



EuroSTELLS

A EUROCORES PROGRAMME

EUROPEAN SCIENCE FOUNDATION COLLABORATIVE RESEARCH

First EuroSTELLS Conference

General biology of stem cell systems

19-21 March 2006, Venice, Italy

Conference Venue: Istituto Veneto di Scienze, Lettere ed Arti, sede di Palazzo Franchetti,
Campo Santo Stefano, Venezia



Pre-conference

March 19

- 18:30-20:00 Coordination meeting of the EuroSTELLS projects**
20:00 Dinner for EuroSTELLS participants

Presentations (20 min)

Raimund Strehl (Gothenburg): *Human embryonic stem cells - an eternal source of human cells for in-vitro applications* – invited speaker

Dirk de Rooij (Utrecht): *Spermatogonial stem cells* – EuroSTELLS

Henrik Semb (Lund): *From embryonic stem cells to functional β-cells* – invited speaker

Sergey V. Anisimov (Lund): *Developing human embryonic stem cell-based system for cell replacement therapy in Parkinson's disease* – EuroSTELLS

Hannu Sarjola (Helsinki): *Regulation of stem cell fate by GDNF* – EuroSTELLS

13:10-13:30 Discussions (all participants)

13:30-14:30 Lunch break, Sala del Giardino

14:30-15:00 Overview on Stem Cell Networks

Giulio Cossu (Milano): *The EuroStemCell Network*

15:00-16:30 Epigenetics and Cell Reprogramming (Chairman: Cesare Galli)

Key note speaker (30 min): Wendy Dean (Cambridge): *Epigenetics and early mammalian development* – invited speaker

Presentations (20 min)

Robert Feil (Montpellier): *Epigenetic maintenance of genomic imprinting* – EuroSTELLS

Jus St. John (Birmingham): *The regulation of mitochondrial DNA transmission and replication in embryos and stem cells* – invited speaker

Giovanna Lazzari (Bologna/Cremona): *Derivation of neural precursors from fertilised and nuclear transfer bovine embryos* – EuroSTELLS

16:30-17:00 Discussion (all participants)

17:00-17:30 Coffee break, Sala del Giardino

17:30-20:00 Poster session, Sala del Giardino

20:30 Dinner-social event

Conference Programme

March 20

- 09:00 Opening of the general meeting (Mariana Resnicoff)**, Sala del Portego

- 09:15-10:30 Overview on Stem Cell Networks**

(15 min presentations)

Cesare Galli (Cremona): Project Leader, EuroSTELLS: *Novel approaches to enhance animal embryonic stem cell research*

Elaine Dzierzak (Rotterdam): Project Leader, EuroSTELLS: *Regulation of hematopoietic stem cell self-renewal in the embryo*

Stefan Krauss (Oslo): Project Leader, EuroSTELLS: *Stem cell research: from basic biology to regenerative medicine*

Glyn Stacey (South Mimms): *Human Embryonic Stem Cells Requirements for Standardisation and Human Therapy*

Henrik Semb (Lund): *The International Stem Cell Initiative (ISCI)*

- 10:30-11:00 Discussion on stem cell initiatives (all participants) – Podium discussion**

- 11:00-13:10 Embryonic Stem Cells and Germ Line (Chairman: Ernest Arenas)**

Key note speaker (30 min): Mahendra Rao (Baltimore): *Stem cells in regenerative medicine* – invited speaker

March 21

9:30-11:40 Neural Stem Cells (Chairman:

Stefan Krauss), Sala del Portego

Key note speaker (30 min): Ernest Arenas (Stockholm): *Dopaminergic differentiation of stem/precursor cells* – EuroSTELLS

Presentations (20 min)

Martinez-Serrano (Madrid): *Modulation of the neuron/glia progeny of human neural stem cells by Bcl-XL* – invited speaker

Morten Meyer (Odense): *Propagation and dopaminergic differentiation of neural precursor cells* – EuroSTELLS

Stefan Krauss (Oslo): *Implications of Wnt signaling on cortical stem cells* - EuroSTELLS

Arndt Rolfs (Rostock): *Neural stem cells in drug screens* – invited speaker

Juha Partanen (Helsinki): *Intercellular signals regulating neuronal differentiation in the embryonic mid- and hindbrain* – EuroSTELLS

11:40-12:10 Discussion (all participants)

12:10-13:40 Lunch break, Sala del Giardino

13:40-15:30 Somatic Stem Cells

(Chairman: **Elaine Dzierzak**)

Key note speaker (30 min): Elaine Dzierzak (Rotterdam): *Regulation of hematopoietic stem cell self-renewal in the embryo* – EuroSTELLS

Presentations (20 min)

Anna Bigas (Barcelona): *A Role for the Notch pathway in embryonic hematopoiesis* – EuroSTELLS

Paul Newman (London): *Regulation of epidermal stem cells by intracellular signaling* – EuroSTELLS

Thorarinn Gudjonsson (Reykjavik): *Breast morphogenesis in three-dimensional cell culture* – EuroSTELLS

Szabolcs Felszeghy (Helsinki): *A signal network regulating epithelial stem cells in the teeth* – EuroSTELLS

15:30-16:00 Discussion (all participants)

16:00-16:30 Coffee break, Sala del Giardino

16:30-19:00 Creating platforms for European stem cell research

Podium discussion (Discussion leaders: Mariana Resnicoff, Ernest Arenas, Elaine Dzierzak, Cesare Galli, Glyn Stacey, Henrik Semb and Stefan Krauss)

20:00 Dinner-social event

Organising committee:

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EuroSTELLS Meeting Venice: Poster Session

Remodelling of paternal chromatin in mammalian zygotes

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Allogeneic *in utero* BMT rescues the mutant phenotype in a murine model of osteopetrosis

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Does fusion play a role in normal liver?

Francesca Faggioli, Maria Grazia Sacco, Juan Pablo Casado, Paolo Vezzoni

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Isolation, expansion and *in vitro* differentiation of sheep bone marrow mesenchymal cells

Irena Vakova, Josef Fulka Jr., Caterina Giolitto Cereser, Kazutsugu Matzukawa, Grazyna Ptak & Lino Loi¹

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Preliminary data on pig-bovine interspecies nuclear transfer embryo development

Irina Lagutina¹, Dario Brunetti¹, Giovanna Lazzari¹, Cesare Galli¹

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The involvement of histone methylation in placenta-specific imprinting

Alexandre Wagschal¹, Heidi Sutherland¹, Katia Delaval¹, Wendy Bickmore¹, Robert Feil¹

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Nuclear lamin A/C expression in bovine partenotes and nuclear transfer embryos

Keith H.S. Campbell¹, R.D.W Kelley¹, R. Alberio¹

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An unexpected function for IL-3 in the embryonic development of hematopoietic stem cells

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GDNF signalling in kidney morphogenesis and spermatogenesis

Hannu Sarjala¹

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Transplantation of expanded ventral mesencephalic progenitor cells leads to functional recovery in a rat model of Parkinson's disease

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Redundant functions of Fgfr1, Fgfr2 and Fgfr3 in the development of the mid- and hindbrain

Juha Partanen¹

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In vivo and *in vitro* fate of cortical progenitor cells

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Endothelial cells in breast morphogenesis

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Regulation of spermatogonial stem cell self renewal and differentiation

Dirk G. de Rooij¹, A.M.M. van Pelt¹

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Role of Rac and Myc in epidermal homeostasis

Paul Newman¹, Salvador Aznar Benitah, Michaela Frye and Fiona Watt

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Stem cells in tooth development

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Developing human embryonic stem cell-based therapy for Parkinsons disease

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