

Speaker: Dr. Kenneth Diller

**Robert M. and Prudie Leibrock Professor in Engineering,
Chairman, Department of Biomedical Engineering
Former Chairman, Department of Mechanical Engineering
The University of Texas at Austin**

**Title: Bioheat Transfer Phenomena Expressed Across
Multiple Length Scales**

Abstract: Heat transfer processes in living systems are manifested across length scales extending from physiological to molecular. Until recently, most analysis has been focused on processes that can be measured and analyzed at the macroscopic and microscopic levels. Advances in adjuvant sciences such as molecular biology have demonstrated that heat transfer can be used to manipulate the genetic expression of specific molecules for purposes of prophylaxis and therapy for targeted medical disease states. This lecture will describe the application and implications of heat transfer to produce controlled phenomena having biological response dimensions varying over many orders of magnitude.

Friday, February 6, 2009

3:00 – 4:00 p.m.

EB 2.04.04

For any questions, please contact: **Ms. Shirley Domyancic**
(210) 458-5516
Office: EB 3.04.02
UTSA College of Engineering, Department of Engineering
San Antonio, TX 78249-0670