The team behind the team
An in-depth look at the inner workings of the sports medicine team

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Dr J takes a look at the hottest diet in the world right now

Unusual moves
An overview of joint hypermobility and its associated syndrome

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• A day in the life of an AFL sports physiotherapist
• A sneak peek at what a sports dietitian provides to an elite sporting team
• Highlights from the 2013 Asics Conference of Science and Medicine in Sport
• New technology changing the way people view orthotics
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visit sma.org.au/conference for more information
Happy 2014 and happy year of the horse. I’m sure I wasn’t alone in taking a sigh of relief upon the completion of 2013. What a year it was!

Many sports administrators and officials were very happy to put the past year behind them following numerous supplements in sport scandals which exposed a number of flaws in the governance, administration and process management in a number of our elite sporting codes and clubs.

Sadly numerous reputations and careers have been damaged in varying degrees and whilst the repair and rehabilitation process continues at a number of levels, I expect the year has not only placed everyone in Australian sport on notice, but also offered the opportunity to ensure that our houses are in order and the risk of such incidents recurring, is at least diminished. But there is still much to be done.

The past 12 months has also served as a timely reminder to many in the sporting world that the health and welfare of the athlete is paramount and is not to be outweighed by a win at all costs. Sadly this principle was often touted, but apparently less frequently acted upon.

The special ‘drugs and supplements’ issue of Sport Health in late 2013 highlighted some of the key issues facing sporting organisations and individuals. The current issue of Sport Health continues with an insight from a number of sports medicine professionals on their role in the sports medicine team, recognised as a critical component in ensuring the health and welfare of the athlete is preserved.

New SMA Partnership – Victor Sports

On a more positive note, I am delighted to announce that SMA has established a new corporate partnership with Victor Sports. Victor Sports is an Australian owned company since 1993 and provide a comprehensive range of sports medical and rehabilitation appliances. Victor’s goal is to equip athletes and medical professionals with the most advanced sports medical products available. The Victor Sports relationship will see all SMA sports trainer and community education courses supplied with fabulous products from the Victor Sports range. We are very excited to be dealing with Victor Sports which in addition to tape and bandage supplies, also distributes brands such as Theraband and Spenco.

The partnership with Victor Sports presents a number of unique opportunities which will benefit SMA members, sports trainers and students, with a roll out of some of these initiatives expected in the coming months.

Mentoring Program roll-out

Following the success of the SMA mentoring program pilot in 2013, I’m pleased to inform members that the program will be rolled out in a number of states in 2014 and will go hand in hand with other initiatives to make membership even more accessible, particularly for individuals in the early stages of their career development.

The pilot proved to be a great success with many of the early career practitioners who participated, many finding great benefit in having a structured program which connected them to a more experienced SMA member.

Nello Marino
Chief Executive Officer
Sports Medicine Australia
nello.marino@sma.org.au

Follow SMA CEO Nello Marino on Twitter @smaceo

Great study in Feb’s issue of JSAMS on exercise helping in the treatment of depression.

Keep in mind injury risk with the kids returning to school & sport for the new year! @JSAMS article.

Planning on picking up a racquet over this summer of #tennis?? If so, check out the RMA Injury Fact Sheet.

Thanks to the outgoing SMA Pres @MichaelAKenihan, jump on board our new chairman @SMACHairman.
SMA member news

Conference ‘Call’

If you’re looking for a conference to attend this year you are certainly spoilt for choice.

On May 1 the Exercise as treatment for chronic disease Conference will be held at Bond University in Queensland. It will be hosted by the Centre for Research in Evidence Based Practice and The Collaborative Research network: Advancing Exercise and Sports Science. We know that exercise is a highly effective, but poorly used, treatment for a number of conditions including cancer fatigue, cardiac rehabilitation, graded exercise for CFS, osteoarthritis, obesity, lower back pain, falls prevention and diabetes.

Speakers have been invited to provide the evidence and rationale for the different types of exercise for different clinical conditions, practical tips on the ‘how to’ of different disease-specific exercise regimes, evidence of a variety of clinical conditions where exercise has been found to be most effective and discuss some of the important cognitive, social, and logistical issues that form part of an effective ‘exercise prescription’.

Staying in the Sunshine State the Queensland State conference will be held on May 17. SMA QLD are calling on all health professionals whose research is relevant to Sports and Exercise Medicine and inviting them to submit an abstract of their work for consideration for a short podium presentation, a call for these papers will be announced shortly. Once again there will also be an Emerging Researchers Award open to undergraduate and postgraduate students.

If an overseas conference is more up your alley then May and April have two on offer.

First up is the American College of Sports Medicine 61st Annual Meeting. Being held in sunny Florida on May 27, ACSM’s 61st Annual Meeting will connect you with a wealth of distinguished experts in the fields of basic and applied science, education, medicine, research, public health, health and fitness and sports performance, and expose you to cutting-edge research, hands-on workshops, highlighted symposia, and keynote speakers.

Just one month later you can head to Rio de Janerio, Brazil for the fifth International Congress on Physical Activity and Public Health (ICPAPH). Being held from April 8–11 the goal of the ICPAPH is to provide a scientific forum in which delegates from around the world can come together to discuss and debate the latest scientific evidence supporting the contribution of regular physical activity to public health. An emphasis will be placed on identifying areas of scientific knowledge that will be of greatest interest to practitioners and policy makers. In particular the focus will be on outcomes and determinants of physical activity and health. The anticipated outcome of the 2014 Congress is to assimilate, interpret and share scientific evidence with key stakeholders who are in a position to develop recommendations concerning effective physical activity policies and programs within their own jurisdictions.

But if you’re keener to stay close to home SMA’s be active 2014 conference will this year be held in the nation’s capital, Canberra from October 15–18, 2014. be active 2014 will bring together some of the finest speakers from Australia and around the world to present a comprehensive scientific forum on all facets of these fields – from elite performance to community participation in sport, physical activity and their impact on individual and public health.

be active 2014 will showcase the latest developments through keynote and invited presentations, free papers, posters, practical workshops, discussion forums, other ‘events’ and a trade exhibition. It will also provide extensive networking opportunities through an exciting social program.

SMA is also calling for interested researchers to submit their papers for this year’s conference. Head to the website for more information at sma.org.au.
Journal of Science and Medicine in Sport free articles

The January edition of JSAMS has a number of fascinating studies, check out the following which are free to read at jsams.org

The association between sports participation, alcohol use and aggression and violence: A systematic review
January 2014 (Vol. 17 | No. 1 | Pages 2–7)
Anders L. Sønderlund, Kerry O’Brien, Peter Kremer, Bosco Rowland, Florentine De Groot, Petra Staiger, Lucy Zinkiewicz, Peter G. Miller

The influence of winter vitamin D supplementation on muscle function and injury occurrence in elite ballet dancers: A controlled study
January 2014 (Vol. 17 | No. 1 | Pages 8–12)
Matthew A. Wyon, Yiannis Koutedakis, Roger Wolman, Alan M. Nevill, Nick Allen

The effect of exercise repetition on the frequency characteristics of motor output force: Implications for Achilles tendinopathy rehabilitation
January 2014 (Vol. 17 | No. 1 | Pages 13–17)
Five minutes with… Peter Nathan
Sports Medicine Australia Chairman

Tell me a little about your sports medicine background?
I graduated from the University of Auckland Medical School in 1986 but at that time sports medicine training was not available in NZ.

I was also interested in orthopedics and emergency medicine and travelled to London to get more experience in these fields. A course in Sports Medicine was available in London but by that time Australia had developed a good reputation in Sports Medicine and I decided to explore further training in Perth.

I completed the ASMF course and then decided to do further study at UNSW and obtained my masters degree. During this time I also completed my General Practice Fellowship.

After joining SMA (WA) I became involved with our event cover. Eventually I became the medical director for the City to Surf Fun Run and the Rottnest Swim.

I also worked on the match day medical team for the Rugby World Cup and other Internationals. When the Western Force arrived I became the match day doctor for the Super Rugby Games.

Unfortunately other work commitments have meant I am no longer involved in these roles although I continue to enjoy working in a large multi-disciplinary Sports Medicine Clinic.

How long have you been an SMA member?
Since 1994 I think.

What do you think the benefit of being a member provides?
As a doctor you need to belong to many professional organisations.

SMA is by far the best value and most member-oriented group I have ever been involved with.

Its unique multi-disciplinary structure is at the heart of Australia’s ongoing prominence in Sports Medicine. Membership of SMA gives access to exceptional educational and professional development opportunities.

Why did you become a board member of SMA?
I was initially invited to nominate for the WA board by our then executive officer, Anne Johnston.

I enjoyed my time on the Board and served as President until taking on further responsibilities with the National Board.

SMA is a great organisation and I encourage other members to nominate for Board Positions or get involved in our new National Working Groups.

How did your role as chairman come about?
I first became involved with the National Board in my role as President of the WA board.

I then also became the WA National Board Member and subsequently Finance Director.

The membership voted for a new National Board at out AGM in Phuket last year and I retained my place on the National Board.

My fellow National Board Members then voted for me to be Chairman of the new National Board.

What are you hoping to achieve during your time as chairman?
This is an exciting time for SMA and I am privileged to be able to play a part in making sure we get the best outcomes for our organization from our restructure.

I am able to reassure our members that some of the benefits we envisaged from a truly National structure have already started to occur and indeed exceeded our expectations.
Besides sports medicine, what floats your boat?
I also work in emergency medicine and General Practice.
I was sailing during Medical School but then switched to windsurfing when it first developed.
At that time I was also skiing and did some mountaineering and rock climbing.
Now I really enjoy my cycling but a recent accident involved a prolonged break and I am yet to regain my form! I began sailing again last season and am crewing regularly this season and competing in the ocean race series here in Perth.

What’s the best piece of advice you’ve ever received?
You should marry that girl.
(and I did!)

What’s your favorite quote?
No man is an island.

“No man is an island, Entire of itself, Every man is a piece of the continent, A part of the main. If a clod be washed away by the sea, Europe is the less. As well as if a promontory were. As well as if a manor of thy friend’s Or of thine own were: Any man’s death diminishes me, Because I am involved in mankind, And therefore never send to know for whom the bell tolls; It tolls for thee.” – John Donne

Favourites:
Travel destination: Ski Fields.
Sport to play/watch: Play: Sailing especially Ocean Racing; Skiing; and Cycling. Watch: Rugby Union.
Cuisine: My wife Ellen’s cooking.
Movies: Moonrise Kingdom.
Songs: Flight of the Conchords.
Book: Lord of the Rings.
Gadget: iPad.
Our lightest Aircast walking boot ever, AirSelect’s clinically proven SoftStrike and Duplex™ technologies improve comfort, compliance, and outcomes. No other walking boot offers more.

Visit DJOGlobal.com/airselect to experience The Ultimate Combination.
The Paleo diet – what’s in it for you?

Dr J, takes a look at the hottest diet in the world right now.

Just for a change, this Dr J column is written about a topic which I am not an expert on. Why change a good formula? (In fact you can take it as a very good rule of thumb that articles published under my real name in Sport Health are ones on subjects I profess to have expertise in and expect to be taken entirely seriously, with the converse often applying to Dr J).

With that said, last year there were some Dr J articles on concussion and drugs in sport, which need to be considered as serious topics (but for which there are specialists that know more on the topic than I do).

Nutrition is a science that you can gain tertiary qualifications in, which I do not have. However, everyone likes to think that they know the ‘basics’ on diet. We all think we can pick a better Test team than the (expert) Australian selectors, run policy better than the (expert) Prime Minister, know more about which stocks to invest in than (expert) fund managers and have a better chance of selecting the winner of the Melbourne Cup than (expert) bookmakers.

Given we all cook and eat food, there is also a tendency for all of us non-dieticians to think that we know more about nutrition than the experts do.

Actually on this point I’d like to digress to an important observation on football clubs. The one job that everyone at a football club secretly thinks that they could do better than the incumbent is the head coach job (as evidenced by softly spoken comments of “I can’t believe he picked him/subbed him/played him in that position” being heard wherever you travel within the club).

However if anyone happens to verbalise any of these suggestions directly to the head coach then it is almost an automatic sackable offence. In contrast, the majority of the other positions in a football club are appreciated as being of a specialist nature which can only be filled by someone with the appropriate qualifications.

Despite this, the head coach has the authority to tell anyone in their alternate specialist position what to do in their job without sanction (e.g. tell the recruiting manager who to recruit, tell the doctor when a player is ready to come back from injury or tell the marketing manager who will and who won’t be speaking to the media, tell the psychologist which player needs time off for counselling and which player is OK to keep playing & tell the CEO which player needs to be sacked for bad behaviour and which one needs to be retained).

“Given we all cook and eat food, there is also a tendency for all of us non-dieticians to think that we know more about nutrition than the experts do.”

The head coach can also sack any other member of the staff, but in return for this power ultimately will be more likely to get sacked himself. End of digression, but the point hopefully made that we all love to claim expertise in areas other than those in which we are trained.

So now that we’ve established that sport and nutrition are two subjects we are all amateur experts, that gives me the right to pen an article on the Paleo diet as an amateur expert, just as you’ve got the right – as an amateur expert or real expert reading it – to reject whatever I have said about it because you know better.

The Low Carb High Fat (LCHF) diet has existed in a number of different incarnations over the years, which raises the question why am I writing about the Paleo diet rather than the much more descriptive LCHF diet, or the Atkins diet? The answer is that the Paleo diet is the current trendy label, and when I refer to it I’m speaking about it as a concept encompassing its promotion as well as the LCHF recommendations.
Once you’ve looked at the concepts within the Paleo diet you may decide that you sit in the camp that firmly disagrees with everything about the Paleo diet. That’s fine and really is up to you, but what you’ll struggle to disagree with is that it has achieved ‘breakthrough’ status.

“The head coach can also sack any other member of the staff, but in return for this power ultimately will be more likely to get sacked himself.”

People are talking about it, the mass media is writing about it, people are tweeting about it and it’s all over Facebook.

Perhaps those in the nutrition fields will be able to tell me that fad diets come and go every couple of years and sell many books, but the rise of social media in recent years means that whatever the diet of the moment is, it generates far greater penetration into the public consciousness than similar incarnations in previous cycles of the concept.

We have recognised that applied science as a field shouldn’t divorce itself from the real world. It is one thing to scientifically prove, for example, that smoking is bad for you, but another separate challenge to get people to stop. Pure scientific facts don’t tend to move people to act on things like diet, but trendy concepts can create action.

It is a great question to sit back and consider why the ‘basics’ of good nutrition are considered passé or boring by the mass media, but the Paleo diet (which as mentioned is a rehash of earlier diets) is suddenly highly newsworthy. It has everyone talking about diet and what is healthy and what is not. The value of this traction is not to be underestimated.

Hakan Alfredson didn’t invent eccentric exercises for the Achilles tendon, but presented them in a way that gave the idea traction and got it going as a popular concept. Although they are merely early converts to low carb – high fat, megastars of the sports medicine world like Tim Noakes & Peter Brukner are ensuring that almost everyone in the sports science and medicine world knows about this diet and many people are disciples of it.

So what has the evidently popular Paleo diet got going for it? By far its biggest strength is in the myth buster category. One of the myths it busts is the low fat con job the food industry has been pedalling for a number of years. To market products as healthy on the basis of being ‘low fat’ (or worse ‘low cholesterol’!) has left many people utterly confused as to what is healthy and what is not. In these foods you’ll find that the low fat version has simply substituted the fat for sugar.
Given that once it’s in the body sugar can convert easily to fat, at best it is misleading to promote a ‘lower fat higher sugar’ variety of a product as a healthy alternative. At worst, this misinformation means that, at least for some people, they will put on more weight when they choose the low fat variety over the full fat. This is because sugar is less filling than fat and there may be a greater likelihood of overeating.

Whilst I would like to think that personally I have never fallen for this three card trick, there is no doubt there were probably food categories in the recent past (e.g. yoghurt) where out of reflex I have purchased the ‘low fat’ variety, considering it a ‘healthier’ choice, when the truth is I have most likely exercised poor judgement.

The fact that Paleo rejects this demonization of all fats means it gets a tick in the plus column from me.

The second myth buster concept associated with the wider promotion of the Paleo diet has been the exposing of the pharmaceutical industry as an overly zealous promotion of statins. I’ll resume a defence of the correct place of statins in a minute, but I am certainly sold on the concept that the drug companies who make statins (and their non-independent experts) have allowed science to be corrupted by sales.

On the basis of seemingly poor or compromised scientific evidence, there have been recommendations made that individuals with low risk of heart disease be prescribed statins, or even the entire population over a certain age.

From what I have read that appears to be scientific, statins do seem to significantly lower risk of dying from cardiovascular disease (CVD) but in return increase risk of dying from other diseases.

“One of the myths it busts is the low fat con job the food industry has been pedalling for a number of years.”

However you can’t get into debates on this topic without getting dragged down into specifics of what each individual Paleo disciple believes. Of course, if you substitute sugar (a carb) for olive oil (a fat) you are probably going to get generally healthier outcomes.

If on the other hand you substitute brown rice (a carb) for something containing trans fats (a fat) then you are probably going to get generally less healthy outcomes.

“The fact that Paleo rejects this demonization of all fats means it gets a tick in the plus column from me.”

You can go around and around in circles with examples and counter-examples along these lines. If an individual wants to swear that they have turned their life around by ‘going Paleo’ and by this they mean reducing their intake of processed carbs, drinking less alcohol, exercising more, sleeping regular hours and giving up social drugs, then I will take my hat off them for turning their life around but would also point out that there is nothing that they have done that a mainstream (non-Paleo) nutritionist wouldn’t have recommended to them in a consult.

When it comes to the scientific evidence that assesses a more formal comparison of low carb diet versus low fat diet, from what I have read (as a non-expert) there does appear to be substantial RCT evidence that carb restriction is better than fat restriction for getting weight loss in an overweight population.

The likely mechanism/explanation for this is that overweight people often struggle to control portion size and this appears to be easier to do on a high fat low carb diet than the reverse.

So if this is your status (overweight) and your desired end point (weight loss) then there appears to be good scientific evidence in support of the Paleo approach. However does this translate into LCHF being a ‘healthier’ diet for those people of normal body weight? Not that I have yet seen.
The fact that enormous Asian populations have a diet based on a major carb (rice) and low rates of obesity suggest that LCHF is not a universal human requirement for weight control (even though it might be effective for many individuals).

And does it translate to lower mortality for those on a LCHF diet? Again not that I have seen. Many of the Paleo disciples are quick to criticise statins on the basis that they ‘only lower total cholesterol’ and that this does not necessarily translate into lower mortality.

However I haven’t yet seen the evidence that LCHF leads to greater longevity than other healthy diet options.

“If on the other hand you substitute brown rice (a carb) for something containing trans fats (a fat) then you are probably going to get generally less healthy outcomes.”

Yes, it is intuitive that weight loss would lead to lower mortality but it isn’t a given. It was intuitive that low fat diets would lead to people becoming less fat, but the Paleo people will swear that this is not true, so something intuitive should not be accepted without adequate study.

It certainly is hard to prove a link between diet and mortality, yet it is well established, for example, that high red meat intake is associated with higher risk of dying from bowel cancer. Lowering intake of red meat would be one of the first things you might do if your end point is living longer, but it is something that many Paleo experts will insist you can increase as it is low carb. It is a further example – according to me – that diet is complicated and it is unlikely a simple ‘rule’ is a cure-all for future medical problems.

My current belief is that there is almost certainly no simple mantra by which you can define the ‘healthy’ diet for all people. Yes, if you have Coeliac disease or are gluten intolerant then avoiding carbs based on wheat is going to make you healthier and a diet that resembles the Paleo one is going to be the best one for you based on medical indication.

The concept that all carbs are bad for everyone just doesn’t wash with me in light of what I read to date. If you narrow the attack to sugar specifically or sugary drinks like soft-drinks then maybe a low-sugar diet makes a lot of sense in general. But this is certainly not where Paleo ends, as traditional nutrition is also anti-sugar. The battleground between mainstream nutrition and the hard-line Paleo advocates is over pasta, rice, fresh fruit and bread, and again I have not seen any solid evidence to suggest that they are universally bad for all people. I accept that for overweight people trying to lose weight, and then these are potentially danger items that can lead to overeating. But they can also be included in a healthy diet such as the Mediterranean diet which seems to have an ‘evidence-base’ (cohort plus some RCT) as being associated with good health. Pasta, bread and fruit (anti-Paleo) are staples in the Mediterranean diets (along with olive oil, fish, vegetables, nuts, yoghurt and wine which are Paleo staples). There are plenty of Greek and Italian people with unhealthy eating habits, but there does seem to be some evidence that their traditional diet is very healthy. That is, to the extent that these things can be measured. Diet is complicated and I appreciate it is hard to categorise an individual’s diet as healthy or unhealthy when it may be made up of, say, 32% healthy choices, 24% unhealthy choices and the remainder of uncertain status.

“The likely mechanism/explanation for this is that overweight people often struggle to control portion size and this appears to be easier to do on a high fat low carb diet than the reverse.”

The lack of evidence of particular diets as being universally superior to others means that Paleo risks falling into the category of ‘fad’ based on anecdotal evidence. Just as one major snowfall in the US doesn’t disprove global warming, a retweet of someone who went on the Paleo diet and lost 15 kgs doesn’t prove that high fat is better than high carb for all people. Social media may be responsible for the greatest triumphs of the Paleo movement (e.g. calling out the low fat/high sugar and other myths) but it also means that scientific proof can be glossed over (e.g. show me an RCT or even cohort study where Paleo knocks off Mediterranean diet for long-term health outcomes).

Another major component I strongly believe that all of the great diets of the world have is a love of food, specifically unprocessed food. Healthy eating habits are generally based on liking food rather than seeing a huge percentage of available food being something terrible that you have to avoid.

Yes, maybe we can all agree on heavily processed food (‘junk’) as being bad for you. The concept that all fats are bad for you (successfully debunked by Paleo) is only as silly as the concept that all carbohydrates are bad for you (promoted by Paleo). Many foods (including alcohol, meat and maybe dairy and pasta) appear to be very healthy in moderation and very bad in excess.
“Exercise, on the other hand, is a no brainer. Regular exercise = good and no regular exercise = bad.”

Some foods (fish and most vegetables) appear to be healthy in any quantities. Although there are exceptions to any rule you write – if you live near a polluted sea (Venice) and the fish contains toxins then maybe it is unhealthy to eat it too much, even though fish is generally a healthy meat.

It is complex and a matter of finding both balance and specific individual advice, with the healthy diet unlikely to ever be able to be reduced into one or two dot points. Which is a good reason why we have experts in nutrition and you need to study for many years to be fully qualified.

Exercise, on the other hand, is a no brainer. Regular exercise = good and no regular exercise = bad. It is only when you reach extreme levels of exercise (professional level contact sport, extreme sports) that you can question whether a negative/positive balance threshold has been crossed.

With exercise it is mainly about implementation (getting people active) rather than knowing what is good for you (almost all activity in moderation). It is also worth remembering that the evidence appears to suggest that exercise is the factor far more associated with superior health outcomes than diet which – to be fair – is associated more with normal (or abnormal) body weight than exercise is. If you want to have medium body weight, you need to focus on diet. If you want to be healthier (i.e. live longer) your diet has far less of a role than whether or not you exercise regularly.

So please look at Paleo and what it represents and try to take some positive learning points from it (that substituting fat for sugar is not a healthy trade-off) rather than an assumption that a simple concept (that carbs are bad for you) has cracked a diet code for everyone to successfully live by. If the Paleo concept is the trigger for you to take a healthy diet seriously and generally live in a much healthier fashion across the board (including exercising, being a non-smoker and using alcohol in moderation) than you would have otherwise, then by all means there is a lot in it for you. If it is an excuse for you to eat a lot of high fat food and think that this is the single magic bullet to good future health (neglecting exercise and being a non-smoker which are the closest things to real magic bullets), then it is potentially a dangerous fad.

Dr J

The opinions expressed in Dr J are the personal opinions of the author.
The team behind the team

2013 was a year in which the lines blurred a little when it came to the role of sports medicine staff. But out of every crisis comes opportunity, *Sport Health* went to four sports medicine professional’s to get their take on the role each discipline plays in preparing an elite athlete.

There is no doubt that 2013 will go down as a difficult year for sports medicine professionals at the elite level. In a number of cases the roles of support staff in a team environment seemed poorly defined.

“Doctors, allied health personnel and coaches all need to work as a collaborative team with the welfare of the player as the number one priority.”

While some took a back seat, others seem to have been handed more responsibility, and the lines between what each member of the support staff provide became blurred.

Last year several prominent team doctors in a number of different sports were excluded from medical decisions in relation to player welfare and safety. There are numerous cases where medical decisions related to player health and wellbeing have been initiated without medical consultation by sports administrators who have no clinical qualification in such matters.

SMA believes that the primacy of the team doctor role deserves the upmost respect, and that all allied health personnel and coaches employed in a professional sporting context refer to the team doctor on any medical matters.

The concept of medical decisions being made by non-medical personnel is archaic and fraught with danger. Any administrator taking these decisions should be well aware of the medico legal consequences and liability for litigation against them by the player and club.

Doctors, allied health personnel and coaches all need to work as a collaborative team with the welfare of the player as the number one priority.

The Essendon saga in the AFL and ASADA’s investigation into the Cronulla Sharks in the NRL shows that this team approach is not functioning as it should.

So how should it function? *Sport Health* asked four people at the coal face for their thoughts.
The role of the team doctor  
Peter Larkins looks at the role of the doctor within a sporting team.

In the everyday world it is the medical practitioner who has ultimate responsibility for the health and well being of the individual. In sport it is no different.

For many decades Australia has been recognised worldwide for its highly developed medical care of teams and athletes. This heritage was born from the development of an enviable medical care plan for the 1956 Melbourne Olympic Games and led to the formation and evolution of SMA into the organisation as we all know it today.

"In the everyday world it is the medical practitioner who has ultimate responsibility for the health and well being of the individual. In sport it is no different."

In 2013 there is no doubt the media and sports world has turned its focus on medical governance issues and called into question some practices, which have been used in the prescription and administration of products to young athletes. What became clear during that publicity is that in almost all circumstances the ‘medical’ aspect of those athletes care was no longer under the direction of a medically qualified sports doctor or sports physician. I have always been a strong advocate for the role that multidisciplinary sports medicine team plays in supporting sport at all levels in Australia. At the elite level it is commonplace for the sports medicine team to include a physiotherapist, exercise physiologist, massage therapist, dietitian, podiatrist, psychologist, sports trainers, other ‘sports science’ personnel (‘fitness staff’) and an appropriately qualified medical doctor.

Underpinning that multidisciplinary support is the crucial role the medical practitioner plays in overseeing the health of the athlete and ensuring that the welfare of the individual is paramount at all times. A medical practitioner is best placed to assess health issues and is the only individual able to legally prescribe medications and make clinical assessments when there is a health problem arising, be it an injury, illness or mental health concern.

The team doctor must establish a thorough medical profile of his team members. This is based on a complete medical questionnaire addressing areas such as injury and illness background, medications, allergies, family history and any specific requirements. A structured physical exam can detect more obvious areas in need of follow up. There are other potential areas involved in developing that profile depending on the nature of the sport.

"….the crucial role the medical practitioner plays in overseeing the health of the athlete and ensuring that the welfare of the individual is paramount at all times."

The role of the team doctor is extremely diverse and variable in Australian sport. Commitments to the team can be as basic as attendance at competitive events only, but more often these days there may be training sessions, meetings, report writing and travel attached to the role. The role of the team doctor has never been a Monday to Friday, 9 to 5 role.

Whilst it is not necessary to have played the sport in which one works, it is most helpful to know the sport well and understand the culture of the code or organisation. It is always a challenge to separate ones emotional attachment to a team from medical decisions but at all times the doctor must act in the best interests of the athlete (patient) and not be influenced by external parties or issues. It is a fine art, developed only with experience, but the days of the ‘fan doctor’ must be eliminated from sport.

I am concerned that there are clear examples in Australian sport where the role of the medical practitioner has been undermined and even usurped by non-medical individuals and that sporting codes and associations have allowed this to happen. I would stress that it is a minority of individuals working as ‘performance enhancement scientists’ who have sullied the reputation of the industry as a whole.

"Whilst it is not necessary to have played the sport in which one works, it is most helpful to know the sport well and understand the culture of the code or organisation."

There are many genuine, ethical and well qualified scientists, especially exercise physiologists, who have always, and continue to, work cooperatively and harmoniously with medical practitioners in providing optimum care and performance preparation for elite athletes.

However, the doctor has ultimate responsibility for athlete health and welfare issues including the approval of administration of all substances that may influence an athlete’s metabolism and performance whether that substance is a ‘supplement’ or medication. The concept of ‘injectable’ agents should unequivocally be considered a medical issue. This model needs to be encouraged and implemented consistently across all sport codes at any level.

Nevertheless there is continuing concern due to the apparent marginalisation and undermining of authority of sports doctors within professional sport.
In the past 12 months several prominent team doctors in a number of different sports have been excluded from medical decisions in relation to player welfare and safety.

There are numerous cases where medical decisions related to player health and wellbeing has been initiated without medical consultation by sports administrators who have no clinical qualification in such matters.

“The concept of ‘injectable’ agents should unequivocally be considered a medical issue.”

I believe the primacy of the team doctor role deserves the upmost respect, and that all allied health personnel and coaches employed in a professional sporting context refer to and confer with the team doctor on any medical matters.

The concept of medical decisions being made by non-medical personnel is archaic and fraught with danger. Any administrator taking these decisions should be well aware of the medico legal consequences and liability for litigation against them by the player and club.

“…in Australia we have a fantastic culture of sports medicine care delivered at all levels of community involvement – and we should be proud of it.”

Doctors, allied health personnel and coaches all need to work as a collaborative team with the welfare of the player as the number one priority.

The subversion of the team doctor’s expertise is a troubling development especially when it relates to issues such as player injury management, nutrition supplementation and concussion.

The message for sporting teams is pretty clear – it is now unacceptable for the coaching, fitness or sport science staff to override the doctor on a medical issue.

Right now we are in the midst of a very sad era for some sporting administrators who seem ignorant to the ethical and clinical principles which dictate doctors’ decision making. In recent times the trend is increasing despite publicity surrounding this issue.

I firmly believe that club doctors and other appropriately qualified health personnel are best placed to provide advice and direction for players and clubs in all issues that involve player welfare.

“The concept of medical decisions being made by non-medical personnel is archaic and fraught with danger.”

This also means there is an obligation on all club doctors to keep their sports medicine knowledge up to date and be familiar with (but not experts in) all important areas relevant to fitness, nutrition, recovery and the physiological demands of the sport they work in. Doctors must also familiarise themselves with the WADA drug code, keep track of the annual changes made to the code and learn how to seek answers to any enquiry put to them on medication or drug use.

This facilitates the collaborative team approach and allows professionals to at least “sing from the same song sheet, even if you don’t know all the words”!

I would also advise that all clubs should demonstrate due diligence when employing personnel, regardless of their role. This is especially important in matters of player health and wellbeing.

Whilst I acknowledge the need to seek a ‘competitive edge’ will always exist in sport, the importance of player safety and welfare should never be overlooked in the pursuit of success.

It is both a privilege and a challenge to work as a team doctor. It is never as glamorous as the public may perceive but in Australia we have a fantastic culture of sports medicine care delivered at all levels of community involvement – and we should be proud of it.
Working as a Sports Science Practitioner in an elite sport environment

Ian Gillam PhD, Asp, AEP, ESSAF, FASMF, gives us an insight into the role of a sports scientist.

Ian is currently an industry development officer for Exercise & Sports Science Australia and he is an accredited exercise physiologist and a sports physiologist. He has been a consultant sports scientist to a number of elite sports teams, including the AFL Melbourne Demons, Tennis Australia and Scotch College and Xavier College Rowing teams. He is a consultant to the Drapac Professional cycling team. He is a Fellow of Sports Medicine Australia and Exercise and Sports Science Australia.

Introduction

Working as a sports scientist in a Sports Institute, with an elite professional team, such as the AFL, NRL, soccer, or cycling, or with a professional athlete is the dream of many exercise and sports science practitioners. Improving the performance of elite athletes by applying cutting edge sports science research and putting this into practice using innovative methods is a challenging and exciting career.

“Liaising with video technicians and information technology specialists, massage therapists and sports trainers may also be part of the over-arching role of the sports scientist.”

As a sports science practitioner, who is fortunate to contribute to the ultimate team or athlete success, this is extremely satisfying and will no doubt result in some memorable, lifetime experiences.

While this may be exciting, the reality is that many sports science positions are highly competitive, often demanding, requiring long, irregular work hours, which may involve weekends away with the team. While exciting, may also be seen as disruptive to a normal family and social life.

As a result, sports science positions probably suit individuals who have good family and friend support networks in place or those without family commitments.

“It is important to recognise that the over-arching director of the sports medicine and science support team is the team medical coordinator, whose primary responsibility is to ensure the health and well-being of the athletes in the team.”

The role of the sports science practitioner within the sports medicine and science team

In most professional sports teams, such as the AFL, the sports science and medical team will generally consist of a sports medicine director and medical support staff, a sports science co-ordinator or high performance manager, strength and conditioning coaches, physiotherapy staff, a sports nutritionist, a sports psychologist and increasingly GPS and training load technician and IT support staff – who are now generally referred to as sports analysts. It is important to recognise that the over-arching director of the sports medicine and science support team is the team medical coordinator, whose primary responsibility is to ensure the health and well-being of the athletes in the team.

Under the direction of the coaching and sports medicine staff, the role of the sports science coordinator or high performance manager, is primarily to work with the coaching team to determine how best to achieve the required physical performance, skill and tactical goals. The role of the high performance manager is to set individualised physical fitness targets, based on their team role and playing position, and a player’s previous fitness levels.

“Further, the primacy of the team sports medicine director has also been emphasised, following the concerns raised about the possible use of injectable pro-hormone products in players in the AFL and NRL.”

Based on these priorities the high performance manager would then develop a periodised training program in consultation with the medical and strength and conditioning staff, for each member of the team over the pre-season and in-season competition schedule. Injury rehabilitation programs for players recovering from off-season surgery including modified training programs and injury prevention programs will also need to be developed, in consultation with the sports medicine and physiotherapy staff, as required.

Team and individualised nutrition and hydration programs need to be established with sports nutrition staff, including on-going monitoring of body weight and composition targets. Working with the coaching staff, key game skill development objectives also need to be prioritised for individual athletes within the team.

Daily and weekly monitoring of athletes procedures need to be established to determine how athletes are responding and adapting to the training load, and recovering from sessions.
“High performance managers in professional sports, such as the AFL can command up to $150–300K/year…”

Regular consultation avenues with medical and supporting allied health staff need to be established to discuss the needs of individual athletes. Most AFL teams have daily monitoring systems in place to record resting heart rates, levels of general and training fatigue, health and well-being, sleep quality and quantity and muscle or joint soreness for each player in the team, which is then used to modify the training plan on a daily or weekly basis.

Physical performance tests, and power testing will also be used to monitor players on a seasonal and even weekly basis to assess their match recovery. Additional GPS monitoring including heart rates during training, speeds and distances covered by key players will also provide data on the player’s training responses and adaptation.

Blood measures including haematology, blood glucose and other biochemical measures, nutritional and hormonal status may also be used at critical phases of the training cycle. Factors including chronic injury, body composition using DEXA, nutritional status, biomechanical or psychological factors are used to determine if these factors may be limiting an athlete’s performance or increasing their risk of injury.

Sports scientists will also be required to evaluate and make recommendations on the potential value of altitude training to enhance sea level sports performance, develop hydration and cooling strategies when exercising and competing in the heat and advise on how best to incorporate practices to minimize the effect of long-haul air-travel and travelling across time-zones to prepare for competition or to assist with recovery.

Sports scientists may also be required to communicate with specialist consultant staff including sports podiatrists, motor control and learning scientists and sports biomechanists to provide an assessment of an athlete’s key skills and how these may best be improved or developed.

Increasingly coaches in team sports, such as the AFL, are focusing on a player’s decision making and visual processing skills to improve team performance and indeed even provide information on what position a player might be best suited to.

Liaising with video technicians and information technology specialists, massage therapists and sports trainers may also be part of the over-arching role of the sports scientist.

Accreditation of Sports Science Practitioners and their Scope of Practice.

In response to the recent Senate inquiry into the practice of sports science and drugs in sport, ESSA has developed a draft scope of practice for sports science practitioners and reviewed its code of professional conduct and ethics to ensure that sports scientists understand the boundaries of their role, and the primacy of the duty of care of the athlete.

Further, the primacy of the team sports medicine director has also been emphasised, following the concerns raised about the possible use of injectable pro-hormone products in players in the AFL and NRL.

Unfortunately, the brand of sports science as a profession has been publically damaged by this episode. ESSA has been strongly arguing through the Senate Inquiry and the media that only accredited sports science practitioners should be employed by professional sports teams and national sports organisations.

This will provide uniformed regulation of the profession and the required duty of care to athletes.

Developing a career as a Sports Science Practitioner

Full-time salaried positions in sport science at National or State Sports Institutes are now highly competitive and require at least a Masters Degree, and most likely a PhD, in one or more of the disciplines of sports science or strength and conditioning.

In addition significant hands-on experience working with high performance athletes will be required. To establish a career working as a sports science practitioner requires commitment, selecting relevant quality practicum placements, volunteering your time to work with experienced sports science practitioners and developing your networks in the industry.

To gain some experience in the industry, working with local teams or in junior assistant roles in a professional sports team for little pay and long hours can be frustrating, but may provide the experience and contacts you will need to step into better paid, senior role.

Your commitment, demonstrating your skills and developing your networks with those who are likely to be your future employers are essential for success in the sports science industry.

Build up your resume while undertaking post-graduate studies in sports science and seek advice from an experienced mentor with wide industry knowledge.
Carefully examine sports or teams that offer the best opportunities based on your experience and expertise and get advice on which area of research may provide you with the most marketable skills for the future.

Developing a unique set of cutting edge knowledge and practical skills will open doors. Sports science practitioners with around 10 years of experience in the industry, with a track record of success can begin to earn above average salaries or consulting fees.

High performance managers in professional sports, such as the AFL can command up to $150–300K/year, however it must be emphasised that the expectations are that these are 24 hour/7-day roles, mostly limited-term contracts which are highly dependent on performance.

As many sports scientists will be well aware, a change of coach often means a change in support staff, so these positions while commanding good salaries are often very insecure, which may result in periods of unemployment, until the next round of contracts.

I wish you all the best in your developing a career as a sports science practitioner.
Recognising one of sports best kept secrets – Accredited Sports Dietitians

Melinda Jacobsen, Executive Officer, & Alison Garth, Accredited Sports Dietitian – Sports Dietitians Australia (SDA), details what a sports dietitian provides to an elite sporting team.

2013 was an interesting year in Australian sport – a year where the extensive use of questionable supplements and alleged use of injectable pharmaceuticals in elite sports was exposed, along with the equally questionable so called ‘experts’ at the forefront of its administration. Apart from the obvious breaches to ASADA/WADA codes, the unknown future health risks to athletes involved, and the lack of qualifications of the ‘scientists’ involved, another central issue to the transgressions appears to be poor governance within some clubs.

“…positive change is underway with sporting codes developing new protocols and policies to ensure the events of 2013 are not repeated.”

It’s interesting to note that anyone applying for a hospital dietetics job would expect a position description that outlines the expectations of the role and the key attributes required to deliver on them, a rigorous recruitment process, management and peer support, and a performance appraisal and review process. Sadly, to date, this has been severely lacking in many professional sporting clubs.

Fortunately, positive change is underway with sporting codes developing new protocols and policies to ensure the events of 2013 are not repeated. Central to these new frameworks is the role of Accredited Sports Dietitians as an integral member of the high performance team in professional sporting teams.

It is acknowledged that there is now a high level of competition with who can, and do, offer nutrition services in the sporting world. However, only Sports Dietitians Australia (SDA) Accredited Sports Dietitian members are appropriately qualified to support teams and athletes to perform at their very best in a safe and ethical way.

As a network of qualified dietitians*, with further training and practical experience in sports nutrition, SDA members are at the forefront of evidence-based, scientific nutritional support. SDA Accredited Sports Dietitian members participate in a rigorous assessment process to attain this qualification and be recognised as such. This includes regular audit and re-accreditation every 3 years. SDA's Career Development Pathway is highly regarded and valued by our members and recognised nationally and internationally. It sets the benchmark for knowledge and practical experience required to be called an Accredited Sports Dietitian. Members with higher level academic qualifications and practical experience are recognised as Advanced Sports Dietitians.

“SDA continues to collaborate and advocate with SMA and ESSA around the role of Accredited Sports Dietitians as the ‘go-to people’ for the prescription of sports supplements in professional clubs.”

Further, the network of Sports Dietitians is strong and collegiate, with nutrition best-practice information and ideas shared freely ensuring integrity and a high moral compass amongst the membership. Only safe and ethical practices safeguard the wellbeing and performance of any athlete.

The role of an Accredited Sports Dietitian is to maximise performance through nutrition by providing practical strategies, guidelines and policies as well as support to athletes and staff regarding the strategic timing of food and fluids. Integration of supplements at key time points will be driven by clear, evidence based supplement policies and protocols. The Accredited Sports Dietitian will have a fundamental role in the management of body composition to help athletes achieve and sustain individualised targets to enhance performance and minimise injury risk.

“SDA Accredited Sports Dietitian members participate in a rigorous assessment process to attain this qualification and be recognised as such.”

Accredited Sports Dietitian responsibilities in a team setting are many and varied and can include:

- Anthropometric testing and body composition manipulation.
- Development and maintenance of evidence based supplement program and injury nutrition protocols.
- Communicating emerging research, sports nutrition ‘hot topics’ and issues to players and staff.
- Providing individual, performance focused, nutrition plans for players in consultation with key staff.
- Travel and match day nutrition planning to name just a few.
SDA has developed a series of resources for sporting teams, clubs and organisations to assist them in recruiting the best possible sports nutrition staff.

These include proposed position descriptions with expected roles and responsibilities of sports nutrition professionals within sporting organisations, and activities and outcomes sporting organisations can expect when engaging the services of an Accredited Sports Dietitian.

SDA supports moves by clubs to have a multidisciplinary supplement panel/committee established which drives policy and recommendations. Not only can an Accredited Sports Dietitian play an important role in the decision making of the panel, it also ensures transparency within the club and prevents the actions of individuals overriding the overall supplement policy of the club.

Finally, SDA continues to collaborate and advocate with SMA and ESSA around the role of Accredited Sports Dietitians as the ‘go-to people’ for the prescription of sports supplements in professional clubs.

There is a nation-wide network of Accredited Sports Dietitians which can be found on SDA’s website – www.sportsdietitians.com.au. Perhaps once a ‘best kept secret’, Sports Dietitians are now at the forefront of sports nutrition practice in Australia.

*The minimum academic requirements for SDA Accredited Sports Dietitians are a Nutrition and Dietetic Qualification (undergraduate or postgraduate), a minimum of 2 years clinical experience as well as further sports nutrition accredited studies.

The sports physiotherapist’s role

Kane Spagnolo, West Coast Eagles Melbourne Based Physiotherapist, gives us a more hands on description of what the game day physiotherapist’s role entails.

I am now entering my seventh year working with the West Coast Eagles, my third as the Melbourne based physiotherapist. My role on game day starts approximately 3 hours before the game when I meet the staff and team at the hotel. Depending on who is playing, some of our players prefer treatment and taping done prior to arriving at the ground and I usually assist our senior physiotherapist, Paul Tucker, with this. For some it’s superstitious whilst for others it allows them that little bit more time to prepare and receive extra treatment.

Everything we do on game day is largely about routine and as such it is planned to the minute from the time we depart the hotel until the moment the team boards the plane to go home.

Once we arrive to the ground we set our equipment up quickly and continue with our pre-game treatment and taping until bounce down. From an outsiders point of view it may look somewhat chaotic with players and staff moving around the change rooms in all directions but everyone has a specific job to do and role to play.

Preparation is paramount, perhaps even more so for away games because if we are missing something when the game starts there is no running back to the rooms to grab it. A lot of this preparation work is put in the week ahead of the game by our head sports trainer, Corinne McGowan, who ensures that we have our necessary supplies available in the right places and are adequately prepared, so that on game day we can be as efficient and effective as possible.

“….or one of our doctors Gerard Taylor or Alex Strahan, will act as our primary response on field whilst I watch the replay screen to see if I can assist the senior medical staff in making a primary diagnosis by providing as much information on the mode of injury.”

Generally the atmosphere in the early stages of pre-game is a relaxed one. At times there will tend to be a bit of banter amongst the players getting taped and treated, some more so than others depending on the personality. It’s important the atmosphere at this stage is relaxed as it’s a long day, however we remain focused on making sure we are efficient with what limited time we have to ensure that we get all our tasks done.

There comes a time in our pre-game preparation, usually post the first address from the coach, where the ‘switch is flicked’ and everyone is focused on the game ahead. We attend to any other ‘running repairs’ that might be required but generally this is the time we use to put any final touches in order, prior to running onto the ground.

During the game communication is a big part of what we do. On the bench Paul and I are constantly talking with one another, and if a player is felled or struggling, Paul, or one of our doctors Gerard Taylor or Alex Strahan, will act as our primary response on field whilst I watch the replay screen to see if I can assist the senior medical staff in making a primary diagnosis by providing as much information on the mode of injury.

If the injury is serious enough, we work out how much time is required to further assess and treat the player and a message is relayed to the bench staff so the necessary adjustments to the rotations of our players can be made by the coaches in the box.
Communication between one another is again the key, and generally Paul will indicate whether he or I will take the player to the change room with the doctor whilst the other continues to keep his eyes on the ground to follow the play.

The call to substitute a player is one that is not made lightly and the coaches give the medical staff as long as they can to make an informative, medically reasoned decision.

The final call on a player’s ability to continue is made by our sports doctor’s and any acute injury management will be carried out by one of us with the assistance of our change room sports trainers.

On occasions we get multiple injuries and this is where the challenge really lies in performing our job effectively. Regardless of what happens we always remain level headed and communicate clearly and calmly with other staff members and players.

I think this is a crucial part of being an effective sports physiotherapist and, to the untrained eye, perhaps a somewhat underestimated part of our job. Game day will always throw so many distractions our way, whether it comes from the crowd or on ground. It’s an important skill to be able to focus on the immediate task at hand and block that external stimulus out, whilst still maintaining a sense of alertness with what is happening immediately around you.

Post-game whether we win, lose or draw we go about our regular routine for recovery straight away to ensure the players receive the best level of care.

From a physio’s point of view when the game finishes we catch up with each player to see if any further post game management is required prior to the team departing the ground so any initial rehab measures can be put in place for the team recovery session the following day.

The final call on a player’s ability to continue is made by our sports doctor’s and any acute injury management will be carried out by one of us with the assistance of our change room sports trainers.

Even though it’s an exhausting day by the time the team leaves, I thoroughly enjoy the experience that each game provides. I feel extremely privileged to work with such a professionally run organisation and hopefully 2014 will be the year that West Coast can resurge to become one of the more formidable teams in the AFL once again.
ACSMS 2013 recap

Overview

Thailand provided the warm weather and tropical location, while attendees to the biannual Asics Conference of Sports Medicine and Science provided some brawn and plenty of brains. ACSMS 2013 was a tremendous success attracting 448 delegates, all of whom embraced the casual nature of the conference. There was fascinating research and Hawaiian shirts a plenty as most delegates spent the conference dressed exclusively in shorts and T-shirts.

We were treated to some insightful presentations from our Keynote and Invited speakers, Craig Purdam setting the pace with his Refshauge Lecture on the evolution of the current understanding of tendon pain and pathology, and what challenges there are for the future. He was joined by a number of cutting edge presentations from Dr Matthieu Sallery, Professor Per Aagaard, Dr Charlotte Suetta, Professor Jiri Dvorak and Professor Kim Bennell.

We were also fortunate enough to have an abundance of high calibre free paper presentations that resulted in both a strong program and a tough job for our awards judges. Congratulations to Professor Wendy Brown from the University of QLD who took out the major prize of the Asics Medal for the Best Paper Overall for her research in population risk factors in women and the need for greater investment in physical activity promotion across the adult lifespan.

As always the social program provided some wonderful networking opportunities for delegates, along with some unique entertainment in the form of the tropical downpour that accompanied the Welcome Reception and the appearance of the baby elephant at the conference dinner.

Sports Medicine Australia would like to take this opportunity to thank our partners and trade exhibitors for their involvement with ACSMS 2013. Most notably we thank Asics, our major partner for this conference, and our other partners including DJO Global, The Athlete’s Foot, Sixty4, Kinetic Orthotics, NSW Sporting Injuries Committee, the AIS, Club Warehouse, the Thailand Exhibition and Convention Bureau, ASPETAR and the ASMF Fellows. A big thanks must also go to the Conference Chair Kay Copeland and the Conference Organising Committee of Professor Garry Allison, Dr Anita Green and Professor Andrew Cresswell.

All conference abstracts will be published online as a supplement to the Journal of Science and Medicine in Sport. Some keynote and invited presentations were also videoed during the conference and will be available shortly to view on the SMA website.

We hope those who attended enjoyed both the conference program and atmosphere and we look forward to seeing you in Canberra for be active 2014 in October this year.
The Athlete’s Foot has developed the world’s most comprehensive fit analysis tool, FITZI®.

Find out more theathletesfoot.com.au/fitzi
“Attending and presenting at be active 2012 in Sydney was a highlight of my year, so I was rapt to be presenting again in Thailand for ACSMS 2013. A well-run conference with a relaxed, friendly, but focused atmosphere, the ACSMS 2013 team kept the event running seamlessly throughout all four days. This allowed us to direct our attentions squarely on the high quality research on display. In my opinion, ACSMS 2013 was just the right mix of professional and playful. Honestly, is there any other event where you’d see a world-renowned professor presenting a keynote lecture in bare feet? Looking forward to being involved at many more SMA conferences for years to come.” – Jacquie Tran

The social program started with a bang with drinks and live food stations enjoyed by all on the Hilton Phuket Arcadia Resort and Spa lawn.

Some of the sports podiatrists catching up at the conference dinner.

Claire Thomas from Asics getting ready for a Shoe Fitting workshop.

Alex Chan, Maria Constantinou and Mark Brown at the Welcome Reception.
Upon seeing the 2013 edition of the Australian Conference of Science and Medicine and Sport would be held in Phuket, Thailand; it was impossible to find a reason to not attend. As with previous SMA conferences there were keynotes and studies presented from a wide range of disciplines and fields, meaning there was always an interesting session to attend. One of my highlights from the conference was seeing Professor Jiri Dvorak’s keynote on the ‘Football for Health’ initiative by FIFA. It truly highlighted the passion for sport at the community and national level, and showed how this passion could be harnessed to send positive health messages. The team at SMA never disappoints with their events, with ACSMS 2013 being no exception; and when an elephant shows up at the conference ending dinner, you know you’re in for a good time.” – Aaron Fox
Awards

Congratulations to the following 2013 Australian Sports Medicine Federation Fellows Award winners:

**Asics Medal – Best Paper Overall**

**Wendy Brown**  
University of Queensland

Population attributable risk factors in women: Should we be investing more in the promotion of physical activity?  
Co-Authors: T. Pavey, A. Bauman

**New Investigator Awards**

**Asics Ken Maguire Award for Best New Investigator – Clinical Sports Medicine**

**Ebonie Rio**  
Monash University

Exercise to reduce tendon pain: a comparison of isometric and isotonic muscle contractions and effects on pain, cortical inhibition and muscle strength.  
Co-Authors: D. Kidgell, L. Moseley, A. Pearce, J. Gaida, J. Cook

**John Sutton Award for Best New Investigator – Exercise and Sports Science**

**Ceri Atkinson**  
University of Western Australia

Systemic adaptations to exercise training in skin microcirculation in humans.  
Co-Authors: D. Thijssen, G. Birk, H. Carter, T. Cable, E. Dawson, D. Green

**NSW Sporting Injuries Award for Best New Investigator – Injury Prevention**

**David Opar**  
Australian Catholic University

A novel field test of eccentric hamstring strength: a reliability and injury study.  
Co-Authors: M. Williams, T. Piatkowski, A. Shield

**Best Paper Awards**

**Asics Best Paper – Clinical Sports Medicine**

**Kate Webster**  
La Trobe University

Comparison of hamstring and patellar tendon autografts for ACL reconstruction: 15 year follow up of a randomized controlled trial.  
Co-Authors: J. Feller, N. Hartnett, W. Leigh

**Asics Best Paper – Exercise and Sports Science**

**Adam Semciw**  
La Trobe University

Are swimmers prone to deloading related dysfunction of gluteus medius and gluteus minimus?  
Co-Authors: T. Pizzari, R. Green

**Asics Best Paper – Injury Prevention**

**Christopher Carty**  
Griffith University

Reactive stepping behaviour in response to forward loss of balance predicts future falls in community-dwelling older adults.  
Co-Authors: N. Cronin, D. Nicholson, G. Lichtwark, P. Mills, G. Kerr, A. Cresswell, R. Barrett

**Asics Best Paper – Physical Activity and Public Health**

**Wendy Brown**  
University of Queensland

Population attributable risk factors in women: Should we be investing more in the promotion of physical activity?  
Co-Authors: T. Pavey, A. Bauman

Mark Doherty, GM of Product for Asics Oceania with Professor Wendy Brown, winner of the Asics Medal.
Asics Award for Best New Investigator – Physical Activity and Public Health

**Vaughan Nicholson**  
*University of the Sunshine Coast*

Six weeks of unsupervised WiiFit game play improves balance and gait speed in independent older adults aged 65–84 years.  
Co-Authors: B. Burkett, M. Mckean

Women in Sport Award

**Wendy Ey**, Women in Sport Award

**Meghan Casey**  
*University of Ballarat*

Effectiveness of a program for adolescent girls linking physical education with community sport and recreation.  
Co-Authors: J. Harvey, W. Payne, A. Telford, R. Eime, A. Mooney, J. Smyth

Poster Awards

Asics Best Poster – Clinical Sports Medicine

**Lachlan Giles**  
*La Trobe University*

Can diagnostic ultrasound measure quadriceps size and vastus medialis to vastus lateralis ratio in patellofemoral pain syndrome?  
Co-Authors: K. Webster, J. McClelland, J. Cook

Asics Best Poster – Exercise and Sports Science

**Mia Schaumberg**  
*University of Queensland*

Oral contraceptive use for manipulation of menstruation in active women and competitive female athletes.  
Co-Authors: D. Jenkins, X. Janse de Jonge, L. Emmerton, T. Skinner

Asics Best Poster – Physical Activity and Public Health

**Toby Pavey**  
*University of Queensland*

Physical activity and surgery in mid-aged women.  
Co-Authors: T. Kolbe-Alexander, G. Peeters, W. Brown
ASMF Fellows

During the conference the ASMF Fellows enjoyed a lovely evening by the pool at the Hilton Phuket Arcadia Resort and Spa for the annual ASMF Fellows Dinner.

Congratulations to long time SMA member Deidre McGhee who was awarded Fellowship at this dinner.

Dr Deirdre McGee

A longstanding SMA member, Deirdre has a Bachelor of Applied Science in Physiotherapy and completed her PhD in 2010. A Senior Lecturer at the University of Wollongong’s School of Health Sciences, Deirdre has also had numerous roles with elite and community sporting teams including the Commonwealth games in 2006.

Deidre’s research passion is breast support and bra fit and she has attended every SMA conference since 2007, regularly presenting a paper or poster. A recipient for a number of awards for excellence in the pursuit of injury prevention, Deidre also joined the New South Wales SMA Board in 2013.

Save the date

be active 2014

National Convention Centre, Canberra
15–18 October, 2014

The conference will incorporate the:
- Australian Conference of Science and Medicine in Sport
- National Physical Activity Conference
- National Sports Injury Prevention Conference

For more information visit the conference website at www.beactive.2014.org
This Shoe
Guide Rails deliver on-demand support
Revolutionises traditional stability by allowing your hips, knees, and joints to move within their unique motion path while you run—all without traditional posts.

Changes
Ideal Heel aligns your stride
Encourages a more natural and easy foot strike.

Everything
Plush Upper conforms to your foot
No-sew tunnels integrate laces into upper for a wrapped fit that’s customised to different foot shapes.

Comfort is
Super DNA delivers adaptable cushioning
Provides 25% more cushioning than BioMoGo DNA and smartly adapts to your every stride.

Redefined
Ideal Pressure Zones distribute pressure evenly
Transforms your foot’s comfort by distributing pressure evenly in the heel, mid-foot, and forefoot.

RISE ABOVE
THE RUN
BROOKSRUNNING.COM.AU/TRANSCEND

DISCOVER THE SCIENCE BEHIND THE TRANSCEND AT BROOKSRUNNING.COM.AU/STRIDESIGNATURE
The growth of ‘stem cell tourism,’ whereby patients head overseas to receive a stem cell treatment has driven the Australian Government’s National Health and Medical Research Council to issue a warning to doctors in relation to stem cell treatments.

The warning stated that:

“The science of stem cells is a field with great potential for treating injury and disease. Reports in the media suggest that stem cell treatments are close to being available to patients to treat a wide range of diseases, and these reports influence public perception. However, further research is required to create safe and effective treatments. The reality is that other than the use of haematopoietic stem cell transplantation for blood and certain immune related disorders, the majority of stem cell treatments are still in the early stages of research and development.”

Sports medicine is an area in which stem cell treatments seem to be more common, a simple google search of “treating sports injuries with stem cells,” produced over 16 million hits.

Doctors are being urged by the NHMRC to make sure their patients are aware of all the risks associated with stem cell treatments, and not to be swayed by “advertisements and self-promotion material by clinics offering unproven stem cell treatments.”

The document from the NHMRC also included quick tips for medical practitioners. Some of those tips were:

**Encourage** your patients to make well informed decisions about their healthcare, emphasising the importance of considering scientific evidence when making these decisions.

**Offer** to help interpret and discuss any information that the patient uncovers in their research, or that the stem cell centre provides to the patient.

**Ask** the patient whether they have considered participating in any stem cell clinical trials that may be available for their condition.

The NHMRC directive is clear that it encourages further clinical trials on Stem Cell therapy (for conditions such as osteoarthritis) but it strongly discourages any practitioner from promoting Stem Cell as a ‘proven’ therapy (e.g. for O/A) in order to convince a patient to pay to undertake it. The NHMRC advice goes so far as to recommend that practitioners not using Stem Cell who have heard of other doctors making unscientific claims about the efficacy of Stem Cell treatment should consider reporting these doctors to AHPRA.

This advice from the NHMRC does not mean that sports medicine practitioners who are offering Stem Cell treatment should necessarily cease doing so. What it does mean is that they need to be very careful about the advice that they provide to patients – making sure that it is made clear that this is an experimental field at this stage with quite limited scientific evidence. It would be prudent to have this stated on any consent form that the patient signs prior to any procedure and also to have the made clear on any practice website that advertises Stem Cell treatment.

What it does do is flag that AHPRA may consider it a breach of professional standards to make unjustified claims about expensive treatment that is offered.

It would be interesting to see whether this advice – relevant to the field of Osteoarthritis management – is extended to Orthopaedic Surgeons who continue to perform ‘cleanout’ arthroscopies for O/A which have lately been shown to be ineffective compared to sham surgery in a number of RCTs.

For further information, direct patients to the following resources:

**The Australian Stem Cell Handbook**
http://www.stemcellfoundation.net.au/patient-information/handbook

**International Society for Stem Cell**
http://www.closerlookatstemcells.org/

**ISSCR patient handbook available at:**

**Stem Cells Australia website available at:**
http://www.stemcellsaustralia.edu.au
AS part of a number or rule changes announced last year the AFL announced they were cutting the number of trainers for each club on game days from six to four.

This was in addition to the AFL also announcing each team would now only be allowed one runner instead of two. Both moves were designed to unclutter the field of play, with the reduction of trainers partly an attempt to stop them illegally delivering messages to players.

While the AFL and AFLPA have both been on record stating they believed reduction in trainers would have “negligible impact on players’ intake of fluids during a match”, the AFL Trainers Association have a different opinion.

Ray Spiteri, the most recent president of the trainers’ association, told the Age Newspaper, that club sports scientists were increasingly demanding the individual fluid requirements of players, whether that be water or sports drinks, were meticulously met.

“We don’t instigate going out on the ground. We are told when to go out and, since these sports scientists have been involved in football, they say it’s imperative we have to be out there giving these guys drinks and keeping their hydration up,” he said.

“Certain players need to have extra fluid in them during games as well as after games.

“It [the reduction] is going to be a problem … it does need addressing, for sure. There is an issue there. We are under the hammer that often, to get the water out to the players quick enough. We used to get told off. Some of the players would come in and say, ‘They [trainers] are not out to us enough with the water.’

“I don’t know how this [ruling] is going to help that. The sports scientist would say, ‘These guys need X amount of water during the game’. You need to go out to them, especially in the warmer weather.

“It won’t be too bad in the cooler months but, once they are running around, they still need water.”

On the AFL’s argument about a cluttered field, Spiteri said: “I understand that but we really only run out when a goal is kicked because the game is that quick.”

Interim secretary of the AFL Trainers Association, and former AFL trainer, Ian Robinson said that it’s not just the on field aspect of being a trainer that needs to be taken into account.

“Having previously worked at AFL Club for over 20 years myself: It’s not just all the hard work on the field, but even harder work pre and post-match, that needs to be considered,” he said.
FootyFirst
Keeping community Australian Football players on the field by preventing leg injuries

Alex Donaldson, Research Fellow at Australian Centre for Research into Injury in Sport and its Prevention (ACRISP), Federation University Australia, SMB Campus, Ballarat, provides an update on the NoGaps research project.

Regular readers of Sport Health will recall an article in the autumn 2011 issue in which Professor Caroline Finch introduced the NoGAPS (National Guidance for Australian Football Partnerships and Safety) project.1 NoGAPS aims to reduce the gaps within player safety in Australian Football by directing significant research attention towards understanding: how sports safety policy is set, particularly at the community level; how consensus can be reached among sports safety experts in the community and sport governing body settings; and how evidence-based safety guidelines can best be developed, packaged and delivered to community sport.

“This current NoGAPS-related article now describes how the research team went about developing FootyFirst.”

This article was followed in the spring 2011 issue of Sport Health by an article from Dr Alex Donaldson in which he expanded on some of the thinking behind the NoGAPS project.2 This article discussed the importance of developing both the right program content and the right program delivery process to maximise the public health impact of sports injury prevention programs among community Australian Football players. (See Figure 1).

Figure 1: Principle behind the NoGAPS project
"The NoGAPS research team is now compiling the evaluation data from a variety of sources..."

This current NoGAPS-related article now describes how the research team went about developing FootyFirst—an exercise-based warm-up program designed specifically for delivery by community Australian Football (AF) coaches to reduce lower limb injuries among their players. Following the steps of the Translating Research into Injury Prevention Practice (TRIPP) framework (See Figure 2), before starting to develop FootyFirst, the NoGAPS research team set out to confirm the importance of lower limb injuries among community Australian Football players as a priority injury prevention target (TRIPP Steps 1 and 2). To do this Professor Finch and her team compiled and analysed published injury data from studies in junior and adult community Australian Football, supplemented with previously unpublished data from a 2007–2008 adult community football injury cohort study. Injuries were ranked according to most common body regions, nature of injury and mechanism. The results showed that lower limb injuries were the most frequent injury in community Australian Football and were generally muscle strains, joint sprains and superficial injuries. These injuries most commonly resulted from incidental contact with other players, being hit by the ball, or from ‘overexertion’. Based on the findings from this study it was concluded that it was likely that a high proportion of lower limb injuries could be prevented and they should therefore be a priority for injury prevention in community Australian Football.

"The result was a combination of dynamic stretches and evidence-informed strength and conditioning exercises, and jumping, landing and changing direction activities targeted at preventing ankle, knee, hamstring, groin and hip injuries."

The next step in developing FootyFirst was then to review the considerable literature available on exercise programmes aimed at reducing lower limb injuries in Australian Football and other running-related sports (TRIPP Step 2). This work, led by Dr Nadine Andrew, concluded that an exercise programme could be an effective lower limb injury prevention strategy and there was the need to develop and test interventions in well-designed population-based trials with an emphasis on promoting intervention uptake and adherence and, hence, intervention effectiveness. A multi-disciplinary research team—consisting of Professor Jill Cook and Associate Professor Belinda Gabbe from Monash University, Professor David Lloyd from Griffith University and Associate Professor Warren Young from the University of Ballarat—then used the results of this literature review, in conjunction with their considerable clinical experience and knowledge of community-AF to create the exercises and progressions that were included in the first draft of FootyFirst (TRIPP Step 3). The result was a combination of dynamic stretches and evidence-informed strength and conditioning exercises, and jumping, landing and changing direction activities targeted at preventing ankle, knee, hamstring, groin and hip injuries. The program was designed to be delivered by a football coach (or fitness coach, sports trainer or an enthusiastic player) and to be performed by players in 20 minutes at football training twice a week as a replacement for the traditional warm-up.

The first draft of FootyFirst was further refined by members of the AFL’s sports scientist, physiotherapist and medical officers associations who agreed on the appropriateness of including the proposed exercises and their various progressions in FootyFirst. Potential end-user groups (community-AF players, coaches, fitness coaches, sports trainers and administrators) then provided feedback about the fit between FootyFirst and their community football settings including potential barriers and facilitators to widespread program use and the types of resources that would be needed by coaches and players. Trials of FootyFirst were conducted to ensure it could be
understood and delivered by community-AF coaches and completed by players. Finally, the research team then reviewed the entire program during discussions focused around the Diffusion of Innovations principles of relative advantage, compatibility, complexity, trialability and observability before expert graphic designers and editors were engaged to develop FootyFirst resources.

“…lower limb injuries were the most frequent injury in community Australian Football and were generally muscle strains, joint sprains and superficial injuries.”

Since the start of the 2012 community Australian Football season, the FootyFirst implementation team (Dr Donaldson, Tim Lathlean and James Tantau) has been working closely with the administrators, clubs and coaches of the Southern Football League (SFL) in metropolitan Melbourne and Football Geelong to develop and implement league-specific delivery plans to maximise the uptake of FootyFirst among clubs, coaches and players in each league. As a result, high profile FootyFirst launches were held before the start of the 2012 (Geelong) and 2013 seasons (Geelong and SFL) and all clubs were provided with copies of the FootyFirst resources (coaching manuals, posters and DVD’s) and access to training in how to deliver FootyFirst. In addition, a comprehensive FootyFirst communication strategy—including presentations at league trade expos and coaches meetings, a twitter account, direct emailing to club coaches and administrators, and regular FootyFirst articles in league football records and newsletters— was undertaken and a FootyFirst mentoring program to enable participating clubs to get expert assistance in implementing FootyFirst, was initiated.

The NoGAPS research team is now compiling the evaluation data from a variety of sources (including injury surveillance, several online surveys, observations of training sessions and interviews with coaches and club administrators) in an effort to assess the effectiveness of both FootyFirst as an injury prevention program, and of our delivery plan in reaching community coaches and encouraging and supporting them to implement FootyFirst with their players.

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Queensland podiatrist Dan Everson is changing the way people view orthotics.

The owner of Kinetic Orthotics is pioneering his own world first approach to prescribing foot orthotics.

Everson’s therapy uses state of the art computer integrated technology and a combination of foot morphology and kinetic clinical data to custom design and manufacture orthotics for individual patients.

A three dimensional model is then used to show practitioners and clients the ideal orthotic device in advance and demonstrate its unique fit for the patient’s needs.

Everson’s accompanying research has enabled him to develop an evidence based approach to orthotics that minimises pain and optimises foot function by boosting the body’s natural healing process.

“Children who never liked sport are now eager to play after trialling our therapy, while elderly patients who had given up activities such as golf and bowls are now enjoying the outdoors again,” Everson said.

Not content with changing the way he does business, Everson is set to change orthotic treatment around the world having just been awarded a world-wide patent for his Kinetic Orthotics approach. He is also involved in teaching and training programs with both Queensland University of Technology (QUT) and SMA.

The association with QUT has seen Kinetic Orthotics develop an education program for postgraduate students, explaining the theory and tests of this new approach.

Advanced interactive technology is used to support the online program that engages the learner and can be accessed on iPads, androids, personal computers and laptops.

Everson has spent 17 years researching and developing the Kinetic approach to orthotic therapy, refining the application to deliver the best outcome for the patient, regardless of their age, disability, disease or injury.

“I have kept on this path because I love seeing people’s lives transformed in this way,” he said.

One of those transformed lives is that of three-year-old Logan Humphreys.

Logan has a rare genetic disability, could not speak and had only just started walking.

Everson noticed the little fellow had been prescribed the incorrect orthotics for his condition and asked Logan’s mum Hayley, who worked at the centre, if she would be prepared to put her trust in him to help.

“Logan has low muscle tone and weak muscles,” Mrs Humphreys said.

“His previous orthotics were inflexible, so he couldn’t bend his ankles and he walked very stiffly. He was really unhappy and didn’t want to walk at all.

“We knew nothing about orthotics or how they worked and it’s been amazing to see how Dan has corrected Logan’s walk with the right orthotics and made it easier for him to just be a little boy,” she said.

“I have kept on this path because I love seeing people’s lives transformed in this way.”

Mrs Humphreys said Logan also loved riding his bike which had a handle at the back so he could be pushed and the five-year-old was now starting to push the pedals.

“Dan has been helping us by treating Logan for free of charge and the difference he has made to a little boy’s life is incredible – we are so grateful that he met us that fateful day and cared enough to offer his help.”

Everson’s second passion is helping to fight the sedentary lifestyle experienced by many of our ageing population and the associated spiralling health costs and subsequent emotional costs to the greater community.

He works closely with fellow podiatrists, health practitioners, educators, government insurance providers and the wider health industry to continually advance the understanding of orthotic design.

“For more than 20 years my goal has been to boost people’s mobility with simple, evidence based intervention,” he said.
The keys to business success

To help make the most of your business, Sport Health brings you the following business insights.

How to write an effective design brief

Brought to you by Papercut

Design briefs are produced to ensure absolute clarity, understanding, and agreement from all stakeholders. An effective design brief is critical to the success of a design project. A good brief will focus on the outcomes and business objectives of a design rather than aesthetics. Aesthetics are the responsibility of your chosen designer.

If you use these questions as a guide, giving as much information as possible, then your design brief will be 90 per cent complete, with the remaining 10 per cent to come from meeting with your designer.

These tips will help you nail the design brief, which in turn will help your designer deliver what you want.

**What does your business do?** – Provide a paragraph or two of background information about your business along with a brief history.

Tip: Never assume that the designer will know anything about your company. Be clear and concise and avoid jargon when replying.

**What is your current situation?** – Explain what’s happening to bring about the need for this project. For example, a new product launch that requires advertising, or new business branding.

**What are the objectives?** – What do you want to achieve? Make your objectives specific and the results measurable.

Tip: Providing old promotional material will assist the designer.

**Who are your competitors?** – Who are they and what sets you apart from them?

**Who is your target audience?** – The knowledge of your target audience is vital for your brief. Demographics – the age, gender, income, employment, geography, and lifestyle of those you want to reach. This will greatly affect the look and feel including colour, style and effectiveness.

Tip: If you have multiple audiences, rank them in terms of importance.

**How will the design be used?** – What sort of media do you intend for your design, printed flyer, direct mail, web, social media, signage or television? How will the audience interact with it?

**What are the specifications?**

- What size/format is the design going to be?
- Where is it going to be printed/used?
- Will it be printed or screen based material and where will it be used/viewed? i.e., inside or on the web, business cards, stationery, on your car, on a mobile phone or a website, does it need to fit into a wallet or a brochure rack?
- What other information should the designer know in regards to specifications?

Tip: The copy (text) and pictures used in a design are as crucial as the design itself. It’s helpful to clearly state who is going to be providing the copy and pictures if needed. You may need a professional copywriter/photographer – ask your designer for some recommendations.

**What is your budget?** – Providing a cost estimate up front allows designers to customise the specifications of the job to your budget. This can save time, money and resources. Professional design is an investment in your business that offers value over time, it’s worth spending the money to get it right from the start.

**What is the time scale/deadline?** – Give the designer a detailed schedule of the project and set a realistic deadline for the completion of the work. You should take into account the various stages of the design project such as consultation, concept development, production and delivery.

Tip: Rushing design jobs helps no one, and mistakes can be made if a complex job is pushed through without time to review. However, there are times when a rush job is needed, and in these cases it’s best to be honest and upfront about it.

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Insurance for all ages – Protect your retirement

Brought to you by Davidsons

With recent amendments to the Superannuation regulations, it is now a requirement that employers contribute 9.25 per cent of an employee’s wages into a complying superannuation fund. The contribution rate is scheduled to increase to 12.00 per cent by 1 July 2019.

However, younger employees, generation ‘X’ and ‘Y’, cannot access their superannuation until at least age 60, being more than 30 to 40 years away.

Accordingly, superannuation is generally of little interest to younger population.

With the right investment strategy and a long term investment outlook, the younger generation should focus on becoming Superannuation Millionaires by retirement.

However, a more immediate strategy for younger superannuation members should be obtaining adequate personal insurance cover.

Personal insurance cover is important on two fronts: Protecting parents’ retirement saving and lifestyle, and protecting younger members families into the future, particularly when there are children and mortgages involved.

Superannuation and specifically Self Managed Superannuation Funds, are an effective means to hold insurance, particularly life insurance and in some instances, total and permanent disability insurance and income protection cover.

Consider the financial effect on your family’s financial position and potentially your retirement savings in the event of a serious illness to one of your children.

In such instances, parents may need to forgo their retirement plans, either continuing to work beyond the desired retirement date, or actually returning to work.

Throughout their lifetime, parents have protected their own personal financial well-being by incorporating an effective personal insurance strategy in the event of serious illness or death.

However, if a younger adult child becomes seriously ill, their parents may be called upon to provide financial assistance, right at that time when they are looking to retire and can therefore least afford it.

Insurance cover is cheaper and easier to obtain when the child is young and healthy.

Once the insurance is in place, the member’s superannuation balance, via regular employer superannuation contributions, can fund the insurance premiums. This is particularly attractive to younger members who:

- Don’t focus on potential and future health issues
- Don’t necessarily have the cash flow to fund the premiums
- Cannot access their superannuation until age 60.

As the child passes the next stages of life and has the financial obligations of a family, mortgages and the like, the insurance cover would already be in place.

Both the child and their parent can have peace-of-mind that in the event of a serious illness or death of the child, and the child’s immediate family will be financially sound and further, the parents’ retirement savings will be preserved.

Actions

As protecting the financial well-being of your family is also an important matter, contact your Davidsons’ team member or Graeme Crofts, director of Davidsons’ Personal Risk Insurance team, to discuss you and your children’s insurance strategies.

Contact details: graemec@davidsons.com.au
03 5244 6864

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Using Twitter for business

Brought to you by Great 2 Tweet U

Social media expert Daniel Hoy has these simple tips for getting the most out of twitter.

If someone tweets and nobody is listening, does that tweet exist? This is a much easier question to answer than the old, “if a tree falls in a forest and nobody is around to hear it, does it make a sound?” conundrum.

The simple answer is yes it exists, but if you’re tweeting to a small number of followers it won’t really make a noise.

While Facebook is more commonly used by a business to connect with clients, or patients, twitter is a little harder to master.

The best way to approach twitter is to look at it as your very own news service. Report on interesting things that occur within your business, retweet interesting studies or news someone in your industry posts.

There is no magic formula to succeeding with twitter, or any form of social media for that matter, but here are a few tips that may help you get a better handle on the medium, and maybe even help grow your business.

Building followers

There are two main ways to do this, follow lots of people within your industry, including any high profile ones, and tweet a lot.

In terms of the number of tweets again no magic number exists, but if you plan ahead and perhaps schedule at least one to two a day, any re-tweets or spontaneous tweets will add to your presence.

Content is king

Make sure your tweets are interesting and engaging. Using twitter to link to longer stories that may be on your website or blog is a great way to increase your click rate. And in most cases this is the way most business’ use twitter. As an example of good content a physio could tweet a short video once a week explaining how to tape a different body part.

Save time

You can do this by using software like hootsuite, or tweetdeck. Both of these sites allow you to schedule tweets, and see multiple feeds. You can view your tweets, re-tweets and followers on one screen.

Both also provide some good analytics which allow you to monitor which tweets and make sure you’re getting the response you want.

Timing

Make sure you tweet when your audience is most active. For twitter this seems to be between 1pm and 3pm on weekdays. As with most aspects of social media this is not an exact science and a little trial and error should be employed on your part to find the best time for you.

A picture is worth a thousand words

As in Facebook land, images are king. People will generally click on an image link when they see it pop up in their twitter feed. It’s engaging and much more likely to be re-tweeted and shared.

It’s also a great way to grab a little more space in the twitter feed as twitter now shows an image preview.

Last thoughts

While your content, timing and frequency of your tweets is an important aspect of twitter success, don’t leave your personality at the front door. Just because you’re tweeting from a business account doesn’t mean you can’t have some fun. Ultimately people want to be sure they are following the person behind the business, rather than a faceless entity.

Great 2 Tweet U are the social media specialists who manage your Facebook and Twitter presence. Headed by Daniel Hoy, a journalist with 15 years’ experience, they can help you to produce a consistent, well planned message that helps grow and promote your brand. Drive sales, build brand awareness, increase customers or simply connect more regularly with the customers you have. For more information email daniel@great2tweetu.com.au
Bounce Back Edition: The Back Pain Personal Health Plan

SMA member and specialist sports physiotherapist Trish Wisbey-Roth has co-authored her first book. She gives SMA members a sneak peek in this edition of Sport Health.

It’s been described as the “next generation of back care book,” so it makes sense that this modern update of a back care self-help book, was written in a very modern way.

“The Back Pain Personal Health Plan was written with one purpose in mind, to return control to the person with the pain.”

Back care specialist, and SMA member, Trish Wisbey-Roth wrote The Back Pain Personal Health Plan, with a co-author based on the other side of the world in London.

“Back pain has been my area of interest and expertise for most of my career. I did a presentation in London before the Olympics on lower back pain and my co-author Nick Sinfield had the first draft of a book and he asked me to have a look at it,” she said.

“I really liked the way he had made it quite simple and easy to understand the psycho-social aspect of back pain, but felt it needed a bit more on ergonomics, posture and a functionally progressed exercise program.

“I offered to help add the exercise aspect and over 8 months we used share point to write the book. I’d work on it overnight in London. It was a great way for us to both collaborate on the book.”

Wisbey-Roth has over 25 years’ experience as a Physiotherapist and lectures internationally in the areas of diagnosis and rehabilitation of lumbar-pelvic and hip regions. She also created the Bounce Back system of active rehabilitation which is now taught in over 50 clinics across Australia. For Sinfield a Charted Physiotherapist based in the UK, The Back Pain Personal Health Plan was written with one purpose in mind, to return control to the person with the pain.

Treating back pain can often be an incredibly complex scenario, but what Wisbey-Roth and Sinfield have managed to do is make the book simple enough for the lay person to understand. Their blend of knowledge has enabled them to create a book the average person can pick up and use.

“Their blend of knowledge has enabled them to create a book the average person can pick up and use.”

“We didn’t want a book just for the health professional that a lay person would struggle to read, so we’ve tried to combine both of those aspects and kept the end user in mind,” Wisbey-Roth said.

“It can be used by someone on their own, and we wanted that to be the case. With the rise of social media, google, and other self-help books, it was important the book was easy to use for anyone with back pain.
As well as being simple to use for the everyday person in the hands of a health professional it can enhance the care and treatment they are able to provide a patient.

“It’s also a great tool for osteopaths, physiotherapists and other allied health providers who can use it as a tool when treating patients. They can send them home and say “read chapter two and three and do the exercises on a certain page,” Wisbey-Roth said.

“It also allows people to do what they are directed to do and then give feedback to their health professional during their next visit. And from there the health professional can then tailor the program further; it’s possible to make it a very individualised program.”

Wisbey-Roth used her many years of experience to make sure that people who purchased the book could do every exercise with just a ball and a thera-band.

“As well as being simple to use for the everyday person in the hands of a health professional it can enhance the care and treatment they are able to provide a patient.”

“It was a challenge to melt the exercises down to just the key ones that people would be likely to do. People can do any of them anyway at any time, at home or on holidays.”

The book can be ordered now online at www.findbounceback.com, and will be in book stores from May.

“I presented recently at the Low Back Pain Conference in Dubai and handed the book out, and the response from people within the field has been really positive. One of them called it “the next generation back care book,” she said.

“So far the response has been very positive.”

The following pages contain an extract from The Back Pain Personal Health Plan.

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<td>Optimising 3D Biomechanics of the Pelvis and Lumbar Spine - Assessment and Treatment</td>
<td>$685.00</td>
</tr>
<tr>
<td>26th July</td>
<td>Saturday</td>
<td>2715</td>
<td>Sydney</td>
<td>Optimising Biomechanics in Cycling</td>
<td>$400.00</td>
</tr>
<tr>
<td>27th July</td>
<td>Sunday</td>
<td>2717</td>
<td>Sydney</td>
<td>Optimising Motor Control of the LumboPelvic and Complex</td>
<td>$400.00</td>
</tr>
<tr>
<td>23rd-24th August</td>
<td>Sat / Sun</td>
<td>2716</td>
<td>Melbourne</td>
<td>3D Assessment and Treatment of the Cervical Spine, Thoracic Spine and Ribs</td>
<td>$685.00</td>
</tr>
</tbody>
</table>

A series of invitation-only Bounce back information cocktail evenings, hosted by Trish Wisbey-Roth and introducing her new book, the Bounce back edition of “The Back Pain Personal Health Plan”, will be taking place in conjunction with the 2014 course dates.

Email us at courses@wisbey-roth.com to find out more and to reserve your place.
The Back Pain Personal Health Plan

The goal of this programme is to get you started in the right direction. The philosophy behind it is based on the premise that your pain can be affected by both your mind and your body. This programme will give you a solid foundation of knowledge and back pain relieving exercises. By committing to this simple exercise programme, you’ll establish healthy new habits that you can build on throughout your life.

A properly structured PHP will help you to:

- A new understanding of how our spine and body works
- Develop a greater understanding of the causes of pain,
- Fully consider your own needs and wishes,
- Provide you with a range of skills to improve the condition,
- Reduce your pain,
- Improve your general health and most importantly,
- Improve your quality of life.

How is a personal health plan designed?

This programme was written for everyone who is struggling with neck and back pain in their everyday life, and for people who have tried all sorts of treatments or medications and yet have seen no lasting results, or worse yet, have experienced a steady increase in their pain and decline in their everyday function.

The Personal Health Plan is owned and designed by individual sufferers. It is up to each person to decide what information and skills he/she wishes to include in his/her Personal Health Plan.

The PHP establishes short, medium and long-term goals, and when used properly with personal commitment, the Personal Health Plan will deliver the knowledge and skills for long-term relief.

The PHP has been designed to be flexible, so you can work through it at your own pace in order to allow it to fit in with your life style. You can choose which sections provide the most benefit to support the management of your condition. It can also be used in conjunction with treatment from a healthcare professional. Some people will be happy to complete the Personal Health Plan on their own whilst others will require assistance. If you need help filling in your Personal Health Plan you may want to ask a family member or friend to help you.

Based on current medical research, the PHP offers practical advice and information to help you better control your back pain and make the most of life.

Remember, following a written Back Pain PHP that’s been developed especially for you can significantly reduce the long-term effects of back pain. The plan may also need adjusting and updating over time.
What are the alternatives?
Whilst there is no cure for chronic back pain, there are many ways to manage the pain and reduce or even eradicate the impact it has on your life. A combination of advice, medication, physical exercise, therapies, and a positive mind-set can help you deal with back pain effectively. A Back Pain Personal Health Plan can help you stay on track and manage your back pain so that your health and lifestyle will benefit.

Back pain explained
Back pain will affect up to 80% of us in our lifetime. Often there is no obvious cause; however, we do know how to manage and control many of its effects, which is what the Back Pain PHP is all about. In this programme you will find some suggested steps you can take to help lower the risk of back pain, reduce the number of recurrences, and limit the pain caused by it.

There are two main types of back pain:

1. Acute or short-term back pain is the common type and it usually resolves itself in three days to six weeks, whether or not you receive treatment.
2. Chronic back pain exists if pain and symptoms persist for longer than three months. It’s useful to know when to seek medical help and that self-care alone will probably not work for you. If you’re still unsure after following the programme, a healthcare professional can make that assessment and guide you through your treatment and recovery.

What you’ll learn from this programme
After reading this book, you will have learned:

- How to break the fear and anxiety cycle that keeps you in a vulnerable and painful state.
- A new understanding of how our spine and body works.
- How to increase your confidence levels through exercise.
- How to identify muscular tightness and imbalances.
- Ways to improve your posture.
- Ways to use stretching to ease the build-up of tense muscles.
- How to gradually strengthen your back muscles as you continue to gain confidence and regain your full range of activity.

The best course of action is to read through the programme so that you can fully comprehend how the information relates to you and your pain. This will increase your understanding and confidence in your back before you start the exercise programme.
The purpose of this programme is to help you to increase your knowledge and understanding of your pain. This is not an instant fix to your pain, but a long, steady road to recovery.

A quick browse through the programme and a couple of days of doing a few exercises isn’t going to make much of a dent in the many processes that have caused your pain. I say this not to scare you, but to make sure you understand that it will take time and effort to achieve results.

If you are starting this programme, you are probably in a negative mindset that includes:

- Being scared and confused about what is causing your pain.
- Not knowing how to help ease your pain.
- Being confused about which exercises are best to ease and prevent pain.
- Lacking motivation and the “get up and go” to do something about your pain.

The Relationship Between Stress and Pain

Our repressed emotions/feelings (anxiety/stress/anger/sadness/frustration/etc.) exist in our subconscious mind.

Our conscious brain now chooses to concentrate on our physical pain, NOT our repressed emotional feelings.

When emotions are not consciously addressed and resolved, they transfer to the body because they have nowhere else to go.

Affected muscles and the surrounding nerves cause pain, spasm, tingling, or numbness.

The emotional stress causes the autonomic nervous system (an involuntary system in the body controlling the blood flow to our tissues) to restrict blood and oxygen to our muscles and nerves.

Muscles deprived of oxygen begin to build up deposits of lactic acid (waste chemicals).
Playsafe Mouthguards have developed a self-impression system so that now impressions for the construction of custom laminated mouthguards can be made in the comfort of your own home.

Order online 24/7 and be ready to play in 7 days.

www.playsafemouthguards.com.au
Did you enjoy your time as SMA President?
Absolutely. I had an opportunity to be a part of significant change within the organisation and having a break between my first and second Presidential terms enabled me to take a breather and then come back to oversee the successful vote for OneSMA. As President I had the opportunity to travel the country and meet and be inspired by so many passionate and committed members and staff, who encouraged me to continue with the Board’s reform agenda.

What were some of the highlights?
Meeting so many of the SMA stakeholders, including sponsors and associate members. To be part of the challenge to gain agreement that the new strategy of OneSMA was the right move for our organisation. I also enjoyed being part of events such as conferences. Being able to work with and learn from Board Members and Board advisors was also a highlight.

The organisation underwent some major changes when you were president, and involved an incredible amount of work. How satisfying was it to receive a yes vote at the OneSMA ballot?
I remember the emotion on the night of the ballot. I had trouble believing that we received such a positive endorsement of the strategy. When I realised that so many members had voted YES it made the innumerable meetings, forums, phone calls and emails worthwhile. It also made me realise how many people had assisted with the consultation process and that the vote was an affirmation of what they had also committed to.

How do you think SMA is placed for the future?
I think the organisation is now on a firm footing for the future. It was encouraging to hear that the Australian Sports Commission congratulated us on achieving a unitary structure as they know that so many sporting organisations have not been able to achieve such a thing. They certainly see that our structure is how the future should look as it will create opportunities nationally that we have not been able to achieve.

I also see that we now have a value proposition that will attract new sponsors and new funding which will provide even further financial sustainability.
Over the last few years SMA has strengthened links with key groups like the APA and ESSA who are keen to collaborate and provide offerings for their members.

What future direction would you like to see SMA move?
We need to develop closer ties with all relevant stakeholder groups of which the APA and ESSA are but two. Strengthening connections with national groups like Heart Foundation, Diabetes Australia, and Arthritis Australia to name a few, will be important as well as making sure that we are heard by Government as the peak body for sports medicine in Australia.
Improving value and opportunity for our members is also a key direction for any membership organisation. Being part of the public health and injury prevention agenda will continue to be important as will SMA’s connection to national sporting organisations and elite sport.

Now that you’re no longer SMA President, what will you do with all your spare time?
Those who know me will know that I am always looking for new opportunities and challenges so I am sure my time will be more than occupied!! I will be trying the play the guitar better and to work harder on learning Spanish!
Will you still tweet, if yes what will your new handle be?
Yes, I will continue to tweet via the handle @MichaelAKenihan

Finally a few fun questions: Name four people living or dead, you would invite to dinner and why?
- Steven R Covey who has been a mentor for me for many years. The author of ‘7 Habits of highly effective people’ and ‘Principle centred leadership’.
- Jesus Christ because he showed that there was a way to live that should be emulated.
- Tim Winton, one of my favourite authors with ‘Cloudstreet’ a great Australian epic.
- Gough Whitlam because I love those who put themselves on the line to try and change the status quo and reform.

Favourites:
Travel destination: Has to be Barcelona.
Cuisine: Spanish Tapas.
Movie: Remember the Titans.
Band/album: Must be Peter Gabriel ‘New Blood’.
Book: Tess of the D’Urbervilles by Thomas Hardy.
Gadget: My portable scanner.

Peak performance requires more than skill alone
Developed specifically for endurance athletes, Endura Rehydration is an exclusive electrolyte formula to help athletes perform at their peak, promote endurance and optimise hydration.

The electrolyte ratio difference
Endura Rehydration contains a full spectrum of electrolytes in ratios specifically chosen for sports rehydration. Electrolyte imbalance may contribute to intracellular muscle dehydration which can impair energy production. Endura Rehydration contains higher levels of intracellular electrolytes (magnesium and potassium) than many sports formulas to specifically target intracellular muscle hydration. Endura also provides the AIS recommended percentages of sodium and carbohydrates to assist rapid stomach emptying for fast hydration.1

The importance of magnesium
Endura Rehydration provides a high concentration of Meta Mag®, a highly absorbable patented form of magnesium to help shorten muscle recovery time and prevent muscular cramps and pains. Unlike many other forms of magnesium, Meta Mag® dissociates intracellularly, rather than in the digestive system.2 This means higher absorption and maximum results for the athlete, without gastric discomfort; an imperative attribute for formulations taken before or during prolonged exercise.

Isotonic vs hypertonic prescribing
Endura Rehydration can be prescribed as an isotonic or hypertonic dose depending on the needs of the athlete. When prepared as a 350 mL isotonic drink, Endura Rehydration has an osmolarity in a similar range to an athlete’s own body fluids. This enables rapid absorption for fast rehydration during exercise whilst supplying fast and slow release carbohydrates for energy. When prepared as a hypertonic dose, Endura Rehydration provides a higher carbohydrate load per 200 mL for glycogen replacement making it ideal for more frequent dosing during pre-event loading and recovery periods.

Key applications for sports health professionals
The following patients may benefit from using Endura Rehydration:
- Those who need to perform in peak condition and support their training and competing demands.
- Those who need to support their body’s hydration requirements.
- Those who want to help shorten muscle recovery time.
- Those requiring relief from muscular pain and cramps.

For more information call the Health World Technical Support team on 1800 777 648 or visit www.endura.com.au

Unusual moves

Robyn Hickmott, APAM, has worked extensively in private practice for more than 20 years. She has postgraduate qualifications in both sports physiotherapy and continence and women’s health from Curtin University. She sees clients of all ages with musculoskeletal or pelvic floor dysfunction and has a special interest in hypermobility-related pain in children and adolescents. In this piece she provides an overview of joint hypermobility and its associated syndrome.

For most people, joint hypermobility (JH) is an asset, offering advantage and pre-selection in gymnasts, dancers and musicians; however, for many it predisposes to musculoskeletal pain and injury, seriously impacting quality of life and curtailing promising athletic careers. While widely recognised in the rheumatological literature, it is rarely discussed in the orthopaedic literature and it is only this century that it has begun to receive significant attention in the physiotherapy literature. Over the last decade there has been much growth in our understanding of the impact of JH. It is important to understand that JH only becomes joint hypermobility syndrome (JHS) in the presence of significant pain and fatigue, and symptoms fitting the criteria are outlined below. Many co-morbidities of JH affect other body systems—the central, peripheral and autonomic nervous systems, the gastro-intestinal and genitor-urinary systems—and these impact rehabilitation. Screening sports participants is recommended using simple tools, which are discussed in this article.

“Sports participants with JH are reported to incur injuries such as joint dislocations, tendinopathies, capsular strains and ligament ruptures.”

“It is important to understand that JH only becomes joint hypermobility syndrome (JHS) in the presence of significant pain and fatigue, and symptoms fitting the criteria are outlined below.”

Implications

JHS appears to be under-recognised, poorly understood and inadequately managed by the medical and physiotherapy professions. Since JHS is one of the most frequent causes of musculoskeletal symptoms in childhood and adolescence, particularly in those aged between 13 and 19 years, this adolescent population represents a vulnerable subgroup more prone to developing persistent pain, as compared to those without JH. A high presence of injuries, failure to respond as expected to usual rehabilitation, and widespread pain or fatigue should alert the physiotherapist to the possibility of JHS.

Given the evidence to date, it seems prudent for physiotherapists to screen for generalised laxity and the more serious connective tissue disorders and autonomic dysfunction. Specific prehabilitation strength and conditioning programs for individuals with JH should be directed towards strengthening supporting musculature and improving proprioception, particularly in the vulnerable joints. This is particularly relevant for adolescents, who are more vulnerable to injury because of the rapid physiological, biomechanical, and emotional changes associated with this time of life. Some sports and performance activities may be more of an injury risk than others, particularly contact sports and where sharp cutting, acceleration and deceleration, and change of direction are involved.

Incidence and aetiology of JH and JHS

JH is common; in children, it was reported as being between 7–36 per cent. It is generally accepted that JH is three times more common in females than males and of higher prevalence in Asian and African races than Caucasians, and that it diminishes with increasing age. Although it can be acquired through stretching in some individuals, it is known to be a highly heritable trait.

JH is a common underlying feature of the heritable disorders of connective tissues, namely Ehlers–Danlos syndrome (EDS), Marfan syndrome and osteogenesis imperfecta. In recent years a more common ‘benign’ connective tissue disorder with a mixed phenotype has been proposed, termed JHS. Many authors now refer to JHS as synonymous with EDS-Type III.
JHS is a genetically inherited multi-system disorder of connective tissue which follows an autosomal dominant pattern. Abnormalities in the properties of Type I and III, Type V and tenascin x are understood to result in collagen that is more elastic, finer and thinner.

**Screening for JH**

The Beighton Scale (Table 1) originated in the 20th century. This is a nine-point screening tool that is still used today, but its lack of sensitivity to patients’ actual symptoms and lack of specificity to all joints (hips and shoulders are not included) led to the development in 2000 of a more comprehensive diagnostic criteria: the Brighton Scale (Table 2). Both the Beighton and the Brighton criteria have been found to have high inter-examiner reproducibility in children as well as adults.

A simple five-point questionnaire (Table 3) was developed by Professor Grahame and Dr Hakim and serves as a quick screening tool. Two or more positive answers have been shown to detect JH with a sensitivity of 85 per cent and specificity of 90 per cent.

**Common non-musculoskeletal associations**

Autonomic dysfunction (symptoms include palpitations, chest discomfort, orthostatic hypotension, postural orthostatic tachycardia, dizziness) is common, particularly in adolescent girls and patients younger than 30 years. Hormonal links are suggested to contribute. Fatigue beyond that seen in peers is thought to be due to the extra demands on the muscular system and related to low tone, dysautonomia and venous pooling.

Proprioceptive dysfunction is strongly associated with JHS, as is impaired postural control. Peripheral nerve entrapments are reported and proposed to be due to the extensible connective tissue and the extra range the nerves traverse. Skin hyperextensibility to varying degrees is characteristic of EDS but may be present to a lesser extent in EDS–JHS. Pelvic floor dysfunction is common, with the prevalence of urinary incontinence, prolapse and haemorrhoids significantly higher in women with JHS compared with controls.

Visceral manifestations such as irritable bowel syndrome, dyspepsia, constipation, gastroparesis and frequent abdominal pain is seen in more than half of those with EDS.

As our appreciation of the complex interaction of biospsychosocial factors on the pain experience continues to evolve, it is interesting that JHS was associated with higher risk of developing anxiety disorders in a Spanish study with a 15-year followup. Dysautonomia is suggested to be an underlying mechanism contributing to psychological distress. The link between anxiety and fear traits and kinesiophobia is documented in JHS, and can severely impact recovery. Progression of symptoms in JHS is reported to result in anxiety, depression and somatosensory amplification if appropriate management is not accessed.

Neuropathic features are reported to exist in two-thirds of JHS sufferers with limb pain. Fibromyalgia and chronic fatigue syndrome often co-exist with JHS, and fibromyalgia is 3.8 times more common in adults with JH than in those without. Up to 81 per cent of children with fibromyalgia have JHS.
“Dancers have been studied intensely. At the Royal Ballet Company in London, the incidence of JH was extremely high (94 per cent of 16–18 year olds) confirming a physical type is most definitely selected.”

**JH and injury risk in sport**

Sports participants with JH are reported to incur injuries such as joint dislocations, tendinopathies, capsular strains and ligament ruptures. Several studies have demonstrated that athletes with JH are at significantly higher risk of sustaining a sporting injury, particularly at the knee, and in particular anterior cruciate ligament ruptures. JH underlying shoulder dislocations is well documented. It has also been identified as an independent risk factor in junior netball, professional male football, amateur rugby and female soccer players. A recent systematic review with meta-analysis across all sports concluded that hypermobile individuals have an increased risk of injury at the knee, but not the ankle.

Dancers have been studied intensely. At the Royal Ballet Company in London, the incidence of JH was extremely high (94 per cent of 16–18 year olds) confirming a physical type is most definitely selected. Interestingly, the incidence of JHS was 46 per cent in these 16–18 year olds, but only 20 per cent in the adult professionals. The decrease in numbers in the company suggests that dancers with JHS are less likely to progress in their profession. It is reasonable to extrapolate this finding to many other sports.

**Rehabilitation**

The principles of rehabilitation do not change in JHS but they are harder to instil. Education about JHS, its co-morbidities, pain education and management is vital. Appropriate and graded exercise and muscle conditioning enhances joint stability, proprioception, and muscle mass and can reduce pain-related fear. Neuromuscular coordination and postural control (especially at outer range of motion) is as important as strength in exercise protocols. Altered joint proprioception requires enhanced sensory input for retraining. Some hypermobile tissues can bruise easily and heal at a slower rate, so this has implications with respect to manual soft tissue techniques.

Encouragingly, it has been shown that specific physiotherapy rehabilitation improves not only proprioception, but symptomatic improvement in JHS. A recent RCT found physiotherapy-supervised exercise programs to be significantly effective in reducing pain and increasing quality of life, and increasing muscle strength in children with JHS and knee pain. There is also strong evidence (but few RCTs) that enhancing physical fitness is an effective treatment for children with JHS.

Pain and fatigue often complicate rehabilitation, and a percentage of JHS sufferers develop a secondary pain syndrome. The impact of an acute injury with its associated pain (eg, a dislocated patella or shoulder) may potentially have a disabling impact on its own, but in those with high levels of pain-related fear it may also lead to a downward spiral due to kinesiophobia. Therefore, individualised modified therapeutic programs involving a multi-disciplinary team is recommended to prevent chronic pain and deconditioning and, thereby, suffering in JHS patients.

Good advice with respect to training dancers with JHS exists. Further discussion about treatment principles in different populations is outside the scope of this article, but an approach to management with links to several texts and case studies for physiotherapists is detailed at medicalobserver.com.au/news/joint-hypermobilitysyndrome.

**Conclusion**

JHS is an inherited multi-systemic connective tissue disorder which is a poorly recognised and understood subgroup of sports participants presenting for physiotherapy with injury and pain. Appropriate screening, particularly children and adolescents, as well as those of any age who seem ‘injury prone’ or who have persistent pain will undoubtedly lead to more appropriate diagnosis and understanding, better treatment options (including co-morbidities) and improved quality of life in those affected.

Dr Jane Simmonds is coming to Perth in 2014 and will be conducting a one-day workshop for physiotherapists on 13 April. For more details, see riseleyphysio.com/seminars.

Jane combines her work at the UK Multi-disciplinary Hypermobility Unit (a specialist clinic for the assessment and management of all hypermobility-related disorders) with her role as Professional Lead for Physiotherapy at the University of Hertfordshire. She is a committed educator and active researcher and regularly publishes research and clinical papers on joint hypermobility syndrome.
Table 1: The Nine-Point Beighton Hypermobility Score

One point may be gained for manoeuvres 1–4 so that the hypermobility score will have a maximum of nine points if all are positive. A score of 4/9 or greater indicates widespread JH.

<table>
<thead>
<tr>
<th>Ability to</th>
<th>L</th>
<th>R</th>
<th>Both</th>
</tr>
</thead>
<tbody>
<tr>
<td>Passively dorsiflex the fifth MCP joint greater than or equal to 90 degrees</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Oppose the thumb to the volar aspect of the ipsilateral forearm</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Hyperextend the elbow greater than or equal to 10 degrees</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Hyperextend the knee greater than or equal to 10 degrees</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Place hands flat on the floor without bending the knees</td>
<td>1</td>
<td></td>
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Table 2: The Revised (Brighton 1998) Criteria for diagnosis of JHS

**Major criteria**
1. A Beighton score of 4/9 or greater (either currently or historically)
2. Arthralgia for longer than three months in four or more joints

**Minor criteria**
1. A Beighton score of 1, 2 or 3/9 (0, 1, 2 or 3 if aged 50+)
2. Arthralgia in one to three joints or back pain or spondylitis, spondyloysis/spondylolisthesis
3. Dislocation in more than one joint, or in one joint on more than one occasion
4. Three or more soft tissue lesions (eg, epicondylitis, tenosynovitis, bursitis)
5. Marfanoid habitus (tall, slim, spam>height, upper segment: lower segment ratio less than 0.89, arachnodactyly)
6. Skin striae, hyperextensibility, thin skin or abnormal scarring
7. Eye signs: drooping eyelids or myopia or antimongoloid slant
8. Varicose veins or hernia or uterine/rectal prolapsed

**Necessary criteria for diagnosis**
Two major criteria, or one major and two minor criteria
Four minor criteria
Two minor criteria and findings in a first degree relative(s)

“Appropriate screening, particularly children and adolescents, as well as those of any age who seem ‘injury prone’ or who have persistent pain will undoubtedly lead to more appropriate diagnosis and understanding, better treatment options...”

References, as indicated within the article, are available at sma.org.au/publications/sport-health
Australia Day Honours 2014

For those in the Sports Medicine Australia family, volunteering is de rigour for most, and not something our members expect accolades for in return. As we have read in Peter Larkins’ analysis of the role of the sports doctor and Kate Spagnolo’s account of a day in her life as a sports physiotherapist, being a sports medicine professional can be both arduous and rewarding in equal measures. And for many of our members, their work doesn’t just stop at the final siren. Whether it’s running education and training courses, mentoring students, coordinating awareness campaigns or supporting research initiatives, our members are committed to furthering sports medicine both on and off the field.

It is always nice to see the hard work and community service undertaken by SMA members receive the recognition and attention it deserves, which is why it’s fantastic to see QLD SMA member orthopaedic surgeon Dr Peter Myers receive Australia Day honours for significant service to sports medicine and orthopaedic surgery. A longstanding member of QLD SMA, Peter has served as President and on the Board of Directors. His achievements in research, sports safety awareness and his role as a founder of the Australian Sports Medicine Clinic (now known as the Brisbane Orthopaedic and Sports Medicine Clinic) make him a worthy recipient of such an honour.

Peter joins a long list of SMA members past and present who have been recipients of Australian Honours which began in 1975 with the creation of the Order of Australia, to recognise service to the nation or humanity.

Australia has created additional awards to completely replace those areas of service previously recognised in the British system and to recognise additional areas of service valued by Australians. Australian honours are unique in that they were designed for the community to make nominations. The Australian honours system is free of patronage or political influence. Anyone can nominate an Australian citizen for an honour.

Also recognised in Australia Day honours this year was Dr Dimity Dornan, wife of longstanding SMA member Peter Dornan AM, her role as founder of the Hear and Say organisation, which provides support for deaf children and their families. Whilst Dimity is not a member of SMA, Dimity frequently attends SMA conferences with Peter.

Following a search of the official Australian honours website, the following is a list of recipients who have been honoured for their service to sports medicine:

- ADAMS, Nancy
- ADONIS, Marcus
- BETTER, Fred
- BLOOMFIELD, John
- BRACE, David
- BRUKNER, Peter
- BRYANT, Grace
- CORRIGAN, Alfred
- CROSS, Mervyn
- DAVIS, Joseph
- DORNAN, Peter
- DRISCOLL, Phillip
- FITCH, Kenneth
- FRASER, John
- FRICKER, Peter
- HARCOURT, Peter
- HOBB, Kevin
- HOBB, Ron
- KANNANGARA, Siri
- MAGUIRE, Kenneth
- MCINERNEY, Robert
- MILLAR, Anthony
- MINES, Kay
- MOYLON, John
- MYERS, Peter
- PARKER, Anthony
- PARRISH, Roger
- REFSHAUGE, John
- RICHARDS, Charles
- SANDO, Brian
- SHARPE, Patricia
- SMETHILLS, Robert
- SMITH, Cliff
- STANTON, Valda
- STEINWEG, Jeffrey
- TOYNE, Albert
- WALLACE, Patricia
- WEBB, William
- YARROW, Robert
- ZUKER, David

NB: Members who have received Australian honours for services to sports medicine or otherwise but are not listed above should contact SMA.
Discipline group news and events

Sports Physiotherapy Australia (SPA)

News:
- The SPA recently worked with the AIS, SMA-ACT, and the ACSP to present the Bone Health in Sport Symposium at the AIS in Canberra on February 1 and 2. All reports are that this was a well organised event with a lot of clinically relevant content.

Upcoming events:
- The SPA has an ongoing calendar of PD events throughout 2014. Please see www.physiotherapy.asn.au for more details on specific PD events.

For more information visit www.physiotherapy.asn.au

Australasian College of Sports Physicians (ACSP)

News:
- Call for membership
  ACSP is the professional body representing training and assessing Sport and Exercise Medicine (SEM) Physicians in Australia and New Zealand. Associate Membership is open to all registered medical practitioners with an interest in the field of SEM and applications are now invited. Benefits include regular news bulletins, access to sport and exercise medicine journals, CPD (MOPS), professional conference and education activities, opportunity for collegial interaction and collaborative research opportunities. Applications for Associate Membership can be obtained from www.acsp.org.au, emailing office@acsp.org.au or phoning (03) 8352 4443.

For more information visit www.acsp.org.au

Sports Doctors Australia (SDrA)

News:
- Sports Doctors Australia has had a great involvement in the ACSMS 2013 last October. With the boutique conference being held in Phuket, SDrA provided an excellent presentation on the current place of concussion in sport. This was extremely well received with a lot of interest. We also provided an excellent workshop on Hip and groin pain in medical practice. Again, this was extremely well received. My thanks to Brendan DeMorton and Neville Blomeley.
- On top of this, SDrA Vice President, Dr Neville Blomeley, presented a workshop at the GP13 conference. This was oversubscribed and very well received.

Upcoming events:
- Sports Doctors is excited about the upcoming events for 2014. SDrA is being represented in Monaco at the BJSM workshop concerning the development of associations of sports medicine from around the world.
- We will soon be presenting a survey of members to help define the future direction of the association. We are very keen to look at our role in education as well as the provision of a collegiate environment for sports doctors across Australia.

For more information visit www.sportsdoctors.com.au
The Journal of Science and Medicine in Sport, published by Sports Medicine Australia (SMA), is the major refereed research publication on sports science and medicine in Australia. The Journal provides high quality, original research papers to keep members and subscribers informed of developments in sports science and medicine. Produced for SMA six times a year by Elsevier Australia, it reflects SMA’s commitment to encouraging world-class research within the industry, and its commitment to the continuing education of its members. Journal articles can be found at jsams.org.

Top 10 most downloaded articles
Journal of Science and Medicine in Sport

The following highlights the most popular article downloads at jsams.org from the quarter ending in 2013.

1. A review of the clinical evidence for exercise in osteoarthritis of the hip and knee
   Volume 14, Issue 1
   Bennell, K.L.; Hinman, R.S.

2. Exercise prescription for patients with type 2 diabetes and pre-diabetes: A position statement from Exercise and Sport Science Australia
   Volume 15, Issue 1
   Hordern, M.D.; Dunstan, D.W.; Prins, J.B.; Baker, M.K.; Singh, M.A.F.; Coombes, J.S.

3. Enhancing sprint and strength performance: Combined versus maximal power, traditional heavy-resistance and plyometric training
   Volume 16, Issue 2
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