

**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 CALCIUM DEPOSITION AND RESORPTION IN THE STERNAL  $\text{CaCO}_3$  DEPOSITS OF *PORCELLIO SCABER* (ISOPODA), ULTRASTRUCTURE AND MOLECULAR MECHANISMS.**

**A. Ziegler<sup>1</sup>**

<sup>1</sup>*Central 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. Gao<sup>1</sup>, D. Whalen<sup>1</sup>, **M. Wheatly<sup>1</sup>**, C. Gillen<sup>2</sup>, A. Golshani<sup>1</sup>

<sup>1</sup>*Wright State University, <sup>2</sup>Kenyon 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. Winkler<sup>1</sup>**, J. Renn<sup>2</sup>, T. Wagner<sup>1</sup>, R. Goerlich<sup>2</sup>, E. Blind<sup>3</sup>, M. Schartl<sup>1</sup>

<sup>1</sup>*Dept. Physiological Chemistry I, Biocenter, University of Wuerzburg, <sup>2</sup>Institute for Molecular Biotechnology, RWTH Aachen, <sup>3</sup>Dept. of Medicine-Endocrinology, University of Wuerzburg, Germany*

11.15

**CE04 PHYSIOLOGICAL ROLE OF CALCITONIN IN CARTILAGINOUS FISH AND CYCLOSTOMES**

**N. Suzuki<sup>1</sup>**

<sup>1</sup>*Noto 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. Hogan<sup>1</sup>, J. A. Danks<sup>2</sup>, J. E. Layton<sup>1</sup>, N. E. Hall<sup>1</sup>, J. K. Heath<sup>1</sup>, G. J. Lieschke<sup>1</sup>

<sup>1</sup>Ludwig Institute for Cancer Research, The Royal Melbourne Hospital, Parkville, Victoria, Australia; <sup>2</sup>St. 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. Brown<sup>1</sup>, D. Vithlani<sup>1</sup>, K. Patel<sup>1</sup>, R. D. Allen<sup>1</sup>, C. G. Dacke<sup>1</sup>

<sup>1</sup>School 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. Kovacs<sup>1</sup>, N. J. Fudge<sup>1</sup>, C. S. Noseworthy<sup>1</sup>

<sup>1</sup>Faculty 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. Sugiyama<sup>1</sup>, H. Kikuchi<sup>1</sup>, K. Nishizawa<sup>2</sup>, S. Kusuhara<sup>1</sup>

<sup>1</sup>Department of Animal Science, Niigata University, Niigata, <sup>2</sup>Meiji Seika Co. Ltd., Saitama, Japan

**CE09 VALPROATE HAS STRAIN-SPECIFIC EFFECTS ON BONE MINERAL CONTENT IN MICE**

S. Senn<sup>1</sup>, S. Kantor<sup>1</sup>, S. Andrikopoulos<sup>1</sup>, T. J. O'Brien<sup>1</sup>, M. J. Morris<sup>2</sup>, J. D. Wark<sup>1</sup>

<sup>1</sup>Department of Medicine and Bone and Mineral Service, The Royal Melbourne Hospital and Austin and Repatriation Hospital, <sup>2</sup>Department of Pharmacology, The University of Melbourne Parkville Victoria, Australia

**CE10 EXPRESSION OF MATRIX METALLOPROTEINASES 2 AND 9 AND RECK DURING AMELOGENESIS**

K.B.S. Paiva<sup>1</sup>, W.F. Zambuzzi<sup>1</sup>, A.C.C.O. Demarchi<sup>1</sup>, T. Accorsi-Mendonca<sup>2</sup>, J.M. Granjeiro<sup>3</sup>

<sup>1</sup>Department of Biochemistry, Biology Institute, State University of Campinas, <sup>2</sup>Department of Endodontics, Bauru Dental School, University of Sao Paulo, <sup>3</sup>Department 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. Sugiyama<sup>1</sup>, N. Sakamoto<sup>1</sup>, K. Nishimura<sup>2</sup>, S. Kusuhara<sup>1</sup>

<sup>1</sup>Department of Animal Science, Niigata University, Niigata, <sup>2</sup>National 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. Murray<sup>1</sup>, C. Farquharson<sup>1</sup>

<sup>1</sup>*Bone Biology Group, Roslin Institute, Roslin, Midlothian, UK*

14.45

**CE13 EXPRESSION PROFILES OF XENOPUS BANDED HEDGEHOG, A HOMOLOG OF MOUSE INDIAN HEDGHEOG, IS RELATED TO THE LATE DEVELOPMENT OF ENDOCHONDRAL OSSIFICATION IN XENOPUS LAEVIS**

T. Moriishi<sup>1</sup>, Y. Shibata<sup>1</sup>, A. Yamaguchi<sup>2</sup>

<sup>1</sup>*Division of Oral Pathology and Bone Metabolism, Nagasaki University Graduate School of Biomedical Sciences, Nagasaki,* <sup>2</sup>*Section 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. Toribio<sup>1</sup>, C. W. Kohn<sup>2</sup>, J. Hardy<sup>2</sup>, T. J. Rosol<sup>1</sup>

<sup>1</sup>*Departments of Veterinary Biosciences,* <sup>2</sup>*Department 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. Riond<sup>1</sup>

<sup>1</sup>*Switzerland*

16.15

**CE16 REGULATION OF SKELETAL DEMINERALIZATION DURING LACTATION AND ITS RECOVERY AFTER WEANING**

C. S. Kovacs<sup>1</sup>, K. L. Buckle<sup>1</sup>, N. J. Fudge<sup>1</sup>, C. P. Sharpe<sup>1</sup>, J. P. Woodrow<sup>1</sup>

<sup>1</sup>*Faculty 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. Liesegang<sup>1</sup>, J. Risteli<sup>2</sup>

<sup>1</sup>*Institute of Animal Nutrition, Vetsuisse Faculty University Zurich, Zurich, Switzerland,* <sup>2</sup>*Department of Clinical Chemistry, University of Oulu, Oulu, Finland*

16.45

**CE18 IMMUNOHISTOCHEMICAL LOCALISATION OF ENDOTHELIAL NITRIC OXIDE SYNTHASE AND ITS RESPONSE TO N-TERMINAL PTH PEPTIDES IN PREGNANT MOUSE UTERINE TISSUES**

R. D. Allen<sup>1</sup>, M. Coulson<sup>1</sup>, J. F. Brown<sup>1</sup>, C. G. Dacke<sup>1</sup>

<sup>1</sup>*School of Pharmacy and Biomedical Sciences, University of Portsmouth, Portsmouth, UK*

17.00

Discussion

17.00

Symposium summary and overview

T. J. Martin (Melbourne, Australia)

17.30

Closing remarks

**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. Korpelainen, 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 SUPRESSED 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

**I001 THE ASSESSMENT OF FRACTURE RISK: A GLOBAL PERSPECTIVE**

**C. E. De Laet**

<sup>1</sup>*Epidemiology Unit, Scientific Institute of Public Health, Brussels, Belgium*

09.30

**I002 COMBINATION THERAPY FOR OSTEOPOROSIS**

**J. S. Finkelstein**

<sup>1</sup>*Endocrine 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. Papalopoulos (Leiden, Netherlands)

**10.00**

**OC001 LOOP DIURETICS INCREASE BONE TURNOVER, DECREASE BONE MINERAL DENSITY AND INCREASE FRACTURE RISK**

**L. Rejnmark**<sup>1</sup>, P. Vestergaard<sup>1</sup>, L. Heickendorff<sup>1</sup>, F. Andreasen<sup>1</sup>, L. Mosekilde<sup>1</sup>

<sup>1</sup>*Dept. 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. Crans**<sup>1</sup>, T. J. Beck<sup>2</sup>, L. M. Semanick<sup>2</sup>, K. D. Harper<sup>1</sup>, D. Desai<sup>1</sup>, E. F. Eriksen<sup>1</sup>

<sup>1</sup>*Lilly Research Laboratories, Eli Lilly and Company, Indianapolis,* <sup>2</sup>*Department of Radiology, The Johns Hopkins University School of Medicine, Baltimore, USA*

**10.24**

**OC003 UTILITY OF MXA FOR DETECTING PREVALENT FRACTURES - EXPERIENCE FROM A LARGE EPIDEMIOLOGICAL STUDY**

**E. McCloskey**<sup>1</sup>, D. Charlesworth<sup>1</sup>, J. Bostock<sup>1</sup>, J. Eastaugh<sup>1</sup>, N. Bonnet<sup>1</sup>, M. Beneton<sup>1</sup>, T. Jalava<sup>2</sup>, J. Kanis<sup>1</sup>  
<sup>1</sup>Metabolic Bone Centre, University of Sheffield, Sheffield, UK, <sup>2</sup>Clinical 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. Ominsky**<sup>1</sup>, P. J. Kostenuik<sup>1</sup>, P. Cranmer<sup>2</sup>, S. Y. Smith<sup>3</sup>, J. E. Atkinson<sup>2</sup>  
<sup>1</sup>Metabolic Disorders, <sup>2</sup>Toxicology Research, Amgen, Inc., Thousand Oaks, USA, <sup>3</sup>Bone Research, CTBR, Montreal, Canada

**10.48**

**OC005 CONCOMITANT TERIPARATIDE PLUS RALOXIFENE FOR THE TREATMENT OF POSTMENOPAUSAL OSTEOPOROSIS: RESULTS FROM A RANDOMIZED PLAC EBO-CONTROLLED TRIAL**

**J. H. Krege**<sup>1</sup>, M. Omizo<sup>2</sup>, E. N. Schwartz<sup>3</sup>, E. F. Eriksen<sup>1</sup>, P. Cantor<sup>1</sup>, J. Wang<sup>1</sup>, E. V. Glass<sup>1</sup>, S. L. Myers<sup>1</sup>, C. Deal<sup>4</sup>  
<sup>1</sup>Lilly Research Laboratories, Eli Lilly and Company, Indianapolis, <sup>2</sup>Oregon Osteoporosis Center, Portland, <sup>3</sup>Foundation for Osteoporosis Research and Education, Oakland, <sup>4</sup>Center 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. Seabra**<sup>1</sup>

<sup>1</sup>Cell and Molecular Biology, Division of Biomedical Sciences, Faculty of Medicine, Imperial College London, London, UK

11.55

**I004 BONE DYNAMICS AND VESICULAR TRAFFICKING**

**G. Stenbeck**<sup>1</sup>

<sup>1</sup>Bone and Mineral Centre, University College London, London, UK

12.20

**I005 MEMBRANE TRAFFICKING AND PODOSOMES**

**R. Buccione**<sup>1</sup>

<sup>1</sup>Cell 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

**I006 PET AND BONE METASTASES**

**I. Fogelman<sup>1</sup>**

<sup>1</sup>*Nuclear Medicine, Guy's, King's, and St Thomas' School of Medicine, London, UK*

11.55

**I007 ANATOMICAL AND FUNCTIONAL CT IMAGING OF BONE**

**R. Müller<sup>1</sup>**

<sup>1</sup>*Institute for Biomedical Engineering, Swiss Federal Institute of Technology, ETH, Zürich, Switzerland*

12.20

**I008 QUANTITATIVE MRI OF TRABECULAR AND CORTICAL BONE ARCHITECTURE**

**F. W. Wehrli<sup>1</sup>**

<sup>1</sup>*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

**I009 NEW INSIGHTS INTO OSTEOCLAST DISEASES**

**M. H. Helfrich<sup>1</sup>**

<sup>1</sup>*Medicine and Therapeutics, University of Aberdeen, Aberdeen, UK*

14.30

**I010 THE ROLE OF NFAT IN OSTEOCLAST DIFFERENTIATION**

**H. Takayanagi<sup>1</sup>**

<sup>1</sup>*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. Crotti<sup>1</sup>**, N. C. Walsh<sup>1</sup>, M. Flannery<sup>1</sup>, S. R. Goldring<sup>1</sup>, K. P. McHugh<sup>1</sup>

<sup>1</sup>*Rheumatology, Beth Israel Deaconess Medical Center and Harvard Institutes of Medicine, Boston, USA*

15.12

**OC007 RAC1 BINDS DIRECTLY WITH RAB7**

**Y. Sun<sup>1</sup>**, K. G. Buki<sup>1</sup>, J. P. Vääräniemi<sup>1</sup>, H. K. Väänänen<sup>1</sup>

<sup>1</sup>*Department 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. Okamoto<sup>1</sup>**, J. Murai<sup>1</sup>, H. Yoshikawa<sup>1</sup>, N. Tsumaki<sup>1</sup>

<sup>1</sup>*Department of Orthopaedics, Osaka University Graduate School of Medicine, Suita, Japan*

15.36

**OC009 OVEREXPRESSION OF BMP4 IN BONE INCREASED OSTEOCLAST NUMBER AND CAUSED OSTEOPENIA**

**J. Murai<sup>1</sup>**, M. Okamoto<sup>1</sup>, H. Yoshikawa<sup>1</sup>, N. Tsumaki<sup>1</sup>

<sup>1</sup>*Orthopaedics, Osaka University Graduate School of Medicine, Suita, Japan*

15.48

**OC010 WNT SIGNALLING REGULATES OSTEOCLASTOGENESIS IN VITRO**

**G. J. Spencer<sup>1</sup>**, L. Etheridge<sup>1</sup>, P. G. Genever<sup>1</sup>

<sup>1</sup>*Biology, 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. Mueller<sup>1</sup>**, M. Stauber<sup>1</sup>, C. Gratzke<sup>2</sup>, F. Eckstein<sup>2</sup>, R. Müller<sup>1</sup>

<sup>1</sup>*Institute for Biomedical Engineering IBT, ETH and University of Zürich, Zürich, Switzerland,* <sup>2</sup>*Musculoskeletal 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. Bauer**<sup>1</sup>, A. C. Santora<sup>2</sup>, M. C. Hochberg<sup>3</sup>, A. Chattopadhyay<sup>2</sup>, P. Ross<sup>2</sup>

<sup>1</sup>Medicine, Epidemiology and Biostatistics, University of California, San Francisco, San Francisco, <sup>2</sup>Clinical Research, Merck Research Laboratories, Rahway, <sup>3</sup>Rheumatology, University of Maryland, Baltimore, USA

16.40

**P003-Tu FRACTURE INDEX VALIDATION IN A POPULATION-BASED SAMPLE OF SWISS ELDERLY WOMEN**

**O. Lamy**<sup>1</sup>, M. Krieg<sup>1</sup>

<sup>1</sup>Department 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. Abrahamsen**<sup>1</sup>, P. Vestergaard<sup>2</sup>, B. Rud<sup>3</sup>, O. Bärenholdt<sup>4</sup>, J. B. Jensen<sup>3</sup>, S. Pors Nielsen<sup>4</sup>, L. Mosekilde<sup>2</sup>, K. Brixen<sup>1</sup>

<sup>1</sup>Dept of Endocrinology M, Odense University Hospital, Odense C, <sup>2</sup>Dept of Endocrinology C, Aarhus University Hospital, Aarhus C, <sup>3</sup>Osteoporosis Clinic, HS Hvidovre Hospital, Copenhagen, <sup>4</sup>Clinical 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. Adami**<sup>1</sup>, R. Nuti<sup>2</sup>, E. Czerwinski<sup>3</sup>, C. Hughes<sup>4</sup>, P. Ward<sup>4</sup>, B. Bonvoisin<sup>4</sup>, L. B. Tanko<sup>5</sup>

<sup>1</sup>., University of Verona, Verona, <sup>2</sup>., University of Siena, Siena, Italy, <sup>3</sup>., Krakow Medical Centre, Krakow, Poland, <sup>4</sup>., F. Hoffmann-La Roche Ltd., Basel, Switzerland, <sup>5</sup>., CCBP, Ballerup, Denmark

16.55

**P006-Tu STRONTIUM RANELATE IMPROVES BONE MICROARCHITECTURE AND INTRINSIC BONE QUALITY**

**P. Ammann**<sup>1</sup>, S. Barrauld<sup>1</sup>, R. Dayer<sup>1</sup>, R. Rizzoli<sup>1</sup>

<sup>1</sup>Division 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 Staa**<sup>1</sup>, P. Geusens<sup>2</sup>, A. Boonen<sup>2</sup>, H. G. M. Leufkens<sup>3</sup>, C. Cooper<sup>4</sup>

<sup>1</sup>Epidemiology, Procter Gamble Pharma, Egham, UK, <sup>2</sup>Department of Rheumatology, University Hospital, Maastricht, <sup>3</sup>Department of Pharmacoepidemiology, Utrecht Institute for Pharmaceutical Sciences, Utrecht, Netherlands, <sup>4</sup>MRC 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. Gremlich<sup>1</sup>, R. Kneuer<sup>1</sup>, S. Kerrad<sup>1</sup>, M. Merdes<sup>2</sup>, A. Suter<sup>1</sup>, **M. Kneissel**<sup>2</sup>

<sup>1</sup>Discovery Technology, <sup>2</sup>Bone 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. Meier**<sup>1</sup>, U. Meinhardt<sup>2</sup>, J. R. Greenfield<sup>2</sup>, C. R. Dunstan<sup>3</sup>, M. J. Seibel<sup>3</sup>

<sup>1</sup>*Clinic for Endocrinology, Diabetes and Clinical Nutrition, University Hospital Basel, Basel, Switzerland,* <sup>2</sup>*Garvan Institute of Medical Research, University of NSW,* <sup>3</sup>*Bone 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. Oshima**<sup>1</sup>, A. Nampe<sup>1</sup>, M. Matsuda<sup>2</sup>, M. Iwaki<sup>2</sup>, A. Fukuhara<sup>2</sup>, J. Hashimoto<sup>1</sup>, H. Yoshikawa<sup>1</sup>, I. Shimomura<sup>3</sup>

<sup>1</sup>*Department of Orthopaedics, Graduate School of Medicine, Osaka University,* <sup>2</sup>*Department of Medicine and Pathophysiology, Graduate School of Frontier Biosciences, Osaka University,* <sup>3</sup>*Department 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 ADVANCES 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

**I011 BONE FORMATION: OF MICE AND MEN**

**E. Orwoll<sup>1</sup>**

<sup>1</sup>*Program Director, General Clinical Research Center, Associate Dean for Research, School of Medicine, Oregon Health and Sciences University, Portland, USA*

09.30

**1012 BONE ANABOLICS: THE BMP PATHWAY**

**I. R. Garrett**<sup>1</sup>, G. Gutierrez<sup>1</sup>, G. R. Mundy<sup>2</sup>

<sup>1</sup>Osteoscreen, <sup>2</sup>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**<sup>1</sup>, Y. Yan<sup>1</sup>, M. Chen<sup>1</sup>, R. J. O'Keefe<sup>1</sup>, D. Chen<sup>1</sup>

<sup>1</sup>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<sup>1</sup>, R. Tare<sup>1</sup>, C. Lengner<sup>1</sup>, A. J. Van Wijnen<sup>1</sup>, J. L. Stein<sup>1</sup>, G. S. Stein<sup>1</sup>, **J. B. Lian**<sup>1</sup>

<sup>1</sup>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**<sup>1</sup>, G. Van Der Horst<sup>1</sup>, S. M. Van Der Werf<sup>1</sup>, H. Farah-Sips<sup>1</sup>, R. L. Van Bezooijen<sup>1</sup>, C. Löwik<sup>1</sup>

<sup>1</sup>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**<sup>1</sup>, M. Ding<sup>1</sup>, C. H. Jensen<sup>2</sup>, N. Serakincı<sup>3</sup>, B. Teisner<sup>2</sup>, F. Dagnaes-Hansen<sup>4</sup>, M. Kassem<sup>1</sup>

<sup>1</sup>Endocrinology dept, Odense University Hospital, <sup>2</sup>Medical immunology, <sup>3</sup>Endocrinology dept, SDU, Odense C, <sup>4</sup>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**<sup>1</sup>, L. S. H. Nissen-Meyer<sup>2</sup>, D. Fortunati<sup>2</sup>, M. E. Pedersen<sup>2</sup>, S. Reppe<sup>2</sup>, V. T. Gautvik<sup>2</sup>, F. P. Reinholt<sup>3</sup>, A. Teti<sup>1</sup>, R. Jemtland<sup>4</sup>, K. M. Gautvik<sup>5</sup>

<sup>1</sup>Department of Experimental Medicine, University of L'Aquila, L'Aquila, Italy, <sup>2</sup>Department of Biochemistry, Institute for Medical Basic Sciences, University of Oslo, <sup>3</sup>Department of Pathology, <sup>4</sup>Endocrine Section, Department of Medicine, National University Hospital, <sup>5</sup>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 AGGRECAN KNOCK-IN MICE RESISTANT TO PROTEOLYSIS IN THE INTERGLOBULAR DOMAIN: IMPLICATIONS FOR THE GROWTH PLATE**

**A. J. Fosang<sup>1</sup>**

<sup>1</sup>*Paediatrics, University of Melbourne, Parkville, Australia*

11.55

**I014 RESCUE OF ACHONDROPLASIA**

**A. Yasoda<sup>1</sup>, Y. Komatsu<sup>1</sup>, K. Nakao<sup>1</sup>**

<sup>1</sup>*Medicine and Clinical Science, Kyoto University Graduate School of Medicine, Kyoto, Japan*

12.20

**I015 IHH IN THE DEVELOPMENT OF THE GROWTH PLATE**

**A. Vortkamp<sup>1</sup>**

<sup>1</sup>*Zentrum 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. Pols<sup>1</sup>**

<sup>1</sup>*Internal Medicine, Erasmus Medical Center, Rotterdam, Netherlands*

11.55

**I017 CALCIUM, VITAMIN D AND BONE**

**R. M. Francis<sup>1</sup>**

<sup>1</sup>*Department of Geriatric Medicine, University of Newcastle upon Tyne, Newcastle upon Tyne, UK*

12.20

**I018 GI AND BONE**

**N. H. Bjarnason<sup>1</sup>**

<sup>1</sup>*Dept. 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

**IO19 NEW INSIGHTS INTO NUTRITION AND THE SKELETON**

**D. P. Kiel<sup>1</sup>**

<sup>1</sup>*Research and Training Institute, Hebrew SeniorLife, Boston, USA*

14.30

**IO20 THYROID AND BONE**

**G. R. Williams<sup>1</sup>**

<sup>1</sup>*Molecular 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**

**F. H. Anderson<sup>1</sup>**, A. M. Grant<sup>2</sup>, A. Avenell<sup>2</sup>, M. K. Campbell<sup>2</sup>, C. Cooper<sup>3</sup>, C. Donaldson<sup>4</sup>, R. M. Francis<sup>5</sup>, W. J. Gillespie<sup>6</sup>, M. C. Robinson<sup>7</sup>, D. J. Torgerson<sup>8</sup>, A. Wallace<sup>9</sup>

<sup>1</sup>*Geriatric Medicine Group, University of Southampton, Southampton*, <sup>2</sup>*Health Services Research Unit, University of Aberdeen, Aberdeen*, <sup>3</sup>*MRC Epidemiology Resource Centre, University of Southampton, Southampton*, <sup>4</sup>*Centre for Health Services Research and Business School, University of Newcastle*, <sup>5</sup>*Musculoskeletal Unit, Freeman Hospital, Newcastle-upon-Tyne*, <sup>6</sup>*Office of the Dean, Hull York Medical School, York*, <sup>7</sup>*Orthopaedic and Trauma Unit, Royal Infirmary of Edinburgh, Edinburgh*, <sup>8</sup>*Department of Health Sciences, University of York, York*, <sup>9</sup>*Division 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 Meurs<sup>1</sup>**, M. Jhamai<sup>1</sup>, A. Hofman<sup>2</sup>, J. P. T. M. Van Leeuwen<sup>1</sup>, H. A. P. Pols<sup>1</sup>, A. G. Uitterlinden<sup>1</sup>

<sup>1</sup>*Internal Medicine*, <sup>2</sup>*Epidemiology 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. Tofteng<sup>1</sup>**, P. Bach-Mortensen<sup>1</sup>, S. E. Bojesen<sup>2</sup>, A. Tybjaerg-Hansen<sup>3</sup>, L. Hyldstrup<sup>1</sup>, B. G. Nordestgaard<sup>4</sup>

<sup>1</sup>*Osteoporosis Research Clinic, Department of Endocrinology, Hvidovre University Hospital, Hvidovre*, <sup>2</sup>*Department of Clinical Biochemistry, Herlev University Hospital, Herlev*, <sup>3</sup>*Department of Clinical Biochemistry and The Copenhagen City Heart Study, Rigshospitalet and Bispebjerg University Hospitals*, <sup>4</sup>*Department 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**

**S. Kaptoge**<sup>1</sup>, . S. Boonen<sup>2</sup>, . D. Felsenberg<sup>3</sup>, . C. Scheidt-Nave<sup>4</sup>, . G. Poor<sup>5</sup>, . H. A. P. Pols<sup>6</sup>, . D. M. Reid<sup>7</sup>, . L. I. Benevolenskaya<sup>8</sup>, . J. B. Cannata<sup>9</sup>, . J. J. Stepan<sup>10</sup>, . C. C. Glueer<sup>11</sup>, . R. Eastell<sup>12</sup>, . J. M. Kaufman<sup>13</sup>, . J. Reeve<sup>1</sup>  
<sup>1</sup>Medicine, University of Cambridge, Cambridge, UK, <sup>2</sup>Medicine, University Hospital, Leuven, Belgium, <sup>3</sup>Radiology, Frei University B Franklin, Berlin, <sup>4</sup>University of Heidelberg, Heidelberg, Germany, <sup>5</sup>National Institute of Rheumatology and Physiotherapy, Budapest, Hungary, <sup>6</sup>Erasmus University, Rotterdam, Netherlands, <sup>7</sup>University of Aberdeen, Aberdeen, UK, <sup>8</sup>Institute of Rheumatology, Moscow, Russian Federation, <sup>9</sup>Asturia General Hospital, Oviedo, Spain, <sup>10</sup>Charles University, Prague, Czech Republic, <sup>11</sup>University of Kiel, Kiel, Germany, <sup>12</sup>University of Sheffield, Sheffield, UK, <sup>13</sup>University 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. Riggs**<sup>1</sup>, L. J. Melton, III<sup>2</sup>, E. J. Atkinson<sup>3</sup>, A. L. Oberg<sup>3</sup>, S. Khosla<sup>1</sup>, M. L. Bouxsein<sup>4</sup>  
<sup>1</sup>Endocrinology, <sup>2</sup>Epidemiology, <sup>3</sup>Biostatistics, Mayo Clinic, Rochester, <sup>4</sup>Orthopedic 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-Guell**<sup>1</sup>, P. Y. Woon<sup>1</sup>, L. J. Miles<sup>1</sup>, E. L. Duncan<sup>2</sup>, F. Consortium<sup>3</sup>, J. A. Wass<sup>2</sup>, M. A. Brown<sup>1</sup>  
<sup>1</sup>Nuffield Department of Orthopaedic Surgery, Botnar Research Centre, <sup>2</sup>Department of Endocrinology, Oxford Centre for Diabetes, Endocrinology and Metabolism, Oxford, <sup>3</sup>Oxagen Ltd, Abingdon, UK

16.35

**P012-Tu PTHRP EXPRESSION IN CARTILAGE CELLS IS REGULATED BY THE HEDGEHOG SIGNALING MOLECULE, GLI2**

**J. A. Sterling**<sup>1</sup>, M. Zhao<sup>1</sup>, B. O. Oyajobi<sup>1</sup>, B. G. Grubbs<sup>1</sup>, G. R. Mundy<sup>1</sup>  
<sup>1</sup>Cellular 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. Lips**<sup>1</sup>, S. M. F. Pluijm<sup>2</sup>, J. H. Smit<sup>2</sup>, N. M. Van Schoor<sup>2</sup>  
<sup>1</sup>Endocrinology, <sup>2</sup>EMGO Institute, VU University Medical Center, Amsterdam, Netherlands

16.45

**P014-Mo Y2 RECEPTORS AND THE CENTRAL REGULATION OF CORTICAL BONE: RECIPROCAL ACTIVITY TO LEPTIN**

**P. A. Baldock**<sup>1</sup>, S. Allison<sup>1</sup>, A. Sainsbury<sup>2</sup>, R. F. Enriquez<sup>1</sup>, H. Herzog<sup>2</sup>, J. A. Eisman<sup>1</sup>, E. M. Gardiner<sup>1</sup>  
<sup>1</sup>Bone and Mineral, <sup>2</sup>Neurobiology, Garvan Institute of Medical Research, Sydney, Australia

16.50

**P015-Tu BETA-CATENIN IS A POWERFUL ENHANCER OF BMP-2 GENE EXPRESSION IN OSTEOBLASTS IN VITRO AND IN VIVO**

**M. Zhao**<sup>1</sup>, M. Qiao<sup>1</sup>, D. Chen<sup>2</sup>, S. E. Harris<sup>3</sup>, B. O. Oyajobi<sup>1</sup>, I. R. Garrett<sup>4</sup>, G. Gutierrez<sup>4</sup>, G. R. Mundy<sup>1</sup>

<sup>1</sup>Cellular and Structural Biology, University of Texas Health Science Center at San Antonio, San Antonio, <sup>2</sup>Orthopaedics, University of Rochester, Rochester, <sup>3</sup>Periodontics, University of Texas Health Science Center at San Antonio, <sup>4</sup>Bone, Osteoscreen Inc., San Antonio, USA

16.55

**P016-Su SECRETED FRIZZLED-RELATED PROTEIN 1 (SFRP1) REGULATES MESENCHYMAL STEM CELL DIFFERENTIATION TOWARD OSTEOGENIC OR ADIPOGENIC LINEAGE**

**F. Wang**<sup>1</sup>, C. Lin<sup>2</sup>, Y. Chen<sup>3</sup>, K. Yang<sup>1</sup>, Y. Huang<sup>1</sup>, Y. Sun<sup>1</sup>, H. Huang<sup>1</sup>

<sup>1</sup>Department of Medical Research, Kaohsiung Chang Gung Memorial Hospital, Kaohsiung, <sup>2</sup>Department of Nephrology, Cjayi Chang Gung Memorial Hospital, Chayi, <sup>3</sup>Department of Orthopedic Surgery, Linko Chang Gung Memorial Hospital, Linko, Taiwan

17.00

**P017-Mo P53 REPRESSES THE EXPRESSION OF TRANSCRIPTION FACTOR OSTERIX AND FUNCTIONS AS A NEGATIVE REGULATOR OF OSTEOBLASTOGENESIS AND BONE FORMATION**

**X. Wang**<sup>1</sup>, H. Kua<sup>1</sup>, Y. Hu<sup>1</sup>, K. Guo<sup>1</sup>, Q. Zeng<sup>1</sup>, G. Karsenty<sup>2</sup>, J. Yeh<sup>3</sup>, B. Li<sup>1</sup>

<sup>1</sup>IMCB, Institute of Molecular and Cell Biology, Singapore, Singapore, <sup>2</sup>Molecular and Human Genetics, Baylor College of medicine, Houston, <sup>3</sup>Medicine, Winthrop-University Hospital, Mineola, USA

17.05

**P018-Tu ROLE OF FIBROBLAST GROWTH FACTOR RECEPTOR -2 IN THE ALTERED OSTEOBLAST PHENOTYPE INDUCED BY TWIST HAPLOINSUFFICIENCY IN THE SAETHRE-CHOTZEN SYNDROME**

**H. Guénou**<sup>1</sup>, K. Kaabeche<sup>1</sup>, S. Le Mée<sup>1</sup>, P. J. Marie<sup>1</sup>

<sup>1</sup>Osteoblast Biology and Pathology, Inserm U606, Paris cedex 10, France

17.10

**P019-Su APO2L/TRAIL IS A POTENT ANTI-CANCER AGENT THAT PREVENTS BREAST CANCER -INDUCED BONE DESTRUCTION IN A MOUSE MODEL**

D. M. Findlay<sup>1</sup>, **A. Evdokiou**<sup>1</sup>, T. L. Minh<sup>1</sup>, A. Labrinidis<sup>1</sup>, S. Hay<sup>1</sup>, V. Liapis<sup>1</sup>, S. Bouralexis<sup>1</sup>, K. Welldon<sup>1</sup>

<sup>1</sup>Orthopaedics and Trauma, The University of Adelaide, Adelaide, Australia

17.15

**P020-Mo SCLEROSTIN IS A DELAYED SECRETED PRODUCT OF OSTEOCYTES THAT REGULATES BMU WIDTH AND CORTICAL CANAL INFILLING**

**K. E. S. Poole**<sup>1</sup>, R. L. Van Bezooijen<sup>2</sup>, N. Loveridge<sup>1</sup>, S. E. Papapoulos<sup>2</sup>, C. W. Löwik<sup>2</sup>, J. Reeve<sup>1</sup>

<sup>1</sup>Department of Bone Research, University of Cambridge, Cambridge, UK, <sup>2</sup>Department of Endocrinology, Leiden University Medical Centre, Leiden, Netherlands

**17.30-17.45**

**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 Aire-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

**I021 REGULATION OF GP130 ACTION BY THE SOCS FAMILY OF PROTEINS**

**W. S. Alexander<sup>1</sup>**

<sup>1</sup>*Division of Cancer and Haematology, The Walter and Eliza Hall Institute of Medical Research, Parkville, Australia*

09.30

**I022 ROLE OF THE IMMUNE SYSTEM IN BONE LOSS**

**S. R. Goldring<sup>1</sup>**

<sup>1</sup>*Rheumatology, 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 1 $\alpha$ -HYDROXYLASE DOUBLE KNOCKOUT MICE DEMONSTRATE SIGNIFICANCE OF RENAL REABSORPTION AND 1,25(OH) $_2$ D $_3$  FOR CALCIUM HOMEOSTASIS**

**B. C. J. Van der Eerden**<sup>1</sup>, K. Y. Renkema<sup>2</sup>, H. Weinans<sup>3</sup>, T. Nijenhuis<sup>2</sup>, A. W. C. M. Van der Kemp<sup>2</sup>, R. J. M. Bindels<sup>2</sup>, J. G. J. Hoenderop<sup>2</sup>, J. P. T. M. Van Leeuwen<sup>1</sup>

<sup>1</sup>Internal Medicine, Erasmus MC, Rotterdam, <sup>2</sup>Cell Physiology, NCMLS, Radboud University Nijmegen medical Center, Nijmegen, <sup>3</sup>Orthopedics, 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. Vukicevic**<sup>1</sup>, P. Simic<sup>1</sup>, J. Buljan-Culej<sup>1</sup>, M. Basic-Koretic<sup>1</sup>

<sup>1</sup>Department 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. Bianchi**<sup>1</sup>, D. Manen<sup>1</sup>, D. Pierroz<sup>1</sup>, R. Rizzoli<sup>1</sup>, S. L. Ferrari<sup>1</sup>

<sup>1</sup>Service of Bone Diseases, Geneva University Hospital, Geneva, Switzerland

10.36

**OC024 RISK OF FRACTURE IN PATIENTS USING HIGH-DOSE INTERMITTENT ORAL GLUCOCORTICIDS**

**F. De Vries**<sup>1</sup>, M. S. G. M. Bracke<sup>2</sup>, H. G. M. Leufkens<sup>2</sup>, J. W. J. Lammers<sup>3</sup>, C. Cooper<sup>4</sup>, T. Van Staa<sup>1</sup>

<sup>1</sup>Dept. of Pharmacoepidemiology and Pharmacotherapy, <sup>2</sup>Department of Pharmacoepidemiology and Pharmacotherapy, Utrecht Institute for Pharmaceutical Sciences, Utrecht University, <sup>3</sup>Department of Pulmonary Diseases, Utrecht Medical Center, Utrecht, Netherlands, <sup>4</sup>Medical 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. Ito**<sup>1</sup>, S. Kido<sup>1</sup>, D. Inoue<sup>1</sup>, T. Matsumoto<sup>1</sup>

<sup>1</sup>Medicine 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<sup>1</sup>**

<sup>1</sup>*Li Lab, Stowers Institute for Medical Research, Kansas City, USA*

11.55

**I024 SKELETAL TISSUE REPAIR BY ADULT STEM CELLS**

**C. De Bari<sup>1</sup>**

<sup>1</sup>*Rheumatology, King's College London, London, UK*

12.20

**I025 REGULATION OF OSTEOBLASTOGENESIS AND BONE MASS BY WNT10B**

**O. A. MacDougald<sup>1</sup>**

<sup>1</sup>*Molecular 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<sup>1</sup>**

<sup>1</sup>*Endocrine Research Unit-111N, San Francisco VA Medical Center, San Francisco, USA*

12.20

**I028 GENETIC BASIS OF HYPERPARATHYROIDISM INCLUDING PARATHYROID CANCER**

**A. Arnold<sup>1</sup>**

<sup>1</sup>*Center 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

**IO29 TOWARD ELUCIDATION OF THE ROLE OF ALTERED WNT SIGNALING IN MYELOMA AND DEVELOPMENT OF CORRESPONDING THERAPEUTIC INTERVENTIONS**

S Yaccoby<sup>1</sup>, F. Zhan<sup>1</sup>, Y. Qiang<sup>2</sup>, E. Tian<sup>1</sup>, M. Zangari<sup>1</sup>, G. Tricot<sup>1</sup>, B. Barlogie<sup>1</sup>, S. Rudikoff<sup>2</sup>, **J Shaughnessy Jr.**<sup>1</sup>  
*Myeloma Institute for Research and Therapy, University of Arkansas for Medical Sciences (UAMS), Little Rock,*  
<sup>2</sup>*Laboratory of Cellular and Molecular Biology, National Cancer Institute, Bethesda, USA*

14.30

**IO30 BREAST CANCER AND BONE**

**R. E. Coleman**<sup>1</sup>

<sup>1</sup>*Academic 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-Daire**<sup>1</sup>, N. Dagoneau<sup>2</sup>, C. Benoist-Lasselin<sup>2</sup>, C. Huber<sup>2</sup>, L. Faivre<sup>2</sup>, A. Megarbane<sup>3</sup>, A. Alswaid<sup>4</sup>, A. Munnich<sup>1</sup>, L. Legeai-Mallet<sup>1</sup>

<sup>1</sup>*Unité 393, INSERM, Paris, France,* <sup>2</sup>*Unité 393, INSERM, Paris,* <sup>3</sup>*Genetics, St Joseph, Beirut, Lebanon,* <sup>4</sup>*Genetics, Riyadh hospital, Riyadh, Saudi Arabia*

15.12

**OC027 OSTEOPROTEGERIN (OPG) MUTATIONS THAT CAUSE HYPERPHOSPHATASIA IMPAIR OPG PROTEIN SECRETION AND BIOLOGICAL ACTIVITY**

**D. Naot**<sup>1</sup>, C. A. Middleton-Hardie<sup>1</sup>, H. Cundy<sup>1</sup>, I. R. Reid<sup>1</sup>, T. Cundy<sup>1</sup>, J. Cornish<sup>1</sup>

<sup>1</sup>*Medicine, University of Auckland, Auckland, New Zealand*

15.24

**OC028 IDENTIFYING TARGETS AGAINST MULTIPLE MYELOMA BY CHARACTERIZING THE PLASMA CELL SPECIFIC UNFOLDED PROTEIN RESPONSE**

**L. Oliva**<sup>1</sup>, E. Benasciutti<sup>1</sup>, R. Sitia<sup>1</sup>, S. Cenci<sup>1</sup>

<sup>1</sup>*DIBIT, San Raffaele Scientific Institute and Università Vita-Salute San Raffaele, Milano, Italy*

15.36

**OC029 HOMOZYGOSITY 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. Uveges**<sup>1</sup>, C. Bergwitz<sup>1</sup>, K. M. Kozloff<sup>2</sup>, A. Forlino<sup>1</sup>, N. V. Kuznetsova<sup>3</sup>, G. Gronowitz<sup>4</sup>, S. A. Goldstein<sup>2</sup>, S. Leikin<sup>3</sup>, J. C. Marini<sup>1</sup>

<sup>1</sup>BEMB, NICHD NIH, Bethesda, <sup>2</sup>Ortho Research Labs, U Mich, Ann Arbor, <sup>3</sup>Sect. Physical Biochemistry, NICHD NIH, Bethesda, <sup>4</sup>U Conn Health Ctr, Farmington, USA

15.48

**OC030 EFFECT OF DEPOT MEDROXYPROGESTERONE ACETATE ON ATTAINMENT OF PEAK BONE MASS**

**J. S. Walsh**<sup>1</sup>, R. Eastell<sup>1</sup>, N. F. Peel<sup>1</sup>

<sup>1</sup>Academic 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**

**M. W. C. J. Schoofs**<sup>1</sup>, M. C. J. M. Sturkenboom<sup>2</sup>, J. P. T. M. Van Leeuwen<sup>3</sup>, B. H. C. h. Stricker<sup>1</sup>, H. A. P. Pols<sup>3</sup>

<sup>1</sup>Epidemiology and biostatistics, <sup>2</sup>Medical Informatics, <sup>3</sup>Internal 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 Vries**<sup>1</sup>, P. C. Souverein<sup>1</sup>, M. L. De Bruin<sup>1</sup>, C. Cooper<sup>2</sup>, T. P. Van Staa<sup>1</sup>, H. G. M. Leufkens<sup>1</sup>

<sup>1</sup>Department of Pharmacoepidemiology and Pharmacotherapy, Utrecht Institute for Pharmaceutical Sciences, Utrecht University, Utrecht, Netherlands, <sup>2</sup>Medical Research Council, Environmental Epidemiology Unit, University of Southampton, Southampton General Hospital, Southampton, UK

16.54

**OC033 MICE NULL FOR  $\beta 1\beta 2$ -ADRENERGIC RECEPTORS HAVE LOW BONE MASS AND ARCHITECTURE AND ARE RESISTANT TO ISOPROTERENOL-INDUCED INHIBITION OF BONE GROWTH**

**D. D. Pierroz**<sup>1</sup>, P. Muzzin<sup>2</sup>, M. L. Bouxsein<sup>3</sup>, R. Rizzoli<sup>1</sup>, S. L. Ferrari<sup>1</sup>

<sup>1</sup>Service of Bone Diseases, Geneva University Hospital, <sup>2</sup>Cellular Physiology and Metabolism, Geneva University Medical Center, Geneva, Switzerland, <sup>3</sup>Orthopedic Biomechanics Laboratory, Harvard Med School, Boston, USA

17.06

**OC034 RESIDUAL LIFETIME RISK OF FRACTURES IN ELDERLY MEN AND WOMEN**

**N. D. Nguyen**<sup>1</sup>, H. Ahlborg<sup>1</sup>, J. Eisman<sup>1</sup>, J. Center<sup>1</sup>, T. Nguyen<sup>1</sup>

<sup>1</sup>Bone and Mineral Research Program, Garvan Institute of Medical Research, Sydney, Australia

17.18

**OC035 INCIDENCE OF HIP FRACTURE OVER A 10-YEAR PERIOD (1991-2000) : REVERSAL OF A SECULAR TREND**

**T. Chevalley**<sup>1</sup>, E. Guilley<sup>2</sup>, D. Baccino<sup>2</sup>, F. Herrmann<sup>1</sup>, . P. Hoffmeyer<sup>3</sup>, C. Rapin<sup>2</sup>, R. Rizzoli<sup>1</sup>

<sup>1</sup>*Service of Bone Diseases, University Hospitals Geneva,* <sup>2</sup>*Centre for Interdisciplinary Gerontology, University of Geneva,* <sup>3</sup>*Service 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. Idris<sup>1</sup>, R. J. Van 't Hof<sup>1</sup>, I. R. Greig<sup>1</sup>, S. A. Ridge<sup>1</sup>, D. Baker<sup>2</sup>, R. A. Ross<sup>3</sup>, S. H. Ralston<sup>1</sup>

<sup>1</sup>Medicine and Therapeutics, University of Aberdeen, Aberdeen, <sup>2</sup>Institute of Neurology, University College London, London, <sup>3</sup>Biomedical Sciences, University of Aberdeen, Aberdeen, UK

10.42

**OC037 DKK PROTEINS CONTROL OSTEOBLAST FUNCTION BOTH IN VITRO AND IN VIVO**

G. Rawadi<sup>1</sup>, S. Roman Roman<sup>2</sup>, K. Boulukos<sup>3</sup>, P. Martin<sup>4</sup>, S. Pinho<sup>5</sup>, P. Pognonec<sup>3</sup>, P. Clément-Lacroix<sup>6</sup>, F. Morvan<sup>7</sup>, C. Niehrs<sup>8</sup>, R. Baron<sup>9</sup>

<sup>1</sup>In vitro pharmacology, <sup>2</sup>In Vitro pharmacology, Prostrakan Pharamceuticals, Romainville, <sup>3</sup>UMR CNRS 6548, Université de Nice, Nice, <sup>4</sup>UMR CNRS 6548, Université de Nice, Romainville, France, <sup>5</sup>Division of Molecular Embryology, Deutsches Krebsforschungszentrum, Romainville, Germany, <sup>6</sup>In vivo Pharmacology, Prostrakan Pharamceuticals, Romainville, France, <sup>7</sup>UMR CNRS 6548, Yale University, New Haven CT, USA, <sup>8</sup>Division of Molecular Embryology, Deutsches Krebsforschungszentrum, Heidelberg, Germany, <sup>9</sup>, Prostrakan Pharamceuticals, Romainville, France

10.54

**OC038 LITHIUM – A POTENTIAL BONE ANABOLIC TREATMENT**

P. Vestergaard<sup>1</sup>, L. Rejnmark<sup>2</sup>, L. Mosekilde<sup>2</sup>

<sup>1</sup>The Osteoporosis Clinic, <sup>2</sup>Department 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. Frattini<sup>1</sup>, M. G. Sacco<sup>1</sup>, F. Cerisoli<sup>2</sup>, M. C. Magli<sup>2</sup>, E. Mira Catò<sup>1</sup>, A. Pangrazio<sup>1</sup>, S. Soldati<sup>1</sup>, E. Scanziani<sup>3</sup>, P. Vezzoni<sup>1</sup>, H. C. Blair<sup>4</sup>, A. Villa<sup>1</sup>

<sup>1</sup>Istituto Tecnologie Biomediche, Consiglio Nazionale delle Ricerche, Segrate, <sup>2</sup>Istituto Tecnologie Biomediche, Consiglio Nazionale delle Ricerche, Pisa, <sup>3</sup>Anatomopatologia, Università degli Studi Milano, Milan, Italy, <sup>4</sup>Department 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. Parsons<sup>1</sup>, H. J. Mroczkowski<sup>2</sup>, F. E. A. McGuigan<sup>1</sup>, O. M. E. Albagha<sup>1</sup>, S. C. Manolagas<sup>3</sup>, D. M. Reid<sup>1</sup>, R. J. Shmookler Reis<sup>2</sup>, S. H. Ralston<sup>1</sup>

<sup>1</sup>Medicine and Therapeutics, University of Aberdeen, Aberdeen, UK, <sup>2</sup>Geriatrics, Biochemistry and Molecular Biology, <sup>3</sup>Division 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 Giacinto**<sup>1</sup>, D. Fortunati<sup>1</sup>, I. Recchia<sup>1</sup>, M. Susa<sup>2</sup>, D. Fabbro<sup>2</sup>, A. Teti<sup>1</sup>, N. Rucci<sup>1</sup>

<sup>1</sup>Department of Experimental Medicine, University of L'Aquila, L'Aquila, Italy, <sup>2</sup>Novartis 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. Hannon**<sup>1</sup>, G. Clack<sup>2</sup>, N. Gallagher<sup>2</sup>, M. Macpherson<sup>2</sup>, A. Marshall<sup>2</sup>, R. Eastell<sup>1</sup>

<sup>1</sup>Academic Unit of Bone Metabolism, University of Sheffield, Sheffield, <sup>2</sup>Clinical 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)