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# CONTENTS

## Feature

6 Sports Psycho-Physiology

## People

10 Star of the Show - Vanes-Mari

12 Jacques de (Sprint) Swardt

14 Legend: Corrie van Zyl

16 Sabelo Ndlovu

18 Energy & Attitude

## High Performance Services

20 Psychology: Part 2: Performance Development: Putting Sport Psychology in context

22 Biomechanics: Building on Shaky Foundations

25 Sport Science Gym: Strength is a Skill

26 Biokinetics: When should my Child Specialise? Early Specialisation vs Multilateral Development

28 Nutrition: Nutritional Guidelines to increase Lean Body Mass

30 Biokinetics: Contrast therapy & recovery

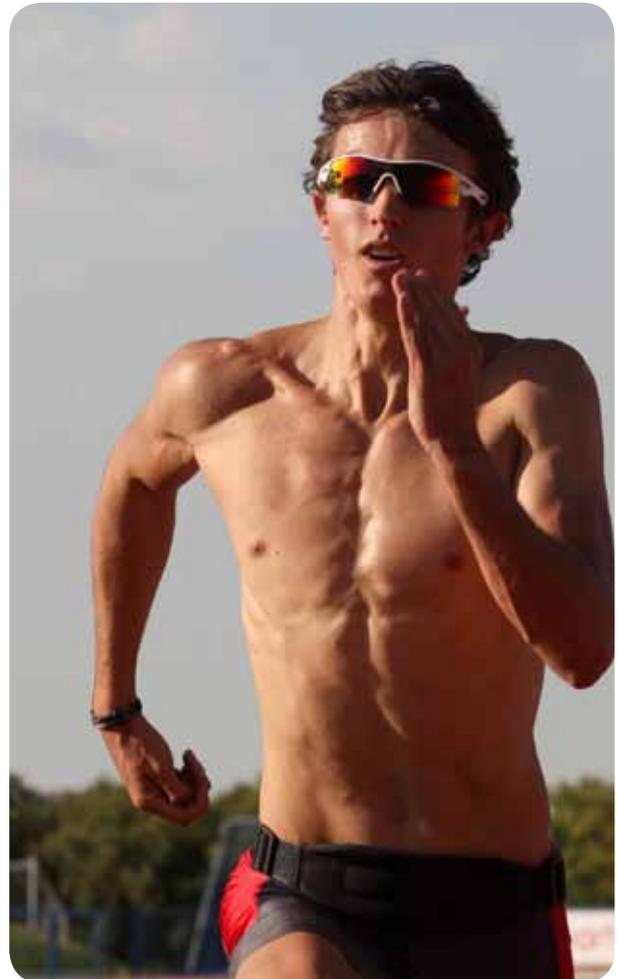
32 Biokinetics: Balance: Maintaining equilibrium

36 Physiotherapy: Yoga 101 - A beginners guide

38 Medical: Calcium & Magnesium supplementation in sports people

## TuksSport High School

40 Heads or Tails? There are two sides to every gold medal...



Cover Image: Reg Caldecott

## TuksSport Academies

42 TuksAthletics Academy

## TuksSport

43

## Inside News

45

## From The Sideline

50



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# from the CEO'S OFFICE



It is amazing to think that this time last year we were working at full steam to prepare the hpc for the "upcoming" FIFA 2010 World Cup and here we are a year later looking back on it as only a distant memory. However there are many upgrades and improvements that have been left behind as a Legacy from the World Cup and we as a business will be reaping the rewards of these upgrades for some years to come.

Looking forward, however, the hpc is gearing up for the 2012 summer Olympics and beyond. The immediate mission is focused on the qualification competitions that will lead up to possible selection by SASCOC in May 2012 for the London Olympics. Phase one for the hpc's athletes towards London is National team selection for the respective World championships in July/ August 2011. Some of our regular sportsmen and women such as Roland Schoeman, LJ van Zyl, Esti Wittstock, Caster Semenya, Ramon di Clemente, Bridgitte Hartley, Duncan Mahlangu, Marlon August and Patrick Trezise's preparation have seriously picked up speed towards ultimate selection. The hpc has stuck to its commitment to these athletes through the ongoing Sport Science and Medical support introduced back in 2009.

In the meantime a new breed of athletes with Olympic potential is being nurtured at the centre. This initiative is focused not on London, but on the 2016 Olympics in Rio de Janeiro and is showing some very encouraging results already. Most of these athletes are full time learners in our TuksSport High School while the others are fully integrated in our academy programmes. The swimming programme has had swimmers representing the hpc and TuksSwimming at the 2010 Youth Olympics, 2010 World short course championships, and will be representing South Africa at the 2011 World Junior championships and also includes national open title winners, national age group winners and swimmers selected on to South African target squads. The recently established TuksAthletics academy programme, now only two years old, has already produced four athletes that qualified for the 2011 World Youth athletics championships. The programme is under the management of ex-Olympian

sprinter, Geraldine Pillay Viret. Another recent success is the triathlon programme that brought Wian Sullwald's talents to the fore when he gained selection for the World Youth Olympics, won the continental Triathlon title and SA title during the past season. Rowing SA's academy programme that remains one of the hpc's most prestigious assets got a major boost when the men's pair won the gold at the 2010 u/23 world championships.

After the recent disappointment of the Protea's at the ICC world cup, the hpc is about to host the next generation of potential Proteas under direction of Cricket SA's national director of coaching, Anton Ferreira. The annual intake of Cricket SA's academy is about to arrive for four months of intensive training that will cover every conceivable aspect of playing cricket at the highest level. We also welcome Corrie van Zyl who will be based at the hpc from May onwards and will be coordinating the high performance programme of Cricket South Africa focused on the next generation of National players.

Time flies at the hpc...major moments quickly fade into faint memories as the next project looms in the distance 🏏

*Toby Sutcliffe*



# SPORTS PSYCHO-PHYSIOLOGY

*Text: Wayne Goldsmith*

Want to know about the latest breakthrough in thinking in sport?

Want to learn about how to coach more effectively and get more out of every training session?

Want to hear how to enhance the performance of your athletes?

Here it is:  
the latest thing - Psycho-physiology (more specifically sports psycho-physiology):  
The way forward in successful coaching and sports performance.

And guess what?

This revolutionary breakthrough in sports performance is so new that it has only been around for 5000 years.....

### What is Sports Psycho-Physiology?

Sports Psycho-physiology (and let me be the first to introduce the inevitable acronym SPP) is a fancy name for the integration of mind and body in the effective training, preparation and performance strategies of athletes. It is about helping athletes to perform better through using their mind and body in harmony in training and competition. Everything old is new again: Psycho-physiology through the ages.

Before someone steps up and writes a book claiming to be the guru of sports psycho-physiology and that they invented it, this stuff has been around for a long, long time. The Ancient Greeks, the Romans, the Chinese and many other great civilizations all have written about, spoken about and lived the integrated mind-body philosophy.

So it has been around for a long time, but only now are coaches and athletes starting to think about how to apply psycho-physiology to enhancing the effectiveness of training and preparation for sports competition.

The only three really new things about (sports) psycho-physiology are:

- Sports scientists and coaches are finally waking up to the understanding that you can't train the body without simultaneously training the mind IF you want to achieve optimal results;
- We now have the techniques and the technologies where we can measure the changes in the brain that occur through the introduction of mind-body integration techniques, e.g. CBT, mindfulness, meditation;
- We have finally got to the point where we can integrate (sports) psycho-physiology in the Daily Athlete Training Environment (D.A.T.E.) through smart coaching.

### What is being done in (Sports) Psycho-Physiology?

There is a lot of exciting work being done around the world in this "new" breakthrough area: here are just three examples:

1. In the field of cardio-vascular disease, researchers are looking more and more at the physiological impact of mental and emotional stresses and mental illness, e.g. anxiety, bi-polar disorder and depression. As a result, we now better understand how mental and emotional states can affect the body (e.g. changes in heart rate, blood pressure, adrenalin levels and platelet formation) all of which has enormous implications for competitive sport;
2. Researchers are looking closely at the impact of introducing mental skills training techniques like "mindfulness" into training programs including measuring pre (mindfulness) / post (mindfulness) performance of athletes with fMRI technology;
3. Many professional teams are using psycho-physiology by measuring brain wave activity as one indicator of over-training, over-reaching and fatigue.

It all adds up to one thing.....Sports Psycho-Physiology is here and it promises to be bigger (and better) than Pilates, Swiss Balls and Creatine Supplements - the difference being....psycho-physiology actually works!!!

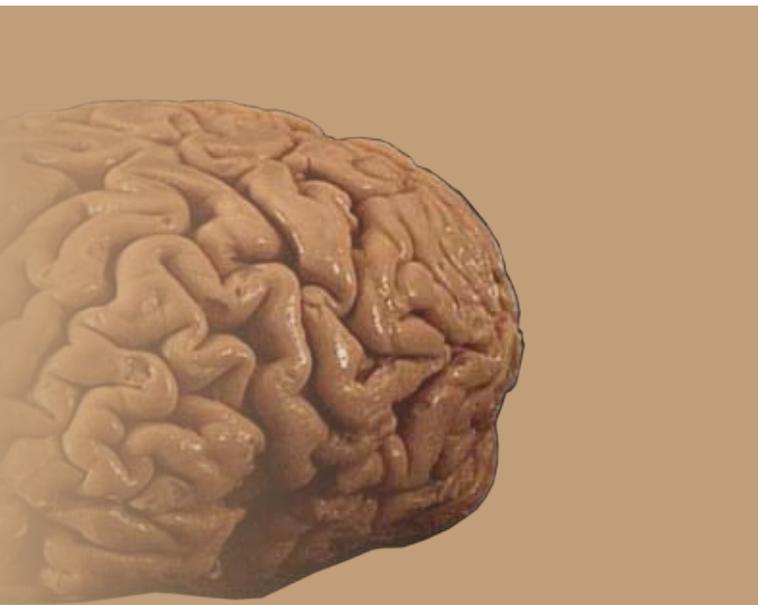
So what does this mean to Athletes?

For athletes, SPP offers unlimited potential for enhanced performance. Traditionally we have prepared athletes for the most part from a physiological standpoint: speed, strength, endurance, power, agility, flexibility.....and then sent them out to "battle" in great physical shape. The "mental" side of preparation we have left to a few war cries, the pre-match psyche up and the ubiquitous (but generally useless) motivation speech. We have laboured under the misguided view that getting the body ready is enough.

However, this is the equivalent of strapping a Ferrari engine to a bicycle frame! An athlete who is well prepared physically but who does not possess an understanding of how to integrate their mind and their "Ferrari engine" together in training and competition can not realise their full potential.

So for athletes.....you have the best ever opportunity to see your dreams become reality.





### What does it mean for Coaches?

The key for coaches is to integrate SPP into their training and preparation environments by the addition of a mental component in their planning, periodization and exercise prescription.

So, in practical terms, it means adding a mental element to every training set, every skill practice routine, every fitness activity: to change your programming tools from just volume, intensity and frequency to volume, intensity, frequency AND a mental factor.

Once you make this fundamental philosophical step of incorporating a mental aspect into your physical training routines and practices your coaching will achieve new heights.

What does it mean for Sporting Institutions, Universities, Academies, and Coach Educators etc.?

For sporting institutions, the Sports Psycho-physiology revolution means four things:

- Integration- of physiology and psychology resources, staff, research and departments;
- Innovation - solving performance problems which incorporate mind / body solutions;
- Inspiration - seeing this new direction as a limitless opportunity to find performance breakthroughs through integrated research, different thinking and as an incredible opportunity to help athletes and coaches achieve new levels of excellence;
- Illumination - changing the way we educate coaches about sports science right from their first day in the coach education system.

Now that the "silo" (i.e. single discipline, reductionist) approach to applying sports science to athlete and coach performance is finally being seriously challenged around the world, more and more of these "inter-disciplinary" breakthroughs will emerge....

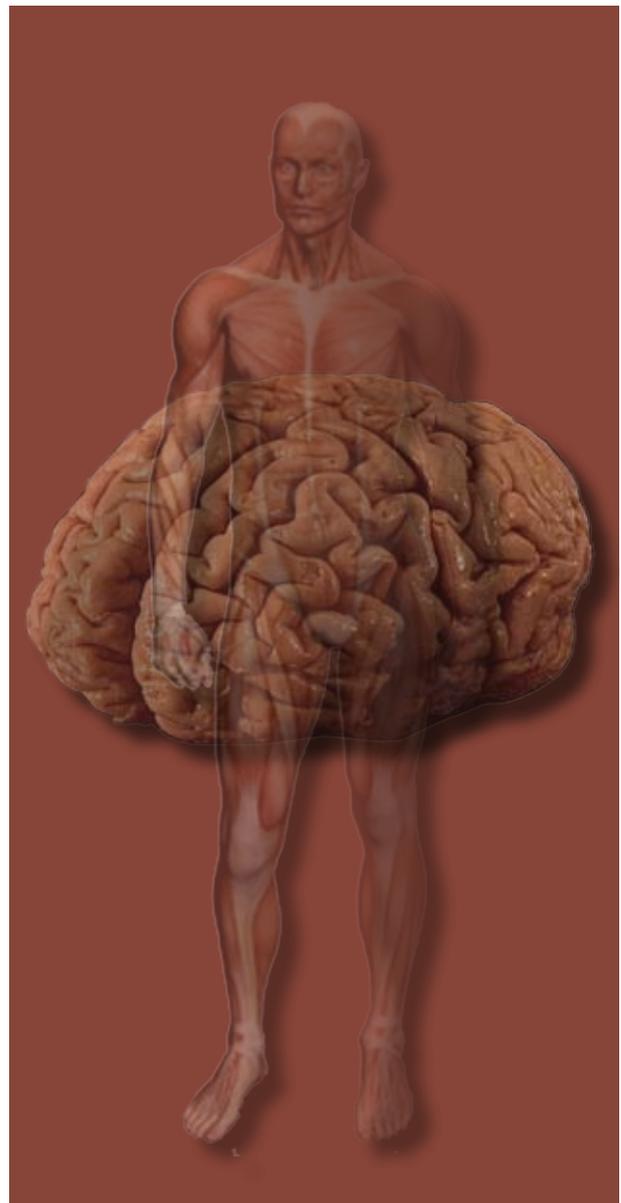
So what's the next inter-disciplinary breakthrough likely to be?

- Bio-physiology:(i.e. bio-mechanics and physiology): Imagine what we could achieve by integrating the fields of bio-mechanics and physiology so that when we make a change to an athlete's technique or skills, we simultaneously consider the impact on physiological efficiency, energy cost, oxygen dynamics etc.
- Psycho-mechanics: (i.e. psychology and bio-mechanics): Imagine what we could achieve if we incorporated a mental component into bio-mechanics so that when we work on improving, changing and enhancing an athlete's technique, we also include things like relaxation, flow, feeling, focus, concentration and mindfulness.

Now that the shackles of the single discipline silo approach to sports science have been removed, so too have the limits to human performance.

Question....Where will it end?

Answer....It won't! 🌈





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# Star of the Show

*Text: Lester Mills Images: Reg Caldecott*

## Vanes-Mari





If, as the old saying goes, a spoon full of sugar makes the medicine go down, taking a proverbial tablespoon of cement will, no doubt, have an entirely different effect.

The latter phrase though, is one University of Pretoria student, Tuks, Gauteng North and now Proteas netball star goalshooter and goalkeeper Vanes-Mari du Toit, has taken on board.

Commenting on her twitter page recently, Vanes-Mari simply said; "its time for a tablespoon of cement, harden up." This in the face of yet another tough sporting challenge.

Don't be deceived then, by this young sportswoman's supermodel-like looks. At 21, Vanes-Mari is a hard as nails competitor who does not take kindly to losing at anything.

Having said that though, Vanes-Mari says she definitely prefers a "brains over brawn concept" and is also a woman happy to give God the glory in everything she does.

"Netball is an incredibly quick game, you've only got three-seconds to keep the ball, so you actually have to be more intelligent in everything you do than physical," says Vanes-Mari.

Ultimately though, she is happy to live by a "work hard, play hard" philosophy which brings glory to her maker.

Following a time at the University of the Free State after leaving school, Vanes-Mari has returned to the place she loves best, Pretoria, to continue her BCom Human Resources Management studies and also her promising career in netball, where she is looking to become the

countries premier all-round player.

Having learned the game at Afrikaanse Hoër Meisieskool, Vanes-Mari is pretty much netball's equivalent of striker Katlego Mphela in the Bafana Bafana soccer set-up or Bryan Habana as a Springbok rugby player. They are the ace goal and try scorers. The stars of the show. Just ask someone like Irene van Dyk about that role in netball. Staring for South Africa in the 90's, Van Dyk changed allegiances went to New Zealand to become a superstar in that country.

Not that Vanes-Mari see herself as anything of the sort. The reason for this is that she also has a role in the team as a goalkeeper. Something her 1.98m frame might have something to do with.

"Netball is a team sport, we play for each other. So whether you are a defender or an attacker, it's the results that matters. And results are what the Proteas will be all about come the 16-team Netball World Championships in Singapore in July.

Vanes-Mari is one of six new caps in the Proteas squad for the tournament where Australia, New Zealand, Jamaica, England, and fellow Africans Malawi will be the teams to beat.

This year the championships will feature three African teams, South Africa, Malawi and Botswana.

"What we are prioritising at the moment is beating Jamaica in our group and then moving on from there, says Vanes-Mari."

The Proteas have been drawn with Botswana, Singapore and the dangerous Jamaicans.

But facing a tough challenge is just what Vanes-Mari thrives on 🇷🇺



# Jacques de (Sprint) Swardt

*Text: Lester Mills Images: Reg Caldecott*

For 18-year-old University of Pretoria 400 and 200m sprint specialist, Jacques de Swardt daring to dream has never been much of a problem. Whether it be dreaming about making the team to represent his country at the World Athletic Championships in South Korea later this year or looking ahead to Team South Africa and the Olympic Games in London next year, Jacques is also equally determined to turn those dreams into reality. Of course, he'll be the first to tell you that reality won't come without hard work and dedication. In fact, in just first year at Tuks studying Bcom Accounting, this former Afrikaanse Hoër Seunskool lad is prepared to take it to the absolute limit to achieve those goals. Already he is living the life demanded of a professional athlete. Up at 6.30am each morning, Jacques dedicates up to three hours a day to training under watchful eye of former South African sprint king and now coach Morne Nagel. Right now mixing athletic training with my studies is tricky, but it simply has to be done," says Jacques. "It's also great to have a guy like Morne in my corner. He was a champion himself and knows exactly what it takes," says Jacques. Indeed, now competing in the senior ranks, Jacques clocked a fantastic 46:30sec in his first competitive 400m run of the season at the Gauteng North championships in March which has set his season up in just the right way. "I'm aiming at 45:50 this season, so to set an early season mark like I did at the Gauteng North champs

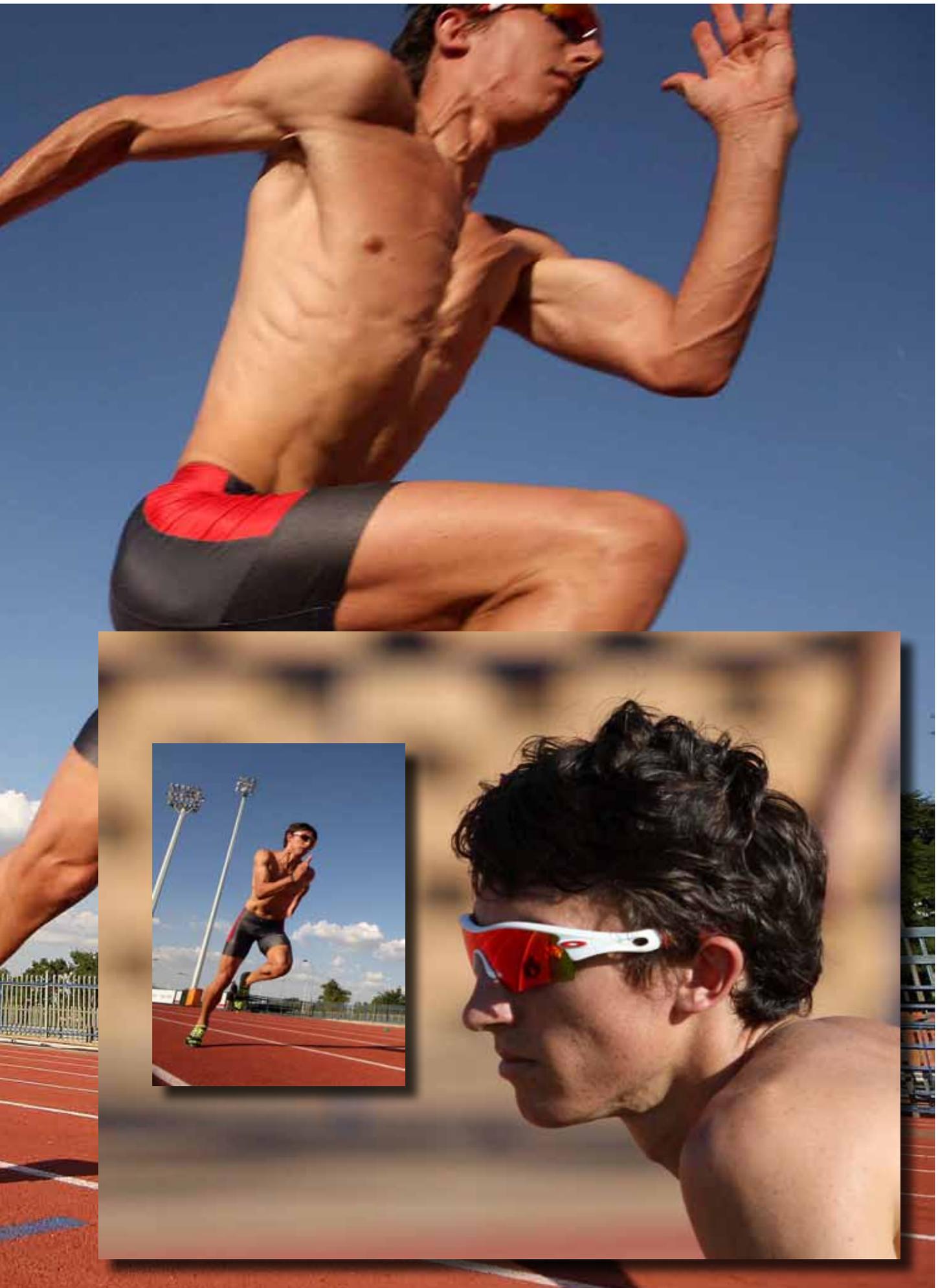
was ideal," says Jacques. His personal best in the 400 is 46:08 which was set in Germiston last year. That 45:50sec mark is also important to Jacques in not just a personal way either. The B Standard Olympic qualifying time for the 400m is 45.70sec and achieving that would be one dream come true already.

Having said that though, the London Olympics remains only a stepping stone for Jacques. With time on his side as far as his age goes, the 2016 Olympics in Rio de Janeiro is the event where this young sprinter truly wants to get into the fast lane. "The Rio games are definitely our main focus. Naturally picking up experience in South Korea and at London will be invaluable, so it's all about doing the hard work here and now.

Not that working hard to achieve his goals is anything new for him.

"My mom Rita (a 400m champion in her own right in SA in the 80's) is my all-time hero." As a single mom she worked hard to make sure I got the chance to achieve. She taught me not to be afraid of hard work and I can honestly say I'm not," says Jacques. For me it's important to stay humble and try very hard to over achieve when necessary. I'm determined not to be a flash in the pan in this sport. My aim is to be consistent.

But a true insight into just how determined this young man is to have a read of his favourite quote attributed to former USA athlete Steve Roland: "The only good race pace is suicide pace, and today looks like a good day to die" 🏃🏆



# LEND NE GE LE



*Text: Lester Mills Images: Getty Images*

## corrie van zyl



It's impossible to properly describe Corrie van Zyl (49), outgoing Proteas coach who is about to resume his job as Cricket SA's High Performance Programme coach at the University of Pretoria's hpc, in just a few words, suffice, however, to say he just wants to get on with the job.

Indeed, Van Zyl has never been a character who enjoys the media limelight too much and in his time as national coach being in the spotlight was a necessary evil.

Then again, we can't forget that Van Zyl is a former fast bowler. Playing for Free State with the likes of Allan Donald, so we can hardly say he's a softy of anything like that. The very job of being a fast bowler – Van Zyl played two ODIs for South Africa against the West Indies – suggests there's a hard-edge to the man. He is also certainly a cricket fundi through and through.

Following his playing career, he took up coaching after a spell as cricket manager of the Free State Cricket Union and in 1998 began a five-year spell as assistant coach of the South African national team. Later, he was head coach of the Eagles, with whom he won six domestic titles. In April 2009, he was appointed CSA's High Performance coach and in January 2010 was appointed national coach on an interim basis following the resignation of Mickey Arthur.

That tenure as national coach comes to an end after the World Cup and Van Zyl made his intentions clear early that he was not going to pursue the job any further.

"Corrie's reasons are personal, but no doubt also



**Full name:** Cornelius Johannes Petrus Gerthardus van Zyl

**Born:** October 1, 1961, Bloemfontein, Orange Free State

**Current age:** 49

**Major teams:** South Africa, Glamorgan, Orange Free State

**Batting style:** Right-hand bat

**Bowling style:** Right-arm fast-medium

include the fact that the position of coach is not a full-time one," CSA's chief executive Gerald Majola said. "He'll in all likelihood also be moving to Pretoria from Bloemfontein."

This was also confirmed by Anton Ferreira, manager of CSA's High Performance National Academy.

Corrie job as CSA's High Performance coach is wide-ranging, according to Ferreira.

"His job at the hpc certainly keeps him busy, looking after emerging cricketers across the country, which includes working with the SA A squad, the Emerging squad and the SA under-19 squad.

"Corrie is passionate about the game and the fact that myself and him played together makes it great to be able to work with him." His presence here has been missed and we're looking forward to getting him back, said Ferreira.

"Corrie has enjoyed the best of both worlds when it comes to his cricket career and is certainly one of the most knowledgeable cricket men around," says Ferreira.

Van Zyl himself has confirmed he would not be reapplying for the role of national coach. "I was originally appointed by CSA at the High Performance Centre and really enjoyed it," he said. "It was a full-time appointment, but the main reason is that it's a job in which I believe I can make a long-term difference to South African cricket."

With a man like Van Zyl nurturing future stars at the hpc and wider afield there is definitely a sense that cricket in this country is in good hands 🏏

# Sabelo Ndlovu

*Text: Lester Mills Images: Reg Caldecott*



**O**n the face of it, promising triple jumper, 17-year-old Sabelo Ndlovu, a Grade 10 pupil at the TuksSport High School, is much like any teenager. Meet him on the street and it would be hard to tell the difference between him and thousands of others his age.

Speak to this up and coming athlete, however, and you'll soon realise that first appearances can be deceiving. Beneath a casual, almost shy exterior lies an individual fired-up by a steely determination to succeed, be it in his athletics career or life in general.

Regarded as a genuine prospect at the triple jump on the South African scene, Sabelo already finds himself ranked 9th on the Athletic South Africa (ASA) senior table. Not bad for a youngster who has only just set out to master what is an extremely difficult discipline.

Sabelo set a PB in the triple jump of 14:56m in February, a distance good enough to get him noticed.

But this self-confessed tough "township lad", getting noticed is just the start of what he really wants.

Of course, his ultimate goal is a spot in the South African athletics squad for the 2016 Olympic Games in Rio de Janeiro. But that goal is also admittedly some way away and hard work still needs to be done.

Already, Sabelo has found himself having had to sacrifice much of the life he has known in an effort to excel at his chosen sport.

Brought to the TuksSport High School from a Hunt Road Secondary School in KwaMashu in KZN by a former hpc coach Lux Gordhan who had spotted him as a potential top achiever on the athletics track, Sabelo was thrown into a world foreign to him.

"I must say it was tough in the beginning. I was home sick and there is quite a lot of pressure on us here. It's not only about athletics but about doing well at school work too." I do think the fact that I grew up in a township where not much sympathy is shown to those who just give up, has helped me cope here. I have had to be self-motivated and tough. This attitude has definitely helped at the jump pit or at school," says Sabelo.

"I prefer to let my deeds do the talking and like to be seen as a person passionate about what I do. But that doesn't mean things are easy. I know there's a long road ahead for me, but I'm ready for it," says this dedicated Kaizer Chiefs and Sharks fan.

Not that Sabelo has forgotten his roots either.

"I love listening to Zulu cultural music. It relaxes me and definitely helps me focus. It's one thing that I'll always love, says Sabelo also, however, admitting, with a grin, that this music does sometimes drive his roommates a little crazy.

Music and jokes aside though, Sabelo reckons 15 metres plus is within his reach in the triple jump this season, so remember his name we could be hearing more from him soon 🏆





# Energy & Attitude

*Text: Anton Roux, TuksCricket Academy Manager / Head Coach Images: Rob's own collection*

**A**lthough short in stature, Rob Walter stands out far above the clouds when it comes to work ethic and the understanding of a human being. When asked to write an article about my friend, Coach, and mentor, two things immediately come to mind. **Energy and Attitude.** These two fundamentals are the pillars that Rob bases his outlook on life on a daily basis and had a profound impact on me and many others. Rob always used to tell me "There are two things that you are in control of **every day** when you wake up every morning, one; the amount of energy that you will bring, and two; your attitude. Will it be positive or negative?"

Together with energy and attitude, add a whole lot of passion for people, and for cricket, and in a nutshell that is the make-up of a man that is goal driven to succeed. His professional involvement in cricket started when he was a player at the Northern Crickets Academy in 1998. From there he moved into the position as fitness trainer for the Titans based at SuperSport Park. In the off-season he did a lot of work with the National Academy students, and made a difference to each programme that he was involved in. In 2007/8 he started up the TuksCricket Academy (based at the hpc) and quickly moved into the Technical Director role of TuksCricket. It was only a matter of time until he got the call up to the Proteas as they embarked on a journey that will enable him to see the world and gain

a lot of knowledge and experience being around the countries best. This brings us to the present. As we speak, Rob and the Proteas are in the sub-continent carrying the hopes and dreams of many South African cricket fans, as they go about the task of winning the coveted World Cup. Could this be our year? Getting players ready for such an arduous task is not easy, and it's not only just a seasons worth of hard work. Three or four seasons worth of planning and conditioning were all done for this one event in mind, and one goal in mind...to win the World Cup.

This could be one hell of a burden to carry on one's shoulders, but with the thought of being in control of your energy and attitude driving you to get up every morning, I have no doubt that the Proteas players will be ready for what I believe is going to be a special World Cup for us.

I caught up with Rob a few weeks ago and asked him a few questions about his journey through cricket and his thoughts on some pertinent issues.

## **How did you first get into cricket?**

Cricket has always been in our family and is by far my father's favourite sport, I can remember at an early age playing club cricket with my dad at Zoo Lake Country Club in Jo'burg. I spent plenty time wandering around the side of the cricket field as a toddler so I guess it was in my genes from an early age. I am really grateful to him for all the support he gave me in my sport and in particular cricket.

## **Tell us about your year at the Northern Crickets Academy and how that opened doors for you?**

After finishing my degree at Rhodes I went to play overseas in Leicestershire and when I came back I was accepted into the Northern Crickets Academy. It was really an awesome year with great experiences and great friendships forged. We had superb facilities and an all day; all year programme in cricket was like a dream come true at that stage. Towards the end of the academy was the first time that I really felt that I had the skills to make a career as a cricketer. It was through the Northern Crickets Academy that I became close to people like Dave Nosworthy and Anton Ferreira and at the same time met guys like Chris van Noordwyk who was already involved with the Titans as an Assistant Coach. I think it was the forging of these relationships that ultimately opened doors for me in the cricketing world as a trainer, and even though I had to give up the dream of being a professional cricketer in the end I was very blessed to have the start to my professional career that I did.

## **Working with the Titans as Strength and Conditioning Coach, and later as Assistant Coach, what do you think are the fundamentals of a good Franchise system?**

Well I believe there are so many levels to creating a successful franchise but firstly I believe there must be a vision and a belief by all involved

that the franchise can achieve high performance at the elite level. Once you have established this then you need to align everyone's focus towards achieving this success. When I joined what was then Northerners, they were fresh off winning the One Day trophy for the second time, the "B" side was a powerhouse team and had won the amateur one day final the year before (which I played in), the Northerners Academy was into its 4<sup>th</sup> year and the age group teams were all very successful. There really was an air of successful team performance throughout the union and the union itself was alive with activity. It really was a great environment to work in and be part of. When everyone is focussed on achieving the same thing, there really is very little that can stop you from achieving that goal. In short I believe you need the following: Skill, Structure, Belief, Focus, Team ethics.

### **When you started the TuksCricket Academy, what was your vision, and do you think it still serves that purpose?**

Well with the advent of the Northerners Academy falling away I really wanted to provide young cricketers with the same type of opportunity I had at the Northerners Academy. With the knowledge I had gained and the experiences of my involvement with the National Academy and Titans I really believed that with the facilities of the University and hpc there was an opportunity to provide a top class academy programme. My vision was always for the academy to strengthen the university's cricket sides, feed the Titans franchise and provide a platform of excellence for young cricketers. With the Junior academy I honestly believed it provided a perfect platform to develop a strong cricketing culture in the most promising school cricketers with an emphasis on those from disadvantaged backgrounds. Again the facilities coupled with TuksSport School and TuksCricket coaches gave young cricketers a unique opportunity to improve their talents in the best suited environment. I still hope to see the Junior Academy growing from strength to strength and that someone somewhere will be prepared to invest in the future of our young cricketers in the TuksCricket Academy and School environments. As far as the senior academy goes I believe the biggest challenge is maintaining the quality of the groups that attend each year,

there seems to be a natural attrition of the quality of players coming in, and secondly to continually stay on the cutting edge of cricket academy programmes countrywide and worldwide. If you can do that then any academy programme will be worthwhile. When you lead the way in something then others will always be trying to produce a programme based on your framework but that is better and so the trick is to try and stay ahead of the followers.

### **Do you see the need for Academies around the country apart from the National Academy, and do they benefit the Franchises?**

I believe there is a definite need for academies at a provincial level as it provides a wonderful platform for young cricketers to develop their personal cricketing skills. There are very few cricketers who are the finished article at age 18 and so the opportunity to attend a full time cricket programme is a great way to steer young cricketers in the right direction. If we look at our own academy at Tuks which is still fairly young, the success rate has been really pleasing with players making amateur provincial sides locally and even professional and national sides in Zimbabwe. With this in mind I think it is clear that these academies are without doubt beneficial.

### **Tell us about what your day to day role entails for the Proteas?**

Well fortunately for me I have a dual role with the national side as strength and conditioning coach and fielding coach. So a typical day will entail me sitting with the coaching staff to plan the session or week ahead, taking the guys for warm-ups at practice or matches then looking after all the fielding practice sessions. This is most often followed by me having to deliver or throw a number of balls to one of the batters at the end of practice. Finally depending on the week's schedule I will have the guys in the gym either in the morning if practice is in the afternoon or vice versa. Along with this I look after the dietary requirements and supplementation of the team as well to try and ensure that the boys are getting the right fuel in but with cricketers this is often a tricky part of the job!!!

### **It's a World Cup year, as we all know, what do you think is needed to succeed this year?**

Well our biggest focus will be to just play the best cricket we possibly can on each match day. If we get this right the success will look after itself. To often people get caught up with the expectation of the end result and forget that there are a bunch of games that need to be won along the way. We have quality cricketers who are all capable of winning games so it's just a matter of pulling these collective efforts together on the same day. In between games we commit ourselves to giving our 100% efforts all the time and then end believe that will be enough, if not so be it!

### **What are your plans after the Proteas? What's next for Rob Walter?**

Well my next step will definitely be into the coaching world (part of me was sad to leave the coaching job which I had at Tuks because I enjoyed its challenges so much and felt that I had just started to make a difference) I don't know when my stint with the national side will end but I do know that my passion and calling is in the world of coaching and high performance so I will go wherever I need to fulfil those coaching aspirations once I am finished with the National Side. In the long run I see myself first coaching at a franchise level and then coaching South Africa to a World Cup victory in 2019.

### **And finally, what message do you have for this years TuksCricket Academy intake and future intakes?**

My message is that despite many people telling you over and over to make the best out of each and every day you will still get to the end of the year amazed at how quickly it flew by and regretting the opportunities you missed. So I can only re-iterate what has no doubt already been said and that is – make the most out of the opportunity that someone somewhere has worked really hard to give you. Each day will provide an opportunity to learn and improve not only as cricketers but as people. If you can seize these moments and grab hold of these opportunities then you will end the year far better off than when you started. If you truly love what you do and are passionate about the game of cricket then an academy set-up will be like living your dream daily. What more could you ask for? 🏏

## Part 2: Performance Dysfunction

### PUTTING SPORT PSYCHOLOGY IN CONTEXT

*Text: Monja Human and Maurice Aronstam*



#### Introduction

To thoughtfully and successfully implement an intervention in the context of sport psychology requires that the difficulties that an athlete experiences be identified and that the best intervention be used to assist the athlete. This often requires that the difficulties presented by an athlete seeking sport psychology services be categorised into the following four categories.

- I. Performance development
- II. Performance dysfunction
- III. Performance impairment
- IV. Performance termination

The interventions that will be best suited to the difficulties experienced by the athlete will differ according to the above categorisation. In part one performance development was addressed and the role that performance enhancement strategies play in this category was explained. In part two we move to the performance dysfunction category.

#### Discussion

Part II: Performance dysfunction:

This category is characterised by the presence of identifiable psychological barriers which create difficulties for the athlete and subsequently affect performance negatively, for example a tennis player who experiences his coach as cold, unforgiving and harsh and therefore he struggles to perform well because he just receives criticism from his coach. This also reminds him of his father's view where he was never good enough.

Barriers to performance could emerge from two main areas:

Firstly, external life events could cause a psychological barrier. When a family member close to the athlete passes away, the performance of the athlete could be affected adversely.

Lets look at a more detailed example of a performance dysfunction case.

<b>The Story of Michael</b>	
<b>Here is an example of a soccer player to illustrate a typical performance dysfunction case:</b>	
<b>The situation</b>	<b>The performance obstacle</b>
Michael joins a new club team following his family’s relocation to a new town. Their relocation happen to be one month before the new season starts and the coaches are always happy for new players to join the club. At the trails Michael really impresses with his talent. He arrives for the first training session and from the outset shows his high level of skill and fitness, outplaying many of the other club members.	Thus far there is not a performance obstacle yet, but the relocation to a new environment increases the chances of adjustment difficulties.
The other boys at the club, as always, tend to give the new comers a bit of a hard time, as this is their way of testing to see if they are mentally strong. With Michael it is no exception, there would be the odd sarcastic comment towards him and he would not really be included in conversation or activities other than when directly instructed by the coaches.	Thus far there is still no observable performance obstacle as this team behaviour does not seem to have a major effect on Michael.
Michael attends all the training and it goes fairly well. Michael remains quiet and reserved, coming for the training but leaving as hastily and quietly as he arrived. It goes unnoticed that Michael was actually a friendly and outgoing person, who wants to play for a team where everyone helps and supports each other.	There is very limited interaction between Michael and the other players, but it is assumed that he is a quiet guy. Due to knowbody knowing him it goes unnoticed that his behaviour has drastically changed.
The first match of the season arrives and despite his talent and skill, Michael makes no real impact on the game. This trend continues for the next three matches and the coaches don’t understand why his performance is not matching up to his potential. The coach advises Michael’s parent to possible seek the services of a sport psychologist due to Michael under performing in the matches.	The distress experienced by Michael has now negatively impacted his performance. He possibly experiences low motivation to want to play for this team in addition that his focus in the games is rather on his exclusion from the team than on his execution of his skills.

Secondly, an internal psychological characteristic of the athlete could cause a barrier when the athlete encounters a certain environment. It can be expected that the performance of an athlete will drop if a highly disciplined athlete who likes to follow a given routine suddenly finds themselves in a very relaxed atmosphere where things are left to develop at their own time.

A sports counselling intervention will be needed to address these concerns, and performance enhancement becomes a secondary goal of the intervention. This does not mean that the enhancement of the performance of the athlete is not as important, it simply means that any traditional performance enhancement strategies will not be effective if the athlete is experiencing wider reaching difficulties. For this reason the sports counselling intervention should be addressed first before any performance development can be completed effectively.

In the example of Michael, it could not be expected for Michael’s performance to improve if he does not find a way to get around his feelings regarding his new team and team mates. This could be addressed in two ways:

Firstly, the intervention should help him handle

adverse situations like this by addressing his personal characteristics (outgoing nature and needs of acceptance in the team) and how he could develop a way to handle being excluded from the group as well as receiving occasional criticism.

Secondly, the intervention could also address the interactional style of the team. If the team were able to treat and interact differently with Michael, they would get a much more positive response from him.

### Summary

To summarise, the performance dysfunction category is characterised by the presence of identifiable psychological barriers which create difficulties for the athlete and subsequently affect performance negatively. While the aim would be to enhance the performance of the athlete, sport counselling interventions in performance dysfunction cases would have to be addressed first before performance enhancement strategies could be effectively introduced 🌈

# Building on Shaky Foundations

*Text: Amy Bathgate - Biomechanics & Video Analysis, hpc*



Intuition often tells a professional or an athlete that something basic is “missing” from their training programmes or that something is “holding them back” from reaching their full potential, but they can’t quite put their fingers on it. Or an injury becomes recurring or chronic and its cause cannot be pin-pointed. It’s this very intuition that brought the Functional Movement Analysis (FMA) into being. The FMA gives both professionals and athletes the opportunity to step back, and see the forest instead of the trees, so to say, and not focus on specific problems or unexplained injuries but rather to focus on the body and movements as a whole.

For example, if an athlete complains of chronic or recurring knee pain, most professionals observe, evaluate and test the knee in many positions. Then the athlete might perform a series of general movements such as balancing on one leg, turning, twisting, or maybe even lunging or squatting. But by looking at the knee first, opportunities are often missed to watch the whole body move – and because the full body movement is not looked at, perspective is often lost. The injury is evaluated as just a knee injury – whereas it should have been evaluated as an athlete experiencing symptoms in the knee but who may have multiple problems. So we reverse the sequence. Regardless of the complaint or injury, we choose to look at the whole before initiating a functional exercise or sports rehabilitation programme. When functional movements are performed, sometimes symptoms will be provoked in the problem area, and other times they will be provoked in other areas.

The Functional Movement Analysis (FMA) we use here at the hpc is a series of 10 – 12 fundamental movements, which look simple but require good flexibility and control. These movements are not simply the basis for sports movements, but also the foundation of all human movement as they relate closely to the movements infants and toddlers use to train themselves to move and turn and twist and walk and climb and crawl and reach. The FMA is simply a way to demonstrate how athletes who have elite strength, power, speed, agility, and sport skills may have fundamental flaws that do not show up every day but that are holding them back from reaching their full potential.

An athlete who is unstable to perform any of the movements correctly, shows a major limitation within one of the movement patterns, or demonstrates an obvious difference between the function of left and right side of the body, has uncovered a significant piece of information that may be the key to reducing the risk of chronic injuries, improving overall sport performance, and developing a training or rehabilitation programme that helps the athlete advance to a higher level of competition. Functional movements should not be sacrificed when the athlete seeks to perform at a higher level through advanced conditioning and skills training. Athletes, who are strong and powerful, and seemingly coordinated, sometimes have extreme difficulty getting into the most basic of positions. Most athletes migrate towards their strengths and spend a majority of their time training their strengths. But the FMA pushes each athlete



into all movement extremes, rather than simply the preferred ones, and thus demonstrates how athletes who appear flexible and under control within their given sports can have significant restrictions and asymmetries between left and right in their basic movement patterns. Their skill and speed and quickness allow them to compensate for and mask fundamental flaws in movement. These flaws rob the athlete of efficiency and may cause unnecessary stress on the body. This may either directly break down a specific area of the body or cause problems when the athlete is trying to rehabilitate a traumatic injury caused by a collision or fall.

Imagine two highly skilled, highly trained athletes recovering from knee surgery. Both are dealing with the swelling, inflammation and weakness caused by the surgery and immobilization, but one athlete also has very poor ankle mobility and a significant amount of stiffness around the hip. To this point, this athlete's knee has been compensating for the lack of mobility in the hip and ankle. But because the knee can no longer compensate, the rehabilitation process will be delayed or unsuccessful unless the weaknesses in the hip and ankle are addressed.

The word functional often creates confusion as most people expect to see drills and movements that closely resemble sport-specific movements. Most people expect a more dynamic collection of vigorous movements that look and feel like sport, and are often puzzled by the simple positions and regard them as insignificant. What they fail to realize is that functional movement for all

sport is built on the foundation of the ability to simply move without restriction or limitation. Often athletes are assessed in terms of how they perform in their sports and in fitness, agility, power, strength, and endurance tests. But simply looking at a skill and performance, the ability to perform is not separate from the ability to move free of limitation or restriction. The functional movements tie all sports together because they are fundamental and representative of human movement.

The Functional Movement Analysis is not a law or an absolute. It is simply a way to demonstrate the most fundamental aspect of human performance – the ability to move freely. This forms the foundation of all sport and exercise. Built on top of an efficient foundation is the ability to move with certain degree of raw athleticism or gross performance, and only after these should we add the ability to take that raw athleticism and gross performance and turn it into a specific skill. So get back to basics and look at the whole – shaky foundations lead to shaky performance pyramids.

"It's what you learn after you know it all that counts most!" 

**Reference:**

Gray Cook. *Athletic Body in Balance*. Champagne, IL: Human Kinetics (2003).



# hpc Biomechanics & Video Analysis Lab



## Functional Movement

Identifies limiting factors through the presence of compensation patterns adopted during specific movements, and allows athletes to realize their full potential

## Video

Filming and review of movements or techniques allows athletes to see what coaches “see” and the athletes themselves usually “feel”, thereby enhancing learning



## Technique

Filming specific techniques allows both coaches and athletes to analyze movements in slow motion and see faults/compensations that are often not obvious with the naked eye

## Game/Match

Review of filmed game/match content can produce highlights, statistic, trends and much other vital information needed for improved performances in both individual and team sports



## Biomechanical

Links functional movement patterns to technique performances and bridges the gap in understanding, rehabilitating and preventing injuries

## Gait

Slow motion filming links patterns in our gait to pain, injuries, and related conditions which might restrict an athletes walking comfort or running potential



## Performance

Integration of various measurements and additional aspects to increase understanding, learning and improvements in athletic/sporting performances

# Analysis is our Game

For more information contact Amy Bathgate: [amy@hpc.co.za](mailto:amy@hpc.co.za) or 012 362 9800

# Strength is a Skill

*Text: Ignatius Loubser, Strength & Conditioning specialist, hpc*

'Naaat, did you do too many squats this morning, or have you been dipping into some old Soviet Union propaganda?' This was the stock response when I told my peers about the subject of this article. Laugh all you want, but strength is a skill just like juggling tenpins on a unicycle is a skill.

Don't take my word for it: experts like Pavel Tsatsouline (Master of Sport and Strength for the Russian and American special forces), Dr. Mell Siff, and Prof. Yuri Verkhoshanski all agree that strength is a skill that can be honed in various ways. Weightlifting, powerlifting, strongman lifts, kettlebell lifting, bodyweight and gymnastics-based exercises, and core abdominal exercises are the whetstones on which strength is sharpened.

Unfortunately the majority of Strength and Conditioning (S&C) specialists still believe that working out entails slapping on a sweatband and putting in the hard yards. To turn sweat into a science, four crucial aspects of strength development require attention: specialized and knowledgeable training, practice (no one juggles perfectly the first time), assistance and performance.

To make matters concrete, an example is useful. Let's say a S&C coach uses squats as a primary movement to increase an athlete's strength. Initially the focus will be on the method: how to move your body, what the purposes of the exercise are, and what benefits it holds. Subsequent sessions will involve repeated movement with uncompromised form and technique – practice makes perfect! Assistance from a savvy training specialist will not only aid motivation levels, but ensure pervasive

quality of movement. Performance, the last building block, involves gauging the athlete's strength by way of a 1RM (this refers to the maximum weight an athlete can manage with a single repetition).

To the four imperatives for strength development an apothegm may be added: strength equals tension. The ability of athletes to generate high levels of muscular action or tension is what determines their strength.

Generating tension does not depend on the size of the muscles but the size of the lightning! By lightning I mean electricity – the electricity that you create in your brain and nervous system to activate muscle fibres. The lightning effect is the reason why a wiry 75kg Powerlifter can deadlift 355kg. The average person can activate about 20% of their muscle fibres in a given muscle if

they put maximum effort into a lift. Top powerlifters, on the other hand, use up to 50% because they have honed their strength.

According to Pavel Tsatsouline, you can lift a car – you just don't know it yet. The fact that we do not know how to activate 100% of our muscle fibres in a given moment is probably a good thing for our own and others' health and safety, but it does leave room to explore the reserves our strength. For this reason S&C specialists need to become, well, more specialised; and strength shouldn't be viewed as an attribute but as a skill 🌩️

#### Resources:

M. Siff, Y. Verkhoshanski, Supertraining, Six edition expanded version  
Pavel Tsatsouline, (1999) Power to the people. Russian strength training secret for every  
American V. Zatsiorski, W. Kraemer. Science and practise of strength training, Second edition



# When SHOULD my Child Specialise?

## Early Specialisation vs Multilateral Development

*Text: Wayne Coldman*

The question that is posed to every parent in the modern day world of sport; when should my child start specialising in one sport. The answer however, is not as simple as giving an age but we need to delve not only into the science first but also the emotional consequences before we can understand this subject properly.

### Physical Attributes:

All human beings have to master certain physical principles in order to be physically efficient in sport. The list of fundamental movements is quite vast and summed up in table 1.1. All sports have different fundamental aspects that we have to master in order to have a chance at success in that sport, however we need to make sure that we are always increasing our skill capability and aptitude in every aspect of sport. When we look at table 1.1. We see that there are a vast number of movements that we need to master to play sports. I like to look at table 1.1 as a list of necessary skills needed by all athletes to be successful at their sports. We need to have a look at how competent children are in all these movements and skills to make sure they increase their chances in being highly competitive in any sport. Although the need to be more proficient at some attributes will differ for each sport, the chances of success will be higher if we can tick all the boxes. Children need to have certain basic skills, like running and jumping, which are crucial in all sports, some sports need hand eye co-ordination and some foot eye co-ordination, as a general rule, the better you are at all skills, the more complete the sportsmen.

Once we look at table 1.1. It is obvious that there is a huge cross-over of skills in most sports, due to this phenomenon; we will improve our performance in a number of different sports by improving these fundamental skills. It is not necessary for us to start the specialisation process to early, as we can allow our children to train in a number of sports, increasing their exposure to more sports and more skills. This will help them improve their general aptitude for sports. If we increase their general aptitude, children will be able to start new sports and get to a competent level much faster. This means that we are improving the child's trainability which is crucial to their development. So by choosing the sports we play at an early age, we can make sure that we are helping our children become more trainable and increase their physical intelligence. Trainability refers to the faster adaptation to stimuli and the genetic endowment of athletes as they

respond individually to specific stimuli and adapt to it accordingly. In doing this, we allow our children to have more choices later on in life. E.g. If we allow our child to play, Cricket, Soccer, Gymnastics, we allow him/her the privilege of learning hand eye co-ordination (cricket), foot eye co-ordination (soccer) and body proprioception (gymnastics). We can see that by choosing such sports, the cross-over effect from soccer and cricket will allow him/her to play rugby and have improved skills in catching and throwing as well as kicking. The gymnastics will also improve his rugby due to the strengthened nature of the sport and improved proprioception that gymnasts need. So by choosing three sports that would appear to have no bearing on his ability to play rugby, we have actually given him/her more tools in his arsenal to actually play rugby and increased his exposure to different sports, without any damage to his rugby career.

Here is a simple table to explain the effects of early vs late specialisation

Early Specialisation	Multilateral programme
Quick performance improvement	Slower performance improvement
Best performance achieved at 15-16 years because of quick adaptation	Best performance at 18 and older, the age of physiological and psychological maturation
Inconsistency of performance in competition	Consistency of performance in competition
By age 18 athletes are burned out and quit the sport	Longer athletic life
Prone to injuries because of forced adaptation	Few injuries

Travelling Skills	Object Control Skills	Balance Movements
<ul style="list-style-type: none"> <li>• Boosting</li> <li>• Climbing</li> <li>• Eggbeater</li> <li>• Galloping</li> <li>• Gliding</li> <li>• Hopping</li> <li>• Ice Picking</li> <li>• Jumping</li> <li>• Leaping</li> <li>• Poling</li> <li>• Running</li> <li>• Sculling</li> <li>• Skating</li> <li>• Skipping</li> <li>• Sliding</li> <li>• Swimming</li> <li>• Swinging</li> <li>• Wheeling</li> </ul>	<p><b>Sending:</b></p> <ul style="list-style-type: none"> <li>• Kicking</li> <li>• Punting</li> <li>• Rolling (ball)</li> <li>• Strike (ball)</li> <li>• Throwing</li> </ul> <p><b>Receiving:</b></p> <ul style="list-style-type: none"> <li>• Catching</li> <li>• Stopping</li> <li>• Trapping</li> </ul> <p><b>Travelling with:</b></p> <ul style="list-style-type: none"> <li>• Dribbling (feet)</li> <li>• Dribbling (hands)</li> <li>• Dribbling (stick)</li> </ul> <p><b>Receiving and Sending:</b></p> <ul style="list-style-type: none"> <li>• Striking (bat)</li> <li>• Striking (stick)</li> </ul>	<ul style="list-style-type: none"> <li>• Balancing</li> <li>• Body Rolling</li> <li>• Dodging</li> <li>• Eggbeater</li> <li>• Floating</li> <li>• Landing</li> <li>• Ready position</li> <li>• Sinking/Falling</li> <li>• Spinning</li> <li>• Stopping</li> <li>• Stretching/Curling</li> <li>• Swinging</li> <li>• Twisting/Turning</li> </ul>



**Consequences of the Choice:**

The biggest risk that we face when we decide to take the early specialisation route is that we have narrowed the child’s focus and their chance for change. What I mean by this is that we do not allow the child to develop and move in the direction of their interests. Once we have made the choice for early specialisation, there is very little wiggle room for the children.

Life changes and things happen that are out of our control and we need to make sure that as parents and coaches, we are doing the best for our children at all times. By pushing the children into early specialisation, we narrow their choices and do not allow them to be able to make any choice of value. Children at a young age are not always mature enough to understand their choices and especially the consequences of their choices. If we lead our children into certain choices, we could be closing windows to learning new skills. The LTAD programme shows us that their opportunity windows in which we learn skills and develop physically faster and we need to use these windows and make the most of them. Early specialisation can cause us to ignore these windows of development and cause them to be deficient in certain crucial developmental movements and inhibit the child’s development. We are not meant to be closing windows and doors for our children but rather open as many doors to increase their chances of success.

We need to educate ourselves in terms of the choices that will benefit our children in the long run and not only focus on the now. We need to be wary of the future and make sure that we are taking into account all the relevant information. Every decision needs to be weighed up carefully when we are dealing with individuals future 🌈



# Nutritional Guidelines to increase Lean Body Mass

Text: Louise Götsche RD (SA) M Sc Dietetics - PVM Nutritional Sciences.

Lean body mass is the ratio of muscle to fat. From this description it can be seen that both training and nutritional strategies to increase muscle mass and to reduce fat will contribute to lean body mass. Realistically, it can be expected to increase muscle mass with no more than 250 - 500g per week. Appropriate individualised hypertrophy training programmes and nutritional strategies should be followed to attain this. The general nutritional guidelines to increase lean body mass, as followed by the Free State Cheetahs, are given below.

1. To increase lean body mass, energy intake must be more than energy expenditure. Therefore, aim for an increase of 2000 - 8000 kJ per day.

1000 kJ Food Portions
1 Cup Muesli / Pronutro
4 Slices of Bread with 2 tsp of Jam/Syrup
2 Large fruits
1½ cup Basmati/brown rice
2 Cups Pasta
2 Medium baked potatoes

Energy content of PVM Supplements	
Octane XTR (50g)	779.0 kJ
Fusion Mass (75g)	1207.0 kJ
Reignite (50g)	763.0 kJ
Reignite (75g)	1145.0 kJ
Protein XTR (50g)	771.0 kJ

2. It is generally recommended to consume 1.8-2g protein per kg body weight per day. In some situations, a greater intake is warranted, but for a limited period under supervision only. To calculate protein intake may be tricky for e.g. a 200 g beef fillet contains approximately 60g protein, not 200g. To help in this regard, please refer to the table below.

Protein content of selected food items		Protein content of PVM Supplements	
200g Beef (meat only)	60g	50g PVM Octane XTR	4.8 g
200g Chicken (meat only)	59g	75g PVM Fusion Mass	32.5 g
200g Tuna, canned in brine	51g	75g PVM Reignite	12.3 g
1 Egg, whole	7g	50g PVM Protein XTR	36.6 g

3. An optimal state of hydration should be maintained which is easily done with the intake of 6-8 glasses water per day.
4. In addition to energy and protein intake, fat intake should be within a recommended healthy range (See tips to reduce fat intake).

### Tips to reduce fat intake:

- Opt for poached or scramble eggs rather than fried eggs.
- Avoid fried vegetables. Steam, stir fry or boil are better alternatives.
- Avoid cream or dips –use yoghurt, buttermilk or cottage cheese.
- Rather use Tomato/ Tabasco/ Soya/ Worcester/ Sweet Chilli sauce than Mayonnaise.
- Use balsamic vinegar or low fat salad dressings.
- Limit the intake of high fat snacks e.g. cookies, cakes, chocolates, pies, chips, etc
- Use skimmed milk products.
- Remove the skin from chicken and all excess fat from chicken and meat before cooking.
- Choose lean meat cuts and mince meat.
- Instead of choosing fish canned in oil, use those in brine, tomato- or chilli sauce.

Professional players may include low dosages of creatine during hypertrophy training phases. This is not recommended for high school children.

The recommended PVM supplement stack to take during training in conjunction with these guidelines is:

Supplement	Energy content (kJ)	Protein content (g)
<b>GYM TRAINING</b>		
Octane XTR (50g in 500ml water, before & during training)	779	4.8
Reignite (50g in 400ml water after training)	763	8.2
<b>FIELD SESSION</b>		
Octane XTR (50g in 500ml water, before & during training)	779	4.8
Fusion Mass (75g 350 ml water 1 hour after training)	1207	32.5
<b>30 MINUTES BEFORE BEDTIME</b>		
Protein XTR (50 g in 250 ml water)	771	36.6
<b>TOTAL</b>	<b>4299</b>	<b>86.9</b>

Alfred Rheeder - PVM Nutritional Sciences. Should you require nutritional assistance contact PVM at (012) 804 7676 or visit [www.pvm.co.za](http://www.pvm.co.za)

PVM Nutritional Sciences offers superior nutrition through applied science. Since 1968 PVM, the producer of the worlds original energy bar, has remained dedicated to a cutting edge understanding of the biology of energy exchanges between humans and their environment. PVM is involved with numerous top athletes and sport teams and is also subcontracted to condition the Free State Cheetahs.



**IF YOU THINK YOU CAN EAT YOURSELF FIT, EAT YOURSELF THIN AND EAT YOURSELF INTO THE RECORD BOOKS, READ NO FURTHER.**

**But if you're serious about fitness and beating your personal best, read on.**



"Ultimately it is about winning... being the best I can. I am serious about nutrition as I am about training. Winning at the level I compete is not easy, it requires hard work and dedication to detail. PVM knows that instant success is impossible and that avoiding fads is important. When it comes to performance nutrition I have learnt to distinguish between fact and fiction. That is why I use PVM"

**Mannie Heymans**



**Octane 90 : 10 : 0**

**Primary Usage**  
**Energy:** Before and during endurance events/training  
**Secondary Usage**  
**Recovery:** After training and events



**Reignite 82 : 10 : 0**

**Primary Usage**  
**Recovery:** After training and events  
**Secondary Usage**  
**Carbo-loading:** Day(s) before event

PVM products contain no stimulants and all ingredients are deemed legal substances by WADA.

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# Contrast therapy & recovery

*Text: Menzi C. Ngcobo, Biokineticist, Institute for Sport Research, University of Pretoria  
Images: Reg Caldecott*

With the London 2012 Olympics just 15 months away, athletes will be subjecting their bodies to ever increasing levels of training loads and stresses as they strive to improve their performance and compete to their full potential at the summer games. Adequate recovery between training sessions or competition is critical to prevent over-training thus increasing the risk of sustaining an injury.

A recovery period allows time for a number of events to occur including the replenishment of the body's energy stores and a reversal of central nervous system fatigue thus allowing optimal function of the neuromuscular pathway (Sanders, 1996).

There are a number of strategies that can be employed to aid recovery

after training or competition. Contrast Therapy (CT) is one such strategy, this technique involves repetitive application of cold (cryotherapy) and heat in an alternating fashion.

Initially, CT was used primarily in the management of injuries. More recently it has been utilised to aid post-exercise recovery (Cochrane, 2004). However, there appears to be insufficient evidence to support the therapeutic efficacy of CT to aid recovery. Support for the assumption that CT is an effective recovery modality appears to be mainly anecdotal.

The proposed physiological effects of using CT amongst researchers is that cryotherapy results in a decrease in muscle temperature leading to vasoconstriction of the blood vessels

and a decrease in inflammation (swelling) through the slowing of metabolism metabolite production (Cochrane, 2004). Another study in support of CT indicates that heat is used to reduce pain and promote healing in soft tissue injuries (Brukner & Khan, 2002).

Although a wide range of effects have been demonstrated to support the use of CT (including changes in blood flow, reduction of inflammation, vasodilation and vasoconstriction, decreased oedema; pain and muscle stiffness) the physiological basis of CT is not adequately understood. One of the popular theories suggests that the vasodilation and vasoconstriction induced by alternating heat and cold results in a 'pumping action' that increases blood flow (Calder, 1996; Cooper & Fair, 1976).



However several authors have reported that CT does not produce the intramuscular temperature changes required to induce a 'pump' effect (Higgins & Kaminski, 1998; Wertz, 1997).

It is of interest to note that most of the research studies reviewed in gathering information for this article used physiological changes in intramuscular temperature, blood volume, heart rate, blood lactate levels and creatine kinase levels as outcome measures to test the efficacy of CT. There is some evidence that changes in these parameters may aid recovery after training or competition and may also be associated with early return to sport after an injury (Cochrane, 2004).

A comparison of the protocols in the reviewed studies highlights the differences in the method of application, the time and order of each hot (+/- 38-40°C) and cold (+/- 10-15°C) cycle as well as the total time for the recovery session. The application of CT for recovery usually involves full or half body immersion as opposed a single body part or a single limb.

Although there is anecdotal evidence that CT is effective in post exercise recovery (Cochrane, 2004), there is a lack of scientific evidence to support the use of CT for injury treatment or to aid recovery. There are also a number of questions regarding the accepted protocols for the application of CT. The differences in the temperature of the hot and cold application, the differences in the time each modality is applied for and the number of cycles will result in different outcomes in terms of both physiological and functional parameters (Wayne A. Hing, 2008). Other factors that are likely to influence the efficacy of the CT are the degree of immersion or area of coverage of a limb 🏊

# Balance:

## Maintaining equilibrium

*Text: Guillaume Malan - Biokineticist, Institute for Sport Research, UP*

As human beings we carry the majority of our body weight fairly high off the ground compared to some of our four-footed friends. This means we have a very high center of gravity, and being bipeds, we have a small base of support for our tall structure. This is where balance becomes essential, the ability to have our postures in equilibrium with our base of support (Prentice 2004).

Normally our balance is maintained seamlessly through our daily lives and physical activity; a careful interplay between our sensory inputs and our muscular control. This occurs largely unconsciously and it is only when we try to purposefully improve this skill or try to regain it after injury that we realize the complexity of the task.

Statistics from the United States show that 50% of persons living in nursing homes fall annually, with 11% of them sustaining injuries. (Clark and Kraemer 2009)

The mere fear of falling can already be a restriction in the lives of those suffering from poor balance, a fear that is not always preceded by an actual fall. Physical training can increase one's balance confidence and improve physical capabilities. (Liu-Ambrosea, Khana et al. 2004) Remember that a stronger body is better able to maintain balance than a weaker one, so be sure to do strengthening exercise for your legs and hips such as a sit-to-stand from a chair. The more you are able to do this consecutively and without losing control, the less chance you have to lose your balance.

### Normally our balance works as follows:

#### Step 1:

Our inner-ear, vision and joint senses supply information to our Central Nervous System (CNS) about our body's current position.

#### Step 2:

Our CNS processes these inputs and sends the signal back towards the muscles.

#### Step 3:

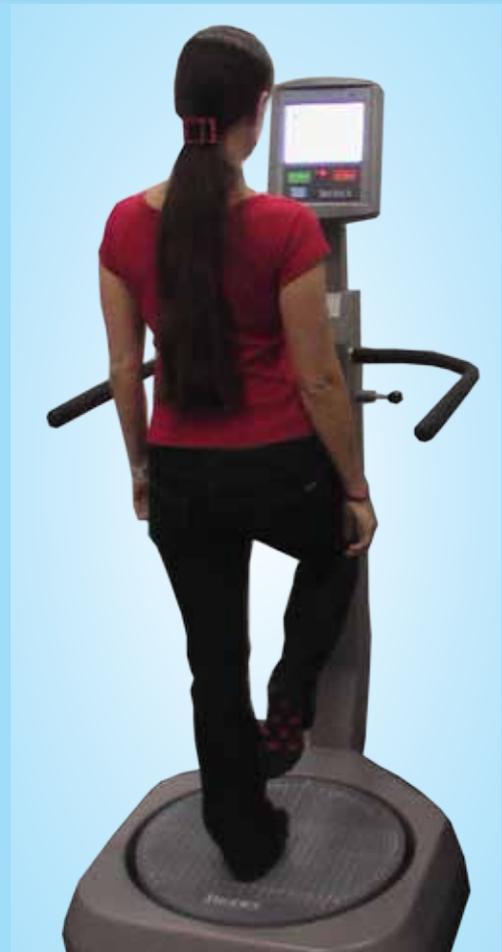
The body then responds with co-ordinated and very precisely timed muscular activation to counteract any shifting of our center of gravity.

Now if we for any reason can not accurately sense our center of gravity relative to our base of support, or if we are unable to automatically respond effectively with appropriate muscular contraction, we are likely to fall (Houghlum 2001).

Many factors can affect our balance: muscle strength, joint range of motion, lack of co-ordination, disease, loss of sight and so forth.

Many of these are associated with aging, making the problem of maintaining balance more problematic for the elderly, with a fear of falling being potentially disabling (Liu-Ambrosea, Khana et al. 2004).

Fortunately this is a skill which does respond to training and can well be improved with a little diligence (Laessoe, Hoeck et al. 2007).



# Institute for Sports Research

## ISR – REHABILITATION LAB

Our Biokineticists offer the following services:

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This support includes athlete assessment and monitoring, research, training analysis, strength and conditioning, long term athlete development and programme development.

For more information please contact us on (012) 362 9800 ex 1065.

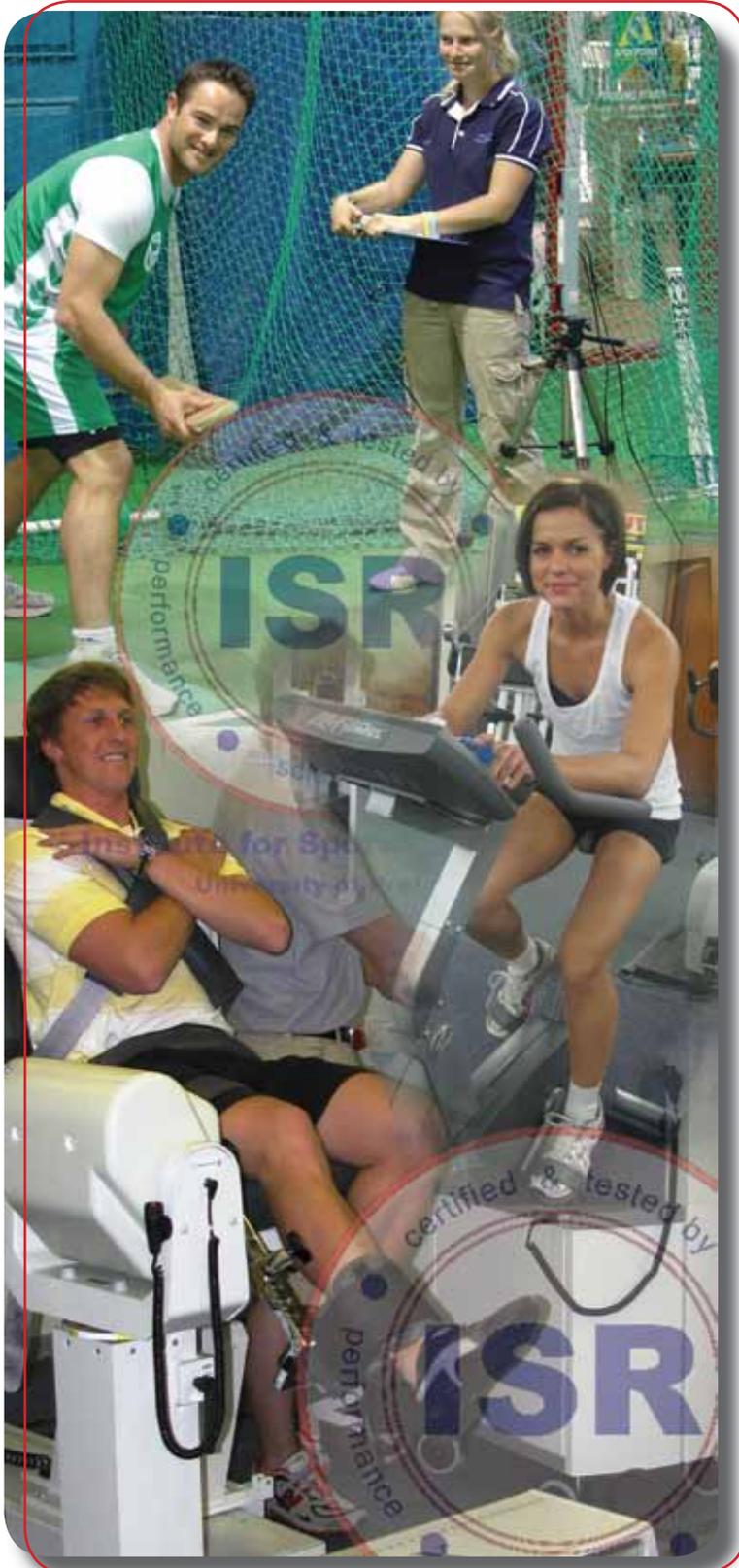
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### Training to improve balance.

Balance is affected by the following training variables:

#### Base of support

(e.g. smaller base would be standing on one leg instead of two, or an unstable base of support such as standing on a foam pillow or BOSU ball)

#### Sensory input

(e.g. performing the drill with eyes closed to reduce input, or with joint support to enhance proprioception)

#### Static vs. Dynamic exercise

(e.g. merely holding balance in place, or while throwing medicine balls from that same position)

#### Speed of execution

(Slowly and carefully performing a movement may require more balance than merely relying on momentum to carry you through the motion)

You can improve your own balance by following the sequence below, one item at a time. Remember, start from the first item and **do not** go on to the next item unless you have mastered the previous:

- 1** Stand barefoot, feet touching, for 30 seconds. (remain barefoot for all the challenges)
- 2** Repeat the above challenge with eyes closed.
- 3** Stand with feet aligned, so heel of left foot is in front of toes of right foot – 30 seconds, eyes open.
- 4** Now close your eyes and stand again for 30 seconds.
- 5** Do a single leg stand with your eyes open. Hold for 30 seconds.
- 6** Do a single leg stand with your eyes closed. Hold for 30 seconds.
- 7** Single leg stand on BOSU / thick foam pillow for 30 seconds.
- 8** Repeat with eyes closed.
- 9** Perform 10 single leg half squats, slowly, on a BOSU with eyes open.
- 10** Repeat with closed eyes.
- 11** If still too easy, find an exercise ball and attempt balancing on all fours.
- 12** Repeat with eyes closed.
- 13** Finally, try standing on the ball.





Always keep your knee aligned with your foot, and your body position must be upright and stable.

Be warned that attempting balancing on a skill level that is too great can lead to injury. Always have proper supervision and a safe, obstacle free environment with adequate fall protection.

When you find a level which is challenging but do-able then perform 3 sets of 1 min every day.

Through advancements in technology, machines have been created which can measure your ability to balance (as well as your risk for falling) and indeed help you to effectively improve your static and dynamic balance ability. One such device is the Balance SD system produced by Biodex, which features a force plate that can be set to be static as well as wobbly for those with greater balance.

A biokineticist can help you evaluate your balance and your risk for falling, through either measurement with devices such as the above or through functional tests. Should you suspect that your balance is less than optimal, make an appointment today for an evaluation 🌈

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# Yoga 101

## A beginner's guide

*Text: Corli van der Watt (hpc)  
Physiotherapist, Pilates and Yoga trained*

Yoga is probably one of the oldest and most misunderstood physical art forms. When you mention the word yoga to most people, it seems to conjure up pictures of super flexible people twisted into impossible poses. Partly true as a lot of the yoga postures practised are not positions we would get into during a normal day.

Yoga is an ancient Indian body of knowledge, not a religion, and the word yoga comes from the Sanskrit word "yuj" meaning to yoke, join or unite. This implies joining or integrating all aspects of the individual – body, mind and soul. Yoga was never intended to be an exercise. It was developed as a way to still the mind through working with the body and breath. An exercise in concentration, a form of moving meditation. For exactly this reason it is a wonderful adjunct to any athlete's regime. It teaches the athlete to control his or her body in sometimes new and weird positions, stay present in the moment and to handle physical challenge or discomfort. The exercises range from very easy to extremely hard, from postures that challenge your flexibility to handstands and a myriad of other stability exercises. What makes yoga different from just contortionist exercise and gymnastics is the intent and breath control. The focus is not on the end result but the practice itself. Not achieving but simply being.



### Different Styles of Yoga suited to Athletes

Style	Description
Ashtanga	A flowing sequence of movements. Six successive series increasing in difficulty. Builds strength and stamina.
Bikram	A set series of 26 postures performed in a heated room (40 ). Promotes flexibility and detoxification.
Power Yoga and Vinyasa Flow	Similar to ashtanga without the set sequences. Postures may be held for longer periods of time. Often done with music playing.
Iyengar	Iyengar is the form of yoga that focuses most on correct alignment and uses props like belts and blocks to achieve the best form. Slower than the above mentioned styles, but helps develop technically sound yoga practice.

## “The Monkey Mind” Yoga philosophy made easy

Try this easy exercise! Try for one minute to only focus your mind on one thing. Not so easy. A person's mind constantly fluctuates between different things, worries and lists of things to do. Our minds are easily distracted and this is the monkey mind. To quieten or calm the mind, you need more than one thing to focus on. While doing yoga you focus on breath and movement, not on goals or responsibilities. The idea is to be fully present in the moment and in doing so train to your fullest potential.

## Pilates vs Yoga

Pilates is a wonderful way to teach body awareness and increase core stability, but its advantages are also its disadvantages. In Pilates your ranges are fairly limited and all the movements are isolated and dissociated. Most classical Pilates exercises are done on your back on a mat. Yoga has more functional positions, a wide variety of standing exercises, balancing exercises and doesn't limit movement to the neutral position. Both of these disciplines link movement to breath, where as Pilates exhales through the mouth, yoga inhales and exhales through the nose. Yoga also incorporates different exercises manipulating and controlling your breath.

## Benefits of Yoga

- Core strength in Functional Positions
- Breath Control
- Increases Concentration and Focus
- Flexibility
- Strength
- Decreases Stress
- Power and Vinyasa flow Yoga can burn up to 1413 and 911 kilojoules in 90 minutes respectively
- Yoga improves your mood: in one study it was found to improve the GABA chemical's level by up to 27%. GABA is an amino acid and has an anti-anxiety effect.
- It decreases chronic pain. A study by the University of West Virginia found that after practising yoga for three months, volunteers reported a decrease of up to 70% in lower back pain. This also resulted in a significant decrease in the amount of pain medication taken.
- In a study published by the Journal of the American Dietetic Association it was found that there is a strong link between mindful eating and doing yoga. Mindful eating is chewing when hungry and stopping when full, not eat for emotional reasons and past the point of satiety 🌈

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# Calcium & Magnesium



## supplementation in sports people

*Text: Dr Org Strauss, hpc*

The use of calcium and magnesium supplementation is a subject we all have come across as sports people and we would all love to know how important these minerals are and why?

Calcium plays an important role in nervous function, muscle contraction and bone/tooth metabolism. Magnesium helps in nervous function and muscle contraction, also immune function, bone metabolism and a cofactor/activator for energy metabolism.

Milk, cheese and dark green vegetables are all high in calcium. Whole grains and green and green leafy vegetables are all very high in magnesium.

An adequate calcium intake in a well balanced diet is needed to prevent bone mineral loss and reduce the risk of osteoporosis in later life. A prime defense against bone loss with age is an adequate calcium intake throughout life and regular physical activity from childhood through adulthood. Paradoxically, women who train too intensively and those whose body weights has reduced to a point at which menstruation is adversely affected often show advanced bone loss at an early age. A well balanced diet is necessary to meet an adequate calcium intake. Restricted energy intake, dietary extremism, fad diets and vegan eating pattern may limit the amount of calcium taken in. Athletes need to make sure that their diets contain enough amounts of calcium.

Healthy adults who eat a varied diet do not generally need to take a magnesium supplement. Magnesium supplementation is usually indicated when a specific health problem or condition causes an excessive loss of magnesium or limits magnesium absorption.

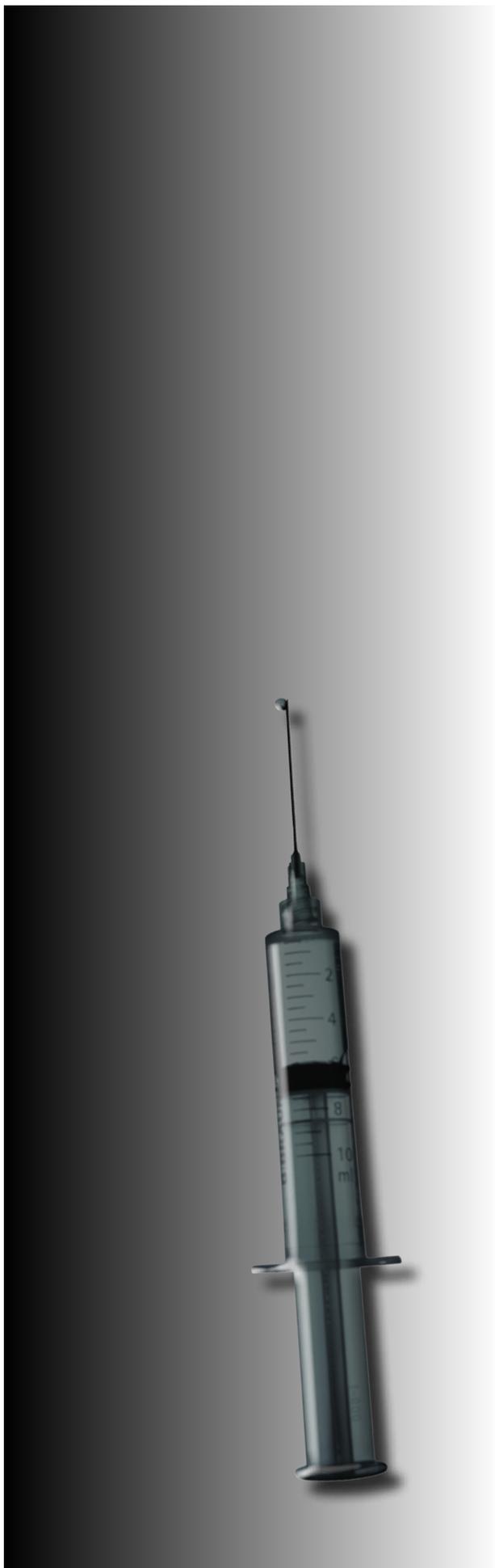
Extra magnesium may be required by individuals with conditions that cause excessive urinary loss of magnesium, chronic malabsorption, severe diarrhea and steatorrhea, and chronic or severe vomiting.

Loop and thiazide diuretics, such as Lasix, Bumex, Edecrin, and Hydrochlorothiazide, can increase loss of magnesium in urine. Medicines such as Cisplatin, which is widely used to treat cancer, and the antibiotics Gentamicin, Amphotericin, and Cyclosporin also cause the kidneys to excrete (lose) more magnesium in urine. Doctors routinely monitor magnesium levels of individuals who take these medicines and prescribe magnesium supplements if indicated.

Poorly controlled diabetes increases loss of magnesium in urine and may increase an individual's need for magnesium. A medical doctor would determine the need for extra magnesium in this situation. Routine supplementation with magnesium is not indicated for individuals with well-controlled diabetes.

People who abuse alcohol are at high risk for magnesium deficiency because alcohol increases urinary excretion of magnesium. Low blood levels of magnesium occur in 30 percent to 60 percent of alcoholics, and in nearly 90 percent of patients experiencing alcohol withdrawal. In addition, alcoholics who substitute alcohol for food will usually have lower magnesium intakes. Medical doctors routinely evaluate the need for extra magnesium in this population.

The loss of magnesium through diarrhea and fat



malabsorption usually occurs after intestinal surgery or infection, but it can occur with chronic malabsorptive problems such as Crohn's disease, gluten sensitive enteropathy, and regional enteritis. Individuals with these conditions may need extra magnesium. The most common symptom of fat malabsorption, or steatorrhea, is passing greasy, offensive-smelling stools.

Occasional vomiting should not cause an excessive loss of magnesium, but conditions that cause frequent or severe vomiting may result in a loss of magnesium large enough to require supplementation. In these situations, your medical doctor would determine the need for a magnesium supplement.

Individuals with chronically low blood levels of potassium and calcium may have an underlying problem with magnesium deficiency. Adding magnesium supplements to their diets may make potassium and calcium supplementation more effective for them. Doctors routinely evaluate magnesium status when potassium and calcium levels are abnormal, and prescribe a magnesium supplement when indicated.

Doctors will measure blood levels of magnesium whenever a magnesium deficiency is suspected. When levels are mildly depleted, increasing dietary intake of magnesium can help restore blood levels to normal. Eating at least five servings of fruits and vegetables daily, and choosing dark-green leafy vegetables often, as recommended by the Dietary Guidelines for Americans, the Food Guide Pyramid, and the Five-a-Day program, will help adults at-risk of having a magnesium deficiency consume recommended amounts of magnesium. When blood levels of magnesium are very low, an intravenous drip (IV drip) may be needed to return levels to normal. Magnesium tablets also may be prescribed, but some forms, in particular magnesium salts, can cause diarrhea. Your medical doctor or qualified health-care provider can recommend the best way to get extra magnesium when it is needed.

Other well known forms of calcium and magnesium supplementations are Slow Mag and Calcium Sandoz. Calcium and magnesium may play a role in muscle cramps during endurance events, but the magnitude of this is definitely debatable. It is believed that the availability of these minerals together with other minerals like sodium and potassium and the functioning/conditioning of the nervous system play a role in muscle cramping. All these aspects should be addressed in cramping.

The most important thing is that these supplementations should always be monitored with the appropriate six monthly blood test with your physician and accompanied by a balanced diet.

In the next article we will spend some time on the ever occurring problem of tiredness and detecting causes of it and some solutions 🌈

# Heads or Tails?

## There are two sides to every gold medal....

*Text: Hettie de Villiers*

**T**he bloodthirsty shouts and screams from the crowd were deafening, and although I could feel the mob closing in on me, I didn't once turn around to look at them or to wave them back. I was transfixed by the scene playing out in front of me. The gladiators were in glorious battle, sweat glistening on their bodies, their faces drawn in sheer determination. Victory was at stake, and neither the Spartans nor the Olympians were willing to admit defeat.

If by reading the paragraph above, you imagined some or other gladiatorial contest taking place in a Roman or Greek Coliseum, you would not be far off. The venue might not have been as grandiose, and the fight did not end with someone's head on a sword, but the intensity and level of competitiveness would have pleased even Julius Caesar. Every single boy or girl that took part in the Fun Day activities competed as if their lives depended on it. Even those that were on the injury list and were not supposed to compete, reported for action. Sitting on the sidelines watching others compete seems to be the worst punishment of them all. It is this competitive spirit that makes teaching at TuksSport High so different from teaching at other schools. That, and a few other things....

I asked two new teachers what it was like teaching at a sport school.

"Kids are kids, and like all youngsters, our learners take chances", says Miss Scholtz, the new Business Teacher.

"They are definitely more driven than most learners at other schools, and if you put out a challenge, they will accept it – even if it is just to beat the boy or girl sitting next to them." She uses the Top Achiever Board she has in her classroom as an example, and says the Grade 10 class in particular fight to have their names appear on the board. "Competing seems to be in their blood, and the classroom is just a different competition field."

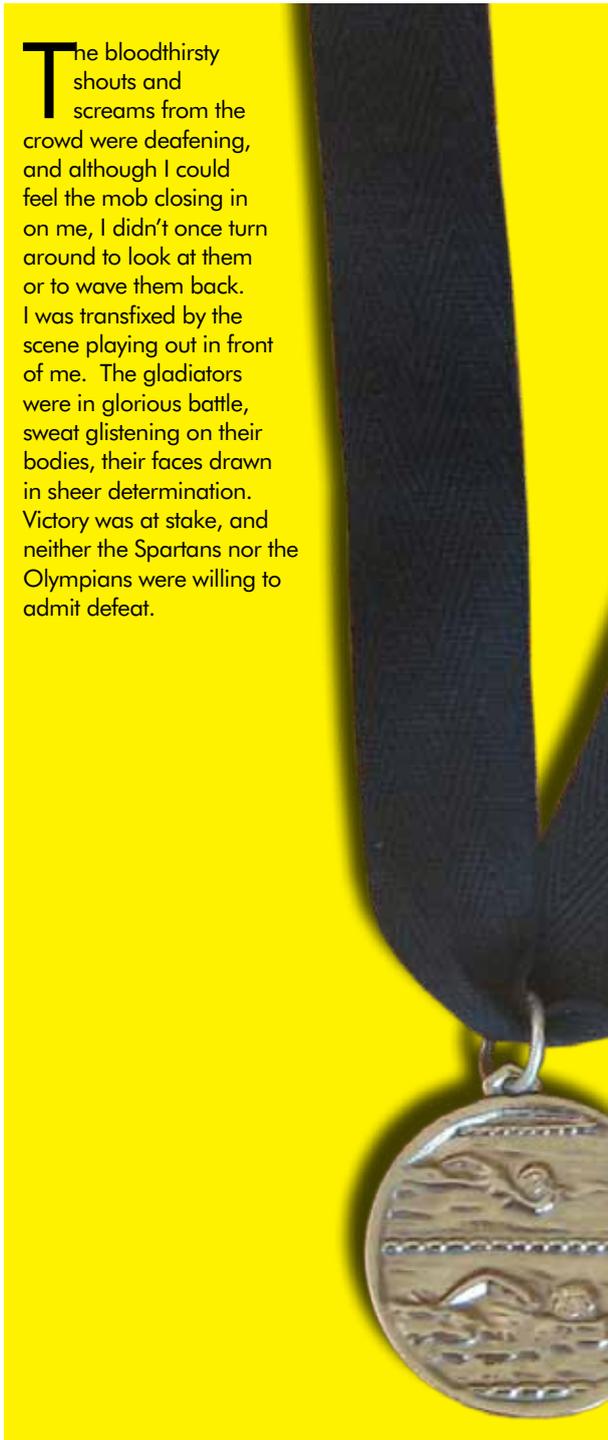
There is, however, a down-side to being so competitive.

According to Miss Scholtz, the learners challenge everything she says in the class. "They are inquisitive and don't just accept everything one tells them. They demand to know the why and the how of business – and of course why things can't be done the way I think it should be done. And when it comes to marking their scripts, they challenge the marks, the memo, the grid, the guidelines from the Department of Education, everything but the colour of the pen she used. But Miss.....

Mrs Seeley is an old hand at teaching English and wasted no time in teaching the Grade 12s that when Iago exclaimed "How poor are they that have not patience!" (Othello ACT II Scene 3), he wasn't talking about teachers.

She agrees that the majority of the learners at TuksSport are very focused and that they challenge teachers far more readily than what she is used to. But, she hastens to add, never in a disrespectful way. She believes that apart from the fact that they are wired to challenge, the intimacy and bonding that result from having smaller classes, make them feel safe enough to question and challenge.

Both teachers are quick to tell me, however, that it is not





The Olympians show that nothing beats teamwork

always easy to teach at a Sport School where learners are so often absent from school.

“It’s not easy keeping all the balls in the air – you have to keep track of who is going away when, what they need to do while they are away, what you need to do when they come back to help them catch up, and the million dollar question – when the coaches will allow them time off from training so that you can help them catch up on work lost.” And driven they might be, but when it comes to choosing between school and sport, it’s no contest.

A common phenomenon both teachers have learned to accept in their stride is that of sharing the class with Morpheus and his accommodating arms. They both express wonder at how the learners – especially the new ones who are not yet used to the demanding training schedules – can drop off to sleep in the middle of a sentence or a lesson.

Miss Scholtz’ seems to have found a solution to the problem in the form of a pink spray bottle – it seems there’s nothing like an unexpected spray of cold water to help a learner re-focus on a lesson!

Mrs Seeley admits it took her quite a while to adjust to a teaching environment that is in a state of constant change. “One hardly ever has a full class, and even if you prepared the most spectacular poetry lesson ever, there is no guarantee that everyone will benefit from it. And a summary on paper is not quite the same as the dramatised version,” she laments.

So are there any positives to teaching at TuksSport High School?

Miss Scholtz: “Every day is positive. The learners are polite and friendly and willing to co-operate. They might not always do all their homework, but that is not so unusual. What is unusual is that they always catch up on assignments and assessments missed when they are away- in other words, everything that counts for marks! They know when they have to deliver, and they do.”

Mrs Seeley: “Definitely. I wouldn’t want to teach anywhere else. One can still connect on a personal level with the learners here. One gets to know them and to share and support them in their dreams. I can still teach here, and I can see the results. It’s like watching a complicated yet perfectly synchronised dance routine – some dancers are up, and some are down, some make up the backline and some sparkle in the front. Together they make a perfect whole” 🌈





# TuksAthletics Academy

*Text: Lester Mills Images: Reg Caldecott*

For some years now, former South African sprint champion Geraldine Pillay has had a mandate as manager of the University of Pretoria High Performance Centre (hpc) Athletics Academy, to scour the length and breadth of the country in search of young athletic talent. Her brief has pretty much been to identify potential champions in the under-14 and under-15 age groups.

All this is, of course, a task far easier said than done considering the pure magnitude of the ask. Thankfully though, the SA government, in the form of the Department of Sport and Recreation, has also come on board and agreed to be one of the financial backers of this Tuks hpc project.

"The department agreed to fund young athletes at the academy last year. Something we are really pleased about," says Pillay.

Not that it makes Pillay's job any easier. The task is nevertheless a vital one for South African athletics. Only one other similar operation exists in the country – in the Western Cape on a much smaller scale – so the success of this TuksAthletics Academy is critical to the future

success of the sport in the country.

The process then of getting talent youngsters into the system at the hpc Academy starts with them being identified as potential stars. Raw talent, however, is not an automatic qualifier for a place at the Academy and TuksSport High School. Athletes face a fairly grueling screening process.

Athletic tests, psychological tests and academic test are all part of the process. All this to gain a prized place as a learner at the Tuks High School and Athletics Academy. But as those who have been exposed to the management of the school will know, it's no ordinary institution. Accommodation is provided at the hpc, classes take place at the Tuks Groenkloof campus to which the learners are bussed each day. What happens before and after those classes which is probably the most different to other schools. Training programmes, gym programmes, physiotherapy and visits to sports doctors are all on an extremely busy agenda.

According to Pillay this environment brings the best out of youngsters at the school.

"Being constantly surrounded by peers who are also among the best

at what they do on the athletics field is the best way to improve", she says.

Right now, the academy is home to 14 youngsters with manager Pillay naturally excited about the potential of all of them.

"As far as I'm concerned, they are all champions," says Pillay. She did though feel it fit to mention two athletes who are excelling at the academy at the moment.

"Youngsters like Dwayne Boer, a long and triple jumper from Eersterust in the Cape and Jacob Pseko a 1500m and 2000m steeplechaser, are definitely champions in the making," says Pillay.

But for Pillay, this does not mean she will be resting on her laurels. There's plenty of leg work to do. As chief talent spotter she has to consistently keep tabs on schools leagues and the various age-group championships on local and national championships.

"Of course, I cannot do this alone and we do have spotters all over the country," says Pillay.

With all this work getting done behind the scenes, this is certainly one academy which is due to produce a number of champions down the road 🏆

# TuksSport

The BestMed TUKS race took place on 19 February and attracted a record number of athletes for a Gauteng race as more than 8,000 athletes took part. This was mostly due to a major sponsorship from BestMed including attractive prize money (including double up for new records) to ensure that the top athletes participated as well as a major advertising campaign that covered all media possibilities. Another major attraction was the 5km fun-run as well as a 1km fun-run for all the small ones, ensuring that the future runners get interested at an early stage. All finishers also received a t-Shirt and medal, including the 1 and 5 km.

The race started at the University of Pretoria Sport grounds, ran towards Loftus Versfeld, turning back with a loop through the main campus before returning to the main sports ground and the 10 km finishing on the tartan track of the athletics ground in front of the main pavilion. The 21.1 took a loop through the rest of the sport grounds and farming area of the university before returning through the eastern suburbs finishing on the tartan track.

BestMed also provided entertainment throughout the day for supporters and the young ones, starting with a dancing group at the start of each event on stage as well as kiddies corner, etc.

The winners for the major events were:

#### 10 km

S Makoka – 29:32

R Nyahora – 35:02

#### 21.1 km

S Nzima – 01:05:56

M Tjoka – 01:14:25



### Elize Kotze – SPAR Protea Leader Coach

The 2010 TuksSport coach of the year – Elize Kotze – was appointed the new leader coach of the SPAR Protea Netball team. She will prepare the Protea team for the World Netball Championships which will take place in Singapore from 3-10 July 2011. The first training camp was held at the University of Pretoria from 27-30 January. The assistant coaches are Burtha de Kock, Prof Chipeya and Reg Sharp.

Elize joined the University of Pretoria as the Head coach of TuksNetball in 2004. She is the heart of the club and the inspiration behind its excellent performances. Her passion and love for netball inspire all netball players to embrace their potential and become the best they can be. Her attention to individual development sets her apart from other team coaches. In 2010 Elize did not just focus on the team dynamics but also spent countless hours developing the Tuks players individually – preparing them for any possible challenge. Her loyalty to TuksSport and TuksNetball is evident in the way she leads the club. She has the highest standards and principles and encourages her players to 'set the standard'. In 2010 she coached the Gauteng North A team to winning the SPAR National Netball Championships and NSA merit Tournament and Tuks 1 that won the Gauteng North League.

To Elize it is not just about Netball – it is about Life!



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## LJ van Zyl – record breaking performance

The University of Pretoria and TuksSport's star 400m hurdler, LJ van Zyl, ran the race of his life on Friday 25 February at the Yellow Pages Meet which took place at a wet ABSA Tuks Stadium. LJ who won a silver medal at last year's Commonwealth Games, ran his race in a time of 47.66 and in the process broke the 11-year old record of Llewellyn Herbert (47.81). According to LJ, preparation for the season started off well – he is definitely fitter and stronger. His next goal will be to record his best time in the 400m. LJ will start his international season in Doha, Qatar on 6 May.



Image: Deaan Vivier - Foto 24

## TuksRoadrunning – Principal makes history

On 14 February – the Tuks Roadrunning club presented the Vice-Chancellor & Principal, Prof Cheryl de la Rey, with colours of the club and her special registration number – 10 000. Prof de la Rey is the first serving Principal of the University to have taken up active membership of a sports club. This coincided with the BestMed Tuks race that took place on Saturday 19 February. More than 8000 athletes participated. The Principal started and finished the 10 km race. TuksSport and TuksRoadrunning are extremely proud to have Prof de la Rey as an honorary member of the club.



Prof Vullie Spies (left), Chairperson of TuksRoadrunning presents Prof de la Rey with her colours.

## TuksGolf – a long awaited dream comes true

Since 2007 the University of Pretoria has been working towards providing a golf practice facility for the students and staff of the University. The Tuks Golf club, celebrated the opening of the TuksGolf Training facility on Monday 31 January 2011, with a small ceremony on the TuksSport campus, when the President of TuksGolf and Deputy Chairperson of the UP Council, Dr Piet Botha, hit the first ball. Business officially started on 1 February. Construction has also started on the 2<sup>nd</sup> phase.

Staff & Students of the University can make use of the facility at subsidized rates from 07:30 – 17:30 every day of the week.



Dr Piet Botha hitting the opening shot.



Dr Piet Botha congratulating Johan Steyn, Executive Manager of TuksGolf

# INSIDE NEWS

## Gaelic Golf Games – Dubai 2011

Hannah Oguz, Kirsty Querl, Shona Hendricks and Devlin Eyden from our ISR High performance Division, as well as hpc mentors Aaron Denenga and Chris Holden and a previous Tuks Cricket player Marnus Lottering joined the first ever South African Gaelic Football squad on tour to the Gaelic Golf Games in Dubai. The SA Gaels have been training from October 2010 for the event, and thanks to the support from many sponsors, including the high performance centre for their generous contributions, were able to go and compete in what was an amazing weekend experienced by all.

The men's side walked away with the plate coming top in their division, whilst the ladies fought a hard battle to lose out to the continued winners Al Rin by a point in extra time. Also SA Gael Marnus Lottering took home most valuable player for the tournament. SA Gaels have made a huge impact, with the Director of Gaelic Games overseas showing huge interest in helping South Africa host their own Gaelic games tournament in the coming years.



Amy Bathgate and 2 of our Sport Science Honours students from last year, Carli van Schalkwyk and Dave Phillips, were involved in a video analysis Dartfish project at the SA Tennis Open held at Monte Casino earlier in February.



## Speedo Sponsorship

Tuks swimmers, who are part of the Swimming SA's high performance squads were very fortunate to receive a fantastic sponsorship from Speedo SA, on Monday, 14 March to help them in their preparation for 2012 – 2016



## This 'Stone' is defying gravity!

A stone is known to sink to the bottom but Brandon Stone, a TuksGolf athlete, rose to the top and is now the no.1 ranked golfer in South Africa. Brandon exploded onto the senior national scene and started pulling in the tournaments one-by-one. Brandon recently also won the Prince's Grant Invitational and is selected to represent South Africa in a test match against Scotland from 07 - 10 March 2011 at Leopard Creek. Brandon has been coached since took the game seriously by TuksGolf Head Coach Llewellyn van Leeuwen.

Brandon is the second South African no.1 ranked player from the University of Pretoria since 2008 and the seventh for coach Llewellyn van Leeuwen since 2007.



# INSIDE NEWS

## TuksCricket

*Text: Anton Roux, TuksCricket Academy Manager / Head Coach*

During one of our visits to Tzaneen, Ben Vorster Hoërskool to be exact, Rob Walter (former Technical Director of TuksCricket Club and current Protea fitness and fielding Coach) and Anton Roux (TuksCricket Academy Head Coach) spotted a young fast bowler by the name of Marchant de Lange. Quiet by nature and very well mannered, Marchant possessed all the qualities and make-up of a fast bowler. He had genuine raw pace, a huge heart, and a competitive instinct that can not be taught, learnt, or coached. Filled with ambition, we offered Marchant a bursary at the TuksCricket Academy for 2009.

Based at the High Performance Centre in Pretoria, Marchant went about polishing his skills and work towards getting strong and ready for higher grade cricket. What better place to be an upcoming cricketer than at the University of Pretoria. Marchant quickly moved up from the 3<sup>rd</sup> team and established himself in the 2<sup>nd</sup> Team. Soon he was spearheading the attack for the Assupol Tuks 1<sup>st</sup> team and was also drafted into the Titans pre-season squad for 2009.



Unfortunately, Marchant picked up a foot injury in the off season but was back in full flight by the end of the year. He spent a few months at the beginning of 2010, gaining fitness and game time at the TuksCricket Academy and was then pulled up again into the Franchise setup. By this time his skills had been worked on and he was ready to tear into any batters, given the chance. It was then that the Titans Head Coach, Chris van Noordwyk, decided to send Marchant to Easterns and apply his trade for the Easterns Amateur side who play in the Domestic 3Day competition and is classed as 1<sup>st</sup> Class. With Marchant's parents staying in Tzaneen, and his Uncle in Boksburg, this was a no brainer decision.

Since moving to Easterns, Marchant has not looked back. Since making his debut against Free State in September 2010, he has posted some very impressive career stats so far.

### Batting and fielding averages

	Mat	Inns	NO	Runs	HS	Ave	BF	SR	100	50	4s	6s	Ct	St
First-class	7	8	1	38	14	5.42	75	50.66	0	0	3	1	5	0
List A	7	5	1	67	29	16.75	69	97.10	0	0	7	0	2	0

### Bowling averages

	Mat	Inns	Balls	Runs	Wkts	BBI	BBM	Ave	Econ	SR	4w	5w	10
First-class	7	14	1221	650	32	6/36	11/62	20.31	3.19	38.1	1	2	1
List A	7	7	288	229	10	4/30	4/30	22.90	4.77	28.8	1	0	0

The future is bright for Marchant, and with the right guidance and opportunities that he will get in the National Academy, it is only a matter of time until he gets a break for the Franchise and higher honours.

## Keri-anne Payne, world champion

*Text: Rocco Meiring Published in Pretoria News: Sink or Swim*

Great Britain Swimming's intensive training center squad based in Manchester is currently training at Pretoria University's high performance centre. Among many top international swimmers in this squad is Keri-anne Payne, world champion and Olympic silver medallist. I had a chat to her about her career so far and her take on swimming professionally.

I remember the impression Keri-anne made on me back in 2000 when I invited her to a talent identification camp when she was still resident in South Africa. Even at 12 her spirit and courage caught my eye. Keri-anne was born in Alberton and attended Bedfordview primary before her family relocated back to the UK. She started her swimming career in the Ellispark pool under Di Williamson and fell in love with swimming right from day one. Her commitment to her training had a natural progression due to the early success she tasted. Just before she emigrated, she won two junior national titles and qualified for the senior national championships at age 13 already!

Only seven months after Keri-anne arrived in Manchester she was selected for the Great Britain junior team competing in an international meet in December 2001. "Once I tasted the feeling of making a national team, I just wanted more!" It wasn't long before Keri-anne had to move from her relatively recent coach to her current coach of eight years! "I've only had three coaches throughout my fifteen year career. I'm of the opinion that changing coaches is not advisable unless you are left with no other option and know that you have done everything in your power to improve your own performance." Keri-anne suggests a swimmer needs a common understanding and a trusting relationship with his/her coach without feeling scared or under pressure to perform for the coach. She adds that personally she wants a happy training environment and world class facilities to apply her trade in.

On the topic of dealing with disappointments, Keri-

anne said that she quickly gets over the emotion and into a mode of analysing her race. She wants to know what went well and what went wrong so that she can focus on correcting the mistakes. "I'm fully in control of my own performance and do not place the blame on anyone else, except myself. The support without any pressure I received from my parents quickly made me realise that my performances and goals were mine. It is vital that a young swimmer learn to take accountability for his/ her training and performances and therefore apply pressure on themselves to meet their own standards."

"I use the sports science support provided to me by Great Britain swimming extensively. I don't think I could've been the swimmer I am today, without having two coaches on deck, a full time sports scientist assisting with training and racing analysis and the unlimited access we have to world class physio's. Although I do not take any supplements, I adhere to a nutritionally sound eating plan and I occasionally consult a sport psychologist to help me through the inevitable bad patches. In addition to the formal support I receive, I'm fortunate to receive personal sponsorship from Jaguar, Speedo, British Gas and Links of London. All this support enables me to compete internationally both in the open water events and pool events. "

"My advice to young aspiring swimmers is to make sure you enjoy yourself. When you hit the bad patches, don't be scared to analyse the situation and make serious changes if necessary. Back in 2006 I didn't enjoy swimming anymore, so my coach and I changed my focus event from 800m Free to the 200 & 400IM and the 10km openwater race! The most important thing that keeps me going is my love for swimming.."



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*Text: Lester Mills*

If you're looking for a sporting "buzzword" at the moment it seems "choked" is the adjective on every critics lips.

Choked as in the inability of our South African cricketers at the Cricket World Cup in India to win a match which really counts and choked as in will those mighty All Blacks again fall apart in the quarterfinals or semifinals of the Rugby World Cup even though it is being held in their own backyard?

But before diving into the unfortunate history of both the Proteas and All Blacks at World Cups, lets define the word choke.

We need to do this for an important reason. You see, the words "choke" or "choked" or "chokers" are certainly the most reviled group of letter compositions yet used as far as the entire South African cricketing fraternity is concerned and ditto the whole of New Zealand – rugby players or not.

In fact, you'll find it is seldom if ever that local cricketing journalists will dare to bring up those words in the presence of any of the Proteas squad. Indeed, it's been pushed to the point where ridicule will be heaped on the said questioner from all corners.

That though, has not stopped the words from being used. At the Cricket World Cup, Indian journalist took delight in asking Graeme Smith and any South African around, for that matter, about this perchance the teams has of "choking" on the big occasions. So irritated at yet another jibe from a journalist that Jacques Kallis suggested everyone should look up the word in a dictionary to get its proper meaning.

So here goes:

Of course, we all know the general definition; "to stop breathing because of a blockage in the airway", but some dictionaries also take it a little further which makes for interesting reading. My trusty "Little Oxford" goes on to add the "phrases speechless from emotion, disgusted and disappointed". the Concise Oxford adds to this by saying "to make movement difficult or impossible. With this in mind then, it does seem these words are being used in proper contest as far as these sports teams are concerned. Certainly at times the Proteas have looked disgusted and disappointed in themselves to the point that movement has been difficult if not impossible for them.

But why?

None of the present group of Proteas players were involved in the first fiasco to the team back in England in 1999 when firstly Herschelle Gibbs dropped Steve Waugh trying to showboat to hand Australia victory in a group

match and then Allan Donald "forgot" to run, again allowing the Aussies to advance to the final on the back of a better run rate after tying that game.

Only the elder statesmen like Kallis and Smith were around when South Africa exited the 2003 tournament after misreading the Duckworth/Lewis system in a match with Sri Lanka they needed to win. Again only Smith, Kallis, AB de Villiers and Robin Peterson were around in 2007 when the Proteas were thrashed by Australia in a lopsided semi-final in the Caribbean after things look quite promising up until then.

There is no doubt the Proteas team management have done all in their power to rid the team of any baggage from the past, the problem is though, that unless they all forced to live in total isolation from the rest of the world, this "choking thing" must play on the minds of the players. Here too, the Proteas management have recognised this and even have the services of a "sports psychologist" Dr Henning Gericke. He was also around when the Springbok won the Rugby World Cup in 2007. Even he though, admitted that the "choking issue" was around like it or not.

The Proteas are not the only renowned "chokers" in world sporting history though. In fact, the All Blacks rugby team probably has a worse record. Since winning the first Rugby World Cup back in 1986 they have gone into every subsequent competition as the overwhelming favourites on the back of fantastic winning record in the run-up to the competition. All this has ended in misery everytime. Semifinal exits in 1991 to Australia, losing to the Springboks in that famous 1995 final at Ellis Park and losses to France in the semifinals in 1999, Australia in 2003 and France again in the quarter finals in 2007.

As fervent fans of the Springboks, I have a feeling that we will all be pushing the "chokers tag" to the limit here and will not let the Kiwis forget their history. Strange how as reviling as it is to think of the word "choked" in the context of the Proteas as encouraging it is to think of that word as far as the All Blacks go. Indeed one mans choke could easily be be another man's joke 🏏

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