



TIAFT 2022 VERSAILLES
A royal meeting



Oral presentations

Tuesday 6 September 2022 morning

Performance-enhancing drugs and behaviour alteration

- O1. Akgür SA. Cut-off dilemma: differences from the forensic and clinic perspective
- O2. Sempio C. Acute effects of Cannabinoid Consumption on Endocannabinoid Levels
- O3. Shimko KM. Prevalence and emergence of steroidal and non-steroidal anabolic agents in the Australian community measured through wastewater analysis
- O4. Thiebot P. Corticoids identification in a lipolytic product promoted by two influencers
- O5. Tou K. Complementary biomarker detection for bisphosphonate use in race horses

New analytical approaches - 1

- O6. Birk L. Expanding the use of cork as biosorbent through the determination of new psychoactive substances in postmortem blood samples
- O7. Desharnais B. Case studies in automation of forensic toxicology practices with R
- O8. Gampfer T. A simplified strategy to assess the cytotoxicity of new psychoactive substances in HepG2 cells using a high content screening assay - Exemplified for nine compounds
- O9. Gottardo R. Intentional and unintentional nitrite intoxications: a novel diagnostic strategy based on the direct ion determination by capillary electrophoresis
- O10. Gunnar T. Wastewater-based epidemiology combined with forensic toxicological information: trends in drug use and impact of law enforcement activities

Recreational drugs and behaviour alteration

O11. Deventer MH. New generic ban evading synthetic cannabinoids shaking up the market?

O12. Grafinger KE. Investigation of the μ and κ -opioid receptor activation by eight new synthetic opioids using the [35S]-GTP γ S assay: U-47700, isopropyl U 47700, U-49900, U-47931E, N-methyl U-47931E, U-51754, U-48520 and U-48800

O13. Di Rago M. Toxicity of heroin laced with synthetic opioid β -U10 and etizolam

O14. Lee D. Would CNS depressants cause paradoxical aggressive driving behaviors?

O15. Morais J. New psychoactive substances: 25 years of early warning and response in Europe. An update from the EU Early Warning System

O16. Persson M. Characterisation of the monoamine transport inhibition of 28 new psychoactive stimulants

O17. Lo Faro AF. Human methylone, MDMA and metabolites' plasma concentrations by a new LC-MS/MS method after controlled administration of methylone and MDMA

O18. Fabresse N. Serotonin syndrome onset following 25H-NBOH and MDPHP consumption: a case report

O19. Pulver B. Review of five years of comprehensive NPS analytics and insights into the substance identification workflow of the ADEBAR project

O20. Augsburger M. Interest of drug checking supply: results of 3 years of activity in Geneva

Tuesday 6 September 2022 afternoon

Alternative specimen

O21. Adamowicz P. Can scene bloodstains be used to quantify drug concentration at the moment of injury?

O22. Busardò FP. Assessment of prenatal exposure to alcohol and gestational consumption by EtG testing in neonatal meconium and maternal hair and neonatal: first Italian national survey

O23. Cobo-Golpe M. Detection of hair metabolome changes in cocaine users using untargeted metabolomics

O24. Concheiro M. Fast and sensitive method for the determination of 17 designer benzodiazepines in hair by Liquid Chromatography Tandem Mass Spectrometry

O25. Dumitrascu C. Phosphatidylethanol in whole blood: a complementary biomarker to ethyl glucuronide in hair

O26. Hakim F. Added value evidence of a simultaneous determination of two phosphatidylethanol isoforms and ethylglucuronide in dried blood spots in forensic contexts

O27. Oliverio S. Impact of hemp-based cosmetic products on cannabis testing in hair

O28. Paniagua-González L. Driving Under the Influence of Drugs (DUID) profiling in Spain: data from oral fluid results between 2016 and 2022, including the effect of COVID-19 lockdown

O29. Ramirez Fernandez M. Passive exposure to cocaine on a professional level: importance of considering relevant interpretation parameters

O30. Rodda LN. Bladder wash as an alternative urine specimen for postmortem toxicology

Clinical & forensic toxicology

O31. Bellouard M. Extrapyrimalidal syndrome in a breastfed child, relevance of toxicological analysis

O32. Ferrari L. Massive intoxication due to cocaine adulterated with carfentanil

O33. Gesseck A. The analysis of drugs in neonates using an ad hoc oral fluid collection device to develop a prediction model for neonatal abstinence syndrome and provide maternal support

O34. Høiseth G. Possibility of falsely low levels of the alcohol marker phosphatidylethanol in patients with high alcohol consumption and hemolytic conditions

O35. Jacobs C. Adherence monitoring of antihypertensive drugs in finger prick blood microsamples – Development and validation of an analytical procedure

O36. Kuchar M. Pharmacokinetic, pharmacodynamic, and behavioural studies of deschloroketamine (DCK) in Wistar rats

O37. Lamoriniere M. Coconut crab intoxication in New Caledonia from January 2016 to April 2022

O38. Morini L. Ethyl glucuronide in hair: a 5-years retrospective cohort study among drivers under the influence of psychoactive substances and alcohol

O39. Schumann J. An illicit drug early warning system in Victoria, Australia: the role of forensic toxicology in clinical casework

O40. Wartmann Y. Finding CYP2D6 activity biomarkers by correlating MDMA pharmacokinetic parameters to untargeted metabolomics data

Wednesday 7 September 2022 morning

Postmortem toxicology - 1

O41. Ameline A. Fate of fentanyl after formalin-fixed tissues: about an authentic case and a stability study

O42. Bottinelli C. Analysis of human insulin and its therapeutic analogs by LC-HRMS: 4 years feedback and perspectives

O43. Bosman I. A case series of suicides by sodium azide ingestion

O44. Di Fazio V. Poisoning with atropine-based eye drops: an almost perfect murder?

O45. Doerr AA. Deadly monointoxication after ingestion of 4F-MDMB-BICA

- O46. Elmsjö A. Postmortem metabolic fingerprinting in death investigations
- O47. Favretto F. Chlopyrifos fatal intoxication: homicide or suicide?
- O48. Gagen S. The significance in detecting and determining out-of-scope findings for volatile organic compounds in forensic casework
- O49. Hikin L. Sodium nitrite poisoning; a case series of 15 fatalities
- O50. Logan B. Increasing incidence of xylazine as a toxic adulterating substance in postmortem forensic toxicology casework

Recent trends in screening procedures

- O51. Griffeuille P. Ultrafast measurement of drugs using Probe Electrospray Ionization Mass Spectrometry (PESI-MS) and isotope dilution: an example with metformin
- O52. Houzé P. Micro sampling, a new trend in toxicological screening?
- O53. Janssens LK. Large-scale activity-based SCRA screening on patient serum samples: CB1 bioassay supported by machine learning
- O54. Kebbabi C. What is the added value of liquid chromatography-tandem mass spectrometry for routine urine drug screening in clinical situations?
- O55. Magny R. Synthetic cannabinoids identification in e-liquid and biological samples through molecular network approach
- O56. Pichini S. The role of analytical pharmacotoxicology in addressing the main functions of the National Early Warning System on NPS
- O57. Trobbiani S. A method for the sensitive targeted screening of synthetic cannabinoids and opioids in whole blood by LC-QTOF with simultaneous suspect screening using HighResNPS.com
- O58. Ververi C. Phosphatidylethanol (Peth) in Dried Blood Spots: development, validation and comparison between LC-MS/MS and QTOF methods
- O59. Wille S. Practical High Resolution Mass Spectrometry screening approach and propositions for adequate identification criteria as well as quality assurance and validation specifics
- O60. Zarrouk E. Quantitative screening of pesticides and their metabolites in human matrices: are we ready to switch to high resolution mass spectrometry?

Wednesday 7 September 2022 afternoon

Metabolomic and metabolism

- O61. Elbourne M. Metabolomic analysis of equine urine to determine route of altrenogest administration
- O62. Gerace E. Metabolic study of methoxpropamine (MXPr) in rats and determination of its metabolites in biological samples by UHPLC-QTOF-HRMS

- O63. Giorgetti A. Synthetic cannabinoids carrying an ethyl ester moiety: human phase I metabolism and prevalence of 5F-EDMB-PICA and EDMB-PINACA
- O64. Jinni Y. Investigation of metabolic biomarkers: a metabolomics approach
- O65. Keen B. A statistical focus on doping using a metabolomics approach
- O66. Kemenes K. Metabolism of the synthetic cathinone alpha-pyrrolidinoisohexanophenone in humans using UHPLC-MS-QToF
- O67. Pelletier R. 4-Chloro-Pyrrovalerone in silico, in vitro, in vivo metabolism studies using molecular networking
- O68. Scholz M. Metabolomics for determination of non-substance related sleepiness
- O69. Verougstraete N. Identification of etazene metabolites in human urine by LC-HRMS
- O70. Schwelm HM. 3-Methyl-PCP – in vitro and in vivo metabolism in humans and post-mortem investigation of a fatal intoxication

Plants intoxications

- O71. Gaillard Y. The crime was so perfect! So, why not another time?
- O72. Gish A. Analytical strategy to document horse fatalities related to *Oenanthe crocata* poisoning
- O73. Flament E. Determination of orellanine and muscarine in biological fluids in suspected or proven poisoning cases: about several cases
- O74. Petzel-Witt S. A case of attempted murder using blue monkshood due to unfulfilled desires
- O75. Vevelstad M. Plant toxin poisoning – a disguised diagnosis?

Thursday 8 September 2022 morning

Postmortem toxicology - 2

- O76. Kacinko S. Tetrahydrozoline: death by eyedrops
- O77. Morley S. Is carbon monoxide testing required on all deaths in the elderly?
- O78. Ojanperä I. Fatal concentrations of antidepressants and antipsychotics in post-mortem blood
- O79. Orfanidis A. Analysis, stability and distribution of pharmaceuticals and drugs of abuse over a period of one year in formalin-fixed liver and formalin solutions
- O80. Rock KL. Detection of novel benzodiazepines in post-mortem cases
- O81. Rygaard K. Citalopram and escitalopram in hair segments from deceased individuals with mental illnesses
- O82. Schwelm HM. 5-Methylmethiopropamine (5-MMPA, mephedrene) – human metabolism and post-mortem investigation of a fatal intoxication
- O83. Söderberg C. Postmortem reference concentrations of elements in blood and urine

O84. Walton S. N,N-Dimethylpentylone – An emerging NPS stimulant of concern in the United States

O85. Ward LJ. Can postmortem metabolomics be used as a tool in the identification of deaths attributed to hypoglycaemia

New analytical approaches - 2

O86. Jurasek B. The versatility of the XRPD for the drug detection

O87. Luginbühl M. Addressing new possibilities and new challenges: automated nondestructive hematocrit normalization for Dried Blood Spots

O88. Mardal M. A new strategy for efficient retrospective data analyses for Designer Benzodiazepines in large LC-HRMS datasets

O89. Massano M. Wastewater surveillance for different classes of pharmaceutical drugs: focus on psychotropic drugs and their metabolites

O90. Moosmann B. A novel receptor binding-based assay to screen for opiates and (synthetic) opioids in human urine samples

O91. Müller A. Formation of ethyl glucuronide by beta-Glucuronidase

O92. Quireyns M. Temporal monitoring of pharmaceutical consumption using a wastewater-based epidemiologic approach

O93. Romolo FS. Nuclear techniques in forensic toxicology

O94. Schneider TD. Uncovering urine adulteration attempts in forensic toxicology: a LC-MS based proteomics approach

O95. Weinmann W. Optimization of DBS-self sampling for PEth in a drinking experiment with standard DBS cards and with a new design of volumetric DBS card

Thursday 8 September 2022 afternoon

Free topics

O96. Knapp-Gisclon A. Analysis of an ampoule found on a WW2 German soldier: poison or medicine?

O97. Green H. CB1 activity of three classes of synthetic cannabinoids and their metabolites – The tail needs to know what the head is doing

O98. Holt A. Impact of vaping ethanol on the Roadside Field Sobriety Test in a clinical setting

O99. Willeman T. New insights into buprenorphine and methadone related fatalities at therapeutic concentration: 11-year results from french national DRAMES Study

O100. Marillier M. Poisoning at the court of the Sun King, the Affair of the Poisons

Société Française de Toxicologie Analytique

Mercredi 7 septembre 2022

SFTA Session Thèmes libres

- O101. Aknouche F. Administration de 5-APB dans une discothèque en Nouvelle-Calédonie : description de deux cas
- O102. André C. Myocardial infarction and cannabis consumption: two years of data collection in CHU Amiens-Picardie
- O103. Arbouche N. Difficulties in interpreting a therapeutic blood concentration of insulin lispro in postmortem blood: a case report
- O104. Becam J. Cocaine pediatric poisoning: a case series
- O105. Blanchot A. Bariatric surgery and changes in metformin distribution: about a fatal case
- O106. Dugues P. Targeted and untargeted screening of new psychoactive substances (NPS) and classical drugs of abuse in Paris using hair testing: A 10-years study (2012-2021)
- O107. Grenier C. 2-MeOPP positive hair result in case of urapidil treatment
- O108. Feisthauer E. Very bad deep... When the scuba tank smells like smoke
- O109. Lelong J. When a toast becomes fatal, the story of two children and sodium fluoroacetate
- O110. Monteil-Ganière C. LC-HRMS toxicological screening and biological sample preparation: evaluation of extraction by turbulent flow chromatography and protein precipitation procedures
- O111. Salle S. Interest of nails analysis to investigate synthetic cannabinoid exposure? a case report
- O112. Zebbiche Y. Identification des sources d'exposition au plomb : intérêt de l'analyse isotopique par ICP-MS

SFTA Session DPC

Cannabidiol : mise à jour des connaissances (réglementaires, cliniques et analytiques) dans un contexte d'actualité

8h30-9h : Session DPC : **accueil et émargement obligatoire**

9h-10h30 **Session DPC (1)**

Approfondissement des connaissances

- **Règlementation** – Pr Jean-Pierre Goullé
- **Aspects pharmacologiques** - Pr Céline Verstuyft
- **Aspects analytiques** – Dr Bertrand Brunet
- **Expérimentation de Cannabis Thérapeutique** - Pr Nadine Attal

10h30-11h : Pause-café

11h-12h30 : **Session DPC (2)**

Approfondissement des connaissances (Suite)

- **Cigarette électronique** – Dr Juliana Tournebize
- **Sport et dopage** – Dr Laurie Gheddar

Aspects pratiques Illustrations des problématiques par des mises en situation proposées par les orateurs (présentation de cas et/ou Frequently Asked Questions,) et des réponses à y apporter.
Echanges avec les participants

12h30 : Session DPC : **Clôture**