

## **The Ethics of Neuro-Doping**

There is increasing interest in the use of neuro-stimulation devices to achieve an ergogenic effect in elite athletes. Although the World Anti-Doping Authority (WADA) does not currently prohibit neuro-stimulation techniques, a number of researchers have called on WADA to consider its position on this issue, particularly with respect to trans-cranial direct current stimulation (tDCS). I shall begin this talk by surveying WADA's general approach to doping, and highlighting important limitations to the current evidence base regarding the performance-enhancing effect of pharmacological doping substances. I shall then briefly review the current evidence base for the safety and efficacy of tDCS, and argue that despite significant shortcomings, there may be sufficient evidence for WADA to consider prohibiting tDCS, in light of the comparable flaws in the evidence base for the efficacy of pharmacological doping substances. As such, I shall suggest that the question of whether WADA ought to ban tDCS turns significantly on the question of whether it is compatible with WADA's notorious 'spirit of sport' criterion. I shall critique some of the previously published positions on this point, and ultimately conclude that tDCS ought to be monitored by WADA rather than prohibited, due to compelling non-ideal considerations.