

## **BIOREACTORS & MONITORING MEETING**

Tuesday 25<sup>th</sup> June 2002  
Sir Herbert Seddon Teaching Centre  
Institute of Orthopaedics, Brockley Hill, Stanmore HA7 4LP

### **A G E N D A**

- 10.00 a.m. Opening Remarks – *Professor Robert Brown*
- 10.05 a.m. **'Elastic Scattering Spectroscopy for Characterisation of 3D Collagen Gel Constructs'**  
*Dr David Pickard, National Medical Laser Centre, UCL*
- 10.25 a.m. **'In situ structural conformation of proteins and enzymes studied by neutron reflection'**  
*Professor Jian Lu, Dept of Physics, UMIST, Manchester*
- 10.45 a.m. **'Visible, near, and mid infrared spectroscopy for assessing tissue constructs'**  
*Professor Dave Delpy, Dept of Medical Physics, UCL*
- 11.05 a.m. Discussion
- 11.15 a.m. **C O F F E E**
- 11.30 a.m. **'Monitoring - the first part of the feedback loop or out of the loop?'**  
*Professor Pankaj Vadgama, Dept of Biomaterials, Queen Mary College, London*
- 11.50 a.m. **'Packed bed bioreactor for tissue engineering'**  
*Professor M Al-Rubeai, Dept of Biochemical Engineering, Birmingham University*
- 12.10 a.m. **'Influence of culture environment on development of cartilage matrix in 3-D constructs'**  
*Dr David Lee, Cell & Tissue Engineering Group, Queen Mary College, University of London*
- 12.30 a.m. **'Characterisation of the mechanical response of articular chondrocytes cultured within a rotating bioreactor and in monolayer'**  
*Dr Mike Wiseman, Institute of Orthopaedics, Stanmore*
- 12.50 a.m. **'Mechanical loading in 3-D muscle constructs'**  
*Ms Umber Cheema, TREC, Institute of Orthopaedics*
- 1.05 p.m. Discussion
- 1.15 p.m. **L U N C H**
- 2.10 p.m. **'Development & evaluation of the ideal circulation for tissue engineering: current application cardiovascular and liver tissue engineering'**  
*Dr A Selifalian, Biophysics & TE, Dept of Surgery, Royal Free Hospital*
- 2.30 p.m. **'Applications For The Multi-Cue Bioreactor (M-CB): Dynamic *In-Vitro* Testing of Whole Cardiovascular Tissue Samples Under Physiological Conditions'**  
*Dr Mark Eastwood, Centre for TE Research, University of Westminster*
- 2.50 p.m. **'Bioreactors in-vitro or in-vivo - which is the way forward?'**  
*Professor Allen Goodship, Director, Royal Veterinary College*
- 3.10 p.m. **'Model Culture Systems for Studying the Biological Effects of Cyclic Mechanical Strain *In Vitro*'**  
*Dr Bridget Matthews, Medical and Biological Engineering Research Group, University of Leeds*
- 3.30 p.m. DISCUSSION GROUPS & TEA
- 4.20 p.m. Summary & Close

