### THE SCIENTIFIC PROGRAMME

#### SATURDAY 25 JUNE
- **Satellite Meetings**
  - 08.45-17.35: Comparative Endocrinology of Calcium Regulation
  - 09.00-18.00: ECTS Training Course: Osteoporotic Vertebral Fracture: Everything you Need to Know
  - 16.00-18.10: Workshop: Physical Activity and Falls

#### SUNDAY 26 JUNE
- **POSTERS**
  - Symposium 1: Osteoporosis assessment and treatment
  - Orals 1: Osteoporosis: assessment and treatment
- **COFFEE**
  - Workshop 1: Vesicular trafficking in bone cells
  - Workshop 2: Physical measurement
- **LUNCH & POSTERS**
  - Symposium 2: Bone resorption and its regulation
  - Orals 2: Bone resorption and its regulation
- **BREAK**
  - Short Orals 1: Osteoporosis: assessment and treatment

#### MONDAY 27 JUNE
- **POSTERS/MEET THE PROFESSOR SESSIONS**
  - Symposium 3: Bone formation
  - Orals 3: Bone formation, cartilage and bone matrix
- **COFFEE**
  - Workshop 3: Growth plate biology
  - Workshop 4: Nutrition and bone

### REGISTRATION OPEN

### SUNDAY 26 JUNE
- **SYMPOSIUM 4**
  - Symposium 4: Osteoporosis pathophysiology, genetics and epidemiology
  - Orals 3: Bone formation, cartilage and bone matrix
  - Orals 4: Osteoporosis, pathophysiology, genetics and epidemiology
  - Workshop 3: Growth plate biology
  - Workshop 4: Nutrition and bone
  - Short Orals 2: Osteoporosis: pathophysiology, genetics and epidemiology

### SHORT ORALS 1:
- **SYMPOSIUM 3**
  - Symposium 3: Bone formation
  - Orals 2: Bone resorption and its regulation
  - Orals 3: Bone formation, cartilage and bone matrix
  - Workshop 3: Growth plate biology
  - Workshop 4: Nutrition and bone

### BREAK

### SUNDAY 26 JUNE
- **SYMPOSIUM 3**
  - Symposium 3: Bone formation
  - Orals 2: Bone resorption and its regulation
  - Orals 3: Bone formation, cartilage and bone matrix
  - Workshop 3: Growth plate biology
  - Workshop 4: Nutrition and bone

### SHORT ORALS 2:
- **SYMPOSIUM 4**
  - Symposium 4: Osteoporosis pathophysiology, genetics and epidemiology
  - Orals 3: Bone formation, cartilage and bone matrix
  - Orals 4: Osteoporosis, pathophysiology, genetics and epidemiology
  - Workshop 3: Growth plate biology
  - Workshop 4: Nutrition and bone

### BREAK

### SUNDAY 26 JUNE
- **SYMPOSIUM 4**
  - Symposium 4: Osteoporosis pathophysiology, genetics and epidemiology
  - Orals 3: Bone formation, cartilage and bone matrix
  - Orals 4: Osteoporosis, pathophysiology, genetics and epidemiology
  - Workshop 3: Growth plate biology
  - Workshop 4: Nutrition and bone

### SHORT ORALS 3:
- **SYMPOSIUM 4**
  - Symposium 4: Osteoporosis pathophysiology, genetics and epidemiology
  - Orals 3: Bone formation, cartilage and bone matrix
  - Orals 4: Osteoporosis, pathophysiology, genetics and epidemiology
  - Workshop 3: Growth plate biology
  - Workshop 4: Nutrition and bone

### BREAK

### SUNDAY 26 JUNE
- **SYMPOSIUM 4**
  - Symposium 4: Osteoporosis pathophysiology, genetics and epidemiology
  - Orals 3: Bone formation, cartilage and bone matrix
  - Orals 4: Osteoporosis, pathophysiology, genetics and epidemiology
  - Workshop 3: Growth plate biology
  - Workshop 4: Nutrition and bone

### SHORT ORALS 4:
- **SYMPOSIUM 4**
  - Symposium 4: Osteoporosis pathophysiology, genetics and epidemiology
  - Orals 3: Bone formation, cartilage and bone matrix
  - Orals 4: Osteoporosis, pathophysiology, genetics and epidemiology
  - Workshop 3: Growth plate biology
  - Workshop 4: Nutrition and bone

### BREAK

### SUNDAY 26 JUNE
- **SYMPOSIUM 4**
  - Symposium 4: Osteoporosis pathophysiology, genetics and epidemiology
  - Orals 3: Bone formation, cartilage and bone matrix
  - Orals 4: Osteoporosis, pathophysiology, genetics and epidemiology
  - Workshop 3: Growth plate biology
  - Workshop 4: Nutrition and bone

### SHORT ORALS 5:
- **SYMPOSIUM 4**
  - Symposium 4: Osteoporosis pathophysiology, genetics and epidemiology
  - Orals 3: Bone formation, cartilage and bone matrix
  - Orals 4: Osteoporosis, pathophysiology, genetics and epidemiology
  - Workshop 3: Growth plate biology
  - Workshop 4: Nutrition and bone

### BREAK

### SUNDAY 26 JUNE
- **SYMPOSIUM 4**
  - Symposium 4: Osteoporosis pathophysiology, genetics and epidemiology
  - Orals 3: Bone formation, cartilage and bone matrix
  - Orals 4: Osteoporosis, pathophysiology, genetics and epidemiology
  - Workshop 3: Growth plate biology
  - Workshop 4: Nutrition and bone

### SHORT ORALS 6:
- **SYMPOSIUM 4**
  - Symposium 4: Osteoporosis pathophysiology, genetics and epidemiology
  - Orals 3: Bone formation, cartilage and bone matrix
  - Orals 4: Osteoporosis, pathophysiology, genetics and epidemiology
  - Workshop 3: Growth plate biology
  - Workshop 4: Nutrition and bone

### BREAK

### SUNDAY 26 JUNE
- **SYMPOSIUM 4**
  - Symposium 4: Osteoporosis pathophysiology, genetics and epidemiology
  - Orals 3: Bone formation, cartilage and bone matrix
  - Orals 4: Osteoporosis, pathophysiology, genetics and epidemiology
  - Workshop 3: Growth plate biology
  - Workshop 4: Nutrition and bone

### SHORT ORALS 7:
- **SYMPOSIUM 4**
  - Symposium 4: Osteoporosis pathophysiology, genetics and epidemiology
  - Orals 3: Bone formation, cartilage and bone matrix
  - Orals 4: Osteoporosis, pathophysiology, genetics and epidemiology
  - Workshop 3: Growth plate biology
  - Workshop 4: Nutrition and bone

### BREAK

### SUNDAY 26 JUNE
- **SYMPOSIUM 4**
  - Symposium 4: Osteoporosis pathophysiology, genetics and epidemiology
  - Orals 3: Bone formation, cartilage and bone matrix
  - Orals 4: Osteoporosis, pathophysiology, genetics and epidemiology
  - Workshop 3: Growth plate biology
  - Workshop 4: Nutrition and bone

### SHORT ORALS 8:
- **SYMPOSIUM 4**
  - Symposium 4: Osteoporosis pathophysiology, genetics and epidemiology
  - Orals 3: Bone formation, cartilage and bone matrix
  - Orals 4: Osteoporosis, pathophysiology, genetics and epidemiology
  - Workshop 3: Growth plate biology
  - Workshop 4: Nutrition and bone

### BREAK

### SUNDAY 26 JUNE
- **SYMPOSIUM 4**
  - Symposium 4: Osteoporosis pathophysiology, genetics and epidemiology
  - Orals 3: Bone formation, cartilage and bone matrix
  - Orals 4: Osteoporosis, pathophysiology, genetics and epidemiology
  - Workshop 3: Growth plate biology
  - Workshop 4: Nutrition and bone

### SHORT ORALS 9:
- **SYMPOSIUM 4**
  - Symposium 4: Osteoporosis pathophysiology, genetics and epidemiology
  - Orals 3: Bone formation, cartilage and bone matrix
  - Orals 4: Osteoporosis, pathophysiology, genetics and epidemiology
  - Workshop 3: Growth plate biology
  - Workshop 4: Nutrition and bone

### BREAK

### SUNDAY 26 JUNE
- **SYMPOSIUM 4**
  - Symposium 4: Osteoporosis pathophysiology, genetics and epidemiology
  - Orals 3: Bone formation, cartilage and bone matrix
  - Orals 4: Osteoporosis, pathophysiology, genetics and epidemiology
  - Workshop 3: Growth plate biology
  - Workshop 4: Nutrition and bone

### SHORT ORALS 10:
- **SYMPOSIUM 4**
  - Symposium 4: Osteoporosis pathophysiology, genetics and epidemiology
  - Orals 3: Bone formation, cartilage and bone matrix
  - Orals 4: Osteoporosis, pathophysiology, genetics and epidemiology
  - Workshop 3: Growth plate biology
  - Workshop 4: Nutrition and bone

### BREAK

### SUNDAY 26 JUNE
- **SYMPOSIUM 4**
  - Symposium 4: Osteoporosis pathophysiology, genetics and epidemiology
  - Orals 3: Bone formation, cartilage and bone matrix
  - Orals 4: Osteoporosis, pathophysiology, genetics and epidemiology
  - Workshop 3: Growth plate biology
  - Workshop 4: Nutrition and bone

### SHORT ORALS 11:
- **SYMPOSIUM 4**
  - Symposium 4: Osteoporosis pathophysiology, genetics and epidemiology
  - Orals 3: Bone formation, cartilage and bone matrix
  - Orals 4: Osteoporosis, pathophysiology, genetics and epidemiology
  - Workshop 3: Growth plate biology
  - Workshop 4: Nutrition and bone

### BREAK

### SUNDAY 26 JUNE
- **SYMPOSIUM 4**
  - Symposium 4: Osteoporosis pathophysiology, genetics and epidemiology
  - Orals 3: Bone formation, cartilage and bone matrix
  - Orals 4: Osteoporosis, pathophysiology, genetics and epidemiology
  - Workshop 3: Growth plate biology
  - Workshop 4: Nutrition and bone

### SHORT ORALS 12:
- **SYMPOSIUM 4**
  - Symposium 4: Osteoporosis pathophysiology, genetics and epidemiology
  - Orals 3: Bone formation, cartilage and bone matrix
  - Orals 4: Osteoporosis, pathophysiology, genetics and epidemiology
  - Workshop 3: Growth plate biology
  - Workshop 4: Nutrition and bone

### BREAK
**THE SCIENTIFIC PROGRAMME**

**TUESDAY 28 JUNE**

**POSTERS/MEET THE PROFESSOR SESSIONS**

- Symposium 5: Local and systemic regulation

**COFFEE**

- Orals 5: Local and systemic regulation

**LUNCH & POSTERS**

**SYMPOSIA**

**Symposium 1: Osteoporosis assessment and treatment**
1. Chris de Laet (Brussels, Belgium): The assessment of fracture risk: a global perspective
2. Joel Finkelstein (Boston MA, USA): Combination therapy for osteoporosis

**Symposium 2: Bone resorption and its regulation**
1. Miep Helfrich (Aberdeen, UK): New insights into osteoclast diseases
2. Hiroshi Takayanagi (Tokyo, Japan): Role of NFAT in osteoclast differentiation

**Symposium 3: Bone formation**
1. Eric Orwoll (Portland OR, USA): Bone formation: of mice and men
2. Ross Garrett (San Antonio TX, USA): Bone anabolics: the BMP pathway

**Symposium 4: Osteoporosis pathophysiology, genetics and epidemiology**
1. Douglas P Kiel (Boston MA, USA): New insights into nutrition and the skeleton
2. Graham Williams (London, UK): Thyroid and bone

**Symposium 5: Local and systemic regulation**
1. Warren Alexander (Melbourne, Australia): Regulation of gp130 action by the SOCS family of proteins
2. Steven Goldring (Boston MA, USA): Role of the immune system in bone loss

**Symposium 6: Clinical disorders other than osteoporosis**
1. John Shaughnessy (Little Rock AR, USA): DKK, myeloma and bone
2. Rob Coleman (Sheffield, UK): Breast cancer and bone

**WEDNESDAY 29 JUNE**

**POSTERS/MEET THE PROFESSOR SESSIONS**

- Symposium 7: What’s new in bone disease?

**COFFEE**

- Orals 8: Hot Topics

**SYMPOSIA**

**Symposium 4: Osteoporosis pathophysiology, genetics and epidemiology**
1. Douglas P Kiel (Boston MA, USA): New insights into nutrition and the skeleton
2. Graham Williams (London, UK): Thyroid and bone

**Symposium 5: Local and systemic regulation**
1. Warren Alexander (Melbourne, Australia): Regulation of gp130 action by the SOCS family of proteins
2. Steven Goldring (Boston MA, USA): Role of the immune system in bone loss

**Symposium 6: Clinical disorders other than osteoporosis**
1. John Shaughnessy (Little Rock AR, USA): DKK, myeloma and bone
2. Rob Coleman (Sheffield, UK): Breast cancer and bone

**WORKSHOPS**

**Workshop 1: Vesicular trafficking in bone cells**
1. Miguel Seabra (London, UK): Rab GTPases and the control of membrane traffic in bone cells
2. Gudrun Stenbeck (London, UK): Bone dynamics and vesicular trafficking
3. Roberto Buccione (Chieti, Italy): Membrane trafficking and podosomes

**Workshop 2: Physical measurement**
1. Ignac Fogelman (London, UK): PET and bone metastases
2. Ralph Müller (Zürich, Switzerland): Anatomical and functional CT imaging of bone
3. Felix Wehrli (Philadelphia PA, USA): Quantitative MRI of trabecular and cortical bone architecture

**Workshop 3: Growth plate biology**
1. Amanda Fosang (Melbourne, Australia): Aggrecan knock-in mice resistant to proteolysis in the interglobular domain: implications for the growth plate
2. Akihiro Yasoda (Kyoto, Japan): Rescue of achondroplasia
3. Andrea Vortkamp (Essen, Germany): IHH in the development of the growth plate

**Workshop 4: Nutrition and bone**
1. Huibert Pols (Rotterdam, Netherlands): Homocysteine and bone
2. Roger Francis (Newcastle upon Tyne, UK): Calcium, Vitamin D and bone
3. Nina Bjarnason (Copenhagen, Denmark): GI and bone

**Workshop 5: Stem cells**
1. Linheng Li (Kansas City MO, USA): Regulation of HSC by osteoblastic niche
2. Cosimo de Bari (London, UK): Skeletal repair by adult stem cells
3. Ormond MacDougald (Ann Arbor MI, USA): Regulation of osteoblastogenesis and bone mass by Wnt10b

**Workshop 6: Metabolic bone disease**
1. Michael Econs (Indianapolis IN, USA): What’s new in phosphate metabolism?
2. Dolores Shoback (San Francisco CA, USA): Calcimimetics in the treatment of hyperparathyroidism
3. Andy Arnold (Farmington CT, USA): Genetic basis of hyperparathyroidism including parathyroid cancer