

Final Program

**Human mesenchymal stem cells:
selection, cultivation, phenotyping**

November 07-09, 2005, St. Gallen, Switzerland



Monday, November 7, 2005

**Human mesenchymal stem cells
Empa St. Gallen, Switzerland
November 07-09, 2005**

From 11.30 Registration

13.30 Welcome note and introduction
Josef Keller, Head of the Cantonal Department of Economic Affairs St. Gallen
Arie Bruinink, Group Leader MaTisMed, Empa St. Gallen

Selection criteria for mesenchymal stem cells

Chair: Arie Bruinink

13.45 Keynote Lecture A
Human Mesenchymal Stem Cell: Isolation from bone marrow based on specific selection criteria
Moustapha Kassem, University Hospital of Odense, Denmark

Moustapha Kassem

14.35 High-grade depletion of CD45/ glycophorin-A positive cells decreases the yield of mesenchymal stem cells from human umbilical cord blood
Ashraf Dada, University of Regensburg, Germany

15.00 Phenotype of human fetal mesenchymal stem cells (fMSC): Implications for intrauterine transplantation
Pascale V. Guillot, Imperial College London, United Kingdom

15.25 Towards a consensus protocol for isolation and phenotyping of mesenchymal stem cells (MSCs) from human bone marrow (BM)
Elena Jones, University of Leeds, United Kingdom

15.50 Coffee break

16.20 Mesenchymal stem cells as reporter for the quality assessment of implant materials
Katharina Maniura, Empa, St. Gallen

16.45 Plasticity and characterisation of single mesenchymal stem cells
Matthias Schieker, University of Munich Hospital, Germany

17.10 Strategies for the enrichment of human mesenchymal stem cells by MACS
Mario Assenmacher, Miltenyi Biotec GmbH, Germany

17.35 Resumee

17.50 Buffet and Poster session

Tuesday, November 8, 2005

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From 08.00 Registration

08.30 Start of the next session

Cultivation conditions

Chair: Katharina Maniura

08.35 Keynote Lecture B **Richard Oreffo**

Adult and fetal mesenchymal stem cells - culture modulation for lineage differentiation and implications for tissue regeneration

Richard Oreffo, Southampton General Hospital, United Kingdom

09.25 Human bone marrow stromal cells expanded directly within 3D porous scaffolds under perfusion

Alessandra Braccini, University Hospital of Basel, Switzerland

09.50 Distinct growth factor repertoire of human mesenchymal stem cells from bone marrow and adipose tissue

Thea Hennig, University of Heidelberg, Germany

10.15 Coffee break

10.45 Evaluation of the expansion and differentiation potential of CD271+ (LNGFR) marrow stromal cells (MSCS) versus MSCs isolated by plastic adherence

Kathrin Godthardt, Miltenyi Biotec GmbH, Germany

11.10 Osteogenic differentiation of mesenchymal stem cells on xerogel composites

Ulrike Bulnheim, University of Rostock, Germany

11.35 Isolation and differentiation of fresh cord blood mesenchymal cells

Sarah Maurice, Technion, Israel

12.00 Resumee

12.30 Scientific Lunch

13.30 Start of the next session

Cell Phenotyping

Chair: Peter Wick

13.35 Keynote Lecture C **Ranieri Cancedda**

Mesenchymal Stem/Progenitor Cells: phenotyping and clinical applications

Ranieri Cancedda, Istituto Nazionale per la Ricerca sul Cancro, Italy

14.25 Multilineage differentiation of human mesenchymal stem cells studied by Atomic Force Microscopy

Serena Danti, University of Pisa, Italy

14.50 A tentative approach to the serum-free culturing of human bone marrow stromal cells for clinical applications

Anita Muraglia, Istituto Nazionale per la Ricerca sul Cancro Genova, Italy

15.15 Coffee break

15.45 Isolation, phenotype, differentiation and immunological function of mesenchymal fetal membranes cells

Ornella Parolini, Ospedale Poliambulanza Brescia, Italy

16.10 The effect of surface topography on adult human bone marrow cells and trabecular bone-derived osteoblasts

Arie Bruinink, Empa, Switzerland

16.35 CD133 positive Mesenchymal Stem Cells isolated from Umbilical Cord Blood and Mobilized Peripheral Blood

Tatiana Tondreau, Jules Bordet Institute Brussels, Belgium

17.00 Resumee

18.30 Meeting point down town; sightseeing and Workshop dinner

Wednesday, November 9, 2005

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08.30 Start of the next session

Overview and Outlook

08.35	Keynote Lecture D Human mesenchymal progenitor cells isolated from bone fragments - methodological aspects, actual and potential use in diagnostic and therapy <i>Heide Siggelkow, University Hospital of Goettingen, Germany</i>	Heide Siggelkow
09.25	Round table part 1 <i>Chair: Arie Bruinink, Empa, Switzerland</i>	
10.15	Coffee break	
10.45	Round table part 2 <i>Chair: Katharina Maniura, Empa, Switzerland</i>	
11.45	Closing remarks and Poster award	
12.00	End	
