The Committee Secretary Senate Regional Affairs and Transport References Committee PO Box 6100 Parliament House Canberra ACT 2600 Australia

May 30, 2013

Mr Stephen Palethorpe Secretary

Dear Mr Palethorpe,

Thank you and the Committee for giving me the opportunity to submit my thoughts on the practice of sports science in the Australian setting.

It may be no coincidence that I am attending the American College of Sports Medicine (ACSM) conference in Indianapolis where these issues are being discussed. They are universal concerns and it is clear that while there is a fairly clear concept of the role of the sports scientist in a team, other issues to which I shall refer to later, are not.

First, the credentialing of the sports scientist:

1- a) Exercise and sports science graduates fall into one of three categories: exercise scientists, accredited exercise physiologists and **sports scientists**. The **sports scientists** are accredited through a university and gain a Bachelor of Sport and Exercise Science. They may belong to Sports Medicine Australia, and Exercise and Sports Science Australia; organizations that helps maintain continuing professional development and ongoing accreditation.

b) The sports scientists' role is to evaluate, research, assess and advise on coaching, training, competition and recovery practices in all areas and levels of sport to achieve the best possible sporting performance. They are integral to the functioning of all professional sporting codes.

In the AFL, for example, they work with the team physicians and coaching staff.

c) In theory, the management should be aware of all the practices of the sports scientists and no program or treatment should be implemented without the full knowledge and cooperation of the coaching and medical staff.

2- The role of boards and management.

Given the chaos inflicted upon the AFL, and in no small measure by the Australian Crime Commission, it should be obvious that here is a need to see that all procedures and protocols used by sports scientists are subject to formal oversight and that guidelines need to be established to shape the protocols of "treatment." In order to protect the proprietary nature of the protocols, an independent body should be established that is the **governing body**. This entity would include sports scientists and medical personnel who would be independent of the teams but experts in this area. Their approval of all protocols would ensure that no single person could become a "renegade" and if a serious breach were to occur, a punitive action would be much more easily enforced compared to the murky mess that still has not yet been resolved in the AFL/NRL "revelations." If nothing else, the current situation shows how little discipline there has been in these sporting codes when it comes to "treatment" regimens.

This governing body would have all protocols on file and they would be responsible for reviewing all blood work and other players' information. This is a formidable task but it would ensure that there would be no recurrence of the current mess.

3- The duty and care of sports scientists to athletes and their ethical obligations.

Clearly, every team wants its sports scientist(s) to give their team a competitive edge. This can be achieved even with strong oversight. It does mean that the oversight body remains knowledgeable about what measures may or may not be implemented under the current rules – the sticking point is what rules to follow- and to give flexibility to the sports scientists to try new techniques. This is likely to remain a gray area in some instances but if there are established Australian protocols, it should be easier to turn gray areas into black and white.

No player should be put at risk. Furthermore, no player should have to bare the consequences of rogue behavior of its medical team, as is the current case. It is preposterous that we insist that each player be responsible for his/her "treatments." That is not expected of any patient/doctor interaction elsewhere and it should not be here. It disadvantages the youngest (and least secure) players who are simply NOT going to question what "medicines" they are going to take.

That responsibility lies solely with the medical team!

The area most in need of reform however, is that of "substances that are banned."

An interactive collegial relationship with other professional sporting bodies, like the ACSM, for example, and working with a (revised) ASADA, could bring the expertise and current scientific knowledge to shape the rules that would govern the Australian sporting codes with respect to banned substances. The ACSM has 60 years of experience that, in varying time frames, includes working with USADA, WADA and sporting codes at both the professional and collegiate level. Other organizations are equal to this as well.

CAVEAT EMPTOR: Having said this, I must stress that none of these organizations seems to have a strong science base formulating their banned substance policies.

This is where we need to have an honest discussion about the governing body- WADA. The World Anti-Doping Agency, is the "parent" body of the Australian Sports Anti-Doping Authority (ASADA) and its reach and clout is enormous. It seeks out cheats, accuses and punishes at the Olympic level and has a heavy hand in the oversight of its off-spring (eg ASADA and USADA).

This would not be of great concern but for the fact that WADA's rules are not scientifically based and thus, its policies are unsound. Further, it is currently seeking to criminalize breaches of its code of ethics AND to ban anyone who assists in these breaches.

None of this would be of consequence if there were a solid scientific base to WADA's decisions.

The list of banned substances has no scientific basis for being there with a couple of exceptions: anabolic steroids and beta- blockers, and these are tenuous at best.

Anabolic steroids administered in pharmacological doses have been shown to improve strength in power lifters and those requiring upper body strength. Beta-blockers have been shown to lessen anxiety and help the most nervous perform better than they might otherwise do in a tense situation, but they do not make that person better than they are inherently when not under stress. They are therefore, "oddly" performance enhancing.

The rest of the list is mostly taken from the body building forums- with no scientific evidence at all that they are performance enhancing.

This is critical because to fail one of WADA's tests could mean a loss of medals and careers! Worse, WADA wants to criminalize a breach of its code. If actions such as these are to be enforced, then the scientific evidence needs to be there to support the penalties.

I am appalled at this lack of scientific integrity. I heard at the meeting I attended yesterday, a member state that, "Well, WADA is trying and is making a good effort." Then, so are the "cheats!" I suggest strongly that Australia, does not support WADA's ineptitude and that USADA becomes independent and I suggest the Australian government funds controlled studies looking at the most obvious candidates on the list hat might be performance enhancing, to prove, or not, their effects.

The majority on WADA's list are almost impossible candidates, including DHEA and Growth Hormone.

Finally, there must be a place for athletes to be allowed to take anabolic steroids and growth hormone, if indicated, when there has been an injury or surgery. Current studies show the recovery period is shortened considerably. This is science -- and there is no place for emotion and ignorance to step in and impede an athlete's ability to get "back on the field."

This is an area for intense discussion and falls outside the current request but I would be glad to assist in any future discussions on this topic.

Again, thank you for giving me the opportunity to have some input into this extremely important area of Australian life.

Sincerely,

Robin J Willcourt. MD MBBS FRANZCOG FACOG