

10th Annual Norwegian Stem Cell Networking Meeting

Soria Moria Hotel and Conference Center

October 14 – 15, 2013



MONDAY 14th of OCTOBER

OPENING

- 09.00 Welcome
Joel Glover (*Norwegian Center for Stem Cell Research, Oslo Univ. Hospital, Dept. of Physiology, Inst. of Basic Medical Sciences, Univ. of Oslo*)

Clinical Session (Session I)

Chair: Morten C. Moe

- 09.15 Morten C. Moe (*Center for Eye Research, Dept. of Ophthalmology, Oslo Univ. Hospital*)
Overview of Stem Cell Research at Dep. of Ophthalmology
- 09.20 Aboulghassem Shahdadfar (*Dept. of Ophthalmology, Oslo Univ. Hospital*)
Tissue engineering of human corneal endothelium
- 09.35 Gunnar Kvalheim (*Dept. of Cellular Therapy, Oslo Univ. Hospital*)
Research and clinical activity on stem cell therapy at Dept. of Cellular Therapy
- 09.40 Dag Josefsen (*Dept. of Cellular Therapy, Oslo Univ. Hospital*)
Stromal vascular fraction from adipose tissue as therapy against chronic wounds
- 09.55 Mohammad Reza Mirlashari (*Dept. of Cellular Therapy, Oslo Univ. Hospital*)
Hypoxia and adipose derived mesenchymal cells

10.15 – 10.45 Coffee break

- 10.45 Iver Arne Langmoen (*Dept. of Neurosurgery, Vilhelm Magnus Lab, Oslo Univ. Hospital*)
Stem cells in the adult human brain
- 10.50 Wayne Murrell (*Dept. of Neurosurgery, Vilhelm Magnus Lab, Oslo Univ. Hospital*)
Neural stem cells and tissue repair
- 11.05 Cecilie Sandberg (*Dept. of Neurosurgery, Vilhelm Magnus Lab, Oslo Univ. Hospital*)
Transcriptional characterization of stem cells in neurospheres

Mesenchymal / Blood Session (Session II)

Chair: Jan E. Brinchmann

KEYNOTE LECTURE I

- 11.20 Mari Dezawa (*Division of Stem Cell Biology and Histology, Tohoku University Graduate School of Medicine, Japan*)
Discovery of Muse cells, novel pluripotent stem cells that reside in human mesenchymal tissues: implications for new concepts of regenerative homeostasis and stem cell failure.

12.30 – 14.00 Lunch

- 14.00 Jan E. Brinchmann (*Inst. of Immunology, Norwegian Center for Stem Cell Research, Oslo Univ. Hospital*)
Research in the Brinchmann group
- 14.05 Krisztina Szöke (*Inst. of Immunology, Norwegian Center for Stem Cell Research, Oslo Univ. Hospital*)
Endothelial cells in peripheral blood: are they progenitor cells?
- 14.20 Magnus Østgård Olderøy (*Inst. of Immunology, Norwegian Center for Stem Cell Research, Oslo Univ. Hospital*)
Engineering cartilage tissue architectures in alginate hydrogels with mesenchymal stem cells
- 14.35 Jan Øivind Moskaug (*Inst. of Basic Medical Sciences, Dept. of Biochemistry, Univ. of Oslo*)
Selected aspects of adipose stem cell biology
- 14.40 Torunn Rønningen (*Inst. of Basic Medical Sciences, Dept. of Biochemistry, Univ. of Oslo*)
Epigenetic regulation of inflammatory factors in adipose-derived MSCs exposed to diabetic glucose concentrations
- 14.55 Leonardo A. Meza-Zepeda (*Dept. of Tumor Biology, Oslo University Hospital*)
Presentation of Mesenchymal Biology and Differentiation Group
- 15.00 Else Munthe (*Dept. of Tumor Biology, Oslo University Hospital*)
The role of HMGA2 and let-7 in cancer
- 15.15 Anne-Mari Håkelien (*Dept. of Tumor Biology, Oslo University Hospital*)
The regulatory landscape of osteogenic differentiation

15.30 – 16.00 Coffee break

- 16.00 Philippe Collas (*Dept. of Biochemistry, Stem Cell Epigenetics Laboratory, Univ. of Oslo*)
Presentation of the Stem Cell Epigenetics Laboratory at UiO
- 16.05 Eivind Lund (*Dept. of Biochemistry, Stem Cell Epigenetics Laboratory, Univ. of Oslo*)
Dynamics of interactions of the nuclear envelope with the genome
- 16.20 Kristina Ivanauskiene (*Dept. of Biochemistry, Stem Cell Epigenetics Lab, Univ. of Oslo*)
Deposition of histone variant H3.3 into adipose stem cell chromatin

- 16.35 Judith Staerk (*Centre for Molecular Medicine, Nordic EMBL Partnership, UiO and Dept. of Hematology, Oslo Univ. Hospital*)
Molecular analysis of normal and malignant hematopoietic development
- 16.40 Julia-Kristine Madsen-Østerbye (*Centre for Molecular Medicine, Nordic EMBL Partnership, UiO*)
Analysing signatures of cord blood stem cell renewal and differentiation
- 16.55 Oksana Rogovchenko (*Centre for Molecular Medicine, Nordic EMBL Partnership, UiO*)
Potential role of SSSCA1 in normal development and blood disorders
- 17.10 Berit Løkenstrand Strand (*Dept. of Biotechnology/ Dept. of Cancer Research and Molecular Medicine, Norwegian University of Science and Technology (NTNU)*)
Biomaterials for use in tissue engineering
- 17.25 End of day I

17.30 – 18.00 Aperitif

18.00 – 19.30 Dinner

TUESDAY 15th OF OCTOBER

Neural Session (Session III)

Chair: Joel Glover

- 09.00 Joel Glover (*Norwegian Center for Stem Cell Research, Oslo Univ. Hospital, Dept. of Physiology, Inst. of Basic Medical Sciences, Univ. of Oslo*)
Creating neurons from stem cells for disease modelling and drug testing
- 09.05 Athina Samara (*Dept. of Physiology, Inst. of Basic Medical Sciences, Univ. of Oslo*)
Human embryonic stem cell derived serotonergic neurons

KEYNOTE LECTURE II

- 09.20 Ian Duncan (*University of Wisconsin, Madison, USA*)
How does the natural history of a disease guide stem cell repair strategy?
- 10.20 Magnar Bjørås (*Dept. of Microbiology, Laboratory for molecular biology, Oslo Univ. Hospital*)
Impact of oxidative DNA damage repair on neurogenesis
- 10.25 Lars Eide (*Dept. of Medical Biochemistry, Laboratory of mitochondrial biology, OUS*)
Mitochondrial transformation during iPS reprogramming: role of Neil3 DNA glycosylase

10.40 – 11.00 Coffee break

Pluripotent Session (Session IV)

Chair: Arne Klungland

- 11.00 Arne Klungland (*Dept. of Microbiology, Rikshospitalet, Oslo Univ. Hospital*)
Novel dynamic modification in DNA and RNA; role in stem cell biology?

KEYNOTE LECTURE III

- 11.20 Lee Wong (*Dept. of Biochemistry and Molecular Biology, Monash University, Australia*)
The maintenance of telomeric chromatin in ES cells

12.30 – 14.00 Lunch

- 14.00 Gareth Sullivan (*Inst. of Basic Medical Sciences, Dept. of Biochemistry, Univ. of Oslo*)
Reprogramming to disease modeling
- 14.05 Richard Siller (*Inst. of Basic Medical Sciences, Dept. of Biochemistry, Univ. of Oslo*)
Cellular reprogramming for disease modeling and other applications
- 14.20 Sebastian Greenhough (*Inst. of Basic Medical Sciences, Dep. of Biochemistry, Univ. of Oslo*)
Small molecule driven hepatocyte differentiation
- 14.35 Jan Oxholm Gordeladze (*Inst. of Basic Med. Sciences, Dept. of Biochemistry, Univ. of Oslo*)
Key regulatory junctions determine acquired phenotypes

Cancer Stem Cell Session (Session V)

Chair: Stefan Krauss

- 14.50 Stefan Krauss (*Dept. of Microbiology, Cell signaling research group, Oslo Univ. Hospital*)
Tankyrase, a novel druggable biotarget in stemcells and cancer
- 14.55 Tor Espen Thorvaldsen (*Inst. for Cancer Research, Dept. of Biochemistry, OUS*)
Elucidating mechanisms of tankyrase inhibitor-induced degradation of β -catenin
- 15.10 Ana Slipicevic (*Dept. of Pathology, Vivi Ann Flørenes, Oslo Univ. Hospital*)
iPSC Based Model of Melanoma Tumorigenesis

15.25 – 15.45 Coffee break / Evaluation of best student speaker

- 15.45 Anna Golebiewska (*Dept. Of Oncology, Centre Recherche Public de la Santé, Luxembourg*)
Characterization of the Side Population phenotype in human Glioblastoma
- 16.00 Bjørn Logi Isfoss (*Sykehuset Telemark HF*)
Stem cell markers label several differentiated cell types: an immunohistochemical study of human tissue

16.15 – 16.30 Short break to decide the best student speaker

- 16.30 Closing remarks & Best Student Speaker award
- 16.45 End of day II