

The fight against doping

Challenges

The World Anti-Doping Agency (WADA) has been created by governments and the Olympic family in order to harmonize and organize the world-wide fight against doping. As one of the 33 WADA-accredited laboratories around the world the Norwegian Doping Control Laboratory at Aker Hospital we are obliged to both render analytical service to anti-doping agencies as Antidoping Norway and to be engaged in research promoting the development of methodologies in analytical chemistry for the detection of doping agents and prohibited methods as well as the identification of novel doping trends and pharmacological studies on doping agents and methods. Although the laboratory's main focus is on the analytical service to anti-doping organizations WADA requires at least 7 % of the total budget to be spent on anti-doping research.

Projects

- Individual profiles of Human Growth Hormone dependent markers, an indirect method for detecting the use of Recombinant Human Growth Hormone in sports
- MAIIA WGA EPO Isoform distribution and detection of microdose administration of EPO
- Characterization of erythropoietin (EPO) produced in liver, a potential source to atypical EPO profiles in doping samples
- Excretion of testosterone metabolites in urine after use of testosterone in different application forms
- Synthesis of anabolic steroid metabolites by liver microsomes
- Beta2 adrenoreceptor agonist and elite athletes Blood and urinary concentrations of terbutaline, formoterol, salmeterol and procaterol in asthmatic and non-asthmatic subjects
- Carbon isotope ratio determination of seized nandrolone, boldenone and testosterone

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