

# A computational decision support system for doping prevention.

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Tier 2

The proposed research involves the use of an integrated framework of complexity theory and methods- systems thinking, intervention design, and computational modelling and simulation across three research phases. The project will focus on understanding the broader systemic influences on doping and will identify the causal influences on doping behaviours and systemic structures enabling doping, and subsequently design a set of novel interventions to be simulated in a computational model for their effectiveness. The outcomes of the proposed project will therefore include new knowledge on the factors which create doping violations, as well as a set of novel and computationally tested interventions ready for implementation in the real world. The long-term impact of the research will be a reduction in doping in Australia, and knowledge transfer to other sports and countries.