

Einladung zum Vortrag

Computational Biomechanics in Treatment and Prevention of Cardiovascular Diseases in Africa

Thomas Franz, PhD

Cardiovascular Biomechanics Lab, Chris Barnard Division of
Cardiothoracic Surgery, University of Cape Town, Observatory, South
Africa

Centre for Research in Computational and Applied Mechanics, University
of Cape Town, Rondebosch, South Africa

Centre for High Performance Computing, CSIR, Rosebank, South Africa

Cardiovascular diseases (CVD) will become the leading cause of death by 2020 superseding infectious diseases such as HIV, tuberculosis and malaria. In Africa, a dramatic increase in CVD incidences, predominantly in children, is expected in the near future in conjunction with the emergence of a new epidemic of obesity, diabetes and uncontrolled hypertension, partially based on improvement of socio-economic conditions and adoption of a western diet. Efficient and affordable strategies for treatment and prevention of CVD are urgently needed. With the trend to therapies based on regenerative medicine, multi-disciplinary approaches are increasingly required. The importance of biomechanics in many of these approaches, alongside cellular bioengineering and advanced biomaterials, is only emerging. This talk will address challenges of biomechanics in treatment of cardiovascular diseases, such as acute myocardial infarction, vascular diseases and rheumatic heart disease, with particular reference to the African situation.

**Donnerstag, 16. Juni 2011
11:00 Uhr**

**Seminarraum LNM
MW 1237**



Für weitere Informationen: <http://www.lnm.mw.tum.de/events>
Lehrstuhl für Numerische Mechanik • Prof. Dr.-Ing. W. A. Wall • TU München
Boltzmannstr. 15 • D-85747 Garching b. München • Tel 089-289-15300

Eine Vortragsreihe des
Lehrstuhls für
Numerische Mechanik