

Mark King, PhD (Loughborough)

Senior Lecturer in Sports Biomechanics at Loughborough University, UK, researching into:

- Computer simulation of dynamic jumps
- Maximal voluntary isovelocity torque
- Computer simulation of racket sports
- Fast bowling in Cricket



The main focus of my current research is using subject-specific computer simulation models to help understand the mechanics of the takeoff phase in dynamic jumps. Integral to this work is the role of muscle on optimum performance and in particular the relationship between maximal voluntary torque and joint kinematics. Other areas of sports biomechanics research that I am currently involved with include using computer simulation models to investigate tennis elbow injuries (funding from Head rackets and EPSRC) and working with fast bowlers in cricket (funding from the England and Wales Cricket Board) to investigate which bowling techniques are more likely to result in lower back injuries. In 1997 Mark was awarded first prize in the Young Investigators Award at the Annual Congress of the European College of Sport Sciences for his work on the computer simulation of vaulting. Mark has made numerous invited presentations including: World Congress of Biomechanics 2006, International Sports Engineering Association 2004, British Association of Sport and Exercise Sciences 2005, Lawn Tennis Association Sports Medicine Conference 2008 and the Pre-Olympic Congress 2008. Mark is a research accredited Biomechanist with the British Association of Sport and Exercise Sciences, is a member of the International Society of Biomechanics and the Technical Group on Computer Simulation (Executive Board member for TGCS) and is a member of the International Cricket Council panel of Human Movement Specialists.