

機電整合研究所  
Institute of Mechatronic  
Technology

醫療器材之研發與評估  
Development and  
Evaluation of Medical  
Instruments

生物力學實驗室  
BioMechanics Lab.



O: 綜科 802-1  
#2082  
L: 綜科 802-2  
#4823

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<http://140.124.30.1/biomech/index.htm>

■ 研究領域

- 牙 科 生 物 力 學
- 骨 科 生 物 力 學
- 足 部 生 物 力 學
- 生 物 材 料

■ 近期研究計畫

- 新式仿真人工椎間盤之生物力學評估與研發
- 俱備緩衝功能人工牙植體之研發與活體犬隻牙周膜韌帶之生物力學研究
- 可吸收性凝膠海綿分佈體積與位置對於骨水泥式脛骨托盤之生物力學評估
- 墜落人體動作分析研究
- 微創醫材原型品組裝可靠度/功能試驗
- 生物可吸收頸椎骨板之生物力學分析與研發

■ Research Area

- Dental biomechanics
- Orthopaedic biomechanics
- Foot biomechanics
- Biomaterials

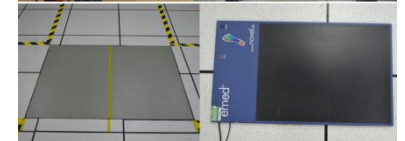
■ Recent Topics

- The Biomechanical Evaluation and Development of Novel Biomimetic Artificial Intervertebral Discs
- Research and development of a resilient dental implant and in vivo biomechanical investigation of canine periodontal ligament
- Biomechanical evaluation of the cemented total knee replacement tibial component with different volumes and locations of absorbable gelfoam
- Motion Analysis of Human Body During Falling
- Assemblage reliability and functional tests for the prototype of minimally-invasive medical device
- Biomechanical analysis and development of biodegradable cervical plate



材料試驗機-MTS 810

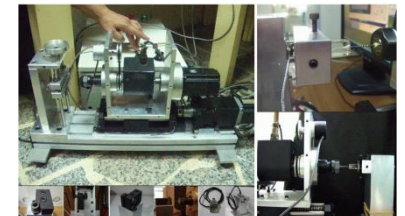
Material testing system-MTS 810



三維動作擷取系統-VICON 460

以及各式力量測裝置

3D motion capture systems-  
VICON 460 and force  
measurement device



牙植體動態測試系統

Dental implant dynamic testing  
system