Saturday, 25 June 2005

Satellite Meetings

08.45-17.35
Room E
Comparative Endocrinology of Calcium Regulation
Organiser: Janine Danks (Fitzroy, Australia)

08.45
Registration

09.15
Welcome and Introduction
C. Dacke (Portsmouth, UK)

09.30
Invertebrate Overview
Chair: M. Wheatly (Ohio, USA)

09.30
CE01 CALCITONIN DEPOSITION AND RESORPTION IN THE STERNAL CACO3 DEPOSITS OF PORCELLIO SCABER (ISOPODA), ULTRASTRUCTURE AND MOLECULAR MECHANISMS.
A. Ziegler1
1Central Facility for Electron Microscopy, University Ulm, Ulm, Germany

10.00
CE02 LEFT OUT IN THE COLD: LOW TEMPERATURE INDUCED CA DYSHOMEOSTASIS ALTERS EXPRESSION OF CALCIUM TRANSPORTING PROTEINS IN CRAYFISH TISSUES
Y. Gao1, D. Whalen1, M. Wheatly1, C. Gillen2, A. Golshani1
1Wright State University, 2Kenyon College, Ohio, USA

10.15
Coffee

10.45
Calcium Homeostasis in Fish
Chair: J. Danks (Fitzroy, Australia)

10.45
CE03 FUNCTIONAL ANALYSIS OF BONE REGULATORY GENES IN THE FISH MODELS MEDAKA AND ZEBRAFISH
C. Winkler1, J. Renn2, T. Wagner1, R. Goerlich2, E. Blind2, M. Schartl1
1Dept. Physiological Chemistry I, Biocenter, University of Wuerzburg, 2Institute for Molecular Biotechnology, RWTH Aachen, Dept. of Medicine-Endocrinology, University of Wuerzburg, Germany

11.15
CE04 PHYSIOLOGICAL ROLE OF CALCITONIN IN CARTILAGINOUS FISH AND CYCLOSTOMES
N. Suzuki1
1Noto Marine Laboratory, Institute of Nature and Environmental Technology, Kanazawa University, Uchiura, Ishikawa, Japan
11.30
CE05 DUPLICATE ZEBRAFISH PTH GENES ARE EXPRESSED ALONG THE LATERAL LINE AND IN THE CENTRAL NERVOUS SYSTEM DURING EMBRYOGENESIS
B. M. Hogan¹, J. A. Danks², J. E. Layton¹, N. E. Hall¹, J. K. Heath¹, G. J. Lieschke¹
¹Ludwig Institute for Cancer Research, The Royal Melbourne Hospital, Parkville, Victoria, Australia; ²St. Vincent’s Institute of Medical Research, Fitzroy, Victoria, Australia

11.45
Discussion

12.15-13.45
Posters and lunch

CE06 FURTHER INVESTIGATION OF THE DESENSITISATION OF RELAXANT RESPONSES TO PTH AND PTHRP IN PREGNANT MOUSE MYOMETRIUM IN VITRO
J. F. Brown¹, D. Vithlani¹, K. Patel¹, R. D. Allen¹, C. G. Dacke¹
¹School of Pharmacy and Biomedical Sciences, University of Portsmouth, Portsmouth, UK

CE07 PARATHYROID HORMONE (PTH) AND PTH-RELATED PROTEIN CO-REGULATE MURINE FETAL-PLACENTAL CALCIUM METABOLISM
C. S. Kovacs¹, N. J. Fudge¹, C. S. Noseworthy¹
¹Faculty of Medicine, Memorial University of Newfoundland, St. John’s, Newfoundland, Canada

CE08 EXPRESSION AND LOCALIZATION OF CALCIUM BINDING PROTEIN IN THE CHICKEN SMALL AND LARGE INTESTINE WITH AGING
T. Sugiyama¹, H. Kikuchi¹, K. Nishizawa², S. Kusuhara¹
¹Department of Animal Science, Niigata University, Niigata, ²Meiji Seika Co. Ltd., Saitama, Japan

CE09 VALPROATE HAS STRAIN-SPECIFIC EFFECTS ON BONE MINERAL CONTENT IN MICE
S. Senn¹, S. Kantor¹, S. Andrikopoulos¹, T. J. O’Brien¹, M. J. Morris², J. D. Wark¹
¹Department of Medicine and Bone and Mineral Service, The Royal Melbourne Hospital and Austin and Repatriation Hospital, ²Department of Pharmacology, The University of Melbourne Parkville Victoria, Australia

CE10 EXPRESSION OF MATRIX METALLOPROTEINASES 2 AND 9 AND RECK DURING AMELOGENESIS
K.B.S. Paiva¹, W.F. Zambuzzi¹, A.C.C.O. Demarchi¹, T. Accorsi-Mendonca², J.M. Granjeiro³
¹Department of Biochemistry, Biology Institute, State University of Campinas, ²Department of Endodontics, Bauru Dental School, University of Sao Paulo, ³Department of Molecular and Cellular Biology, Biology Institute, Fluminense Federal University, Brazil

13.45
Avian Bone Turnover
Chair: C. Farquharson (Roslin, UK)

13.45
MEDULLARY TISSUES IN DINOSAUR BONE EXHIBITING SOFT TISSUE PRESERVATION: PHYLOGENETIC AND REPRODUCTIVE IMPLICATIONS
M. Schweitzer (North Carolina, USA)

14.15
CE11 EFFECTS OF ENDOCRINE DISRUPTORS ON AVIAN MEDULLARY BONE FORMATION
T. Sugiyama¹, N. Sakamoto¹, K. Nishimura², S. Kusuhara³
¹Department of Animal Science, Niigata University, Niigata, ²National Institute of Livestock and Grassland Science, Tsukuba, Japan
14.30

CE12  CORTICAL BONE POROSITY AND OSTEOBLAST GENE EXPRESSION DURING GROWTH OF THE IMMATURE AVIAN SKELETON
D. H. Murray¹, C. Farquharson¹
¹Bone Biology Group, Roslin Institute, Roslin, Midlothian, UK

14.45

CE13  EXPRESSION PROFILES OF XENOPUS BANDED HEDGEHOG, A HOMOLOG OF MOUSE INDIAN HEDGEHOG, IS RELATED TO THE LATE DEVELOPMENT OF ENDOCHONDRAL OSSIFICATION IN XENOPUS LAEVIS
T. Moriishi¹, Y. Shibata¹, A. Yamaguchi²
¹Division of Oral Pathology and Bone Metabolism, Nagasaki University Graduate School of Biomedical Sciences, Nagasaki, ²Section of Oral Pathology, Graduate School of Tokyo Medical and Dental University, Tokyo, Japan

15.00

Coffee

15.30

Mammalian Calcium Metabolism

Chair: T. Rosol (USA)

15.30

CE14  CHANGES IN SERUM PARATHYROID HORMONE AND ELECTROLYTE CONCENTRATIONS AND URINARY EXCRETION OF ELECTROLYTES IN HORSES WITH EXPERIMENTAL ENDOTOXEMIA.
R. E. Toribio¹, C. W. Kohn², J. Hardy², T. J. Rosol¹
¹Departments of Veterinary Biosciences, ²Department of Veterinary Clinical Sciences, College of Veterinary Medicine, The Ohio State University, Columbus, Ohio, USA

16.00

CE15  PREVENTION WITH DCAD OF HYPOCALCEMIC POSTPARTURIENT PARESIS OF DAIRY COWS
J. L. Riond²
²Switzerland

16.15

CE16  REGULATION OF SKELETAL DEMINERALIZATION DURING LACTATION AND ITS RECOVERY AFTER WEANING
C. S. Kovacs¹, K. L. Buckle¹, N. J. Fudge¹, C. P. Sharpe¹, J. P. Woodrow¹
¹Faculty of Medicine, Memorial University of Newfoundland, St. John’s, Newfoundland, Canada

16.30

CE17  BONE METABOLISM OF MILK GOAT AND SHEEP DURING SECOND PREGNANCY AND LACTATION
A. Liesegang¹, J. Risteli²
¹Institute of Animal Nutrition, Vetsuisse Faculty University Zurich, Zurich, Switzerland, ²Department of Clinical Chemistry, University of Oulu, Oulu, Finland
CE18 IMMUNOHISTOCHEMICAL LOCALISATION OF ENDOTHELIAL NITRIC OXIDE SYNTSHEASE AND ITS RESPONSE TO N-TERMINAL PTH PEPTIDES IN PREGNANT MOUSE UTERINE TISSUES
R. D. Allen¹, M. Coulson¹, J. F. Brown¹, C. G. Dacke¹
¹School of Pharmacy and Biomedical Sciences, University of Portsmouth, Portsmouth, UK

17.00 Discussion
17.00 Symposium summary and overview
T. J. Martin (Melbourne, Australia)

09.00-18.00
Room D
ECTS Training Course
(In association with the International Osteoporosis Foundation (IOF) and European Society for Skeletal Radiology (ESSR))

Osteoporotic Vertebral Fracture: Everything you Need to Know
Organiser: Judith Adams (Manchester, UK)

09:00
WELCOME AND INTRODUCTION
J. Adams (Manchester, UK)

09:05
EPIDEMIOLOGY OF OSTEOPOROTIC FRACTURE
C. Cooper (Southampton, UK)

09:50
EPIDEMIOLOGY OF VERTEBRAL FRACTURE
T. O’Neill (Manchester, UK)

10:35
Coffee break

11:05
CLINICAL SYMPTOMS AND SIGNS
D. Reid (Aberdeen, UK)

11:50
MEDICAL THERAPY FOR VERTEBRAL FRACTURE
P. Delmas (Lyon, France)
12:35
Lunch

13:35
IMAGING OSTEOPOROTIC VERTEBRAL FRACTURES AND DIFFERENTIATING OTHER PATHOLOGY
H. Genant (San Francisco, USA)

14:20
VERTEBRAL MORPHOMETRY – METHODS AND PROS AND CONS
D. Felsenberg (Berlin, Germany)

15:05
Tea

15:35
WHAT REALLY CONSTITUTES A CLINICAL OSTEOPOROTIC FRACTURE?
R. Eastell (Sheffield, UK)

16:20
VERTEBRAL FRACTURE IDENTIFICATION ON DXA IMAGES AND POTENTIAL FOR COMPUTER AIDED DIAGNOSIS (CAD)
J. Adams (Manchester, UK)

17:05
VERTEBROPLASTY AND KYPHOPLASTY IN THE TREATMENT OF VERTEBRAL FRACTURE
A. Gangi (Strasbourg, France)

17:50
QUESTIONS AND SUMMING UP

18.00
CLOSE

09.00-13.00
Room G
Swiss Bone and Mineral Society
Organiser: Juerg Gasser (Basle, Switzerland)

15.30-17.00
Room C
Satellite Symposium 1
Supported by Eli Lilly

Osteoporosis and Fragility Fractures: A New Approach

WELCOME AND OVERVIEW
J. Compston (Cambridge, UK)
SS01
FOLLOWING UP ON PATIENTS WITH OSTEOPOROSIS
J.-Y. Reginster (Liège, Belgium)

SS02
ARE ALL FRAGILITY FRACTURES EQUAL?
P. Delmas (Lyon, France)

SS03
USE OF ANTIRESORPTIVES AND BONE-FORMING AGENTS IN THE MANAGEMENT OF OSTEOPOROSIS
J. Finkelstein (Boston, USA)

16.00-18.10
Room G
Working Group on Physical Activity and Falls
Organisers: Kim Brixen (Aarhus, Denmark)/Tash Masud (Nottingham, UK)

Chairs: K. Brixen (Odense, Denmark)/M. Lissens (Leuven, Belgium)

16.00
VITAMIN D AND FALL REDUCTION IN OLDER PEOPLE
H. Bischoff (Zürich, Switzerland)

16.20
THE IMPORTANCE OF PHYSICAL ACTIVITY IN THE PREVENTION AND REHABILITATION OF OSTEOPOROSIS
M. Lissens (Leuven, Belgium)

16.40
CAN MODIFYING VISUAL IMPAIRMENT REDUCE FALLS AND FRACTURES
T. Masud (Nottingham, UK)

17.00
THE EFFECTS OF IMMOBILITY ON BONE TURNOVER IN FRAIL OLDER PEOPLE
P. Sambrook (Sydney, Australia)

17.20
WEIGHT BEARING EXERCISE OVERRIDES IMPACT OF DIETARY PROTEIN ON BONE GROWTH- RESULTS FROM A 3-YEAR LONGITUDINAL STUDY
J. A. Nurmi Lawton, A. Baxter-Jones, C. Cooper, S.A.New (Surrey, UK)

17.30
ASSOCIATION OF AMOUNT OF PHYSICAL ACTIVITY WITH CORTICAL BONE SIZE AND TRABECULAR VOLUMETRIC BONE MINERAL DENSITY IN YOUNG ADULT MEN. THE GOOD STUDY
M. Lorentzon, D. Mellstrom, C. Ohlsson (Gothenburg, Sweden)
17.40
INTENSITY OF PHYSICAL ACTIVITY IS A PREDICTOR OF BONE DENSITY CHANGE IN PREMENOPAUSAL WOMEN
A. Vainionpaa, R. Korpelainem, E. Vihriala, A. Rinta-Paavola, J. Leppaluota, J. Jamsa (Oulu, Finland)

17.50
FALLS MECHANISMS IN A HEALTHY OLDER POPULATION WITH MINIMAL TRAUMA FRACTURES
P. Turner (Middlesbrough, UK)

18.00
LONG PERIODS OF DISUSE RESCUE THE OSTEOGENIC RESPONSE TO MECHANICAL LOADING THAT IS SUPPRESSED BY AGING
R. L. De Souza, M. Maiko, F. Eckstein, L. E. Lanyon, C. Chenu, A. A. Pitsillides (London, UK and Munich, Germany)

18.10
Close

17.00-17.30
Break

17.30-19.00
Room C
Satellite Symposium 2
Supported by Roche/GSK

The Evolution of Bisphosphonate Dosing: Improving Therapeutic Outcomes in Osteoporosis

WELCOME AND INTRODUCTION
S. E. Papapoulos (Leiden, Netherlands)

SS04
ADHERENCE, PATIENT PREFERENCE AND DOSING FREQUENCY: UNDERSTANDING THE RELATIONSHIP
J.-Y. Reginster (Liège, Belgium)

SS05
BEYOND WEEKLY DOSING: PRECLINICAL AND CLINICAL EXPERIENCE
C. Cooper (Southampton, UK)

SS06
ONCE MONTHLY DOSING: AN EFFECTIVE STEP FORWARD
D. Reid (Aberdeen, UK)

REDUCING DOSING FREQUENCY: ADVANCING OSTEOPOROSIS TREATMENT
S. E. Papapoulos (Leiden, Netherlands)

19.00-19.15
Break
19.15-20.15
Room A/B
Opening Ceremony and Awards

R. Eastell (Sheffield, UK) (Programme Chairman)
R. Rizzoli (Geneva, Switzerland) (Local Organiser)

ECTS Awards:
Chair: S. Ralston (Edinburgh, UK) (ECTS President)
Career Development Grant
Iain T. Boyle Award

IBMS Awards:
Chair: G. Mundy (San Antonio, USA) (IBMS President)
Gideon and Sevgi Rodan IBMS Fellowship 2005
IBMS Best Paper Award 2005

Keynote address

Chair: R. Rizzoli (Geneva, Switzerland)

HALF A CENTURY OF BONE RESEARCH - A PRECLINICAL AND CLINICAL RETROSPECTIVE
H. Fleisch (Berne, Switzerland)

20.15-21.15
Exhibition and Poster Hall
Welcome Reception
Sunday, 26 June 2005
08.00-09.00
Exhibition and Poster Hall
Poster viewing

08.55-09.00
Room A/B
IBMS Awards:

2005 IBMS Elsevier Award
2005 IBMS John G. Haddad, Jr. Award

Chair: G. Mundy (San Antonio, USA) (IBMS President)

09.00-10.00
Room A/B
Symposium 1
Osteoporosis Assessment and Treatment

Chairs: C. Glüer (Kiel, Germany)/S. Papapoulos (Leiden, Netherlands)

09.00
1001 THE ASSESSMENT OF FRACTURE RISK: A GLOBAL PERSPECTIVE
C. E. De Laet
1Epidemiology Unit, Scientific Institute of Public Health, Brussels, Belgium

09.30
1002 COMBINATION THERAPY FOR OSTEOPOROSIS
J. S. Finkelstein
1Endocrine Unit, Massachusetts General Hospital, Boston, USA

10.00-11.00
Room A/B
Oral Communications 1
Osteoporosis: Assessment and Treatment/1

Chairs: C. Glüer (Kiel, Germany)/S. Papapoulos (Leiden, Netherlands)

10.00
OC001 LOOP DIURETICS INCREASE BONE TURNOVER, DECREASE BONE MINERAL DENSITY AND INCREASE FRACTURE RISK
L. Rejnmark1, P. Vestergaard2, L. Heickendorff2, F. Andreasen1, L. Mosekilde1
1Dept. of Endocrinology and Metabolism C, Aarhus Sygehus, Aarhus University Hospital, Aarhus, Denmark

10.12
OC002 BASELINE BUCKLING RATIO DERIVED FROM HIP STRUCTURE ANALYSIS PREDICTS THE RISK OF NONVERTEBRAL FRACTURES
G. G. Crans1, T. J. Beck2, L. M. Semanick2, K. D. Harper1, D. Desaiah1, E. F. Eriksen1
1Lilly Research Laboratories, Eli Lilly and Company, Indianapolis, 2Department of Radiology, The John's Hopkins University School of Medicine, Baltimore, USA
10.24 OC003 UTILITY OF MXA FOR DETECTING PREVALENT FRACTURES - EXPERIENCE FROM A LARGE EPIDEMIOLOGICAL STUDY
E. McCloskey1, D. Charlesworth1, J. Bostock1, J. Eastaugh1, N. Bonnet1, M. Beneton1, T. Jalava2, J. Kanis1
1Metabolic Bone Centre, University of Sheffield, Sheffield, UK, 2Clinical Trials, Schering Oy, Helsinki, Finland

10.36 OC004 THE RANKL ANTAGONIST OPG-FC CAUSES SIGNIFICANT INCREASES IN CORTICAL BONE AREA, BMD, AND BONE STRENGTH INDEX IN MALE CYNOMOLGUS MONKEYS
M. S. Ominsky1, P. J. Kostenuik1, P. Cranmer2, S. Y. Smith3, J. E. Atkinson2
1Metabolic Disorders, 2Toxicology Research, Amgen, Inc., Thousand Oaks, USA, 3Bone Research, CTBR, Montreal, Canada

10.48 OC005 CONCOMITANT TERIPARATIDE PLUS RALOXIFENE FOR THE TREATMENT OF POSTMENOPAUSAL OSTEOPOROSIS: RESULTS FROM A RANDOMIZED PLACEBO-CONTROLLED TRIAL
J. H. Krege1, M. Omizo2, E. N. Schwartz3, E. F. Eriksen1, P. Canto4, J. Wang5, E. V. Glass1, S. L. Myers1, C. Deal6
1Lilly Research Laboratories, Eli Lilly and Company, Indianapolis, 2Oregon Osteoporosis Center, Portland, 3, Foundation for Osteoporosis Research and Education, Oakland, 4Center for Osteoporosis and Metabolic Bone Disease, Cleveland Clinic Foundation, Cleveland, USA

11.00-11.30 Coffee Break

11.30-12.45 Room C
Workshop 1
Vesicular Trafficking in Bone Cells

Chairs: C. Löwik (Leiden, Netherlands)/K. Väänänen (Oulu, Finland)

11.30 I003 RAB GTPASES AND THE CONTROL OF MEMBRANE TRAFFIC IN BONE CELLS
M. C. Seabra1
1Cell and Molecular Biology, Division of Biomedical Sciences, Faculty of Medicine, Imperial College London, London, UK

11.55 I004 BONE DYNAMICS AND VESICULAR TRAFFICKING
G. Stenbeck1
1Bone and Mineral Centre, University College London, London, UK

12.20 I005 MEMBRANE TRAFFICKING AND PODOSONES
R. Buccione1
1Cell Biology and Oncology, Consorzio Mario Negri Sud, S. Maria Imbaro, Italy
11.30-12.45
Room A/B
Workshop 2
Physical Measurement

Chairs: M. Kraenzlin (Basel, Switzerland)/L. Riggs (Rochester, USA)

11.30
1006 PET AND BONE METASTASES
I. Fogelman
\textsuperscript{1}Nuclear Medicine, Guy's, King's, and St Thomas' School of Medicine, London, UK

11.55
1007 ANATOMICAL AND FUNCTIONAL CT IMAGING OF BONE
R. Müller\textsuperscript{1}
\textsuperscript{1}Institute for Biomedical Engineering, Swiss Federal Institute of Technology, ETH, Zürich, Switzerland

12.20
1008 QUANTITATIVE MRI OF TRABECULAR AND CORTICAL BONE ARCHITECTURE
F. W. Wehrli
\textsuperscript{1}Department of Radiology, University of Pennsylvania Medical Center, Philadelphia, USA

12.45-13.30
Room A/B
IBMS Annual General Meeting
(IBMS members only)

12.45-14.00
Lunch & Attended Posters (posters Pnnn-Su)

14.00-15.00
Room A/B
Symposium 2
Bone Resorption and its Regulation

Chairs: M. Rogers (Aberdeen, UK)/A. Teti (L'Aquila, Italy)

14.00
1009 NEW INSIGHTS INTO OSTEOCLAST DISEASES
M. H. Helfrich\textsuperscript{1}
\textsuperscript{1}Medicine and Therapeutics, University of Aberdeen, Aberdeen, UK

14.30
1010 THE ROLE OF NFAT IN OSTEOCLAST DIFFERENTIATION
H. Takayanagi\textsuperscript{1}
\textsuperscript{1}Cellular Physiological Chemistry, Tokyo Medical and Dental University, Bunkyo-ku, Japan
15.00-16.00
Room A/B
Oral Communications 2
Bone Resorption and its Regulation

Chairs: M. Rogers (Aberdeen, UK) / A. Teti (L’Aquila, Italy)

15.00
OC006  NFAT REGULATION OF THE HUMAN BETA 3 GENE IN OSTEOCLAST DIFFERENTIATION
T. N. Crotti1, N. C. Walsh1, M. Flannery1, S. R. Goldring2, K. P. McHugh1
1Rheumatology, Beth Israel Deaconess Medical Center and Harvard Institutes of Medicine, Boston, USA

15.12
OC007  RAC1 BINDS DIRECTLY WITH RAB7
Y. Sun1, K. G. Buk1, J. P. Viüräniemi1, H. K. Viäränen1
1Department of Anatomy, University of Turku, Institute of Biomedicine, Turku, Finland

15.24
OC008  ROLE OF BMP SIGNALS IN ENDOCHONDRAL OSSIFICATION AND FRACTURE REPAIR; ACTIVATION OF OSTEOCLASTIC RESORPTION AND REMODELING OF BONE
M. Okamoto1, J. Murai1, H. Yoshikawa1, N. Tsumaki1
1Department of Orthopaedics, Osaka University Graduate School of Medicine, Suita, Japan

15.36
OC009  OVEREXPRESSISON OF BMP4 IN BONE INCREASED OSTEOCLAST NUMBER AND CAUSED OSTEOPENIA
J. Murai1, M. Okamoto1, H. Yoshikawa1, N. Tsumaki1
1Orthopaedics, Osaka University Graduate School of Medicine, Suita, Japan

15.48
OC010  WNT SIGNALLING REGULATES OSTEOCLASTOGENESIS IN VITRO
G. J. Spencer1, L. Etheridge1, P. G. Genever1
1Biology, University of York, York, UK

16.00-16.30
Coffee Break

16.30-17.30
Room A/B
Short Oral Communications 1
Osteoporosis: Assessment and Treatment/2

Chairs: J. Compston (Cambridge, UK) / S. Cummings (San Francisco, USA)

16.30
P001-Su  GENDER DIFFERENCES IN TRABECULAR AND CORTICAL MICROSTRUCTURE OF THE DISTAL RADIUS SHOWN IN AN ELDERLY POPULATION AS ASSESSED BY HIGH-RESOLUTION 3D-PQCT
T. L. Mueller1, M. Staub1, C. Gratzk2, F. Eckstein2, R. Müller1
1Institute for Biomedical Engineering IBT, ETH and University of Zürich, Zürich, Switzerland, 2Musculoskeletal Research Group, Institute of Anatomy, Ludwig-Maximilians-Universität, München, Germany
16.35  
P002-Mo  FRACTURE RISK AMONG WOMEN WITH THE LOWEST BONE TURNOVER DURING 10 YEARS OF ALENDRONATE TREATMENT  
D. C. Bauer¹, A. C. Santora², M. C. Hochberg³, A. Chattopadhyay², P. Ross²  
¹Medicine, Epidemiology and Biostatistics, University of California, San Francisco, San Francisco, ²Clinical Research, Merck Research Laboratories, Rahway, ³Rheumatology, University of Maryland, Baltimore, USA

16.40  
P003-Tu  FRACTURE INDEX VALIDATION IN A POPULATION-BASED SAMPLE OF SWISS ELDERLY WOMEN  
O. Lamy¹, M. Krieg¹  
¹Department of Internal Medicine, Centre Hospitalier Universitaire Vaudois, Lausanne - CHUV, Switzerland

16.45  
P004-Su  TEN YEAR ABSOLUTE RISK OF OSTEOPOROTIC FRACTURES ACCORDING TO BMD T-SCORE AT MENOPAUSE. THE DANISH OSTEOPOROSIS PREVENTION STUDY  
B. Abrahamsen¹, P. Vestergaard¹, B. Rud¹, O. Bärenholdt², J. B. Jensen³, S. Pors Nielsen³, L. Mosekilde², K. Brixen¹  
¹Dept of Endocrinology M, Odense University Hospital, Odense C, ²Dept of Endocrinology C, Aarhus University Hospital, Aarhus C, ³Osteoporosis Clinic, HS Hvidovre Hospital, Copenhagen, ⁴Clinical Physiology, Hillerød Hospital, Hillerød, Denmark

16.50  
P005-Mo  INTRAVENOUS IBANDRONATE INJECTIONS ARE AT LEAST AS EFFECTIVE AND SIMILARLY WELL TOLERATED AS DAILY ORAL IBANDRONATE IN POSTMENOPAUSAL OSTEOPOROSIS: 1-YEAR RESULTS FROM DIVA  
S. Adami¹, R. Nuti², E. Czerwinski³, C. Hughes⁴, P. Ward⁴, B. Bonvoisin⁴, L. B. Tanko⁵  
¹University of Verona, Verona, Italy, ²University of Siena, Siena, Italy, ³Krakow Medical Centre, Krakow, Poland, ⁴F. Hoffmann-La Roche Ltd., Basel, Switzerland, ⁵CCBR, Ballerup, Denmark

16.55  
P006-Tu  STRONTIUM RANELATE IMPROVES BONE MICROARCHITECTURE AND INTRINSIC BONE QUALITY  
P. Ammann¹, S. Barrauld¹, R. Dayer¹, R. Rizzoli¹  
¹Division of Bone Diseases, Department of Rehabilitation and Geriatrics, University Hospital, Geneva, Switzerland

17.00  
P007-Su  AN INDIVIDUALISED MODEL OF COST-EFFECTIVENESS OF BISPHOSPHONATES IN ELDERLY WOMEN  
T. P. Van Staa¹, P. Geusens², A. Boonen², H. G. M. Leufkens³, C. Cooper⁴  
¹Epidemiology, Procter Gamble Pharma, Egham, UK, ²Department of Rheumatology, University Hospital Maastricht, ³Department of Pharmacoepidemiology, Utrecht Institute for Pharmaceutical Sciences, Utrecht, Netherlands, ⁴MRC Resource Center in Epidemiology, Southampton Hospital, Southampton, UK

17.05  
P008-Mo  IN VIVO MONITORING OF BONE FORMATION BY NEAR-INFRARED FLUORESCENCE MEDIATED TOMOGRAPHY  
H. Gremlich¹, R. Kneuer¹, S. Kerrađ, M. Merdes², A. Suter¹, M. Kneissel²  
¹Discovery Technology, ²Bone and Cartilage Unit, Novartis Institutes for BioMedical Research, Basel, Switzerland
17.10

**P009-Tu**  
SERUM CATHEPSIN K LEVELS REFLECT OSTEOCLASTIC ACTIVITY IN WOMEN WITH POSTMENOPAUSAL OSTEOPOROSIS AND PATIENTS WITH PAGET'S DISEASE

C. Meier¹, U. Meinhardt², J. R. Greenfield², C. R. Dunstan³, M. J. Seibel¹

¹Clinic for Endocrinology, Diabetes and Clinical Nutrition, University Hospital Basel, Basel, Switzerland, ²Garvan Institute of Medical Research, University of NSW, ³Bone Research Program, ANZAC Research Institute, University Sydney, Sydney, Australia

17.15

**P010-Su**  
ADIPONECTIN INCREASES BONE MASS IN MICE BY SUPPRESSING OSTEOCLASTOGENESIS AND ACTIVATING OSTEOBLASTOGENESIS

K. Oshima¹, A. Nampei¹, M. Matsuda², M. Iwaki², A. Fukuhara², J. Hashimoto¹, H. Yoshikawa¹, I. Shimomura³

¹Department of Orthopaedics, Graduate School of Medicine, Osaka University, ²Department of Medicine and Pathophysiology, Graduate School of Frontier Biosciences, Osaka University, ³Department of Internal Medicine and Molecular Science, Graduate School of Medicine, Osaka University, Suita, Japan

17.30-17.45  
Break

17.45-19.15  
Room C  
Satellite Symposium 3  
Supported by Servier  

Fighting Osteoporosis on Two Fronts

Chairs: C. Cooper (Southampton, UK)/P.D. Delmas (Lyon, France)

**SS07**  
UNCOUPLING BONE FORMATION AND BONE RESORPTION: A NOVEL THERAPEUTIC APPROACH

R. Rizzoli (Geneva, Switzerland)

**SS08**  
PHARMACOLOGICAL APPROACH FOR OPTIMIZING BONE FORMATION AND BONE RESORPTION

P. J. Marie (Paris, France)

**SS09**  
IMPLICATIONS FOR BONE QUALITY AND STRENGTH

P. Ammann (Geneva, Switzerland)

**SS10**  
VERTEBRAL AND HIP ANTIFRACTURE EFFICACY OF STRONTIUM RANELATE

C. Cooper (Southampton, UK)

**SS11**  
RECENT ADVANCE IN THE MANAGEMENT OF POST MENOPAUSAL OSTEOPOROSIS

S. Adami (Verona, Italy)

CONCLUSION

P. D. Delmas (Lyon, France)
Monday, 27 June 2005
08.00-09.00
Exhibition and Poster Hall
Poster viewing

Meet the Professor Sessions

Room E
OSTEOPOROSIS AND OSTEOARTHRITIS
C. Cooper (Southampton, UK)

Room F
BONE AND BREAST: RELATIONSHIPS BETWEEN OSTEOPOROSIS AND BREAST CANCER
S. Cummings (San Francisco, USA)

Room G
HORMONES THAT CONTROL PHOSPHATE HOMEOSTASIS
S. Fukumoto (Tokyo, Japan)

Room H
IMMUNE SYSTEM AND BONE
M. Gillespie (Melbourne, Australia)

Room I
PTHRP AND THE GROWTH PLATE
H. Kronenberg (Boston, USA)

08.55-09.00
Room A/B
IBMS Awards:

2005 Peter Gaillard IBMS Founder's Award
2005 IBMS D. Harold Copp Award

Chair: G. Mundy (San Antonio, USA) (IBMS President)

09.00-10.00
Room A/B
Symposium 3
Bone Formation

Chairs: J. Cornish (Auckland, New Zealand)/T. Skerry (Sheffield, UK)

09.00
1011 BONE FORMATION: OF MICE AND MEN
E. Orwoll

1Program Director, General Clinical Research Center, Associate Dean for Research, School of Medicine, Oregon Health and Sciences University, Portland, USA
09.30

**I012  BONE ANABOLICS: THE BMP PATHWAY**

I. R. Garrett\(^1\), G. Gutierrez\(^2\), G. R. Mundy\(^2\)
\(^1\)Osteoscreen, \(^2\)Cellular and Structural Biology, University of Texas Health Science Center at San Antonio, San Antonio, USA

10.00-11.00
Room A/B
Oral Communications 3
Bone Formation, Cartilage and Bone Matrix

Chairs: J. Cornish (Auckland, New Zealand)/T. Skerry (Sheffield, UK)

10.00

**OC011  BMP-2 STIMULATES OSTEOBLAST DIFFERENTIATION THROUGH ACTIVATION OF BETA-CATENIN SIGNALING IN OSTEOBLASTS**

Y. Lim\(^1\), Y. Yan\(^1\), M. Chen\(^1\), R. J. O'Keefe\(^1\), D. Chen\(^1\)
\(^1\)Department of Orthopaedics, University of Rochester, Rochester, USA

10.12

**OC012  A REGULATORY NETWORK OF HOMEODOMAIN PROTEINS SUPPORTS OSTEOBLAST DIFFERENTIATION BY REGULATION OF RUNX2 AND TARGET GENES**

M. Hassan\(^1\), R. Tare\(^1\), C. Lengner\(^1\), A. J. Van Wijnen\(^1\), J. L. Stein\(^1\), G. S. Stein\(^1\), J. B. Lian\(^1\)
\(^1\)Department of Cell Biology, University of Massachusetts Medical School, Worcester, USA

10.24

**OC013  DOWNREGULATION OF WNT SIGNALING BY INDUCTION OF DICKKOPF-1 AND -2 EXPRESSION DURING OSTEOBLAST MATURATION IS ESSENTIAL FOR BONE MATRIX MINERALIZATION**

M. Karperien\(^1\), G. Van Der Horst\(^1\), S. M. Van Der Werf\(^1\), H. Farih-Sips\(^1\), R. L. Van Bezooijen\(^1\), C. Löwik\(^1\)
\(^1\)Endocrinology, Leiden University Medical Center, Leiden, Netherlands

10.36

**OC014  IN VIVO OVEREXPRESSION OF CIRCULATING DLK1/PREF-1 PROTEIN LEADS TO INCREASED BONE TURNOVER AND DECREASED BONE MASS**

B. M. Abdallah\(^1\), M. Ding\(^1\), C. H. Jensen\(^2\), N. Serakinci\(^2\), B. Teisner\(^2\), F. Dagnaes-Hansen\(^3\), M. Kassem\(^1\)
\(^1\)Endocrinology dept, Odense University Hospital, \(^2\)Medical immunology, \(^3\)Endocrinology dept, SDU, Odense C, \(^4\)Medical Microbiology and Immunology, AU, Aarhus, Denmark

10.48

**OC015  ADULT MICE HETEROZYGOUS FOR THE TRANSCRIPTION FACTOR SOX4 EXHIBIT REDUCED BONE MINERAL DENSITY AND SUPPRESSED OSTEOBLAST ACTIVITY IN CULTURE**

R. Paro\(^1\), L. S. H. Nissen-Meyer\(^2\), D. Fortunati\(^2\), M. E. Pedersen\(^2\), S. Reppe\(^2\), V. T. Gautvik\(^2\), F. P. Reinhold\(^1\), A. Teti\(^1\), R. Jemtland\(^4\), K. M. Gautvik\(^5\)
\(^1\)Department of Experimental Medicine, University of L'Aquila, L'Aquila, Italy, \(^2\)Department of Biochemistry, Institute for Medical Basic Sciences, University of Oslo, \(^3\)Department of Pathology, \(^4\)Endocrine Section, Department of Medicine, National University Hospital, \(^5\)Department of Biochemistry, Institute for Medical Basic Sciences, University of Oslo and Ullevål University Hospital, Oslo, Norway

11.00-11.30
Coffee Break
11.30-12.45
Room C
Workshop 3
Growth Plate Biology

Chairs: C. Farquharson (Roslin, UK)/J. Gasser (Basel, Switzerland)

11.30
I013  AGGREGAN KNOCK-IN MICE RESISTANT TO PROTEOLYSIS IN THE INTERGLOBULAR DOMAIN: IMPLICATIONS FOR THE GROWTH PLATE
A. J. Fosang¹
¹Paediatrics, University of Melbourne, Parkville, Australia

11.55
I014  RESCUE OF ACHONDROPLASIA
A. Yasoda¹, Y. Komatsu¹, K. Nakao¹
¹Medicine and Clinical Science, Kyoto University Graduate School of Medicine, Kyoto, Japan

12.20
I015  IHH IN THE DEVELOPMENT OF THE GROWTH PLATE
A. Vortkamp²
²Zentrum für Medizinische Biotechnologie, Abteilung für Entwicklungsbiologie, Universität Duisburg-Essen, 45117 Essen, Germany

11.30-12.45
Room A/B
Workshop 4
Nutrition and Bone

Chairs: J.-P. Bonjour (Geneva, Switzerland)/D. Reid (Aberdeen, UK)

11.30
I016  HOMOCYSTEINE AND BONE
H. A. P. Pols¹
¹Internal Medicine, Erasmus Medical Center, Rotterdam, Netherlands

11.55
I017  CALCIUM, VITAMIN D AND BONE
R. M. Francis¹
¹Department of Geriatric Medicine, University of Newcastle upon Tyne, Newcastle upon Tyne, UK

12.20
I018  GI AND BONE
N. H. Bjarnason¹
¹Dept. Clin. Pharmacol., Rigshospitalet, Copenhagen University Hospital, Copenhagen, Denmark

12.45-13.30
Room A/B
ECTS Annual General Meeting
(ECTS members only)

12.45-14.00
Lunch & Attended Posters (Posters Pnnn-Mo)
14.00-15.00
Room A/B
Symposium 4
Osteoporosis Pathophysiology, Genetics and Physiology

Chairs:  C. Cooper (Southampton, UK)/A. Uitterlinden (Rotterdam, Netherlands)

14.00
1019  NEW INSIGHTS INTO NUTRITION AND THE SKELETON
D. P. Kief
1Research and Training Institute, Hebrew SeniorLife, Boston, USA

14.30
1020  THYROID AND BONE
G. R. Williams
1Molecular Endocrinology Group, Imperial College London, London, UK

15.00-16.00
Room A/B
Oral Communications 4
Osteoporosis, Pathophysiology, Genetics and Epidemiology/1

Chairs:  C. Cooper (Southampton, UK)/A. Uitterlinden (Rotterdam, Netherlands)

15.00
OC016  THE RECORD TRIAL: AN EVALUATION OF CALCIUM AND/OR VITAMIN D IN THE SECONDARY PREVENTION OF OSTEOPOROTIC FRACTURES
1Geriatric Medicine Group, University of Southampton, Southampton, 2Health Services Research Unit, University of Aberdeen, Aberdeen, 3MRC Epidemiology Resource Centre, University of Southampton, Southampton, 4Centre for Health Services Research and Business School, University of Newcastle, 5Musculoskeletal Unit, Freeman Hospital, Newcastle-upon-Tyne, 6Office of the Dean, Hull York Medical School, York, 7Orthopaedic and Trauma Unit, Royal Infirmary of Edinburgh, Edinburgh, 8Department of Health Sciences, University of York, York, 9Division of Orthopaedic and Accident Surgery, Queens Medical Centre, Nottingham, UK

15.12
OC017  LRP5 AND LRP6 VARIANTS DETERMINE FRACTURE RISK IN ELDERLY MEN
J. B. J. Van Meurs1, M. Hamal1, A. Hofman1, J. P. T. M. Van Leeuwen1, H. A. P. Pols1, A. G. Uitterlinden1
1Internal Medicine, 2Epidemiology and biostatistics, ErasmusMC, Rotterdam, Netherlands

15.24
OC018  INTEGRIN BETA 3 LEU33PRO POLYMORPHISM AND RISK OF HIP FRACTURE: 25 YEARS FOLLOW-UP OF 9233 ADULTS FROM THE GENERAL POPULATION
C. L. Tofteng1, P. Bach-Mortensen1, S. E. Bojesen1, A. Tybjærg-Hansen1, L. Hyldstrup1, B. G. Nordestgaard4
1Osteoporosis Research Clinic, Department of Endocrinology, Hvidovre University Hospital, Hvidovre, 2Department of Clinical Biochemistry, Herlev University Hospital, Herlev, 3Department of Clinical Biochemistry and The Copenhagen City Heart Study, Rigshospitalet and Bispebjerg University Hospitals, 4Department of Clinical Biochemistry and The Copenhagen City Heart Study, Herlev and Bispebjerg University Hospitals, Copenhagen, Denmark
15.36
OC019 POPULATION-BASED GEOGRAPHIC VARIATIONS AND DETERMINANTS OF BMD CHANGE IN ELDERLY MEN AND WOMEN ACROSS EUROPE. RESULTS FROM THE NETWORK FOR MALE OSTEOPOROSIS (NEMO) STUDY
1Medicine, University of Cambridge, Cambridge, UK, 2Medicine, University Hospital, Leuven, Belgium, 3Radiology, Frei University B Franklin, Berlin, 4University of Heidelberg, Heidelberg, Germany, 5National Institute of Rheumatology and Physiotherapy, Budapest, Hungary, 6Erasmus University, Rotterdam, Netherlands, 7University of Aberdeen, Aberdeen, UK, 8Institute of Rheumatology, Moscow, Russian Federation, 9Asturia General Hospital, Oviedo, Spain, 10Charles University, Prague, Czech Republic, 11University of Kiel, Kiel, Germany, 12University of Sheffield, Sheffield, UK, 13University Hospital, Ghent, Belgium

15.48
OC020 POPULATION-BASED ASSESSMENT OF BONE STRENGTH INDICES AND TRAUMATIC LOADS: RELATIONSHIP TO PATTERNS OF FRAGILITY FRACTURES AT WRIST AND HIP
B. L. Riggs1, L. J. Melton, III2, E. J. Atkinson3, A. L. Oberg3, S. Khosla1, M. L. Bouxsein4
1Endocrinology, 2Epidemiology, 3Biostatistics, Mayo Clinic, Rochester, 4Orthopedic Surgery, Beth Israel Deaconess Medical Center, Boston, USA

16.00-16.30
Coffee Break

16.30-17.30
Room A/B
Short Oral Communications 2
Osteoporosis, Pathophysiology, Genetics and Epidemiology/2

Chairs: T. J. Martin (Melbourne, Australia)/H. van Leeuwen (Rotterdam, Netherlands)

16.30
P011-Mo PTHR1 POLYMORPHISMS AND THEIR ROLE IN VARIATION IN BONE MINERAL DENSITY
C. Vilarino-Guell1, P. Y. Woon1, L. J. Miles1, E. L. Duncan2, F. Consortium3, J. A. Wass2, M. A. Brown4
1Nuffield Department of Orthopaedic Surgery, Botnar Research Centre, 2Department of Endocrinology, Oxford Centre for Diabetes, Endocrinology and Metabolism, Oxford, 3Oxagen Ltd, Abingdon, UK

16.35
P012-Tu PTHRP EXPRESSION IN CARTILAGE CELLS IS REGULATED BY THE HEDGEHOG SIGNALING MOLECULE, GL12
J. A. Sterling1, M. Zhao1, B. O. Oyajobi1, B. G. Grubbs1, G. R. Mundy1
1Cellular and Structural Biology, University of Texas Health Science Center San Antonio, San Antonio, USA

16.40
P013-Su VITAMIN D STATUS AND THE THRESHOLD FOR SECONDARY HYPERPARATHYROIDISM IN THE LONGITUDINAL AGING STUDY AMSTERDAM (LASA)
P. Lips1, S. M. F. Pluijm2, J. H. Smit2, N. M. Van Schoor2
1Endocrinology, 2EMGO Institute, VU University Medical Center, Amsterdam, Netherlands

16.45
P014-Mo Y2 RECEPTORS AND THE CENTRAL REGULATION OF CORTICAL BONE: RECIPIROCAL ACTIVITY TO LEPTIN
P. A. Baldock1, S. Allison1, A. Sainsbury2, R. F. Enríquez1, H. Herzog2, J. A. Eisman1, E. M. Gardiner1
1Bone and Mineral, 2Neurobiology, Garvan Institute of Medical Research, Sydney, Australia
P015-Tu  BETA-CATENIN IS A POWERFUL ENHANCER OF BMP-2 GENE EXPRESSION IN OSTEOBLASTS IN VITRO AND IN VIVO
M. Zhao¹, M. Qiao¹, D. Chen², S. E. Harris³, B. O. Oyajobi¹, I. R. Garrett⁴, G. Gutierrez⁴, G. R. Mundy¹
¹Cellular and Structural Biology, University of Texas Health Science Center at San Antonio, San Antonio,
²Orthopaedics, University of Rochester, Rochester,
³Periodontics, University of Texas Health Science Center at San Antonio,
⁴Bone, Osteoscreen Inc., San Antonio, USA

P016-Su  SECRETED FRIZZLED-RELATED PROTEIN 1 (SFRP1) REGULATES MESENCHYAL STEM CELL DIFFERENTIATION TOWARD OSTEOGENIC OR ADIPOGENIC LINEAGE
F. Wang¹, C. Lin², Y. Chen³, K. Yang³, Y. Huang³, Y. Sun³, H. Huang¹
¹Department of Medical Research, Kaohsiung Chang Gung Memorial Hospital, Kaohsiung,
²Department of Nephrology, Chajy Chang Gung Memorial Hospital, Chayi,
³Department of Orthopedic Surgery, Linko Chang Gung Memorial Hospital, Linko, Taiwan

P017-Mo  P53 REPRESSES THE EXPRESSION OF TRANSCRIPTION FACTOR OSTERIX AND FUNCTIONS AS A NEGATIVE REGULATOR OF OSTEOBLASTOGENESIS AND BONE FORMATION
X. Wang¹, H. Kua¹, Y. Hu¹, K. Guo¹, Q. Zeng¹, G. Karsenty², J. Yeh³, B. Li¹
¹IMCB, Institute of Molecular and Cell Biology, Singapore,
²Molecular and Human Genetics, Baylor College of medicine, Houston,
³Medicine, Winthrop-University Hospital, Mineola, USA

P018-Tu  ROLE OF FIBROBLAST GROWTH FACTOR RECEPTOR-2 IN THE ALTERED OSTEOBLAST PHENOTYPE INDUCED BY TWIST HAPLOINSUFFICIENCY IN THE SAETHRE-CHOTZEN SYNDROME
H. Guénon¹, K. Kaabeche¹, S. Le Mée¹, P. J. Marie¹
¹Osteoblast Biology and Pathology, Inserm U606, Paris cedex 10, France

P019-Su  APO2L/TRAIL IS A POTENT ANTI-CANCER AGENT THAT PREVENTS BREAST CANCER–INDUCED BONE DESTRUCTION IN A MOUSE MODEL
D. M. Findlay¹, A. Evdokiou¹, T. L. Minh¹, A. Labrinidis¹, S. Hay¹, V. Liapis¹, S. Bouralexis¹, K. Welldon¹
¹Orthopaedics and Trauma, The University of Adelaide, Adelaide, Australia

P020-Mo  SCLEROSTIN IS A DELAYED SECRETED PRODUCT OF OSTEOCYTES THAT REGULATES BMU WIDTH AND CORTICAL CANAL INFILLING
K. E. S. Poole¹, R. L. Van Bezooijen², N. Loveridge¹, S. E. Papapoulos², C. W. Löwik², J. Reeve¹
¹Department of Bone Research, University of Cambridge, Cambridge, UK,
²Department of Endocrinology, Leiden University Medical Centre, Leiden, Netherlands

Break
17.45-19.15
Room C
Satellite Symposium 4
Supported by MSD

**Evolution of Osteoporosis Therapy**

Chairman: U. Liberman (Tel Aviv, Israel)

**EFFICACY FIRST**
M. Hochberg (Baltimore, USA)

**VITAMIN D INADEQUACY: THE SILENT GLOBAL EPIDEMIC**
P. Lips (Amsterdam, Netherlands)

**NEW STANDARD OF CARE; A BETTER APPROACH FOR YOUR OSTEOPOROSIS PATIENTS**
S. Epstein (New York, USA)

20.00
**ECTS Football Tournament**
Stade FC Aïre-Le Lignon

20.00
**Concert**
St Pierre Cathedral
Tuesday, 28 June 2005
08.00-09.00
Exhibition and Poster Hall
Poster viewing

Meet the Professor Sessions

Room D
HORMONES THAT LINK FAT MASS WITH BONE MASS
J. Cornish (Auckland, New Zealand)

Room E
CANCER AND BONE
G. Mundy (San Antonio, USA)

Room F
OPTIMAL OSTEOPOROSIS TREATMENT
S. Papapoulos (Leiden, Netherlands)

Room G
GENETICS AND TREATMENT OF PAGET'S DISEASE
S. Ralston (Edinburgh, UK)

Room H
NUTRITION AND BONE HEALTH
R. Rizzoli (Geneva, Switzerland)

Room I
BISPHOSPHONATE MECHANISMS
M. Rogers (Aberdeen, UK)

09.00-10.00
Room A/B
Symposium 5
Local and Systemic Regulation

Chairs: M. Gillespie (Melbourne, Australia)/H. Kronenberg (Boston, USA)

09.00
1021 REGULATION OF GP130 ACTION BY THE SOCS FAMILY OF PROTEINS
W. S. Alexander

1Division of Cancer and Haematology, The Walter and Eliza Hall Institute of Medical Research, Parkville, Australia

09.30
1022 ROLE OF THE IMMUNE SYSTEM IN BONE LOSS
S. R. Goldring

1Rheumatology, Harvard Medical School, Boston, USA
10.00-11.00
Room A/B
Oral Communications 5
Local and Systemic Regulation

Chairs: M. Gillespie (Melbourne, Australia)/H. Kronenberg (Boston, USA)

10.00
OC021  TRANSIENT RECEPTOR POTENTIAL CHANNEL TRPV5 AND 1A-HYDROXYLASE DOUBLE KNOCKOUT MICE DEMONSTRATE SIGNIFICANCE OF RENAL REABSORPTION AND 1,25(OH)2D3 FOR CALCIUM HOMEOSTASIS
B. C. J. Van der Eerden1, K. Y. Renkema2, H. Weinans3, T. Nijenhuis2, A. W. C. M. Van der Kemp2, R. J. M. Bindels2, J. G. J. Hoenderop2, J. P. T. M. Van Leeuwen1
1Internal Medicine, Erasmus MC, Rotterdam, 2Cell Physiology, NCMLS, Radboud University Nijmegen medical Center, Nijmegen, 3Orthopedics, Erasmus MC, Rotterdam, Netherlands

10.12
OC022  BMP-6 RESTORES LOST BONE IN OVARIECTOMIZED RATS AND MEDIATES THE EFFECT OF ESTRADIOL ON TRABECULAR BONE IN BMP-6 KNOCK-OUT MICE
S. Vukicevic1, P. Simic1, J. Buljan-Culej1, M. Basic-Koretic1
1Department of Anatomy, School of Medicine, Zagreb, Croatia

10.24
OC023  ARRESTINS REGULATE OSTEOPROTEGERIN (OPG) AND RANKL EXPRESSION BY INTERMITTENT AND CONTINUOUS PTH IN PRIMARY CULTURES OF MICE OSTEOBLASTS
E. Bianchi1, D. Manen1, D. Pierroz1, R. Rizzoli1, S. L. Ferrari1
1Service of Bone Diseases, Geneva University Hospital, Geneva, Switzerland

10.36
OC024  RISK OF FRACTURE IN PATIENTS USING HIGH-DOSE INTERMITTENT ORAL GLUCOCORTICOIDS
F. De Vries1, M. S. G. M. Bracke2, H. G. M. Leufkens2, J. W. J. Lammers3, C. Cooper4, T. Van Staa1
1Dept. of Pharmacoepidemiology and Pharmacotherapy, 2Department of Pharmacoepidemiology and Pharmacotherapy, Utrecht Institute for Pharmaceutical Sciences, Utrecht University, 3Department of Pulmonary Diseases, Utrecht Medical Center, Utrecht, Netherlands, 4Medical Research Council Environmental Epidemiology Unit, University of Southampton, Southampton, UK

10.48
OC025  GLUCOCORTICOID BLOCKS AP-1 ACTIVITY LEADING TO TRANSCRIPTIONAL REPRESSION OF AN OSTEOGENIC CYTOKINE INTERLEUKIN-11: A MECHANISM OF IMPAIRED BONE FORMATION
Y. Ito1, S. Kido1, D. Inoue1, T. Matsumoto1
1Medicine and Bioregulatory Sciences, University of Tokushima Graduate School Institute of Health BioSciences, Tokushima, Japan

11.00-11.30
Coffee Break
11.30-12.45
Room C
Workshop 5
Stem Cells

Chairs: W. Hofstetter (Berne, Switzerland)/S. Vukicevic (Zagreb, Croatia)

11.30
**I023  REGULATION OF HSC BY OSTEOBLASTIC NICHE**
L. Li
1Li Lab, Stowers Institute for Medical Research, Kansas City, USA

11.55
**I024  SKELETAL TISSUE REPAIR BY ADULT STEM CELLS**
C. De Bari
1Rheumatology, King's College London, London, UK

12.20
**I025  REGULATION OF OSTEOBLASTOGENESIS AND BONE MASS BY WNT10B**
O. A. MacDougald
1Molecular and Integrative Physiology, University of Michigan, Ann Arbor, USA

11.30-12.45
Room A/B
Workshop 6
Metabolic Bone Disease

Chairs: T. Cundy (Auckland, New Zealand)/B. Langdahl (Aarhus, Denmark)

11.30
**I026  WHAT’S NEW IN PHOSPHATE METABOLISM?**
M. Econs (Indianapolis, USA)

11.55
**I027  CALCIMIMETICS IN THE TREATMENT OF HYPERPARATHYROIDISM**
D. M. Shoback
1Endocrine Research Unit 111N, San Francisco VA Medical Center, San Francisco, USA

12.20
**I028  GENETIC BASIS OF HYPERPARATHYROIDISM INCLUDING PARATHYROID CANCER**
A. Arnold
1Center for Molecular Medicine, University of Connecticut School of Medicine, Farmington, USA

12.45-14.00
Lunch & Attended Posters (Posters Pnnn-Tu)
14.00-15.00
Room A/B
Symposium 6
Clinical Disorders other than Osteoporosis

Chairs: S. Fukumoto (Tokyo, Japan)/A. Stewart (Pittsburgh, USA)

14.00
I029 TOWARD ELUCIDATION OF THE ROLE OF ALTERED WNT SIGNALING IN MYELOMA AND DEVELOPMENT OF CORRESPONDING THERAPEUTIC INTERVENTIONS
S Yaccoby¹, F. Zhan¹, Y. Qiang¹, E. Tian¹, M. Zangari¹, G. Tricot¹, B. Barlogie¹, S. Rudikoff², J Shaughnessy Jr.¹
¹Myeloma Institute for Research and Therapy, University of Arkansas for Medical Sciences (UAMS), Little Rock, USA
²Laboratory of Cellular and Molecular Biology, National Cancer Institute, Bethesda, USA

14.30
I030 BREAST CANCER AND BONE
R. E. Coleman¹
¹Academic Unit of Oncology, Weston Park Hospital, Sheffield, UK

15.00-16.00
Room A/B
Oral Communications 6
Clinical Disorders other than Osteoporosis

Chairs: S. Fukumoto (Tokyo, Japan)/A. Stewart (Pittsburgh, USA)

15.00
OC026 ADAMTS 10 MUTATIONS IN THE AUTOSOMAL RECESSIVE WEILL-MARCHESANI SYNDROME
V. Cormier-Daire¹, N. Dagoneau², C. Benoist-Lasselin², C. Huber², L. Faivre², A. Megarbane³, A. Alswaid⁴, A. Munnich¹, L. Legeai-Mallet¹
¹Unité 393, INSERM, Paris, France, ²Unité 393, INSERM, Paris, ³Genetics, St Joseph, Beirut, Lebanon, ⁴Genetics, Riyadh hospital, Riyadh, Saudi Arabia

15.12
OC027 OSTEOPROTEGERIN (OPG) MUTATIONS THAT CAUSE HYPERPHOSPHATASIA IMPAIR OPG PROTEIN SECRETION AND BIOLOGICAL ACTIVITY
D. Naot¹, C. A. Middleton-Hardie¹, H. Cundy¹, ¹I. R. Reid¹, T. Cundy¹, J. Comish¹
¹Medicine, University of Auckland, Auckland, New Zealand

15.24
OC028 IDENTIFYING TARGETS AGAINST MULTIPLE MYELOMA BY CHARACTERIZING THE PLASMA CELL SPECIFIC UNFOLDED PROTEIN RESPONSE
L. Oliva¹, E. Benasciutti¹, R. Sitia¹, S. Cenci¹
¹DIBIT, San Raffaele Scientific Institute and Università Vita-Salute San Raffaele, Milano, Italy
15.36
OC029  HOMOZYGOITY FOR A DOMINANT-NEGATIVE TYPE I COLLAGEN MUTATION ATTENUATES THE TYPE IV OI PHENOTYPE OF THE HETEROZYGOUS BRTL MOUSE: INSIGHT INTO DISEASE MECHANISM
T. E. Uveges1, C. Bergwitz1, K. M. Kozloff2, A. Forlino3, N. V. Kuznetsova3, G. Gronowitz4, S. A. Goldstein2, S. Leikin1, J. C. Marini1
1BEMB, NICHD NIH, Bethesda, 2Ortho Research Labs, U Mich, Ann Arbor, 3Sect. Physical Biochemistry, NICHD NIH, Bethesda, 4U Conn Health Ctr, Farmington, USA

15.48
OC030  EFFECT OF DEPOT MEDROXYPROGESTERONE ACETATE ON ATTAINMENT OF PEAK BONE MASS
J. S. Walsh1, R. Eastell1, N. F. Peel1
1Academic Unit of Bone Metabolism, University of Sheffield, Sheffield, UK

16.00-16.30
Coffee Break

16.30-17.30
Room A/B
Oral Communications 7
Osteoporosis: Fracture Risks

Chairs: P. Burckhardt (Lausanne, Switzerland)/G. Russell (Oxford, UK)

16.30
OC031  USE OF BETA-BLOCKERS IS ASSOCIATED WITH BMD AND FRACTURE RISK
1Epidemiology and biostatistics, 2Medical Informatics, 3Internal Medicine, Erasmus Medical Center, Rotterdam, Netherlands

16.42
OC032  USE OF BETA-BLOCKERS AND RISK OF HIP AND VERTEBRAL FRACTURES: ASSOCIATIONS WITH DAILY AND CUMULATIVE DOSE
F. De Vries1, P. C. Souverein1, M. L. De Bruin1, C. Cooper2, T. P. Van Staa1, H. G. M. Leufkens1
1Department of Pharmacoepidemiology and Pharmacotherapy, Utrecht Institute for Pharmaceutical Sciences, Utrecht University, Utrecht, Netherlands, 2Medical Research Council, Environmental Epidemiology Unit, University of Southampton, Southampton General Hospital, Southampton, UK

16.54
OC033  MICE NULL FOR ß1ß2-ADRENERGIC RECEPTORS HAVE LOW BONE MASS AND ARCHITECTURE AND ARE RESISTANT TO ISOPROTERENOL-INDUCED INHIBITION OF BONE GROWTH
D. D. Pierroz1, P. Muzzin2, M. L. Bouxsein3, R. Rizzoli1, S. L. Ferrari1
1Service of Bone Diseases, Geneva University Hospital, 2Cellular Physiology and Metabolism, Geneva University Medical Center, Geneva, Switzerland, 3Orthopedic Biomechanics Laboratory, Harvard Med School, Boston, USA

17.06
OC034  RESIDUAL LIFETIME RISK OF FRACTURES IN ELDERLY MEN AND WOMEN
N. D. Nguyen1, H. Ahlborg1, J. Eisman1, J. Center1, T. Nguyen1
1Bone and Mineral Research Program, Garvan Institute of Medical Research, Sydney, Australia
17.18

T. Chevalley¹, E. Guilley², D. Baccino², F. Herrmann¹, P. Hoffmeyer³, C. Rapin², R. Rizzoli¹
¹Service of Bone Diseases, University Hospitals Geneva, ²Centre for Interdisciplinary Gerontology, University of Geneva, ³Service of Orthopaedic Surgery, University Hospitals Geneva, Geneva, Switzerland

17.30-17.45
Break

17.45-19.15
Room A/B
Satellite Symposium 5
Supported by The Alliance for Better Bone Health (Procter & Gamble Pharmaceuticals and Sanofi-Aventis)

Understanding the Factors which Contribute to Fracture Risk Reduction

Chairman: N. Watts (Cincinnati, USA)

BIOMECHANICAL INSIGHTS INTO THE COMPONENTS OF BONE STRENGTH
K. Jepson (New York, USA)

SURROGATE MARKERS: HOW MUCH DO THEY REALLY TELL US ABOUT FRACTURE RISK REDUCTION?
R. Eastell (Sheffield, UK)

UNDERSTANDING THE IMPACT OF NON-VERTEBRAL FRACTURES: IMPLICATIONS FOR PATIENT MANAGEMENT
N. Watts (Cincinnati, USA)

20.00
Gala Dinner
Wednesday 29 June 2005
08.00-09.00
Exhibition and Poster Hall
Poster viewing

Meet the Professor Sessions

Room D
ABSOLUTE FRACTURE RISK
C. Glüer (Kiel, Germany)

Room E
MECHANICAL LOADING AND BONE
T. Skerry (Sheffield, UK)

Room F
HYPERCALCEMIA
A. Stewart (Pittsburgh, USA)

Room G
BIOLOGY AND TECHNOLOGY OF OSTEOCLASTS
A. Teti (L’Aquila, Italy)

Room H
GENETICS OF OSTEOPOROSIS
A. Uitterlinden (Rotterdam, Netherlands)

Room I
STEROID HORMONES AND BONE
H. van Leeuwen (Rotterdam, Netherlands)

09.00-10.00
Room A/B
Symposium 7
What’s New in Bone Disease?

Chairs: G. Mundy (San Antonio, USA)/S. Ralston (Edinburgh, UK)

09.00
THE GENETIC BASIS FOR RESISTANCE TO PARATHYROID HORMONE
M. Levine (Cleveland, USA)

09.30
UPDATE ON TREATMENTS FOR OSTEOPOROSIS
P. Delmas (Lyon, France)

10.00-10.30
Coffee Break
10.30-12.00
Room A/B
Oral Communications 8
Hot Topics

Chairs: G. Mundy (San Antonio, USA)/S. Ralston (Edinburgh, UK)

10.30
OC036  CANNABINOID RECEPTOR 1 KNOCKOUT MICE HAVE INCREASED BONE MASS AND ARE PROTECTED FROM OVARIECTOMY INDUCED BONE LOSS
A. I. Idris1, R. J. Van ’t Hof1, I. R. Greig1, S. A. Ridge1, D. Baker2, R. A. Ross3, S. H. Ralston1
1Medicine and Therapeutics, University of Aberdeen, Aberdeen, 2Institute of Neurology, University College London, London, 3Biomedical Sciences, University of Aberdeen, Aberdeen, UK

10.42
OC037  DKK PROTEINS CONTROL OSTEOBLAST FUNCTION BOTH IN VITRO AND IN VIVO
G. Rawadi1, S. Roman Roman2, K. Boulukos1, P. Martin1, S. Pinho5, P. Pognonec3, P. Clément-Lacroix1, F. Morvan1, C. Niehrs1, R. Baron9
1In vitro pharmacology, 2In Vitro pharmacology, Prostrakan Pharmaceuticals, Romainville, 3UMR CNRS 6548, Université de Nice, Nice, 4UMR CNRS 6548, Université de Nice, Romainville, France, 5Division of Molecular Embryology, Deutsches Krebsforschungszentrum, Romainville, Germany, 6In vivo Pharmacology, Prostrakan Pharmaceuticals, Romainville, France, 7UMR CNRS 6548, Yale University, New Haven CT, USA, 8Division of Molecular Embryology, Deutsches Krebsforschungszentrum, Heidelberg, Germany, 9Prostrakan Pharmaceuticals, Romainville, France

10.54
OC038  LITHIUM – A POTENTIAL BONE ANABOLIC TREATMENT
P. Vestergaard1, L. Rejnmark2, L. Mosekilde2
1The Osteoporosis Clinic, 2Department of Endocrinology and Metabolism C, Aarhus Amtssygehus, Aarhus, Denmark

11.06
OC039  ALLOGENEIC IN UTERO BMT RESCUES THE MUTANT PHENOTYPE IN A MURINE MODEL OF OSTEOPETROSIS
A. Frattini1, M. G. Sacco2, F. Cerisoli2, M. C. Magli2, E. Mira Catò1, A. Pangrazio1, S. Soldati1, E. Scanzianì3, P. Vezzoni2, H. C. Blair4, A. Villa1
1Istituto Tecnologie Biomediche, Consiglio Nazionale delle Ricerche, Sez. Biomed. Biotech., 2Istituto Tecnologie Biomediche, Consiglio Nazionale delle Ricerche, Pisa, 3Anatomopatologia, Università degli Studi Milano, Milan, Italy, 4Department of Cell Biology and Physiology, University of Pittsburgh, Pittsburgh, USA

11.18
OC040  IDENTIFICATION OF A QUANTITATIVE TRAIT LOCUS FOR BONE MINERAL DENSITY ON HUMAN CHROMOSOME XP22 BY INTERSPECIES SYNTENY MAPPING
C. A. Parsons1, H. J. Mroczkowski5, F. E. A. McGuigan1, O. M. E. Albagha1, S. C. Manolagas3, D. M. Reid1, R. J. Shmookler Reis5, S. H. Ralston1
1Medicine and Therapeutics, University of Aberdeen, Aberdeen, UK, 2Geriatrics, Biochemistry and Molecular Biology, 3Division of Endocrinology and Metabolism, University of Arkansas for Medical Sciences and VA Medical Center, Little Rock, USA
11.30
OC041  C-SRC INHIBITION DECREASES BREAST CANCER-INDUCED LETHALITY AND INCIDENCE OF EXPERIMENTAL BONE METASTASES IN BALB NU/NU MICE
C. Di Giacinto¹, D. Fortunati¹, I. Recchia¹, M. Susa², D. Fabbro², A. Tei¹, N. Rucci¹
¹Department of Experimental Medicine, University of L’Aquila, L’Aquila, Italy, ²Novartis Pharma, Novartis Pharma, Basel, Switzerland

11.42
OC042  THE EFFECT OF AZD0530, A HIGHLY SELECTIVE SRC INHIBITOR, ON BONE TURNOVER IN HEALTHY MALES
R. A. Hannon¹, G. Clack², N. Gallagher², M. Macpherson², A. Marshall², R. Eastell¹
¹Academic Unit of Bone Metabolism, University of Sheffield, Sheffield, ²Clinical Science, AstraZeneca, Macclesfield, UK

12.00-12.30
Room A/B
Closing Ceremony and Young Investigator Awards

Chairs: R. Bouillon (Liège, Belgium) (IBMS Secretary)/H. van Leeuwen (Rotterdam, Netherlands) (ECTS Secretary)