Presentations for the 2023 NACRW Veterinary Drug Residue Working Group annual meeting.



2:45 – 4:15 pm

NACRW Veterinary Drug Residue (VDR) Working Group Caribbean Ballroom 1-3

VDR Collaborative Studies

Co-chairs: Eric Verdon and Sherri Turnipseed













2:45 – 3:05 pm

Comparison of the Low versus High Resolution-based Confirmation Criteria for Veterinary Chemical Residues in Food Control

Anton Kaufmann, Official Food Control Authority of the Canton of Zürich, Zürich, Switzerland

Tandem quadrupole based analyte confirmation criteria are well defined and widely accepted. This is not yet the case for high resolution mass spectrometry (HRMS) based measurements. Using the unit mass resolving quadrupole of a Q-HRMS instrument and monitoring two HRMS resolved product ions clearly outperforms any conventional tandem quadrupole based multi reaction monitoring (MRM) confirmation. Hence there is the open question, if reliable HRMS based confirmation is achievable by using wider mass isolation windows (e.g. SWATH) or if the monitoring of one product ion is acceptable.

3:05 – 3:25 am

Progress of the Veterinary Drug Residue Collaborative Study, 2022-2023 (Round 1)

<u>Maiwenn Le Floch</u> and Eric Verdon, ANSES, the French AGENCY for Food, Environmental and Occupational Health & Safety, Laboratory of Fougeres; France

In 2019, the Working Group started to talk about the organization of an inter-laboratory collaborative study to evaluate the screening practices for veterinary drug residues carried out using various new generation mass spectrometry instruments. Three "Rounds" were planned, each of them focusing on two different commodities. Round 1 organization started in the fall of 2021 led by the reference laboratory of Anses-Fougères in France. This laboratory have sent to participants in summer 2022 multiple trays of vials consisting of spiked final matrix extracts and relevant calibration standards. All the data have been collected in autumn 2022, and since have been processed. During this meeting will be presented the major outcomes of the study.

3:25 – 3:45 pm

Development of HRMS Food Residue Megamethods

<u>Steve Lehotay</u>, USDA ARS, Wyndmoor PA, USA; <u>Jian Wang</u>, Canadian Food Inspection Agency, Calgary, CANADA; <u>Jon Won</u>, USFDA Center for Food Safety and Applied Nutrition, College Park, MD, USA; <u>Sherri Turnipseed</u>, USFDA Animal Drugs Research Center, Denver, CO, USA

A panel of scientists will update progress in their laboratories on the development, validation and implementation of analytical methods for a large number of chemical contaminants using LC- HRMS. Aspects of extraction techniques, instrumental optimization, and data evaluation will be discussed with application to both pesticide and veterinary drug analysis.















3:45 -4:05 pm

Open Forum

Jo Marie Cook -Moderator, Florida Department of Agriculture, FL, USA, retired

4:05 –4:15 pm

Summary and Closing Remarks

Eric Verdon and Sherry Turnipseed











