



# » NEWS

## » Sportsmedicine Australia 2010 ...

Bigfoot recently attended **Sportsmedicine Australia's conference of Science and Medicine in Sport**. Aply titled "HOT TOPICS IN THE TROPICS" and held in Port Douglas, the temperatures averaged 28–30 degrees celcius everyday! Set amongst the tropical oasis of the Sheraton Mirage the conference is the biggest in Australasia covering all aspects of sport science, exercise and medicine. What is fantastic about a multidisciplinary conference is seeing sports science and medicine working together.

This year I took it upon myself to listen to emerging topics from other disciplines which was refreshing. I challenge every medical specialist to do the same, I'm sure it will revitalise your thinking. Topics ranged from the History of Sports Science/Physiology, DNA sportsmedicine and the advent of gene doping, workshops on ankle and foot mobilisation, childhood obesity—a relevant and growing epidemic, and current ankle and foot papers.

Peter Fricker, a renowned sports doctor spoke on "**genetics and the athlete—science and ethics**". What I thought would be a boring topic was one of the most interesting lectures on the current findings on genetics, the athlete and the possibility for gene doping. Currently there are business's who can screen for the gene ACTN3 which may determine if you will be good at endurance or sprint events. Peter pointed out the ethical dilemma of commercialising for profit when there is a lack of research to support the truth in current genetic screening to identify and develop talent. He further elaborated on the fact that WADA (World Anti-doping Agency) are spending millions on gene research for the threat of gene doping in athletes. The evidence base is growing in sports-gene research and more papers are needed with larger samples to show a reliable trend. A subject certainly worth following for the future.

**Childhood obesity** sessions have been an interest having listened to the winner of the Asics Medal—Tim Olds in SMA Fiji. Auckland's, AUT were well represented with two clinicians Julie McPhee and Amy Curtis presenting there papers on increasing activity in children through activity based homework programmes and the perceptions of NZ children towards activity. Carol Maher, working with Tim Olds gave a controversial presentation on the prevalence of obesity over nine countries. Bigfoot will meet with Julie to ensure we are up to date on this relevant topic. Bigfoot continue to find this subject interesting and the measures we take now on our young will benefit the countries future.

A conference like this lends itself to meeting many people. A chance breakfast with **Mark Doherty, Asics International Product Manager and Designer** was a highlight. From beginnings as a tool setter fixing guns for a distribution company he realised linking footwear with science and medicine was the perfect method to develop shoes. Over 16 years he pursued the medical practitioners and researchers and has changed the way Asics design and develop footwear. Along with three other global developers they set about designing Asics shoes 5 years in advance!

Overall, another well run conference by SMA. The delegates reached a record 450 for a boutique conference and is increasing each year. Every second year SMA have a boutique conference with previous locations being Fiji, Hamilton Island and now Port Douglas. We look forward to 2013 which will celebrate SMA's 50th year in administering sport to Australasian sports medicine and science practitioners—I wonder where this one will be!



Poolside with Jason Mansfield—Asics Managing Director NZ, Arata Ikeda—Asics Managing Director Asia Pacific. Arata is a dynamo and is training for the Noosa ironman. He had just completed a run session in the sweltering humidity before this photo!

## » ISSUE 26 December 2010

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- Leg Length Descrepancy in Ironmen
- Shoe review  
Asics GT-2160

### CLINICS

#### Northcote

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## &gt;&gt; Leg Length Discrepancy in Ironmen

A recent case is worth sharing on the effects of a leg length discrepancy on ironmen athletes. Male, 38 years. Completing his 8th ironman in 2011, no medical history or family history. Injuries include intermittent MTSS (R>L), **right** tibial stress # 2005 and **right** femoral bone stress 2010. He has had numerous physiotherapy, podiatry and sports physician assessments to manage his injuries. He uses formthotics with a slight heel lift for ankle equines and trains in the Asics Nimbus and races in the Asics DS Racer.

On clinical analysis we identified a possible structural LLD and arranged for a CT scanogram. An **11mm right shorter leg** was identified. An 11mm difference can be considered a normal variant, however, in an endurance athlete where there are recurring injuries, and the injuries are predominantly one sided the LLD will have profound effects on impact and loading through the joints, muscles and bone.

Key areas to look for in ironmen are:

1. Asymmetrical hypertrophy of the quads and glutes. In this case the left leg and gluet were significantly larger by compensating with the longer leg when riding
2. Check the saddle. The saddle was bent to the left further reinforcing his compensation by using the longer leg when riding
3. Look for abnormal wear on the cleats. The left cleat was more worn increasing evidence that the left leg was overworking on the ride.

Triathlon exposes the lower limb to large loads from running and cycling. In this case the longer leg was overworking in the cycle which fatigued and caused him to compensate by using the right side more in the run sessions. Subsequently, MTSS, tibia and femoral bone injuries developed on the right (short) side. The client has excellent muscle strength and was able to compensate for the LLD in the early stages of ironman career, but with aging the loads are increasing and more injury is developing, in this

case bone load in the tibia(2005) and femur (2010). A lift has been used in his running and cycling shoes along with new cleats. The bike technician has made changes to ensure he is positioned more evenly. He is feeling more balanced running and riding pain free.



Greater definition on the left leg



## &gt;&gt; Shoe Review – Asics 2160

The analogy “if it ain't broke why fix it” holds true for many runners and the Asics 2000 series is no exception. Over the generations the 2000 series has changed subtly for consistency and kept loyal runners happy. When I look at the 2160 (launching in NZ, Jan 2011) the key improvements have been **improved comfort and ride** (the feel of the shoe from heel contact to toe off). The fit in this category has always been excellent and with solyte cushioning in the forefoot and the additional padding around the outside heel cushioning has certainly been enhanced in the 2160. The biggest change is the **Full Guidance Line** which is a groove running from heel to toe allowing a consistent line of progression from heel strike to toe off. The guidance line combined with Asics IGS (impact guidance system) now completes the components to move the foot from heel strike, to toe off with a smooth ride. The Guidance Line has also shaved approximately 10-15grams off the weight of the shoe improving performance. Guidance Line is used in the current Kayano 16 and Nimbus 12.

So, how did it perform? The Asics 2160 came in its box and I opened it and threw it on straight way for a 60minute jog around Cornwall Park. That's right, not the best way to test a shoe on the first day but a real test if there ever was going to be one. Immediately, the fit was fantastic, and the Solyte cushioning under foot gave a cushioned feel. A kilometre into the run



the weight was a noticeable improvement to previous models. The softer midsole and Guidance Line gave this shoe one of the smoothest rides I have had in a shoe for a while. Thumbs up to the Asics designers! Overall, I was buzzing after the run, felt fantastic, the ride was smooth and the weight reduction surprised me. This shoe will certainly be a winner for 2011 and I am confident it will please most wearers, especially those in the 2150 moving to the 2160. The 2160 will suit the mild to moderate overpronator and both the lighter and heavier runner. See our video in the movie corner at [www.bigfootpodiatry.co.nz](http://www.bigfootpodiatry.co.nz) for a further review of the shoe.