

Agenda for BIPM-WADA Symposium 28-29 September 2016

STANDARDS AND METROLOGY FOR ANTI-DOPING ANALYSIS

Day 1: Wednesday 28th September

8.30-9.00 Registration

Opening of the meeting

9.00-9.05 Welcome by the Director of the BIPM (**Dr Martin Milton**)

9.05-9.15 Address by the Representative of the Ministry of Economy and Finance (TBC)

9.15-9.25 Address by the Secretary of State for Sports (**His Excellency M. Thierry Braillard or delegate**)

9.25-9.35 Address by the US Under Secretary of Commerce and Director of NIST (**Dr Willie May**)

9.35-9.45 Address by the Chair of WADA Health and Medical Research Commission (**Dr Valerie Fourneyron**)

9.50-10.20 *Group Photograph /Coffee Break*

METROLOGY FOR ANTI-DOPING ANALYSIS: CURRENT ISSUES

Session 1 Metrology Needs and Reference Material requirements for Anti-Doping Analysis

Co-Chairs: Lindsey Mackay/John Miller

10.20-10.40 Overview of WADA activities and viewpoint on metrology (**John Miller, WADA Lab Expert Group**)

10.40-11.00 Overview of CCQM activities in organic and bioanalysis (**Willie May - NIST, USA**)

11.00-11.20 Reference Materials for Doping Analysis (**Lindsey Mackay - NMIA, Australia**)

11.20-11.40 Metrology support for doping analysis at the Rio Olympics (**Bruno Garrido - INMETRO, Brazil**)

11.40-12.00 (Certified)RM requirements – availability and gap analysis (**Catrin Goebel - ASDTL, Australia**)

12.00-12.30 **Discussion 1** - (C) RM priorities for WADA Code compliance and accreditation

12.30-14.00 *Lunch*

12.30-13.00 *Press Conference (Grand Salle, Pavillon de Breteuil)*

Session 2: Measurement Uncertainty (MU) of Determinations of Threshold Substances (TS)

Co-Chairs: Robert Wielgosz/Peter van Eenoo

14.00-14.20 “Bottom up” (GUM) approach to MU assignment for organic analytes (**Chris Mussell - LGC, UK**)

14.20-14.40 “Top-down” approaches to MU assignment of Threshold Substance determinations

(Peter van Eenoo - DoCo Laboratory University of Ghent, Belgium)

14.40-15.00 Practical Implementation of the GUM (**Antony Possolo - NIST, USA**)

15.00-15.30 **Discussion 2** - “Best (Fit-for-purpose) practice” for assigning and applying MU for TS results

15.30-16.00 *Coffee Break*

Session 3: Roles of Comparisons and EQAS studies in Measurement Systems

Co-Chairs: Steven Westwood/Victoria Ivanova

16.00-16.20 CCQM Key comparisons and NMI measurement services for EQAS providers

(Lindsey Mackay - NMIA, Australia)

16.20-16.40 EQAS in clinical chemistry: Linking routine analysis to reference laboratory results

(Anja Kessler - RfB, Germany)

16.40-17.00 Expanding the role and use of WADA EQAS studies and results (**Thierry Boghosian - WADA**)

17.00-17.30 **Discussion 3** – Enhancing the value of WADA EQAS studies for anti-doping analysis

18.00-21.00 **Reception and buffet dinner at BIPM**

Day 2: Thursday 29th September

METROLOGY FOR ANTI-DOPING ANALYSIS: EMERGING ISSUES

Session 4: Measurement systems for quantitative biomolecule analysis – Part 1

Co-Chairs: Robert Wielgosz/Osquel Barroso

9.00-9.20 WADA Isoform assay for detecting and reporting doping with hGH
(Martin Bidlingmaier - Endocrine Laboratory, LMU Munich, Germany)

9.20-9.40 Reference measurements for hGH **(Andre Henrion - PTB, Germany)**

9.40-10.00 Biomarker assay for hGH and the role of IGF-1 measurements
(David Cowan – Doping Control Centre, King’s College London, UK)

10.00-10.20 Reference measurements for IGF-1 **(David Bunk - NIST, USA)**

10.20-10.30 **Discussion 4** – Measurement systems for quantitative protein analysis

10.30-11.00 *Coffee Break*

Session 5: Measurement systems for quantitative biomolecule analysis - Part 2

Co-Chairs: Lindsey Mackay/Peter van Eenoo

11.00-11.20 Realising traceable, comparable results for steroid hormone analysis
(Hubert Vesper - Centre for Disease Control, USA)

11.20-11.40 Measurement issues for detection by GC-IRMS of doping with steroids
(Thomas Piper - Sport University Cologne, Germany)

11.40-12.00 Accreditation assessment of GC-IRMS
(Detlef Thieme - IDAS, Germany)

12.00-12.20 Dealing with bias in measurements of endogenous substances
(Elvar Theodorsson - Clinical and Experimental Medicine, University of Linköping, Sweden)

12.20-12.40 Detection systems for gene doping **(Anna Baoutina - NMIA, Australia)**

12.40-13.00 **Discussion 5** – Standards and Metrology for Emerging Analytical Challenges

13.00-14.00 *Lunch*

Session 6: Measurement support for qualitative analysis

Co-Chairs: Steven Westwood/Detlef Thieme

14.00-14.20 Determining and controlling the LOD of methods for qualitative organic analysis
(Steve Ellison - LGC, UK)

14.20-14.40 Detection of doping with peptide non-Threshold Substances
(Mario Thevis -Sport University Cologne, Germany)

14.40-15.00 Determination of the decision limit CC- α and detection capability CC- β for analytical methods based on mass spectrometry **(Corinne Buisson -AFLD, France)**

Session 7: Workshop Summary and Recommendations

Panel to lead discussion

15.00-15.30 **Discussion 6** - Review of recommendations for metrology support of anti-doping analysis

15.30-15.45 Summary of Workshop and Recommended Outcomes

Co-Chairs: Olivier Rabin, WADA/Robert Wielgosz, BIPM

Coffee Break and Close