

FALL 2006 AME UNDERGRADUATE RESEARCH CONFERENCE

December 8, 2006

2:00 to 5:00 pm

DeBartolo Hall

Rooms 244 and 245

TIME	SESSION A BIOENGINEERING ROOM 244 Session Chair: Marissa Post	SESSION B CONTROLS & ROBOTICS ROOM 245 Session Chair: David Post
2:00	Keri-Anne Macaulay: "Hybrid Cellular Automaton Simulations of Bone Remodeling"	Fred Thwaites: "Behavior and Stability of Coupled Thermostatically Controlled Rooms"
2:15	Kimberly Dueffert: "Tibia Fracture and Plate Analysis"	Laura Peveler: "Automatically Guided Wheelchair"
2:30	Luis Criales: "Tibia Fracture and Plate Analysis"	David Rowinski: "Path-Tracking Adaptation to Ceiling Environments"
2:45	Constance Slaboch: "Procedure Used to Discern the Role of Trabecular Bone with Respect to Osteoporosis"	Billy Gallagher: "A mobile Platform for Autnomous Soil Removal"
3:00	Caitlin Feely: "Collagen Cross-links in Cortical Bone"	Alfredo Tuesta: "Electron Flow in Semiconductor"
3:15	BREAK – Room 232	BREAK – Room 232
	SESSION C MATERIALS ROOM 244 Session Chair: Jason Nightingale	SESSION D TRANSPORTATION AND DESIGN ROOM 245 Session Chair: Charlie Penninger
3:45	Patrick Fox: "Friction Welding"	Amanda Waylett: "Quantitative Comparison of Topologies Generated Using the Hybrid Cellular Automaton Method in Automobile Crashworthiness Design"
4:00	John Souder: "Hydroxyapatite Whisker Formation on Porous Metal Substrates"	David Lettieri: "Topology Optimization of Aeroelastic Airfoil"
4:15	Matthew Meagher: "Precipitation of a Barium Sulfate Nanoparticle Contract Agent Using Microemulsions"	Tom Economon: "Effects of Wake Vortices on Commercial Aircraft"
4:30	Andy Crutchfield: "Thermal Properties of a Nonhomogeneous Composite"	Megan Miller: "Feasibility Assessment of Light Duty Vehicle On-Board Hydrogen Storage Technologies"