## Ryan Lumsden - Q Golf

Growing up in St Andrews, Scotland, Ryan has been involved in Golf from an early age. As a member of the St Andrews Golf Club, he has had many individual achievements and representations at school, boys, youths, county, and national level, and was in the Scottish National Squad at Boy's level. Ryan was the recipient of an R&A Golf Bursary at university



and a member of the golf team throughout, which won Scottish and British Universities.

This playing background and the exposure to Coaching and Sports Science Support he received through National Squad Programs lead to him completing an Honours Degree in Sport and Exercise Science at the University of Strathclyde, during which Golf was the focus of much of his study.



Since completing his degree and moving to Australia in 2003, Ryan has been working with Institute Programs, Governing Bodies, Golf Associations, and players and their service provider team. In 2009, Ryan established his company, Q Golf, which provides 3D biomechanical analysis and sports science consultancy services.

His work has involved working closely with a number of top coaches, both within Australia and internationally, as well as working closely with leading golf specific physiotherapist Ramsay McMaster to integrate biomechanical analysis and biofeedback into physical screenings and players training programs.

Ryan has worked with golfers of all levels, particularly elite development players and players playing on Australasian, European, and PGA Tours. He has also worked with National

Teams including Australia, Scotland, England, Norway, Switzerland, and New Zealand as well as the Australian Institute of Sport Golf Program, State Institute Programs (QAS, NSWIS, VIS), and the Top Sport School (VVG – Belgium).

As such, he also regularly contributes to continued professional development programs and does workshops for coaches, physiotherapists, and strength and conditioning coaches. This has included consulting to the PGA's of Australia, Belgium, Switzerland, and Holland, presenting at the 2006 Asia Pacific Coaching Summit, and several publications.



## Q Golf – 3D Biomechanical Analysis and Sports Science Consultancy

Q Golf provides biomechanical analysis, through which the keys aspects of technical performance,



technical and physical correlates, and cause and effect relationships can be established. It is important to measure these aspects, and evaluate the implications they may have for subsequent coaching input and training programs to assist players develop consistent and repeatable movement patterns.

3-D motion analysis provides a quantitative evaluation of coordination and timing, swing dynamics, injury risk, dynamic postural control and range of

motion, and swing consistency. From this, physical capabilities can be identified so that appropriate technical direction and intervention strategies can be implemented, helping players develop an efficient technique that places the body at minimal risk of injury.

Postural awareness, flexibility exercises, *biofeedback*, and golf specific exercise drills are introduced to complement a players' coaching program to aid technical development and the learning of new "feels" associated with swing changes. Through such programs, learning is optimised, together with improved body awareness and an understanding of why certain drills or exercises are most appropriate to achieve desired movement patterns.

Biofeedback - Current technology also incorporates a biofeedback training mode that provides realtime auditory feedback. This enables us to define the ranges of intended movements during the swing, which helps a player establish what their focus needs to be during the swing, as well as the "feels" they should attach to the desired movements; also utilised to reinforce body awareness drills, feedback is more specific as players' are able to achieve appropriate swing positions dynamically. As such, this is a



valuable tool in bringing about technique change that can accelerate skill learning.