

<p style="text-align: center;"><b>NOFSA-ISCD BONE DENSITOMETRY COURSE</b> <b>31 OCTOBER – 2 NOVEMBER 2008</b></p>
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**FRIDAY, 31 OCTOBER 2008**

12h00-12h55      REGISTRATION

12h55              Opening and Welcome

**SESSION I              (13h00-15h15)**

13h00-13h45      **Definition of osteoporosis and determinants of bone strength**

- \* Bone structure and function
- \* WHO and NIH definitions
- \* Bone quality and non-mass determinants of bone strength
- \* Pathogenesis and causes of osteoporosis and fracture

***Stephen Hough***

13h45-14h30      **Osteoporosis : Scope of the problem**

- \* Epidemiology of clinical fracture syndromes
- \* Ethnic, genetic and social aspects
- \* Under-diagnosis of osteoporosis
- \* Morbidity and mortality
- \* Direct and indirect costs of osteoporosis

***Tobie de Villiers***

14h30-15h15      **Clinical evaluation and laboratory assessment**

- \* Risk factors
- \* Clinical findings
- \* Laboratory assessment
- \* Biomarkers
- \* Differential diagnosis

***Brynne Ascott-Evans***

15H15-15H45      **TEA / COFFEE**

**SESSION II              (15h45 - 17h00)**

15h45-17h00      **Basic principles of densitometry, radiation safety and quality assurance**

- \* X-Ray and dual energy production
- \* Radiation safety
- \* Operating principles of DEXA, QCT, QUS
- \* Pro's and cons of current DEXA techniques
- \* Quality control

***David Kendler***

**SATURDAY, 1 NOVEMBER 2008**

**SESSION III (08h00 - 11h00)**

08h00-09h00

**Use of bone densitometry for the diagnosis of osteoporosis**

- \* Diagnosis in postmenopausal women; T and Z scores
- \* Strengths and limitations of WHO diagnostic criteria
- \* Use in premenopausal women and non-Caucasians
- \* Male osteoporosis
- \* Use of QUS and QCT in diagnosis / risk assessment

***Bobo Tanner***

09h00-09h45

**Osteopenia in children and adolescents**

- \* Assessment of BMD in the young
- \* Causes of osteopenia, osteoporosis
- \* Mineralisation disorders

***John Pettifor***

09h45-11h00

**Principles of performing and interpreting a DEXA scan**

- \* Spine, hip, forearm and total body scans
- \* Artifacts and pitfalls
- \* Scan analysis

***Bobo Tanner***

11h00-11h30

***TEA / COFFEE***

**SESSION IV (11h30 - 13h00)**

11h30-12h15

**Principles of reporting DEXA Scans**

- \* Standard nomenclature
- \* ISCD recommendations for reporting

***Tobie de Villiers***

12h15-13h00

**Overall fracture risk assessment**

- \* Clinical risk factors
- \* Absolute/relative risk; site-specific risk; global risk; current and lifetime risk
- \* WHO/FRAX analyses - an integrated approach

***Stan Lipschitz***

13h00-14h00

**LUNCH**

**SESSION V**

**(14h00 - 17h00)**

14h00-17h00

**WORKSHOP: Vertebral Fracture Assessment (VFA)**

- \* Importance of vertebral fracture detection
- \* What is VFA and how is it done
- \* Comparison of conventional X-rays and VFA to diagnose vertebral fractures
- \* Basics of VFA technology
- \* Detection and grading of vertebral fractures
- \* Indications for VFA testing
- \* Problems with VFA interpretation

***David Kendler***

**SUNDAY, 2 NOVEMBER 2008**

**SESSION VII**

**(08h30 - 10h00)**

08h30-09h15

**Treatment of Osteoporosis I**

- \* Lifestyle interventions, calcium/vitamin D
- \* Conventional hormone therapy
- \* Oestrogen analogues

***Ernie Sonnendecker***

09h15-10h00

**Treatment of Osteoporosis II**

- \* Bisphosphonates and calcitonin
- \* Strontium ranelate
- \* Parathyroid hormone

***Bilkish Cassim***

10h00-10h30

**TEA / COFFEE**

**SESSION VIII (10h30 - 12h00)**

10h30-12h00

**Monitoring patients with osteoporosis**

- \* Clinical
- \* BMD; precision error / least significant change preferred sites; frequency of follow – up; clinical relevance of changes in BMD
- \* Biochemistry
- \* X-rays

***Bobo Tanner***

12h00-13h00

**Selected clinical case studies**

**Panel Discussion  
(Chair: *Stephen Hough*)**

**C L O S E**

13h00-14h00

**LUNCH**

14h00-16h00

**Clinician Certification Examination**