Initial Mechanical Stability of Cementless Highly-porous Titanium Tibial Components (Mentor: Phil Cornwell, Rose-Hulman Institute of Technology)

Chris Warren – Chris graduated from the University of Massachusetts – Lowell (UML) with a BS in Mechanical Engineering in May 2008, he will pursue his MSME with a concentration in Modal Analysis and Vibrations upon returning in the fall. He will be working concurrently under Dr. Peter Avitabile as a research assistant and teaching assistant in the Modal Analysis and Controls Laboratory at UML. While at Lowell, Chris led the UML Society of Automotive Engineers' Formula team to their first competition in more than ten years, for which he was awarded the 2008 Senior Leadership Award by the Francis College of Engineering. The Formula SAE® competition is for SAE student members to conceive, design, fabricate, and compete with small formula-style racing cars. The restrictions on the car frame and engine are limited so that the knowledge, creativity, and imagination of the students are challenged. At Virginia International Raceway in April 2008, the team placed 21st out of 44 registered teams.

Luke Amer – Luke is currently a senior at the University of Colorado at Boulder and will graduate in the spring with a B.S. in Chemical and Biological Engineering. He was raised in Santa Fe New Mexico and has spent the previous two summers working at LANSCE in AOT-RFE. In the next academic year he will be pursuing an undergraduate thesis while researching in a biomaterials laboratory at the University of Colorado. After graduation he plans to attend graduate school in chemical and biological engineering either practicing biomedical research or performing biofuels studies. Outside of school he is focused on road bike racing and generally enjoys spending time outdoors with any active pursuit.

Brandon Stone – In his pursuit of higher education Brandon Stone has recently graduated from Harding University with a B.S. in Physics and Mathematics. He is currently enrolled in the Los Alamos Dynamics Summer School as a summer student where he will be evaluating and testing the initial mechanical stability of cementless highly-porous titanium tibial components using vibration analysis techniques as opposed to the traditional linear variable differential transducers. He has spent the last two summers as a technical student intern at LANL. In 2006 with fluid dynamics research conducted to verify computational fluid dynamics models containing Richtmeyer-Meshkov instabilities. In 2007 he worked with radiation protection in post contamination analysis of airborne contamination data taken from rooms in the plutonium facility. His future lies undecided as he will use his summer experience to determine a direction for his graduate studies.