDA Required)*
University of Illinois, Henrique Reis

David Hjelle, Fergus Falls, MN
Chad Langer, Bethel, MN
Ryan Van Der Bill, Richfield, MN
Conan Yates, Ripon, CA
FOR THE ENTRY: *Pediatric Walker*
Dordt College, Dr. Ethan Brue

Imiola Lindsey, Kamuela, HI
Stephanie Molinaro, Alta Loma, CA
Holi Ogle, Boise, ID
Michael Ereno, San Jose, CA
FOR THE ENTRY: *Project Print*
Santa Clara University, Timothy Hight

Timothy Wardlow, Conyers, GA
FOR THE ENTRY: *Mechanical Wear Tester for Novel Articular Cartilage & Disk Biomaterials*
Southern Polytechnic State University, James McKee

Nathan Carter, Heath, OH
Kevin Clear, Dublin, OH
A J Wagner, Clinton, OH
FOR THE ENTRY: *Pulse Parameter Development for GMAW of Aluminum*
The Ohio State University, Richard Richardson

Timothy Hughes, Glenwood, IL
Julia Streicher, Pontiac, IL
FOR THE ENTRY: *Greenlee Textron: Drill Bit Coating Comparison*
University of Illinois, Brian Lilly

Ryan Gneiting, Dubuque, IA
James Reynolds, Columbus, OH
Benjamin Schaefer, Columbus, OH
FOR THE ENTRY: *Feasibility Study of Friction Stir Welding Penetration Control via Eddy Current Sensing*
The Ohio State University, Dr. David Farson

Timothy Ennesser, Orland Hills, IL
Barbara Wagus, Cary, IL
FOR THE ENTRY: *Forsheada: Coating Process Design and Control*
University of Illinois, Harry Wildblood/Ali Yassine

Joseph Dierksheide, Bradner, OH
Aaron Lindsey, London, OH
Chris Rogers, Columbus, OH
FOR THE ENTRY: *Effect of Torch Weave Parameters on Weld Bead Characteristics*
The Ohio State University, Dr. David Farson

Clifton Brock, The Woodlands, TX
Michael Corrigan, Tinley Park, IL
David Johnson, Dolton, IL
FOR THE ENTRY: *Emerson: Laminated Collar Design (NDA Required)*
University of Illinois, Brent W. Hall

Kent Coughlin, Berwyn, IL
Matt Green, Glen Ellyn, IL
Michael Ogrodnik, Wheeling, IL
FOR THE ENTRY: *Pactiv: Heat Exchanger Fouling Analysis*
University of Illinois, Juraj Medanic

AbdulRasheed Alabi, Springfield, IL
Kenny Ching, Singapore
Erik Hein, Hong Kong
Wei-Hsien Hou, Taiwan
Andy Jeng, Arcadia, CA
Joyce Lin, Cupertino, CA
Bin Luo, Commack, NY
Jessica May, Lakeport, MI
Melanie Ruffner, Allison Park, PA
Somponnat Sampattavanich, Thailand
Ashkon Shaahinfar, Woodbridge, CA
Eugene Wu, Bethesda, MD
FOR THE ENTRY: *Device to Measure Bioimpedance in Tissue: Towards Early Detection of Preterm Labor*
The Johns Hopkins University, Dr. Robert Allen

Katherine Bewersdorf, Naperville, IL
Michael Jan, Naperville, IL
Daniel Litchfield, Greenville, OH
FOR THE ENTRY: *Aurora Pump: Pump Performance Test Stand Design*
University of Illinois, Francesco Bullo

Allison Kalis, (no address available)
Eric Monsen, Santa Clara, CA
Giselle Sancen, San Jose, CA
Janson Young, Honolulu, HI
FOR THE ENTRY: *ROVers: A Tether Management System*
Santa Clara University, Chriss Kitts