

**ASIAN LOWER LIMB SYMPOSIUM SEPT 2015 | FEET IN SPORTS**

**26 Sept 2015, SATURDAY**

**Singapore Sports Medical Centre | Level 8 Unit 8 | Singapore**

1400 - 1430 **REGISTRATION**

1430 - 1445 Welcome & Opening  
**Mr Jeffrey Tan** | DIRECTOR - Salfordinsole (Asia) Pte Ltd

**Scientific basis to foot biomechanics practice**

1445 - 1515 **Orthoses - From Root to Science**  
**Keynote Speaker : Prof Chris Nester**  
 Across the world Podiatry biomechanics teaching is based on the classical theories of Dr Mert Root and his USA Podiatry Colleagues. Recent scientific research has however demonstrated that the Root model of foot function is not evidence based, and indeed much of the scientific research data tells us it is wrong and it's time to replace it. This lecture will look at the scientific evidence base to the Root model of foot function and argue it's time to move from "Root to Science" to underpin our clinical practice with real science.

**Q&A (5 mins)**

**Feet for Sports**

1515 - 1545 **Ultrasound imaging in lower limb sports injuries**  
**Dr Ng Chung Sien**  
 Musculoskeletal ultrasound is an effective imaging tool for the assessment of both acute and overuse lower limb sports injuries. It is also useful in targeted injections and being portable, ultrasound may be performed on field or bedside to quickly aid diagnosis and treatment. In this presentation, we will discuss the ultrasound findings and its applications for common lower limb sports injuries that physicians and podiatrists may encounter.

**Q&A (5 mins)**

1545 - 1615 **Physiotherapy and High Performance Athletes**  
**Dr Belinda Ting**  
 The chronic ankle pain from an inversion sprain as a result of cuboid syndrome: A physiotherapist's perspective adopting a multidisciplinary approach.  
 Cuboid syndrome is a diagnosis that is difficult to assess due to the lack of evidence in the literature. Its place in the clinical setting especially in the assessment of chronic ankle sprain is often underestimated. This lecture presents a case of an athlete with chronic symptoms after an ankle sprain and the journey to recovery through manual therapy and exercise.

**Q&A (5 mins)**

**1615 - 1630 TEA BREAK**

**Orthotic science and technologies**

1630 - 1700 **Lecture - How the foot really moves during gait**  
**Prof Chris Nester**  
 If the Root model of foot function is wrong, then we need to rewrite our thinking and clinical models of normal and abnormal foot function. This lecture will cover cadaver, invasive in vivo and multi segmental foot model research by Chris and his colleagues, data which provides a new foundation for understanding foot function.

**Q&A (5 mins)**

1700 - 1730 **Effect of foot structure and functional foot stability on running gait**  
**Ms Malia Ho**  
 Statistics have shown that up to 85% of runners experience foot injuries every year. Some of them have been attributed to the mal-aligned foot structure. Some individuals seek treatment to correct their asymptomatic mal-aligned feet in order to prevent these foot injuries. However, the necessity to treat asymptomatic mal-aligned feet has been debated. Studies have not shown consistent evidence that individuals with a mal-aligned foot structure exhibited deviated gait patterns, which may lead to foot injuries. We will look at how to determine the combined effect of foot structure and functional foot stability on the running gait patterns of the foot.

**Q&A (5 mins)**

1730 - 1830	<p><b>New concepts for how foot orthoses work</b>  <b>Prof Chris Nester</b>          With the Root model lacking in scientific evidence we need to formulate new and scientifically sound concepts to underpin orthotic practice. This lecture will apply Newton's laws in an easy to understand and clinically relevant way to demonstrate how it is we can be confident our patients will get better with foot orthoses.</p>
	<p><b>What is the biomechanical evidence base for foot orthoses?</b>  <b>Prof Chris Nester</b>          This lecture will look at the evidence for how choices in orthotic geometry and material directly affect the tissues and structures of the foot, and thus explore the biomechanical evidence basis for using foot orthoses in your clinical practice.</p>
	<p><b>Q&amp;A (5 mins)</b></p>
<b>ASIAN LOWER LIMB SYMPOSIUM SEPT 2015   FEET IN SPORTS</b>	
<b>27 Sept 2015, SUNDAY</b>	
<b>Singapore Sports Medical Centre   Level 8 Unit 8   Singapore</b>	
0815 - 0845	<b>REGISTRATION</b>
<b>Orthotics Geometry   Pressure Mapping   Pressure Off Loading Strategies</b>	
0845 - 0915	<p><b>Going Digital - why going digital and embracing computer aided design is good for practice and patients</b>  <b>Prof Chris Nester</b>          The case for leaving behind the traditional hand crafting of foot orthoses is now firmly established. Better capture of foot shape, better repeatability of orthoses production, more accurate detailing of motion control or pressure relieving features, are all advantages of using a "digital" design and supply process for orthotic practice. This lecture and demonstration will explore current, emerging and future technologies for provision of foot orthoses, to the benefit of patients, clinicians and practices.</p>
0915 - 0945	<p><b>Workshop - Motion Control orthotic design features</b>  <b>Prof Chris Nester</b>          Evidence based motion control design features will be designed and demonstrated using CAD.</p>
<b>0945 - 1000 TEA BREAK</b>	
1000 -1030	<p><b>Using plantar pressure data to optimise plantar pressure relief</b>  <b>Prof Chris Nester</b>          Reducing plantar pressure under the forefoot in MSK and diabetes practice can be achieved by redistribution of load to other areas of the forefoot, and appropriate choice of materials. This lecture will explore how plantar pressure data has been used in the EU funded SMARTIF project to optimise the design of metatarsal bars and choice of forefoot materials.</p>
1030- 1100	<p><b>Workshop - Pressure relieving orthotic design features</b>  <b>Ms Malia Ho</b>          Evidence based plantar pressure reducing orthotic features will be designed and demonstrated using CAD.</p>
1100 - 1200	<p><b>PANEL DISCUSSION of audience questions with Prof Chris, Dr Ng Chung Sien, Dr Belinda Ting and Ms Malia Ho. Moderator - Marabelle Heng (President of Podiatry Association Singapore)</b></p>
1200 - 1215	<p><b>CLOSING : Ms Marabelle Heng - President of Podiatry Association (Singapore)</b></p>
1215 - 1230	<p><b>Celebration Photo Taking</b></p>