

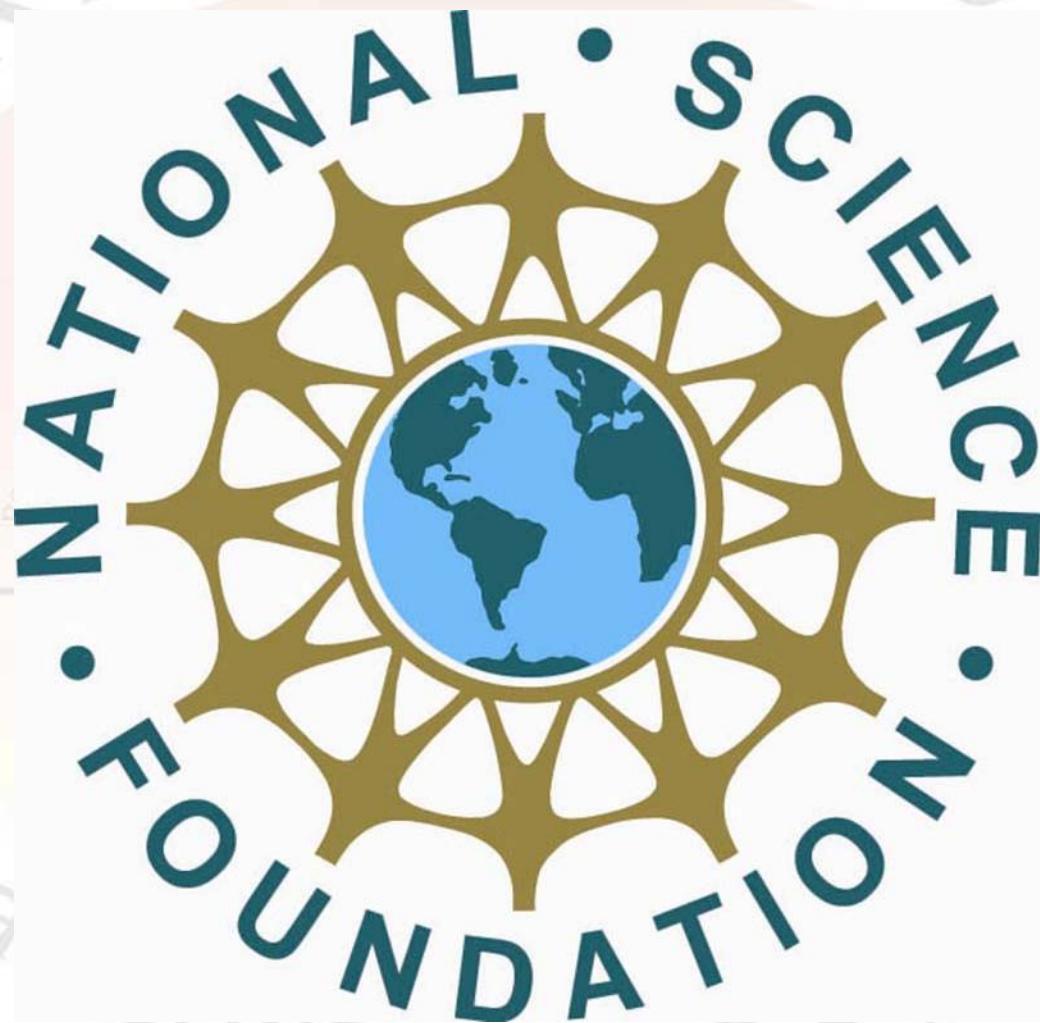


# *Student Design Competition 2007*

# Student Design Judges

- Mark Novak, BSEE, PE, Co-chair
- Jay K. Martin, PhD, Co-chair
- Robert Van Etten, BSE, ME, ATP
- Maureen Linden, MS, BME
- Doug Gayton, RCA, ATP
- Kirk Siqveland

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# **A Design to Add Body-Powered Functionality to the International Red Cross Above-Elbow Prosthesis**

- Sarah E. Huber
- Nupura Bhise
- Rebecca Carlisle
- William J. Richardson

University of Arkansas  
Fayetteville, AR

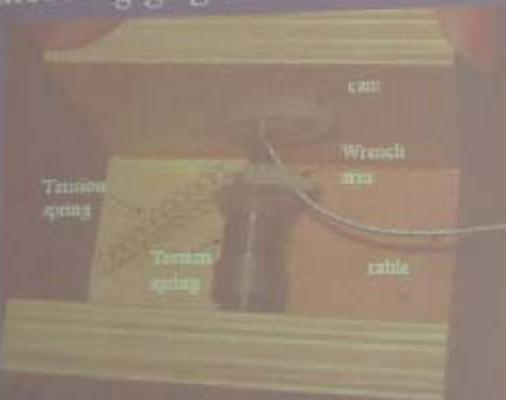


## Prototyping: Locking Mechanism

### ■ Alternative 2

Torsion spring grips shaft, rotates cam, and slides the locking pin in/out of the elbow slots to lock/unlock

- Wrench arm is rotated into original position by a torsion spring without engaging the shaft and cam



# **The Adjustable Camber Axle Plate (ACAP): Redesign of a Wheelchair Axle Plate for Rapid Changes in Wheel Camber**

- Jay Kothar
- Amit Kausha
- Daniel Ramirez
- Samir Shah

New Jersey Institute of Technology  
Newark, NJ



# Walker Monitor

- Nancy Du
- Shawn George

Department of Biomedical Engineering  
University of North Carolina at Chapel Hill



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# An Automated Page Turning Device to Assist in Navigating through Reading Materials

- Joshua M. Keena, BS
- Peter B. Backlund, BS
- Hung P. Nguyen, MS
- Bryan M. Sanchez, BS
- Stewart A. Vaculik, MS
- Jeffrey M. Chan, MA, BCBA

The University of Texas at Austin, TX



# Adaptable Prosthetic Foot & Ankle Mechanism for Sloped Walking

- Ryan Williams  
Northwestern University  
Evanston, IL



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