



TECH IN BIO-MECH

Padraig Harrington and Rory McIlroy may be the stars but Dr. Paul Hurrion has helped both from behind the scenes.

By Roger Valberg





If you have never heard of Dr. Paul Hurriion, it is no surprise. He is rarely in Asia and even then his work is strictly in the background of the many professionals he helps at his Quintic Labs. If the old maxim of

'drive for show and putt for dough' has any truth in it, then this is the man you'd want in your corner. But calling him merely a putting guru is like saying Bill Gates is merely a rich man. There is so much more going on in that head that has shored up Padraig Harrington's putting so much so that he won three majors and helped Rory McIlroy take his maiden win this year.

It takes a certain kind of human being to not only be able to be an authority on putting, a dark art if there ever was one, but to also establish a company that rolls out putters based on his research. Dr. Hurriion has also ventured into the realms of training aides to help the average golfer. To top it all off, he also advises and assists other athletes in sports other than golf. The base of his work centres around biomechanics. "Sports biomechanics uses the scientific methods of mechanics to study the effects of various forces on the sports performer. Therefore, in short it tells you why something has happened. It is part of the overall picture of sports performance," explained Dr. Hurriion.

"Biomechanics focuses on the forces that act on the human neuro-musculoskeletal system, velocities, accelerations, torque, momentum, and inertia. It also considers aspects of the behavior of sports implements, footwear and surfaces where these affect athletic performance or injury prevention," he added. The subject though is wide and it can be divided up into two sections: Performance Improvement & Injury Prevention. His Quintic Labs work on research for questions that an athlete may ask. "What is the best run-up for a high jumper? How should the knee angle be modified for the delivery stride of a fast bowler in cricket? What is the velocity of the swimmer after the tumble turn?

These questions are of the form - What is done? How is it done? Why does it

work? The answers to 'What, How and Why' are important to the athlete, coach and scientist, respectively. Biomechanics is the science concerned with the internal and external forces acting on a human body and the effects of these forces. So for the humble duffer it is the science that explains every duff and topped shot, every slice and hook and most importantly, how it can be fixed. But unless you have the cash to get on a plane and fly to Europe in search of the good doctor, the next best thing is to look up some of his training aides that are used by Harrington and McIlroy.

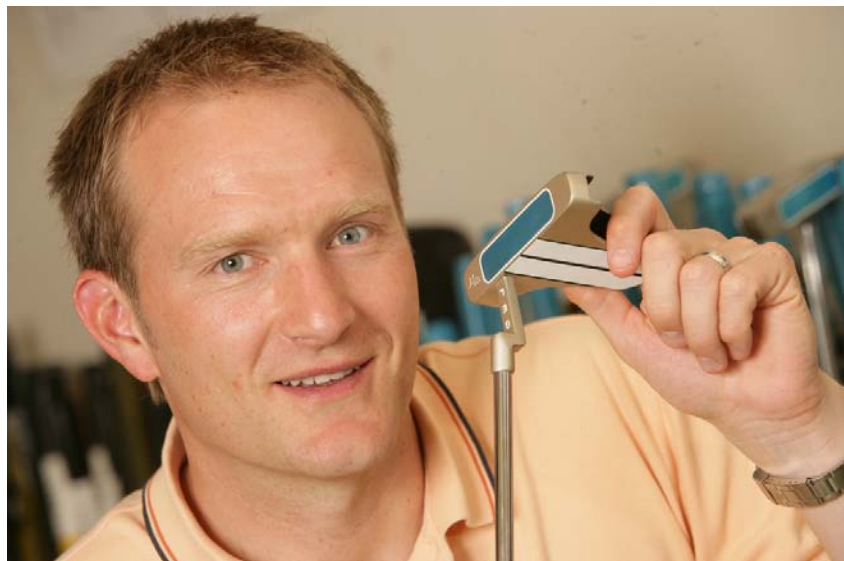
But just what made him go into such a complex business? "I was very fortunate to live in the country with a very supportive and close family. We enjoyed a lot of sporting activities from sailing, waterskiing, rugby, football and athletics. In fact I represented West Midlands and England in the decathlon. I also had my own free range chicken business when I was in secondary school, raising the chickens, selling the eggs and delivering them to people in the local village. I had about 90 chickens until a fox got in and ate them all!

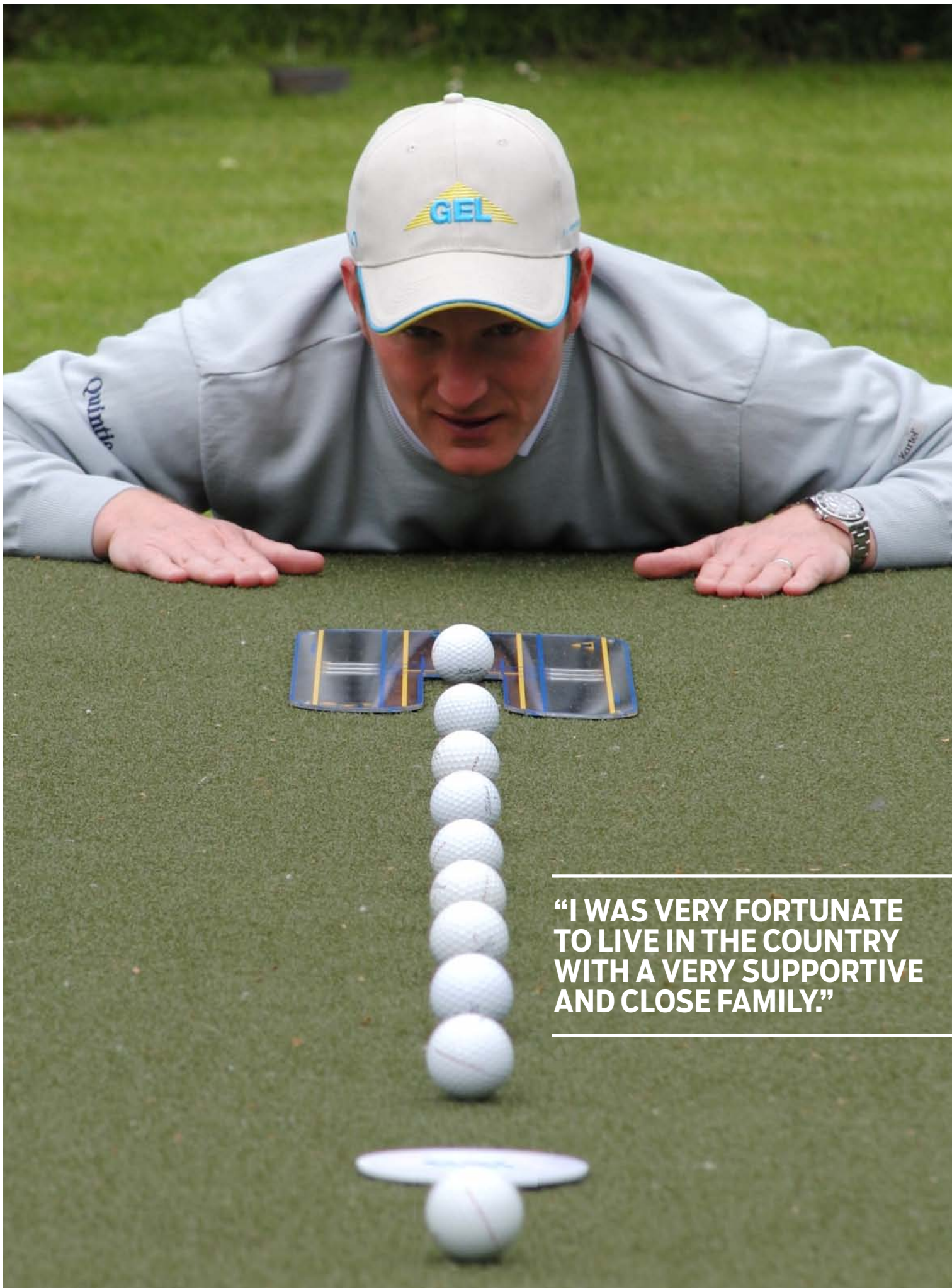
"From there, I had the choice of studying Geography or Sports Science at University and it was my girlfriend at the time that said do what you enjoy more, and suddenly a difficult choice wasn't so difficult," he said. After university, he set up Quintic. "To continue my sports science consultancy with elite athletes, specializing in biomechanical analysis using high-speed cameras, force platforms

and computers, I developed contracts with UK Athletics, International Cricket Council (ICC), English Cricket Board (ECB) and British Diving. However it wasn't until the ECB asked if it was possible to buy the Quintic software that the business developed an additional focus. The software and consultancy go hand in hand, as a result of our work with high level sport and education, we can constantly develop the software to meet the requirements of the users.

"Quintic Consultancy Ltd (established 1997) has just released its latest version of the elite 'biomechanics' video analysis software which includes auto tracking, 4 camera live capture and even the capability of streaming videos direct from a website. In addition to this, our 'Quintic Ball Roll' software is an industry first. The 'Ball Roll' software is a launch monitor for putting, measuring speed, spin, rotation, launch angle and true roll. The latest version of the Quintic software is incorporated in our 'Full Swing Biomechanics' facility at The Belfry Golf Club (UK) and in our 'putting laboratory' at Quintic Head Office in Coventry (UK)," said the doctor.

Apart from his work with Quintic, he also takes time to advise Hi-Tec on their line of golf shoes. These were the shoes that Harrington used to win his three majors until he switched to FootJoy earlier this year. But for Malaysians, perhaps the most visible product of Dr. Hurriion is his input for GEL putters of which he has a signature line, the Paul Hurriion range. It was in lethal action earlier this year helping Anthony Kang win the Malaysian





**“I WAS VERY FORTUNATE
TO LIVE IN THE COUNTRY
WITH A VERY SUPPORTIVE
AND CLOSE FAMILY.”**





“THE BEST WAY TO FIT A PUTTER OR PROVE THE PUTTER IS PROPERLY FIT IS TO ANALYZE WHAT THE BALL IS DOING,”

Open. “Working with GEL Golf, I have designed the Paul Hurrion Signature Range of putters to help golfers enjoy the key benefits tour players look for on the greens. The putters are designed with horizontal grooves to impart forward roll, peripheral-weighting that maximizes the sweet spot across the putter face and heel-toe weighting to increase the MOI for improved resistance to twisting on off-centre hits.

“I have based all my ideas on the biomechanical principles that I have studied and work on with all my players. In conjunction with the increased MOI, the True Temper S400 iron shaft enables the golfer to experience the latest in shaft technology, increased feel and improved pace control. The GEL Paul Hurrion range of putters creates stability at impact in the area of the game that matters most. There are currently eight models on the market. Since its launch in 2007, GEL Golf has firmly established itself as the number one groove putter on Tour in Asia and is aggressively working its way into the US PGA, European and Canadian Tours and also the Ladies European Tour.”

But underneath all the science and products Dr. Hurrion says that there is no substitute for good old fashioned hard

work. But if you wish to drop strokes from your score, he says start at the custom-fitters. “First thing, get your putter fitted to your length, lie & loft. Don’t just buy a putter because it looks nice, it needs to be fitted correctly. GEL has created a ‘custom fitting putting tool’ that, by following my coaching principles, will enable all golfers to be custom fitted correctly for their own putter. This along with the ‘Quintic Ball Roll’ software enables each golfer to be analysed in fine detail. Custom fitting golfers for putters is an area that, in my opinion, is currently lacking in the market place. The best way to fit a putter or prove the putter is properly fit is to analyze what the ball is doing. We have developed Quintic Ball Roll software to help you do exactly that.

“Secondly, practise your putting. Learn how to putt consistently and to do that you need help. If I had to choose one training aid for my golfers to use consistently, it would have to be the GEL Putting Alignment Mirror. The graphics and tools provided by the training aid enable them to understand and develop consistent alignment of the putter face, their shoulder line and their eye position during each putt. It is easy to use for a quick practice indoors at home or in

the office as well as on the putting green where tees can be used in specially designated positions. I also recommend they use it on all manner of putts - breaking, straight and different length.”

With such dramatic strides in golf engineering through bio-mechanics, software support and equipment manufacturing, it is no surprise that Dr. Hurrion juggles his work and family life with some difficulty. “It’s very busy and it does take a lot of planning,” he said but considering his results thus far, it won’t be just the Harrington’s and McIlroy’s of the world in the limelight. For the millions who struggle around a golf course trying to break 100, Dr. Hurrion will likely have some very neat tricks, tips and advice for you. **MGD**

SHORT FACTS:

- Quintic Ball Roll cameras capture the ball at 2,000 frames per minute.
- Quintic Ball Roll will be available in Malaysia at the Golf House Academy located at Bukit Jalil Golf & Country Club Driving Range from November 18 onwards.
- Hi-Tec Golf Shoes are available at MST Golf outlets.
- Gel Golf Putters is available at JNG Golf.

