



*The World Anti-Doping Agency (WADA) promotes, coordinates and monitors, at the international level, the fight against doping in all its forms. Through this independent agency, the Olympic Movement and the Public Authorities have intensified their efforts to keep drugs out of sport.*

## 2013 Scientific Research Topics

The World Anti-Doping Agency's (WADA) Health, Medical and Research Committee (HMRC) has identified relevant areas of research in the field of anti-doping, in particular those related to the List of Prohibited Substances and Methods in sport (for the latest version of the Prohibited List, go to [www.wada-ama.org](http://www.wada-ama.org)).

WADA promotes and funds, on a yearly basis, scientific projects in the anti-doping field covering the development or optimization of analytical tools for the detection and/or quantification of doping substances or methods as well as the pharmacology of such substances and the ergogenic effects of specific substances/methods or group of substances on athletic performance. **In this context, WADA gives high priority to projects with direct and imminent applicability in the fight against doping in sport and less preference to basic research projects.**

The review process includes the project evaluation by external independent reviewers, a panel of experts as well as the review and selection by WADA's HMRC.

### Special attention will be given to projects addressing:

- autologous blood transfusion,
- detection of peptide hormones
- improvement of windows/limits of detection of prohibited drugs.

For 2013, submission of research projects covering the following topics is encouraged:

- A. Detection of prohibited substances/methods: methodologies in analytical chemistry**, and in particular research addressing:
  - The detection of doping substances and methods using liquid or gas chromatography, mass spectrometry, or new methods in analytical chemistry.
- B. Detection of prohibited substances/methods: affinity-binding and biochemical methodologies**, and in particular research addressing:
  - The detection of doping substances and methods using affinity-binding assays (e.g. assays using antibodies (immunoassays, aptamers or other affinity-binding reagents) and biochemical methods (e.g. IEF, SDS-PAGE, etc).
  - Multiplexing of affinity-based assays.
- C. Detection/Identification of novel doping trends**, and in particular research addressing:
  - Identification and/or detection of novel substances (not on the current Prohibited List) with suspected doping potential (e.g. drugs newly approved or in advanced clinical development; substances with clinical or field evidence of abuse.)
  - The detection of gene doping and gene manipulation;
  - Validation of molecular and metabolic signatures to detect use of prohibited substances and methods (either alone or as part of the Athlete Biological Passport);
  - The administration, effect on performance and detection of stem cells in muscle(s);
- D. Pharmacological studies on doping substances/methods**, and in particular research addressing:
  - Establishment and/or refinement of threshold values for prohibited substances showing doping effect above a certain dose or depending on route of administration;

- Pharmacokinetics/pharmacodynamics of prohibited substances and methods including impact of gender, ethnic, and environmental factors affecting drug metabolism and excretion;
- Doping potential and strategies for detection of drug interactions (cocktail formulations) or micro-dosing

WADA invites you to submit your application for projects related to the topics above by **February 17 2013**. Please use the electronic system "WADAGrants" accessible from <https://grants.wada-ama.org/science/home> to submit your application. The application shall be submitted in English and shall include the following enclosures. **An English translation of documentation should be appended where necessary:**

- A project description (max. 5 pages) including objectives, methodology, experimental design, timelines, preliminary results and relevant bibliographic references;
- Information about the researchers (curriculum vitae), their home institution, and its resources;
- \*For research involving human subjects and/or human samples (including existing material): a copy of local ethics committee approval, participant information letter and consent form; and
- \*For research involving animals, a copy of animal care committee approval.  
*\* If these documents are pending at the time of submission, they will be required once the grant is approved for funding.*

The full original application form should be printed, signed by all investigators and sent to:

Ms Violet Maziar  
Executive Assistant  
Science Department/WADA  
800, Place Victoria (Suite 1700)  
PO Box 120  
Montreal (Quebec) H4Z 1B7  
CANADA

All submitted projects will be peer-reviewed by independent external reviewers, a panel of experts, and WADA's Health, Medical and Research Committee will make the final proposal to WADA's Executive Committee. A response on the application can be expected by mid-October 2013. WADA will only fund projects deemed appropriate.

Prof. Arne Ljungqvist  
WADA Vice-President  
Chairman, WADA Health, Medical and Research Committee

Mr. David Howman  
WADA Director General