It is a pleasure and a privilege to address this very important conference.

As WADA has communicated many times in the past, doping is no longer an issue that is confined within elite sporting boundaries. Rather, it is a problem that permeates other areas of our society, and has a much wider impact than it did several decades ago when it first became a major challenge for sport.

WADA provides the pointy end of the sport issue with its focus on elite athletes but, when the curtain is drawn, what is revealed is a social problem of steroids in schools and amongst our security forces; the presence of the criminal underworld in trafficking prohibited substances; an unregulated supply of non-sanitized drugs through the internet and from profit-making opportunists (including many in local gyms); amateur athletes doping in recreational sports events; young people taking steroids in a bid to look good; and, an overall challenge to the values of sport and its integrity through allied activities such as spot- or match-fixing, bribery and corruption. None of these matters really fall under WADA’s express mandate of elite sport, but evidence of all have come to our attention, and all provide significant issues for society in general.
In the public health area internationally, there is often very little regulation over “kitchen laboratories”, minimum scrutiny and control of imported raw materials, and therefore, not much attention to the growing use of steroids. It is almost as if there is an acceptance of the burgeoning use, as there is increased use of the drugs that provide the “fountain of youth” and which are prescribed regularly by wellness clinics for the aged. Peptides, growth hormones, testosterone are becoming more common place and who is noticing, yet alone regulating?

WADA is hopeful that this gathering will allow the public health message to resonate more loudly, and help inform a broader section of society as to the issues of doping – both in terms of our physical health and in terms of our moral wellbeing.

**First, a quick view of where WADA is at present:**

Formed in 1999, WADA has grown into a well-recognized international agency, responsible first for harmonizing the many rules and regulations that varied from sport to sport and country to country into one all-encompassing global Code dealing with doping in sport; second, for uniting sport (private) with governments (public authorities) in a unique partnership; and
third, for becoming an independent hybrid body that has a high collection of annual dues from governments (better than United Nations bodies).

The World Anti-Doping Code was initially drafted and unanimously accepted in 2003. It was reviewed and revised in 2007, and again in 2013. The Fourth World Conference on Doping in Sport, in Johannesburg, in November 2013 approved a revised Code which came into force on 1 January 2015.

WADA has invested more than US$ 60 million in scientific research; forged partnerships with Interpol and the World Customs Organization, the International Federation of Pharmaceutical Manufacturers Associations and the Biotechnology Industry Organization; written models of best practice; provided education models for schools; appealed many cases to the Court of Arbitration for Sport (CAS), and much more.

When you consider the size of the problem faced by WADA; the limited budget at our disposal (still less than $US30 million per year); and. the difficulties inherent with uniting disparate bodies and countries while attempting to enhance anti-doping practice; there is little doubt that WADA has achieved much.
We all should know by now that the fight against doping in sport has reached the stage where science alone will not eradicate cheating or very often even detect it.

This is not a secret - it is a worrying trend that WADA has communicated many times in the last few years. The reality is that the scientific expertise of those who choose to dope – many of whom are assisted by an entourage with increasing scientific and medical expertise designed solely to cheat and avoid detection - is often able to keep ahead of the science of the anti-doping community or at least the practical application of science in the accredited laboratories when analyzing collected samples which of course the laboratories did not collect, nor select for collection.

The clever cheating athlete on the other hand is becoming better at cheating, more sophisticated and funded more extensively. That athlete might now be confident in the view that he or she will avoid detection under the historical approach.

Detection has got better in the last decade, of that there is no doubt, but do not forget the extent to which people will take risks to achieve financial gain and personal glory.
Tyler Hamilton wrote in his recent book, The Secret Race: Inside the Hidden World of the Tour de France, that he and his teammates felt they had a 99% chance of avoiding detection so long as they followed the simple rules laid down by their unscrupulous support staff.

A direct quote from the book sheds some light on this: “The test for EPO is a good example of how big an advantage (Michele) Ferrari (physician and trainer) was to us. It took the drug-testing authorities several years and millions of dollars to develop a test to detect EPO in urine and blood. It took Ferrari about five minutes to evade it. His solution was dazzlingly simple....”

Even if what Hamilton describes is no longer the case, and detection methods have improved, the dopers have figured out new ways of avoiding detection: micro-dosing, cocktails, designer drugs, super hydrating, transfusions and more.

What has become more telling, however, is that the mode of collection of evidence need not be simply nor solely through the means of sample collection and analysis.

Already we have moved far from being reliant only on such processes - perhaps to the discomfort and concern of many - but
to successfully gathering evidence against those who have cheated with impunity.

Non-analytical cases are mounting, from the days of BALCO and Tim Montgomery, to regular cases in Australia, recently in Switzerland, and elsewhere in the world where the authorities now exchange data on a growing basis.

One only has to remind people that Lance Armstrong and Marion Jones competed for many years, were tested many times and were never found to have an adverse analytical finding yet cheated throughout.

Jones specifically wrote in her book that she had not taken drugs and sued those who suggested she cheated. It was only during the investigation process, which led to her lying to a grand jury and the eventual charge of perjury against her, that she confessed and went to prison.

Armstrong went on for many years bullying and threatening anyone who dared to challenge him. In fact, if he had not returned to competition in 2009, following his retirement in 2005, he might have got away with it all.
Investigations should now form an integral part of any effective and efficient anti-doping program. There are of course ways and means of obtaining evidence through such inquiries. It need not engage an anti-doping organization in its own investigation work.

There are many bodies, also funded by government, already in place and needing strong laws to act on. Australia, the United States of America and the United Kingdom provide good models in this respect.

If you consider the unscrupulous journey that a doping athlete takes, the anti-doping community has traditionally relied on testing to bring this journey to an end.

Well, with the advent of more and better intelligence, and the support of advancements such as the Athlete Biological Passport, WADA has put in place processes that can end the journey in other ways.

Athletes can now be caught when they start this doping journey – that is when they purchase their performance enhancing substances – and further down the line when they are taking them in training, and finally during competition.
The anti-doping community is now able to gather biological and non-analytical evidence on doping activities. The bases are being covered.

I turn now to some of the specific challenges WADA faces - or indeed has been encountering for some time - and the steps being taken to address them, in particular through the development of alliances:

1. **The continuing and increasing engagement of the underworld in providing prohibited substances through trafficking and distribution.**

   The incentive to engage in trafficking has been there for a number of years and remains high. In many parts of the world, this is legal activity and the returns on initial investment are vast. For one hundred dollars one might get a return of anything between one thousand and ten thousand dollars.

   All governments might appropriately recognize this intrusion; it is a criminal matter if laws are in place and the police will act if there are compelling penalties.

   The substances are from raw materials obtained on the internet, and put together in “kitchen laboratories”, unregulated and non-sanitized. They do not just go to elite
athletes or their entourage. They go to high school students who want to “look good”, to security agents, to armed forces. It is a matter of public health and should be of concern to governmental authorities.

This is an occasion for it to be confronted. The Danish Government looked at the issue closely during its recent term as EU President, and a good study has been published examining the problem from a greater societal perspective.

The criminal underworld makes money out of this activity, but it is also engaged heavily in other aspects challenging the integrity of sport. WADA is well aware that the same people who engage in the distribution and trafficking of prohibited substances are involved in bribery, corruption, money laundering, illegal betting and fraud.

Clearly WADA does not have the mandate, jurisdiction or expertise to engage these underworld figures, but WADA is able to share information with the relevant authorities. Our Chief Investigative Officer has increased these lines of communication.

The recent publication “The Sports Doping Market” by Letizia Paoli and Alessandro Donati – commissioned by WADA – clearly shows how law enforcement can assist the fight against doping in sport; but, more importantly, that doping
is a public health issue and only looking at the issue as it relates to elite athletes reflects “the reality of the public health problem represented by the spread of doping product use among recreational athletes and non-competitive sports people” (pg 229).

2. **The growing and encroaching black market for pharmaceutical products.**

While we have good and growing arrangements and agreements with the regulated pharmaceutical industry, part of the reason for that is to ensure that evidence of the black market supply is provided to the industry and to the regulators. At present, it is estimated that at least 25% of the world’s pharmaceutical products emanate from the black market and that 50% or more of the drugs sold on the internet are counterfeited. They are non-sanitary and potentially dangerous to health. Again this is a public health matter.

Some of the products are readily available through the internet; some are “stolen” during research and development stages of the regulated industry. A good example of this was given by German television journalists just before the Winter Olympic Games in Sochi of MGF being available despite not being on the market.
This is one of the reasons that WADA has strengthened its relationships with the pharmaceutical and bio technology industries in recent years. Partnerships now exist that allow WADA to receive information on compounds that have the potential for abuse in sport during their research and development stages, and this gives WADA the opportunity to develop detection methods at a much earlier stage.

3. The increasing sophistication of cheating at the high end of sport.

In sport, there continues to be the “dumb” doper who is regularly caught through standard testing protocols, with a large number still risking in-competition testing. This doper effectively catches himself. On the other hand, there is the “sophisticated” doper who continues to get away with cheating.

Some might say the sophistication has expanded since the advent of WADA. Some might say that it has advanced even further through the introduction of the biological passport. Whatever the genesis, increasing sophistication is undoubted.

From micro dosing to manipulation, the clever doper, aided, abetted and considerably financed by clever entourage members, continues to evade detection through the analytical process. And we continue to be haunted by the
impunity with which, for example, many have treated human growth hormones and other prohibited substances.

In addition to the increasing partnerships with the pharmaceutical industry, WADA also continues to spend more than 10% of its annual budget on science research.

WADA is under no illusion that it faces a huge struggle to keep pace with the techniques of the sophisticated dopers, but this must continue to be the aim – indeed, we need to get in front and, if that means more thinking like the bad guys, then so we shall and we shall encourage our researchers to do so also.

The IOC President recognized the challenge and the need for more research of an innovative or new style. The new Research Fund will contribute to close the gap on the sophisticated cheater.

4. **The trickle down of doping?**

Why are athletes being tempted to dope? And, why is it becoming an issue for society in general?

Is it just because substances are so much more readily available than they were, say, 10 years ago, or is it due to a quantum shift in moral attitudes?
WADA suspects it is a combination of the two, but there is no doubt that attitudes towards doping have changed. Values generally across our societies have changed and there are studies to prove that ‘cheating’ in its many forms is not only commonplace but also considered acceptable in many countries, just so long as you do not get caught.

Cheating pervades all levels of the social spectrum. We have major scandals involving politicians that are fiddling with their expense forms and stories of tax evasion; while, in the world of academia, there is the recent controversy of dozens of students in a Harvard undergraduate class admitting to plagiarism in an open book exam. Without integrity, there can be no genuine achievement.

WADA operates in an age where the values of honesty and integrity are constantly under threat from a ‘win at all costs’ mentality, where the path one takes to achievement is considered irrelevant so long as one can claim success at the end of it, no matter how.

WADA continues to deliver anti-doping messages and information through its Education and Outreach programs, but we also need there to be a greater recognition that doping is wrong – on all levels.
It is not just at the elite level of sport that doping exists - we are now experiencing a significant ‘trickle down’ effect.

There are examples of high school athletes choosing to dope in order to try and win professional contracts - a particular problem with schoolboy rugby in South Africa for example.

We hear of veteran recreational cyclists and runners taking prohibited substances, both to cheat their way to contention and to prolong their careers. Indeed, there was even the recent case of a national federation board member testing positive after competing in an amateur event.

There has to be a greater sense of outrage, otherwise the trickle-down effect we are now witnessing from the elite to amateur and youth level could become a torrent.

Finally, a word in relation to athletes and athlete groups. WADA is essentially a body looking after the clean athlete. Sport relies on athletes for its survival. These athlete groups are most important in terms of representation of athletes. There are many areas in which appropriate representation can lead to proper voices for athletes. Sport must be very aware of its athletes and must take careful steps to ensure
they are engaged. The rights of the clean athlete must be protected. The clean athlete must be heard.

Sport and governments must realize that, in most cases, it is not athletes acting alone who abandon everything for which they should stand. They are assisted, counselled, sometimes tricked and occasionally forced into the downward spiral of cheating.

Coaches, trainers, medical doctors, scientists, sports administrators - even some misguided parents - all of whom ought to know better, make a mockery of their responsibilities and trivialize the years of training and dedication of the trusting athletes whom they betray.

One of the missions at WADA is to make sure that it is not only the athletes who are sanctioned for doping offences. Athletes are, of course, the instruments through which the doping occurs, but often they are less to blame than the coaches, doctors, lawyers, agents, trainers and others around them.

Again this has been addressed to a degree in the revised Code, but imposing sanctions often relies on governmental processes, not sport tribunals.
In conclusion, I leave you with several thoughts.

The rules have been reviewed and revised. We look now to implementation and practice of the rules with an emphasis on quality practice.

We must confront complacency and ensure there is long-term commitment from all. A proper mix of prevention and deterrence, and greater regard by our youth for the values of sport, will result in a more level playing field.

Further alliances with the pharmaceutical industry and the arms of government, such as health, along with recognition of the fact that doping is not limited to elite athletes, will be of benefit to our young people and society in general.

Thank you.