

# 2025 Scientific Research Grants Call for Proposals

## Background

The World Anti-Doping Agency (WADA) was established in 1999 as an international independent agency to lead a collaborative worldwide movement for doping-free sport. WADA's governance and funding is based on equal partnership between the Sport Movement and Governments of the world. WADA's primary role is to develop, harmonize and coordinate anti-doping rules and policies across all sports and countries. Our key activities include scientific and social science research; education; intelligence and investigations; development of anti-doping capacity; and monitoring of compliance with the World Anti-Doping Code.

Science is key to driving advances in anti-doping. Innovative research helps the anti-doping community identify new trends in doping, new drugs, new delivery mechanisms, new methods and new ways of improving doping detection.

WADA's <u>Health, Medical and Research Committee</u> (HMRC), which is one of the Agency's Standing Committees, monitors scientific developments in sport with the aim of safeguarding doping-free sport practice. With this aim, it oversees the following WADA Expert Advisory Groups: <u>Prohibited List</u>, <u>Therapeutic Use Exemption</u> (<u>TUE</u>), <u>Laboratory</u> and <u>Gene and Cell Doping</u>. The HMRC Committee is also responsible for the selection of <u>WADA-funded Scientific Research Grant Projects</u>.

Since 2001, WADA has committed more than USD 90 million to helping researchers around the world develop breakthroughs in anti-doping science. The Agency's scientific research grants are critical because they facilitate research dedicated to developing new and improved detection methods for prohibited performance-enhancing substances and methods as well as attract high level researchers to this cause.

## WADA-funded Scientific Research Grant Projects

WADA promotes and funds <u>Scientific Research Projects</u> on development or optimization of analytical tools for the detection of doping substances or methods, growth of the Athlete Biological Passport, the pharmacology of prohibited substances and of drug combinations, evaluation of doping potential and anti-doping testing programs. **With this objective, WADA gives high priority to projects with direct and imminent applicability** (including human studies if applicable) in the fight against doping in sport; and therefore, **rarely funds basic research projects.** More specifically, applicants are encouraged to propose translational research beyond the discovery stage, and the proposed projects should aim to attain concrete deliverables by the end of the funding period.

Applicants are encouraged to consult with anti-doping laboratories (e.g., <u>WADA-accredited laboratories</u>) or <u>anti-doping organizations</u> during development of the research plan to help ensure practical applicability of the research.

## 2025 Scientific Research Grant Topics

For 2025, the HMRC has identified relevant areas of research in the field of anti-doping; in particular, those related to the <u>2024 List of Prohibited Substances and Methods.</u>

It should be noted that higher priority will be granted to proposals addressing:



- Detection/improvement of detection/quantification of peptide and protein hormones and growth factors, preferably by, but not limited to, chromatography-mass spectrometric methods;
- Improved window (retrospectivity) of detection of prohibited substances/methods (e.g., detection of new long-term metabolites including administration studies, improved methodologies of detection, analyte multiplexing);
- Pharmacokinetic studies to establish thresholds or minimum reporting levels of prohibited substances or their metabolites (*e.g.*, beta-2 agonists, stimulants) to distinguish permitted (*e.g.*, out-of-competition or route) from prohibited use, natural sources vs. intended use or presence in food residues;
- Detection of autologous blood transfusion, including validation of candidate biomarkers or molecular/cellular/subcellular signatures;
- The Athlete Biological Passport (e.g., new biomarkers of doping or confounding factors relevant to the hematological, steroidal or endocrine [markers of growth hormone] modules); and
- Selected Certified Reference Material synthesis (please consult WADA for materials needed).

For 2025, proposals will be classified as follows:

**A. Detection of doping substances/methods: methodologies in analytical chemistry**; and, in particular, research addressing:

• The detection of doping substances and methods using chromatography-mass spectrometric methods or new methods in analytical chemistry.

**B.** Detection of doping substances/methods: affinity-binding and biochemical methodologies; and, in particular, research addressing:

- The detection of doping substances and methods using immunoassays, other assays based on affinitybinding reagents or other biochemical methods; and
- Multiplexing of validated affinity binding-based assays and other biochemical approaches.
- C. Pharmacological studies of doping substances/methods; and, in particular, research addressing:
  - Establishment and/or refinement of threshold/reporting levels of prohibited substances or their metabolites in urine/blood/dried blood spots that may be produced endogenously, or present in foodstuff or as food contaminants, or associated with doping effects above a certain dose or depending on route or time of administration;
  - Pharmacokinetics/pharmacodynamics/metabolism of prohibited substances and methods including impact of sex, genetics, and environmental factors on excretion, detection or biological action;
  - Doping potential and strategies for detection of drugs, drug interactions (cocktail formulations) or drug micro-dosing; and
  - Long-term metabolites or markers of doping substances.

**D. The Athlete Biological Passport (ABP)**; and, in particular, research addressing:

- Discovery and validation of new discriminant markers for the Hematological, Steroidal and Endocrine modules of the ABP, including transcriptomic, metabolomic and proteomic approaches to discovery of new markers;
- Evaluation of confounding factors and validation of new biomarkers that increase the specificity of the current modules; and



• Expansion of the ABP approach to other target analytes (*e.g.*, additional peptide hormones as part of the endocrine module), analytical methods for detecting ABP markers, alternative sample matrices, and other approaches for analysis of biological data.

E. Detection of doping substances/methods: molecular biology, "omics" and miscellaneous methodologies; and, in particular, research addressing:

- The detection of gene doping, including new sensitive and multiplexed methods to detect emerging gene transfer, gene silencing, and gene editing technologies evaluated in samples from human or animal studies;
- Validation of molecular and metabolic signatures to detect use of prohibited substances and methods (*e.g.*, autologous blood transfusion); and
- Detection of prohibited cell therapies (*e.g.*, genetically modified cells) in muscle(s), connective tissues or other tissues and organs relevant in sport.

F. Scientific innovations\* to improve anti-doping programs; and, in particular, research addressing:

- Data analytics, artificial intelligence to identify trends in doping, to improve the detection of prohibited substances and/or methods, to develop tools to improve doping detection;
- Optimization of resources (efficacy and cost) in planning testing programs, specific analyses and sample retention;
- Improvements to the athletes' experience of sample collection; and
- Evaluation of the likelihood of positive test scenarios in results management.
- \* Projects primarily focused on social science research are not eligible.

### Call for Proposals for 2025 Scientific Research Grants

Deadlines for the submission of Expression of Interest (EOI) and full application are presented in the table below. Deadlines may be revised and an updated table is maintained on <u>WADA's website</u>.

Cycle	Granting Year	EOI submitted by	EOI Decision	Full Application submission	Decision notice expected by
#1	2025	30-September-2024	Mid-November 2024	13-December-2024	Mid-March-2025
#2	2025	28-February-2025	Early-May-2025	30-May-2025	Mid-September- 2025
#3	2025	04-July-2025	Late-August-2025	03-October-2025	Mid-December-2025

<u>Application guidelines for the scientific research grants</u> are available on WADA's website with more information about the submission and review processes (e.g., documents requested for EOI/full application submission).

Please note that, to complement the year-round call for proposals, WADA releases special calls for projects when topics of interest are identified. Open topics will be listed on <u>WADA's website</u>, with links to more detailed requests for applications where relevant.

Applicants are encouraged to contact WADA (<u>science@wada-ama.org</u>) for assistance with composition of the research team and access to biological samples, as well as other technical aspects.



WADA thanks all scientists in advance for their valuable submissions, in line with the above topics, aimed at helping advance anti-doping research in the protection of clean sport.

Sincerely,

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Prof. Lars Engebretsen Chair Health, Medical and Research Committee

Prof. Olivier Rabin Senior Director Science and Medicine