

# WPT2011 Satellite Programme



## Osteoporosis And Low Bone Mass: Examination And Exercise Prescription In The Real World

| Time                     | Topic  | Speaker                         |
|--------------------------|--|---------------------------------|
| 8.30 – 9.00              | Registration   |                                 |
| 9.00 – 9.30              | 1) Demographics, epidemiology, and pathophysiology of low bone mass and osteoporosis<br>a) Incidence of low bone mass and osteoporosis<br>b) FRAX<br>c) Worldwide statistics for osteoporosis-related fractures<br>d) Functional limitations and disability following osteoporotic fracture  | Karen Kemmis and Marilyn Moffat |
| 9.30-12.30               | 2) Evidence-based functional and disease-specific tests and measures related to osteoporosis and osteoporotic fracture<br>a) Posture tests and measures<br>i) Kyphosis index utilizing a flexicurve<br>ii) Accurate measurement of height<br>iii) Rib-pelvis distance<br>iv) Wall-occiput distance<br>b) Balance and fall risk tests and measures<br>i) Single Leg Stance<br>ii) Berg Balance Scale<br>iii) Four Square Step Test<br>iv) Controversy regarding balance testing in a person with osteoporosis<br>c) Cardiovascular/aerobic and gait/mobility tests and measures<br>i) 2 minute step test<br>ii) Gait speed<br>iii) Timed Up and Go test<br>d) Muscular strength tests and measures<br>i) Chair rise test<br>ii) Supine hip extensor test<br>iii) Heel rise test<br>iv) Toe tap test<br>v) Grip strength/dynamometry |                                 |
| Within above 10.45-11.15 | Break  |                                 |
| 12.30-13.30              | Lunch Break  |                                 |
| 13.30-15.15              | 3) Evidence-based exercise prescription for the prevention and treatment of low bone mass and osteoporosis<br>a) Overview of current guidelines for safe and effective exercise<br>b) Exercises for bone density<br>i) Exercises to increase bone mass in youth  | Karen Kemmis and Marilyn Moffat |

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|-------------|--|---------------------------------|
|             | <ul style="list-style-type: none"> <li>ii) Exercises to maintain bone mass in adulthood</li> <li>c) Exercises for posture correction</li> <li>d) Exercises to improve balance/prevent falls</li> <li>e) Safe movement for those with osteoporosis <ul style="list-style-type: none"> <li>i) Prevention of hip fractures through fall prevention strategies</li> <li>ii) Prevention of vertebral fractures with best posture and body mechanics <ul style="list-style-type: none"> <li>(1) Examination of risky activities of daily living</li> <li>(2) Determination of impairments which may increase risk of vertebral fractures</li> <li>(3) Evidence-based exercise interventions to address impairments</li> <li>(4) Overview of common exercise programs including possible adaptations for those with osteoporosis <ul style="list-style-type: none"> <li>(a) Pilates</li> <li>(b) Yoga</li> <li>(c) Tai Chi</li> </ul> </li> </ul> </li> </ul> </li> </ul> |                                 |
| 15.15-15.45 | Break  |                                 |
| 15.45-16.05 | <ul style="list-style-type: none"> <li>4) Return to function following fracture <ul style="list-style-type: none"> <li>a) Current situation for return to function following hip fracture</li> <li>b) Physical therapy interventions to improve return to function</li> </ul> </li> </ul>  | Karen Kemmis and Marilyn Moffat |
| 16.05-16.30 | <ul style="list-style-type: none"> <li>5) Overcoming challenges of exercise prescription for those with osteoporosis and co-morbidities <ul style="list-style-type: none"> <li>a) Painful conditions preventing optimal exercise</li> <li>b) Common myths and road blocks regarding exercise for aging adults with osteoporosis</li> <li>c) Strategies for successful exercise in the presence of common challenges</li> </ul> </li> </ul>   |                                 |
| 16.30-16.50 | <ul style="list-style-type: none"> <li>6) Nutritional considerations for low bone mass and osteoporosis</li> </ul>   |                                 |
| 16.50-17.30 | <ul style="list-style-type: none"> <li>7) Case studies <ul style="list-style-type: none"> <li>a) Integration of evidence-based examination and evaluation</li> <li>b) Formulation of safe and effective exercise prescriptions for individual patients with osteoporosis</li> </ul> </li> </ul>  |                                 |
| 17.30       | Close  |                                 |