

What it takes to win Gold – Dave Smith

David Smith, Paralympic Gold medal winner in the mixed four Paralympic rowing, reflects with Claire-Marie Roberts on his experiences in elite sport and the achievement of his ultimate goal in the summer of 2012.



In the beginning

The fact that I was born with talipes equinovarus, a disability more commonly known as club foot, was no barrier to me pursuing my love of sport despite the many operations and corrective procedures I had to attempt rectify this impairment. The end result was a permanently fused right ankle and as a consequence, little to no dorsiflexion in this limb.

My sporting beginnings and first international representation

Like most boys of my age, I was obsessed with sport. Aged 7, I decided to specialise in karate. As I progressed, I began to represent Great Britain and won a medal in the 1993 World Championships. However, I admit that I experienced a few problems along the way. For example, I started to experience problems holding certain positions and generating power through my hips. I found that I was unable to bend my right knee and started to develop lower back problems. I was referred to a podiatrist who gave me insoles to correct my gait and sent me on my way. Despite these biomechanical difficulties and a developed imbalance on my right side, I continued to represent GB until I was 19, when I took a decision to give a different sport a go. In any case, karate wasn't an Olympic sport and I knew that's where I wanted to be.

From karate to skiing...

After my retirement from karate, I pursued ski racing for a few years, competing in slalom and giant slalom events. I did find that as my foot was trapped in a ski boot it was difficult to employ the correct racing positions for my events as I struggled to recruit the correct muscles on the right side of my body.

...and athletics...

In an attempt to enhance my training for skiing, I joined an athletics club in 1998 where I inadvertently fell in love with sprinting. Having no idea about the science behind sporting performance, I used to travel for 3 hours each way to training and back. When I started to experience shooting pains in my legs, headaches and back pain, doctors told me I was training too hard. In 2000, the end of my athletics career was marked by a fracture of the navicular and an acceptance that my biomechanical limitations meant that I couldn't run efficiently around corners. I felt that I should turn my attentions

A timeline for Dave's sporting career

1982	1985	1993	1997	1998	1999	2000	2002
Born	Specialised in Karate (represented GB)	Won Karate World Champion	Retired from Karate. Took up Ski Racing	Joined Athletics Club	Eme of Scotland 400 m title	Fracture of navicular ends athletic career	Retired for GB Bobsleigh

to the 100 m instead, but at 6'4" and 100 kg, I was hardly the ideal somatotype.

An epiphany

During the period of time that I was recovering from my foot fracture, I decided to visit my sister who lives in Australia. My visit just happened to coincide with the Sydney Olympics! While I was out there, I met a biomechanist by chance who was working in a medical practice in North Sydney. This was my first introduction to sport science. During the six months I spent here, I became inspired to study the principles of training and bought many books on the topic. It was then I realised that all of the limitations I'd been fighting with in the various different sports I'd tried may originate in my right foot. From what I could gather, strength training may provide the solution. I started pushing weights and planning my next course of attack in the sporting world. What could I possibly do next?

Bobsleigh

It just happened that bobsleigh fitted my criteria: A love of athletics, a love of winter sports and a possibility to get to the Olympics. On return to the UK, I picked up the phone and organised attendance at trials for the GB Bobsleigh team. I trained hard to make the team and in 2002 I discovered a training environment with more of a focus on the scientific approach and a whole wealth of knowledge amongst the support staff. It was during this time that I really learned to train properly. Although I hadn't mentioned my problematic right foot to anyone within the team, subtle markers were evident in my gait when I subconsciously over-compensated for my lack of dorsiflexion. In 2005 there were signs that I may have been selected for the Winter Olympics in Turin but on a pre-Games training camp, my body finally shut down and I was diagnosed with overtraining syndrome.

Missing out on the Olympics

While I was having a break from training, I took a position as Assistant Coach with the GB Skiing team where I gained valuable experience as a coach. However, the sporting environment I was in fuelled my desire to return to sport as an athlete. I spent a summer training and strengthening my body with the intention to return to bobsleigh in 2008.

Finally, some answers

It was during this time that I came across a physiotherapist who was working as a classifier for the British Paralympic Association (BPA). After lengthy discussions, she made me aware that my problematic right foot was the most likely cause of my consistent injuries, biomechanical imbalance and impaired gait. She suggested that it was responsible for a 10–15 % deterioration in performance, in a world where less than 1 % can be responsible for winning or losing! She asked me whether I'd considered Paralympic sports, reassuring me that I would qualify, and encouraged me to attend the next BPA talent day. Although I understood her reasons for suggesting this, and even though I now had an explanation for the frustrations I had suffered in each sport I'd represented, I couldn't help but wonder what people would think of me if I transitioned from Olympic to Paralympic sport. I found it difficult to accept that there was something so wrong with me that would warrant my inclusion in disability sport.

British Paralympic Association Talent Day

I bit the bullet and attended the next BPA talent day where I was put through a whole battery of general tests. The last one was a 3 minute row on the ergometer (erg). Although I'd only ever been on an erg twice before, it turned out that I'd rowed a pretty decent time, and I was immediately put in touch with GB Rowing. When I went to visit them, I have to admit that I was inspired. The professionalism of the set up, the facilities, everything about it just blew me away.

Great Britain Rowing

Five months after entering the full-time residential programme, I'd won the world championships in my new event: the legs, trunks and arms Paralympic mixed coxed four rowing (LTA4Mx4+). It had been far from easy though. When I reflect on this time, it was clear that going from spending many hours training remotely and on my own to becoming part of a full-time residential programme was a challenge. I had relinquished control of my training to others at the grand old age of 30! In addition to this, neurological symptoms persisted as did my fidgety sleep patterns. It was fortuitous then, that during my time with GB Rowing I was introduced to a new physiotherapist who had previously been working with British Swimming. He had a specialism in neurology and was the first person to examine my complaints 'outside the box'. On first examination, he felt that I may have a structural neck problem, so I was sent for an MRI scan of my upper spine. Thanks to my programme being heavily funded and supported by specialists at the English Institute of Sport (EIS), any support that was needed was delivered at super-quick speeds, so I'd been in and out of the scanner before I knew it.

The results

After the scan, I had been told that I was being referred to a neurologist and duly attended my allocated appointment, oblivious to the news that was about to come my way. I quickly discovered that the MRI had shown evidence of a suspected tumour inside my spinal cord, and it needed removing...now. Oddly enough, I remember feeling a great sense of relief on hearing this news. The diagnosis explained the all too familiar shooting pains, back

problems, sleep issues, chronic fatigue, my inability to recover and many more symptoms that had plagued me for years. Things I had attributed to the natural consequences of being an athlete. When the significance of the news finally sunk in, I had an overwhelming sense that I was in safe hands. I knew that there was no better place to be as an individual in this predicament than surrounded by the most competent support network I could hope for.

Surgery

I was pleased to note that my surgeon was a former athlete himself. It was comforting to be in the hands of someone who knew how my mind worked, and who had no intention of patronising me. I remained adamant that this setback would not prevent me from competing in my home Paralympics and I had confidence that he understood this and would support my end goal. Although the surgery was successful in removing the tumour, I was required to undergo a further operation 12 days later to remove a blood clot that had formed at the base of my neck. It had caused me to lose the use of my legs and my left arm.

The aftermath

As I lay reflecting on the experiences of the last few weeks, I knew that I was going to make it. The most powerful thing when you have nothing is your mind. I used a lot of psychological skills while I was in hospital, practising my training and my event in my head as a substitute for my physical training. During these times, I used to think back to a lecture I'd attended that was given by Dave Collins: "How you perceive something affects the way your body deals with it" he claimed. "If your body sees it as a challenge, it will fight it. If it's seen as a threat, it will shut down." Those words couldn't have been more significant for me, as I decided to take Dave's advice and approach my recovery as a fighter.

The happy ending

Fourteen months post (second) surgery, I won the World Championships, and just over two years since I won Gold at my home Paralympics. My recovery, my rehabilitation, my success, the achievement of my life goal, would not have been possible without the unparalleled science and medical support and guidance I had from people within the EIS and from GB Rowing. I am completely in awe of these people, and I owe them my life. Every link in this chain helped me rebuild, rehabilitate and become an athlete again. I was so fortunate to be in this privileged environment where I was pushed past my limits, with no special concessions. The results, as they say, speak for themselves. ■

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David's next challenge is an around the world cycle challenge to raise money for 'Coming Home', a charity set up to help injured service men and women. He's looking for an additional member to join his team - someone driven and focused who can work with a team, bring extreme highs and lows. They need to be a leader, yet also not easily intimidated, with high levels of mental and physical fitness. Further information: davecollins.org

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2005	2006	2008	2008	2009	2010	2011	2012
Pre-Olympic selection. Diagnosed with overtraining syndrome*	Started as Assistant coach for GB Slings	BAA Talent Day (joined GB Rowing)	BAA Talent Day (joined GB Rowing)	Won LTA4Mx4+ World Champion	Diagnosed with tumour on spinal cord. Temporary paralysis	Won LTA4Mx4+ World Champion	Won Gold medal in LTA4Mx4+ at London 2012 Paralympics