

# The biomechanist

World-respected data analyst Russell Guire on dyslexia and failing his maths and science GCSEs, and his research to improve horse welfare and performance

**Aged nine, I couldn't read or write and was sent to a specialist school for dyslexia.** I started going to a riding school at that time. It's a cliché, but horses were my escape, my sanctuary. It can be a lonely place when you can't do the things your peers can and are bullied. I got my first horse, an Anglo-Arab, when I was 13. I fell off twice when I tried her, got her home and fell off four times on the first day — completely unsuitable, but she was my world.

**I went back to a mainstream school and failed my maths and science GCSEs.** I knew I wanted to work with horses and run my own business. It was thanks to the late Pippa Francis that I ended up at Warwickshire College. Low on confidence, as is common when you have dyslexia, I went for my interview, and she said: "Don't worry, we will look after you."

I earned a distinction for my national diploma in equine studies. I went on to do a degree in equine and human sports science and am currently working on my thesis for a PhD. I've published

nearly 20 research papers either as author or co-author.

**I was into showjumping and honoured to do a placement at the late Tim Stockdale's.**

I realised I didn't have the resources and, after I had a bad fall at Hickstead, I decided to give showjumping a miss. I now have three dressage horses and competed at this year's national winter championships.

**It was during my degree course that I had my lightbulb moment,** when we had a lecture demo from a biomechanist specialising in cycling. This is when I first had the idea to apply what he told us to horses. I had worked at a rehabilitation centre for horses for 18 months during one of my placements and was fascinated by the causes of lameness.

I came up with a business plan and registered Centaur Biomechanics with Companies House the day after I graduated in 2006. I worked in a hotel reception to fund it to begin with and have not looked back since.

**My aim is to share research and relate it back in a user-friendly way to the everyday rider.** I use various state-of-the-art measuring systems to analyse horse locomotion and rider position. I find it amazing how a horse will alter his gait immediately when you reduce areas of pressure, whether that's due to a crooked rider, pinching girth, an ill-fitting saddle, lunge roller or bridle — it's just like a pebble in a shoe.

**Every day is different, but my typical day starts around 5.15am.** I'm on my first horse at 5.30am and finish riding at 7.30am. Then I drive to my first appointment. This might be to do research trials, courses, seminars, equine gait analysis, or rider position assessments for anyone from riding club to Olympic and Paralympic level. I'm usually home by 7pm, when I go for a run. I work on my research or analyse data from 8-11pm.

**My biggest worry is that I won't have enough time to do everything I want to do, but**

I had to re-evaluate my life and restructure my company not long after I started out. I developed a kidney infection just before flying out to a conference in Canada where I was giving a presentation. I ended up in hospital fighting for my life, having developed septicaemia. It was a huge wake-up call and I learned not to be afraid to ask for help. I now have a team of six employees.

**My next project is to write a book for dyslexic people.** I want to talk about my struggle with numeracy and literacy to help others. I get so excited about the research process, collecting data and statistics — you live and sleep it. I have people ring me on a regular basis asking for advice about getting into this type of work. I always ask them whether they love it. If they don't, I tell them: "Don't do it." You have to love it to do it. **H&H**

● **As told to Leslie Bliss**

**NEXT WEEK**

**Side-saddle maker Clare Barnett**

Picture by Centaur Biomechanics



*'A horse will alter his gait immediately when you reduce areas of pressure — it's like a pebble in a shoe'*