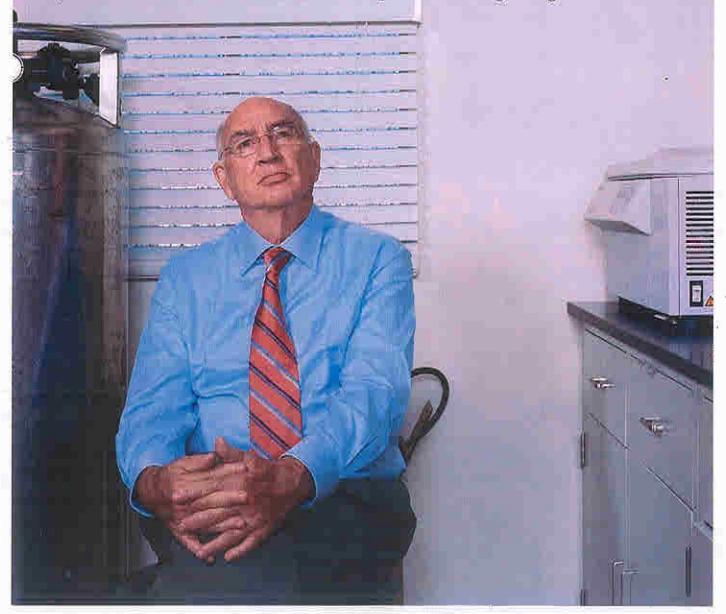
Interview

Photography: Misha Gravenor

Ending the influence

Since organising dope testing for the 1984 Los Angeles Olympics, **Don Catlin** has waged war against drugs in sport. His detection of the "designer" steroid THG in 2003 exposed a scandal that is still reverberating around the sporting world. With the Tour de France mired in doping chaos and baseball's home-run king Barry Bonds under suspicion, Catlin tells **Peter Aldhous** about his plan to turn drug testing on its head



When did you discover that rogue chemists were making drugs for athletes?

The episode that really taught me what was going on was a steroid called norbolethone. In 2002, I found it in the urine of track cyclist Tammy Thomas. I found that the drug company Wyeth had a patent on it and had synthesised it 35 years before, but they had never manufactured it. Where did she get this stuff? There were only two possibilities. One, there was a scientist from Wyeth who had squirrelled away a supply. That didn't make a lot of sense. Or there was a rogue scientist out there making it. I studied the molecule and realised that, with the right starting material, you could make it.

Then THG [tetrahydrogestrinone] came along, which was made by the same chemist. He gave it to Victor Conte of the Bay Area Laboratory Co-operative, BALCO, who sold it to athletes. It's the most powerful stuff around, but it's as toxic as all hell.

What is wrong with the current system of testing?

I'm not saying it's doomed to failure, but we are always playing catch-up. If I live another five years, another BALCO will drop into my lap. We'll develop some fancy chemistry and write some papers and get a lot of accolades, but what will we have achieved? I don't see all the mass spectrometers and all the chemists in the world really being able to handle this. It is becoming very expensive to develop means to detect new drugs.

We've also got to get away from the lawyers and all the legal challenges. You've got to be insane, in a sense, to be a testing lab director, where the next positive sample could belong to somebody who can marshal huge resources to fight. I've had lawyers on my staff and paid them a lot of money. No matter how it comes out, everybody has lost. I am asking: is there a way to induce some sort of major cultural shift?

This is where your "volunteer programme" comes in. How would it work?

As a clean athlete, you agree to its terms and conditions – if we ask you for blood or urine, you'll give it willingly. Your participation would be known. You conform, and you stay

Profile

Don Catlin was director of the Olympic Analytical Laboratory at the University of California, Los Angeles, from 1982 until March this year. He was in charge of dope testing at the 1984 Olympic Games in Los Angeles, the 1996 Olympics in Atlanta, and the 2002 winter games in Salt Lake City. Today he heads Anti-Doping Research; a non-profit laboratory in Los Angeles.

clean. If you don't, you are off the programme. If it can harbour people who are cheating, then the whole thing's going to fall apart. So we've got to be sure that they are clean, and there are ways of doing that.

How would testing differ from what is done today? We would monitor a range of "biomarkers". Take growth hormone. If your doctor feels that you might have a growth disorder, you go to a hospital and they perform a clinical assay for that hormone. It's that same type of test that could work in this system. It's not going to have utility in the sense that I can take that clinical test and call you guilty, because that would not pass tough legal scrutiny. But I can still monitor you, and see if your growth

hormone levels are going in a strange direction.



The directors of drug leating labs now lace serious logic makenges from athletes found to be positive.

Other biomarkers would include haematocrit – the proportion of blood occupied by red blood cells – which is boosted by the drug erythropoietin, abused by endurance athletes. In total we'd have 30 to 35 biomarkers, which we would monitor to develop a profile of normal variation for each athlete. Initially, monitoring would be fairly frequent, probably once a month. Once you see somebody's basic pattern, then you could slow down, and drop to about 10 markers.

So what needs to be done to validate the concept? I would start a pilot programme with about 25 average athletes. We would do a clinical trial

and follow their biomarkers to see how much data you need before you can say: "This is out of line." In the best of all worlds I would give them a dose of a performance-enhancing drug and see if I can detect it. We do that today, when we want to develop our methods.

How much might this cost, and who will pay?

I'm looking to fund four or five researchers for up to five years. So far I can probably count on pledges of \$2 million. If I could be sure of those pledges and increase it a bit we could start. There are people in sport who can write cheques for that out of their back pocket. We're talking about the professional leagues. Certainly they have problems with drugs, but I've worked with them for years, and I believe they might just support this new concept.

And will the athletes buy into it?

This programme will work best if the ownership is taken over by athletes. We've simply got to get them involved. Look, it's their life. The bottom line is that they don't want to take drugs. Some feel they have to. But others are speaking out now because there is so much garbage going on. There are enough drug-free athletes out there who love sport.

You want to avoid legal challenges, but might athletes thrown off the programme sue you for defamation?

It's something that I'm concerned about. I am convinced that if we run the programme right, we're not going to have people who are grousing and wanting to sue if they get booted out. The process of getting booted out is going to be slow. We may at some point have to err on the side of letting somebody who took drugs right in the middle of our programme stay in. But if we discovered them, I don't think they're going to do that again.

There are a number of issues that are tough, but when I balance them against where we've been, and where we're going, it's got to be tried. I don't hold this out to be a cure-all. What I'm saying is I think the time is right to try a new paradigm.

So it's a means of reducing the prevalence of drug use, rather than solving the problem?

Yes, and a means of making life better for the athletes who don't cheat. What other business is there where you get to the top of your profession and people say: "Well, you must have cheated"? I want them to be able to say: "That's my proof that I'm clean."

Has your experience as a dope-tester made you cynical about sport?

I've seen every grubby chapter there is to see. I've seen a lot of drugs and a lot of people make wrong decisions about covering it up. At the 1984 Olympics there were cases covered up, no doubt about it, right under my nose. But sport is a wonderful institution. It should be preserved and protected. It is worth it.