

Conference Agenda

Sunday 26th September

8.15 Welcome

Session 1 Theme: Cell-based therapies **Chair: David Marsh**

8.30 **Regenerative Medical Systems - UK Lecture**
Dr Cheong-Ho Chang – Introduction of regenplasty

9.00 **Oral 1**
Improved bone healing by transplantation of stromal cell-derived factor-1 (SDF-1) overexpressing bone marrow cells .
Chih-Yuan Ho^{BY}

9.15 **Oral 2**
T Lymphocytes have an essential role in normal bone fracture repair
Sally-Anne Phillips

9.30 **Oral 3**
Endothelial progenitor cells for healing of segmental bone defects: a radiographic, microCT, and biomechanical study in rats
Aaron Nauth^B

9.45 **Oral 4**
Endothelial progenitor cells for healing and angiogenesis in a segmental bone defect model: a comparison with mesenchymal stem cells
Aaron Nauth^B

10.00 **Oral poster presentations**

Oral P7
Predictors of recovery in mobility at one year following hip fracture in independent community and household ambulators: a one-year prospective cohort study
Yoshinobu Watanabe

Oral P46
Applications of artificial neural networks & genetic algorithms in multiobjective design optimization of spinal pedicle screw
Jinn Lin

Oral P48
Estimating patient recruitment in orthopaedic randomized controlled trials
Mohit Bhandari

Oral P15
Prognostic factors for predicting reoperations after intramedullary nailing of the tibia

Mohit Bhandari

Oral P3

Low-magnitude high-frequency vibration accelerated callus remodeling in osteoporotic rat femoral fracture
Kwok Sui Leung

Oral P30

The influence of hemorrhagic anemia on fracture healing
Thomas Varecka

Oral P41

Peri-implant bone microarchitecture influences implant stability
Harry van Lenthe

Oral P38

Evaluation of risk for secondary fracture after removal of a new femoral neck plate for intracapsular hip fractures
Sebastian Eberle

Oral P50

Cross-cultural adaptation and validation of two knee function scores for Japanese-speaking patients
Sabine Goldhahn

Oral P1

Enhancement of normal and osteoporotic fracture healing using Low Intensity Pulsed Ultrasound (LIPUS)
Kwok Sui Leung

10.30 **Break - Posters and Sponsors**

Session 2 Enhancement of fracture healing **Chair: Allen Goodship**

11.00 **Amgen lecture**
David Ke – Systemic Inhibition of Sclerostin for Treatment of Osteoporosis and Bone Healing

11.30 **Oral 5**
Replacement of Fracture Hematoma with Fresh Hematoma delays Bone Healing in Sheep
Hanna Schell^{BY}

11.45 **Oral 6**
Sildenafil accelerates fracture healing in mice
Tina Histing^{BY}

12.00 **Oral 7**
Sclerostin antibody treatment enhances metaphyseal bone healing in rats
Per Aspenberg

B - Candidate for best paper award. Y- Candidate for Young Investigator award

Sunday 26th September CONTINUED

12.15 **Oral 8**
Homozygous deletion of the SOST gene results in faster healing and increased hard callus formation
Alyson Morse

12.30 **Oral 9**
Sclerostin antibody enhances bone healing during distraction osteogenesis in rats
David Little^B

12.45 **Oral 10**
Factor XIII can enhance the maturation of regenerated bone
Lutz Claes

13.00 Lunch - Posters and Sponsors

Session 3 Theme: Bone structure and strength
Chair: Peter Augat

14.00 **Medtronic lecture**
Philippe Maxy - Biomechanics of the ageing spine: what does modelling teach us?

14.30 **Oral 11**
Low serum folate and vitamin B6 are associated with an altered cancellous bone structure in humans
Joerg Holstein^B

14.45 **Oral 12**
A biomechanical study of the possible cause of atypical fractures in patients after long-term bisphosphonate treatment
Kwok-Sui Leung^B

15.00 **Oral 13**
Subsequent Fracture After First Hip Fractures and Prevention of Second Hip Fractures in Japanese Women
Hiroshi Hagino^B

15.15 **Oral 14**
Bisphosphonates increase the risk of femoral fatigue fractures: a study of all women in Sweden 2008
Per Aspenberg

15.30 Break - Posters and Sponsors

16.00 **President's Guest Lecture – Biomechanics and biology of bone regeneration - Professor Georg Duda (Berlin)**

Session 4 Theme: Outcome studies
Chair: Takashi Matsushita

16.30 **Oral 15**
A qualitative analysis on outcome assessment in randomized clinical trials: recommendations of a multidisciplinary ISFR hip fracture outcomes working group
Amy Hoang-Kim^Y

16.45 **Oral 16**
Aiming for successful hemiarthroplasty? Avoid uncemented stem, dorsal approach – and bipolar head? Regression analysis of 16,835 patients in the Swedish National Hip Register 2005-2008
Cecilia Rogmark^B

17.00 **Oral 17**
Identifying minimal core set of measures in wrist fracture trials: preliminary report from ISFR focus group
Amy Ladd

17.15 **Oral 18**
No gain in preserving the femoral head after displaced femoral neck fractures in elderly (RCT n=450)
Cecilia Rogmark^B

17.30 **Oral 19**
Predictable factors of non union after femoral nailing: A case-control study
Yoshinobu Watanabe^B

17.45 Close

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Monday 27th September

Session 5 Theme: Biology of fracture healing

Chair: Antonio Moroni

9.00 **Lilly Lecture**
Henry Bryant - links between bone homeostatic mechanisms and the biology of fracture healing

9.30 **Oral 20**
The use of endothelial progenitor cells to promote bone healing in a segmental bone defect
Kivanc Atesok^{BY}

9.45 **Oral 21**
Local administration of low dose simvastatin-conjugated gelatin hydrogel for fracture healing
Tomoaki Fukui

10.00 **Oral 22**
Teriparatide improves early callus formation in distal radial fractures: analysis of a subgroup within a randomized trial
Per Aspenberg^B

10.15 **Oral 23**
IL-6 deficiency inhibits early fracture healing in mice
Marjolein van der Meulen

10.30 **Break - Posters and Sponsors**

Session 6 Biomechanics of fracture fixation

Chair: Nick Fazzalari

11.00 **Smith and Nephew lecture**
Jacob Cartner – biomechanics of plate fixation in the distal femur

11.30 **Oral 24**
Fracture healing in mice under controlled rigid and flexible conditions
Katharina Roentgen^{BY}

11.45 **Oral 25**
An assessment of locking and ao screw position to increase cyclic fatigue during axial compression of an oblique mid-diaphyseal equine third metacarpal fracture model
Gary Sod

12.00 **Oral 26**
Influence of the fracture geometry and the fixation stability on the healing time
Tim Wehner

12.15 **Oral 27**
Stability of volar fixed-angle plating for distal radius fractures - the difference of one or two row fixation – a biomechanical study
Sebastian Mair

12.30 **Oral 28**
How rigid do distal radial volar locking plates need to be?
Alan Johnstone

12.45 **Oral 29**
A comparison of fracture healing with rigid and non-rigid fixation in the presence of bisphosphonate therapy
Terence Savaridas

13.00 **Lunch - Posters and Sponsors**

14.00 -17.00 **ISFR Board meeting**



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Tuesday 28th September

Session 7 Theme: Biology of fracture healing		12.30	General Assembly
Chair: David Hak			
9.00	Stryker-Biotech Lecture Gerhard Schmidmaier – bone morphogenetic proteins in trauma surgery	13.00	Lunch and second Board Meeting
9.30	Oral 30 Muscle progenitors make a major contribution to open fracture repair David Little		Session 9 Secondary prevention of fragility fractures Chair: Jörg Goldhahn
9.45	Oral 31 The distinct composition of the initial fracture hematoma Katharina Schmidt-Bleek	14.00	Novartis Lecture – Paul Mitchell – evidence-based service design for secondary prevention
10.00	Oral 32 Expression of VEGF gene isoforms in a rat segmental bone defect model treated with endothelial progenitor cells Aaron Nauth	14.30	Oral 38 Prophylactic nailing in hip fracture patients with severe osteoporosis? Preliminary results Eugenio Chiarello
10.15	Oral 33 A health economic analysis for european health systems for the use of BMP-2 in grade IIIA and B open tibia fractures Volker Alt	14.45	Oral 39 What you need to know about treating an atypical subtrochanteric and femoral shaft fracture associated with long term use of an oral bisphosphonate Richard Dell
10.30	Break - Posters and Sponsors	15.00	Oral 40 PTH and ALN reduce fractures and alter mechanical properties in the oim/oim mouse model of OI Mathias Bostrom
Session 8 Theme: Hip fractures		15.15	Oral 41 Efficacy of low-magnitude, high-frequency vibration treatment on the healing of osteoporotic intertrochanteric fracture in elderly Kwok-Sui Leung
Chair: Mathias Bostrom		15.30	Break - Posters and Sponsors
11.00	Orthofix Lecture Thomas Gausepohl – Proximal Femoral Fractures: Implant Selection		Session 10 Theme: Miscellaneous Chair: David Little
11.30	Oral 34 Comparison of risk factors and mortality rate between low-energy trochanteric and cervical hip fractures Jinn Lin	16.00	Oral 42 Three dimensional simulation of long bone distraction Esther Reina Romo
11.45	Oral 35 Primary arthroplasty better than internal fixation for displaced femoral neck fractures Cecilia Rogmark	16.15	Oral 43 The evaluation of a new measure for assessing healing in lower extremity fractures Mohit Bhandari
12.00	Oral 36 Hemi-arthroplasty for displaced femoral neck fracture. Few complications but uneven distribution of rehabilitation efforts Cecilia Rogmark	16.30	Oral 44 Gene expression patterns of insulin-like growth factors and insulin-like growth factor binding proteins are different between experimental nonunions and standard healing fractures Akihiro Koh
12.15	Oral 37 Functional outcomes following intramedullary nailing of trochanteric hip fractures: a pilot multicenter, randomized controlled trial Mohit Bhandari	16.45	Oral 45 Visualization of peri-implant trabecular bone during failure in human femoral heads Thomas Mueller
		17.00	Close