The Tour de France organisers estimate that around 3.5 billion people around the planet watch their race each year. Whilst it’s perhaps questionable whether it’s possible that half the world’s population watch the race on television, it is clear that several million people are sufficiently captivated to turn out at the roadside and support the world’s largest annual sporting event. It seems that as sports and exercise scientists we have an enviable potential reach for our work.

This special issue reminds us that cycling can provide an outstanding platform for research. The cycle ergometer is probably the most ubiquitous and widely-used piece of exercise laboratory equipment. This means that cycling is probably the most commonly studied form of exercise. And for those interested in exercise and wellness, cycling’s non-weight bearing nature makes it accessible to many who are not able to sustain running or walking activity.

An intriguing aspect of cycling-related research is it deceptive complexity, as the studies in this special issue demonstrate. Although your feet may be fixed to your pedals when cycling, using them effectively is not a simple skill to learn. Several of the studies examine the intricacies involved in making the best choices for equipment and cycling position. Perhaps the most consistent focus for studies in this special issue is in examining those factors that influence cycling performance. Yet you will see that the range of factors that are found to exert an influence is clearly diverse. Given the above, it will be unsurprising if the debate on whether Tour de France champions are born or made, continues beyond the review in this special issue.

This special edition also reminds us that the future research involving cycling is no longer constrained to take place within our laboratory walls. This is due in part to the recent proliferation of reasonably accurate and reliable bicycle-mounted power meters. Using the bicycle as a field-based ergometer will hopefully inspire distinctive and innovative approaches in our research. The exercise and training regimes people actually complete could be evaluated, rather than those we have to impose when we are obliged to work within the laboratory. Furthermore, the evaluation of interventions designed to influence cycling exercise or performance could be conducted in a naturalistic setting - out on the road. Thus, our potential to conduct research that has increasing relevance to those millions, if not billions, of fans of cycling would seem greater than ever.