

BIOREACTORS & MONITORING MEETING

Tuesday 25th 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

