

PROGRAMME

Sunday 14 June: Participants arrival - City Tour - Dinner

Monday 15 June:

9.00 Opening: **E. Garaci, P. Zuccaro**

9.15 Welcome by **S. Pichini**, congress host and **P. Kintz**, President of the Society of Hair Testing

9.30 Plenary Lecture of **S.D. Ferrara** on Non-invasive biological matrices and forensic evidence

10.00 Session: Hair Testing in Forensic Toxicology. **C. Jurado, P. Kintz**

Oral presentations on forensic applications of hair testing for drugs of abuse

10.45 **coffee break** and poster session chaired by **C. Moore, R. Kronstrand**

11.20 Oral presentations on novel methodologies of hair testing for drugs of abuse

13.00 **Lunch**

14.00 Discussion with the speakers and experts regarding problems most commonly encountered in hair testing and doubts among applications and data interpretations.
Moderators: **C. Moore, R. Kronstrand**

15.00 Session: Expansion of Drug Profiles in Alternative Matrices. **C. Staub, M. Uhl**

R. Kingston. An Overview of Ethyl Glucuronide Testing at Concateno TrichoTech

J. Wicks. Drug Testing Using Hair: Addressing Client's Expectations

C. Moore. Oral fluid: Overcoming problems associated with routine analysis

C. Moore. Semi-quantitative Determination of THC in Hair using Immunoassay

J. Gareri. Clinical & Research Applications for Immunoassay in Neonatal Drug Testing

16.30 Business Meeting

Tuesday 16 June:

9.00 Plenary Lecture of **P. Kintz** on Hair Testing in Clinical Pharmacology. Interpretation of hair findings in children after methadone poisoning

9.30 Session: Hair testing in clinical pharmaco-toxicology. **S.Pichini, R. de la Torre**

Oral presentations

10.30 coffee break

11.00 Plenary Lecture of **F. Pragst** on Combined use of FAEEs and EtG in hair for diagnosis of chronic excessive alcohol consumption. Interpretation and Advantages.

11.30 Session: Alcohol markers in hair. **M. Yegles, F. Pragst**

Oral presentations

12.50 Discussion of the Consensus of Society of hair testing on hair testing for chronic excessive alcohol consumption

Moderators: **H. Sachs, P. Kintz**

13.30 Lunch

14.30 Plenary Lecture of **S. Pichini** on Drug testing in other alternative biological matrices

15.00 Session: Testing in other alternative biological matrices. **R. Pacifici, A. Luna**

Oral presentations

16.00 Conclusions and announcement of awards for the best oral and poster presentations

SPEAKERS and CHAIRPERSONS

R. de la Torre - Institut Municipal d'Investigació Mèdica (IMIM– Hospital del Mar),
Barcelona, Spain

S.D. Ferrara - Tossicologia Forense, Università di Padova, Padova

E. Garaci - Presidente, Istituto Superiore di Sanità, Roma

C. Jurado - Instituto Nacional de Toxicología, Sevilla, Spain

M. Yegles - Laboratoire National de Santé, Toxicologie, Luxembourg

P. Kintz - Presidente SoHT, Laboratoire ChemTox, Illkirch, France

R. Kronstrand - National Board of Forensic Medicine, Linköping, Sweden

A. Luna - Universidad de Murcia, Murcia, Spain

C. Moore - Immunalysis Corporation, Pomona, U.S.A.

R. Pacifici - Reparto “Farmacodipendenza, Tossicodipendenza e Doping” Istituto
Superiore di Sanità, Roma

S. Pichini - Reparto “Farmacodipendenza, Tossicodipendenza e Doping” Istituto Superiore
di Sanità, Roma

F. Pragst - Institute of Legal Medicine, University Hospital Charité, Berlin

H. Sachs - FTC, München, Germany

C. Staub - West Switzerland University Centre of Legal Medicine, Geneva, Switzerland

M. Uhl - Bayerisches Landeskriminalamt, München, Germany

P. Zuccaro - Reparto “Farmacodipendenza, Tossicodipendenza e Doping” Istituto
Superiore di Sanità, Roma

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GENERAL INFORMATION

Venue:

Aula Pocchiari
Istituto Superiore di Sanità
V.le Regina Elena, 299
00161 Roma

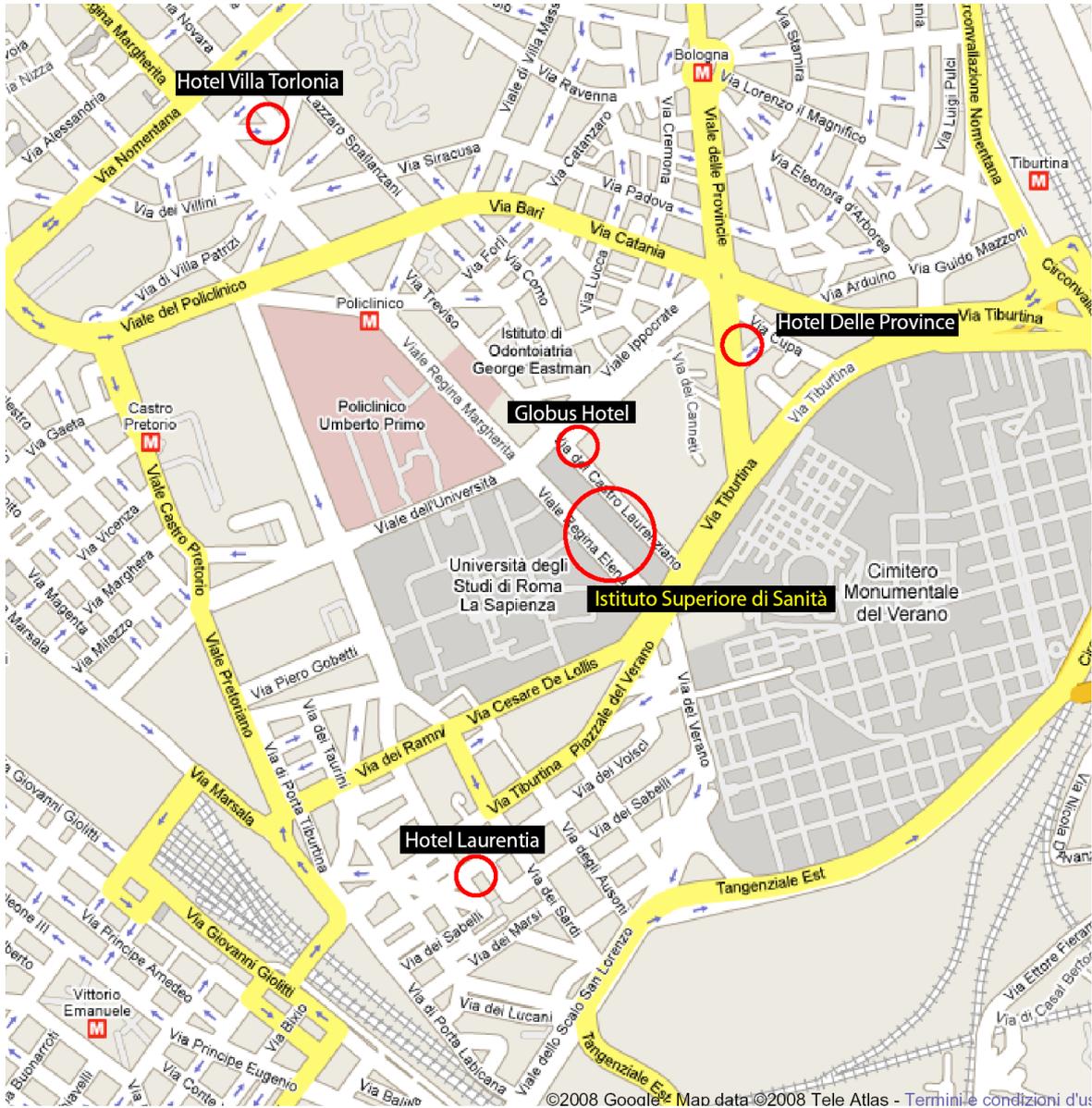
Conference Language:

English

How to get there:

From Termini railway station: Bus N° 310
From the Fiumicino airport: 25 km far from the city centre.
Train to Termini railway station and bus N° 310
Taxi (cost about € 50,00)

Congress Map



ORAL PRESENTATIONS AND POSTERS

Hair Testing in Forensic Toxicology.

1. Non-invasive biological matrices and forensic evidence: Plenary Lecture.

S.D. Ferrara

Tossicologia Forense, Università di Padova, Padova, Italy

Oral presentations on forensic applications of hair testing for drugs of abuse

2. Hair analysis for drugs in driver's licence regranting. The first Swedish evaluation.

I. Nyström¹, K. Käll², M. Forsman¹, R. Kronstrand¹

¹National Board of Forensic Medicine, Dep. Forensic Toxicology, Linköping, Sweden; ²Clinic for Dependency Disorders, University Hospital, Linköping, Sweden

3. Drug Enforcement Administration (DEA) traffics in drugs of abuse.

M. Villain, V. Cirimele, P. Kintz

Laboratoire ChemTox, Illkirch, France

4. A tendency for re-offending in drug-facilitated crime.

M. Chèze, M. Deveaux, A. Lenoan, G. Pépin

Laboratoire TOXLAB, Paris, France

5. Hair analysis for Δ^9 -tetrahydrocannabinolic acid A – new insights into the mechanism of drug incorporation of cannabinoids into hair.

V. Auwärter, J. Jung, J. Traber, W. Weinmann

Institute of Forensic Medicine, University Medical Centre Freiburg, Albertstr. 9, 79104 Freiburg, Germany

Oral presentations on novel methodologies of hair testing for drugs of abuse

6. High throughput analysis of drugs of abuse in hair by combining purposely designed sample extraction compatible with immunometric methods used for drug testing in urine.

R. de la Torre¹, E. Civit¹, F. Svaizer², A. Lotti², M. Gottardi², M. Miozzo²

¹Institut Municipal d'Investigació Mèdica (IMIM– Hospital del Mar), Human Pharmacology and Clinical Neurosciences Research Group, Barcelona, Spain; ²Laboratorio di Sanità Pubblica (LSP) – Azienda Provinciale Servizi Sanitari, Trento, Italy

7. Hydrophilic interaction liquid chromatography (HILIC) determination of ecgoninemethylester in hair as a marker of cocaine consumption.

O. Quintela¹, E. Lendoiro¹, A. Cruz¹, A. de Castro¹, C. Jurado², M. López-Rivadulla¹.

¹Forensic Toxicology Service, Institute of Legal Medicine, University of Santiago de Compostela, Spain.; ²Instituto Nacional de Toxicología y Ciencias Forenses, Sevilla, Spain.

8. Incorporation of Codeine into Hair from External Contamination.

J. Beyer, V. Staikos, D. Gerostamoulos, O.H. Drummer

Victorian Institute of Forensic Medicine, Department of Forensic Medicine, Monash University, Melbourne, Australia

9. Hair testing for a broad range of psychoactive substances by liquid chromatography-high resolution mass spectrometry.

G. Frison, D. Favretto, S. Vogliardi, G. Stocchero, F. Castagna, S. Maietti, S.D. Ferrara
Tossicologia Forense, Università di Padova, Padova, Italy

10. Hair analysis for the monitoring of human exposure to polycyclic aromatic hydrocarbons – First determination of PAH metabolites in hair.

B. M. R. Appenzeller¹, C. Schummer^{1,2}, M. Millet², R. Wennig¹

¹Laboratoire de Toxicologie, Centre de Recherche Public – Santé / Laboratoire National de Santé ; Université du Luxembourg, Luxembourg; ² Laboratoire des Matériaux, Surfaces et Procédés pour la Catalyse, Équipe de Physico-Chimie de l'Atmosphère (UMR 7515 CNRS-Université Louis Pasteur), Strasbourg, France

11. Simultaneous analysis of multiple agricultural pesticides in hair of occupationally exposed humans.

C. Schummer^{1,2}, B. M. R. Appenzeller¹, M. Millet², R. Wennig¹

¹ Laboratoire de Toxicologie, Centre de Recherche Public – Santé / Laboratoire National de Santé ; Université du Luxembourg, Luxembourg; ² Laboratoire des Matériaux, Surfaces et Procédés pour la Catalyse, Équipe de Physico-Chimie de l'Atmosphère (UMR 7515 CNRS-Université Louis Pasteur), Strasbourg, France

12. LC-MS-MS detection of Flunitrazepam and its metabolites 7-aminoflunitrazepam and 7-aminodesmethylflunitrazepam in hair after a single oral dose.

M. Forsman, I. Nyström, M. Roman, L. Berglund, J. Ahlner, Robert Kronstrand.

National Board of Forensic Medicine, Department of Forensic Toxicology, Linköping, Sweden

POSTERS SESSION: Hair testing for drugs of abuse

13. Strychnine in Hair – a Case Report.

J. Beyer, V. Staikos, P.J. Bedford, D. Gerostamoulos, O.H. Drummer

Victorian Institute of Forensic Medicine, Department of Forensic Medicine, Monash University, Melbourne, Australia

14. CEDIA immunochemical screening of drugs of abuse in hair.

R. Donghi, M. Nasello, D. Pilato, N. Cattai

Laboratorio Di Sanita' Pubblica - A.S.L. Della Provincia Di Lecco, Lecco, Italy

15. Retrospective evaluation of amphetamine use through hair analysis in patients admitted by the medical committee for driving licence regranting.

U. Andreotta¹, V. Crespi¹, Annarita Zippo¹, M.M. Ferrario^{1,2}

¹Laboratorio di Tossicologia, UO Medicina del Lavoro e Preventiva, Ospedale di Circolo e Fondazione Macchi, Varese, Italy; ²Dipartimento di Scienze Cliniche e Biologiche, Università degli studi dell'Insubria, Varese, Italy

16. Buprenorphine detection in hair samples by immunometric screening test. Preliminary experience.

F.Svaizer, A. Lotti, M. Gottardi, M. Miozzo.

Laboratorio Sanità Pubblica, Trento, Italy

17. CEDIA® assays for drugs of abuse: application in hair analysis.

C. Stramesi, M. Polla, A. Zucchella, , G. Collo, F. Pozzi, C. Vignali, A. Groppi

Department of Legal Medicine, Forensic Science and Pharmacotoxicology, University of Pavia, Pavia, Italy

18. Analysis of 11-nor-9-carboxy-delta-9-tetrahydrocannabinol in hair by liquid chromatography-mass spectrometry.

M. Brambilla¹, S. Cristoni², E. Gonella¹, P.M Gerthoux³, M. Bertona¹, L. D'Amato¹, P. Mocarrelli¹, P. Brambilla¹

¹University Department of Laboratory Medicine, Hospital of Desio, Desio, Italy; ²ISB, Ion Source and Biotechnology, Milano, Italy; ³Department of Laboratory Medicine, Hospital of Sesto San Giovanni, Sesto San Giovanni, Italy

19. Solid-phase microextraction for the detection of codeine, morphine, and 6-acetylmorphine in human hair by gas chromatography-mass spectrometry.

M. Moller^{1,2}, K. Aleksa¹, P. Walasek¹, T. Karaskov¹, G. Koren^{1,2}

¹Motherisk Program, Division of Clinical Pharmacology & Toxicology, Hospital for Sick Children, ²Department of Pharmacology & Toxicology, University of Toronto, Toronto, Ontario, Canada

Expansion of Drug Profiles in Alternative Matrices.

Oral presentations on expansion of Drug Profiles in Alternative Matrices.

20. An overview of ethyl glucuronide testing at Concateno TrichoTech.

R. Kingston and C. Jones.

Concateno TrichoTech, Cardiff, Wales, UK

21. Drug testing using hair: addressing client's expectations.

J. Wicks¹, L. Tsanaclis¹, R. Atkinson², E. Fiori¹

¹ DrugView Consultancy, Cardiff, Wales, UK; ²Atkinson & Lewis, Cardiff, Wales, UK

22. Oral fluid: Overcoming problems associated with routine analysis.

C. Moore, M. Vincent, J. Soares

Immunoanalysis Corporation, Pomona, CA, USA

23. Semi-quantitative determination of THC in hair using Immunoassay.

C. Coulter, J. Tuyay, M. Taruc, C. Moore

Immunoanalysis Corporation, Pomona, CA, USA

24. Clinical & Research Applications for Immunoassay in Neonatal Drug Testing.

J. Gareri, Motherisk Laboratory, Division of Clinical Pharmacology & Toxicology, Hospital for Sick Children, Toronto, Canada

Hair testing in clinical pharmacology

25. Hair testing in clinical pharmacology. Interpretation of hair findings in children after methadone poisoning. Plenary Lecture.

P. Kintz¹, M. Villain¹, J. Evans², V. Cirimele¹

¹Laboratoire ChemTox, Illkirch, France; ²Eurofins Forensic Services, UK

Oral presentations on hair testing in clinical pharmacology

26. Changes in antidepressant metabolism in pregnancy evidenced by metabolic ratios in hair: a novel approach.

L. O'Brien^{1,2}, C. Baumer³, D. Thieme^{3,4}, H. Sachs PhD^{3,4}, G. Koren M.D.^{1,2,5}

¹Division of Clinical Pharmacology and Toxicology, Hospital for Sick Children, Toronto; ²Institute of Medical Science, University of Toronto; ³Forensic Toxicological Centre, Munich, Germany; ⁴Institute of Forensic Medicine, Munich, Germany; ⁵Department of Pediatrics, Hospital for Sick Children, Toronto

27. Determination of diazepam and its metabolites nordiazepam and temazepam in neonates and their mothers hair.

R. Stanaszek¹, W. Lechowicz¹, W. Piekoszewski², E. Florek³

¹Institute of Forensic Research, Kracow, Poland; ²Department of Analytical Chemistry, Jagiellonian University, Krakow, Poland; ³Chair and Department of Toxicology, Medical University, Poznan, Poland

28. Increased hair cortisol levels in patients with acute myocardial infarction.

R. Gow¹, D. Pereg⁸, G. Koren^{2,3,5,7}, M. Rieder^{2,4,5}, S. Van Uum^{5,6}

¹Dept. of Physiology and Pharmacology, ²Pediatrics and Physiology/Pharmacology, ³Ivey Chair in Molecular Toxicology, ⁴CIHR-GSK Chair in Pediatric Clinical Pharmacology, Children's Health Research Institute, ⁵Dept. of Medicine, ⁶Lawson Health Research Institute, Schulich School of Medicine and Dentistry, University of Western Ontario, London, Ontario, ⁷Div. of Clinical Pharmacology/Toxicology, Hospital for Sick Children, Toronto, Canada; ⁸Dept of Internal Medicine A and Cardiology division, Meir Medical Center, Kfar Sava, Israel

29. High resolution mass spectrometry to evidence gestational exposure to venlafaxine.

D. Favretto, G. Stocchero, S. Vogliardi, G. Frison, F. Zancanaro, A. Nalesso, S.D. Ferrara
Tossicologia Forense, Università di Padova, Padova, Italy

POSTERS SESSION: Hair testing in clinical pharmacology

30. Assessment of fetal and childhood exposure to cigarette smoke after recent implementations of smoke-free policy by hair, urine and cord blood testing.

M. Pellegrini¹, MC. Rotolo¹, S. La Grutta², F. Cibella², S. Di Carlo¹, A. Bacosi¹, O. Garcia-Algar³, R. Pacifici¹, S. Pichini¹

¹Department of Therapeutic Research and Medicines Evaluation, Istituto Superiore di Sanità, Rome, Italy, ²Consiglio Nazionale delle Ricerche, Istituto di Biomedicina e Immunologia Molecolare, Palermo, Italy; ³Paediatric Service, URIE, Hospital del Mar, and Universitat Autònoma, Barcelona, Spain

31. Hair and serum testing for drugs of abuse in women requesting voluntary termination of pregnancy.

M. Falcon¹, M. Pellegrini², MC. Rotolo², S. Pichini², R. Pacifici², J. Joya³, O. Vall³, O. García Algar³, A. Luna¹.

Legal Medicine. University of Murcia, Spain; ²Istituto Superiore di Sanità, Rome, Italy; ³Paediatric Service, URIE, Hospital del Mar, and Universitat Autònoma, Barcelona, Spain.

32. Validation of an analytical method for detection of benzodiazepines and other psychotropic drugs in human hair by GC/MS.

M. Bernini, S. Manzoni, E. Saligari, S. Vezzoli

Università degli studi di Brescia/Spedali Civili -Medicina Legale, Brescia, Italy

Alcohol markers in hair

33. Combined Use of FAEE and EtG in Hair for Diagnosis of Alcohol Abuse. Interpretation and Advantages. Plenary lecture

F. Pragst¹, M. Rothe², S. Herre¹, D. Simmert¹, M Hastedt¹

¹Institute of Legal Medicine, University Hospital Charité, Berlin, Germany; ²Lipidomix GmbH, Berlin, Germany

Oral presentations on Alcohol markers in hair

34. Validation of a gas chromatography-negative chemical ionization tandem mass spectrometry method for the determination of ethyl glucuronide in hair : use of accuracy profiles and real quality controls.

H. Kharbouche, F. Sporkert, M. Augsburg, C. Staub

West Switzerland University Centre of Legal Medicine, Lausanne and Geneva, Switzerland

35. Ethyl glucuronide in hair as a marker of chronic ethanol abuse in comparison with CDT in serum.

L. Morini¹, L. Politi², S. Acito¹, A. Groppi¹, A. Poletti³

¹Department of Legal Medicine and Public Health, University of Pavia, Pavia, Italy; ²Department of Anatomy, Histology, and Legal Medicine, University of Florence, Florence, Italy; ³Department of Medicine and Public Health, University of Verona, Verona, Italy

36. Chemometric evaluation of alcohol biomarkers: the prevalence of ethylglucuronide in hair for determining chronic assumption.

A. Salomone, D. Di Corcia, R.A. Salvo, A. Mastrone, A. Albarello, V. Valente, M. Petrarulo, S. Pellegrino, A. De Bernardis, M. Vincenti

Centro Regionale Antidoping "A.Bertinaria", Orbassano, Torino, Italy

37. Routine Testing of Ethyl glucuronide in Hair validated according to Forensic Guidelines

R. Agius, T. Nadulski, H.G. Kahl, B. Dufaux

Laboratory Dr. Krone & Partner, Bad Salzuflen, Germany

38. Ethyl glucuronide determination in hair: role of lotions containing ethanol.

M. Yegles, S. Schneider, R. Wennig

Laboratoire National de Santé – Toxicologie, Université du Luxembourg, Luxembourg

39. Ethyl Glucuronide (EtG) in Hair: A Comparison between Self-declared Alcohol Consumption and EtG-Concentration.

A. Boss, M.R. Baumgartner, P. Lemmer, M. Haag

Institute of Legal Medicine, University of Zurich, Switzerland

40. Results of the first ethyl glucuronide proficiency test.

F. Sporkert, C. Staub, H. Kharbouche

West Switzerland University Centre of Legal Medicine, Lausanne and Geneva, Switzerland

POSTERS SESSION: Alcohol markers in hair

41. Fatty acid ethyl ester concentrations in hair and self-reported alcohol consumption in 644 cases from different origin.

S. Süße¹, C. M. Selavka², T. Mieczkowski³, Fritz Pragst⁴

¹Trimega Drogencheck, Ulm, Germany; ²9 Hollywood drive, Charlton, MA 01507, USA; ³Department of Criminology, University of South Florida, USA; ⁴Institute of Legal Medicine, Berlin, Germany

42. Consensus of the Society of Hair Testing on hair testing for chronic excessive alcohol consumption

Testing in other alternative biological matrices

43. Drug testing in other non conventional matrices. Usefulness of oral fluid and sweat for measurement of methylphenidate and ritalinic acid. Plenary lecture

S. Pichini¹, E. Marchei¹, M Farrè², M. Pellegrini¹, Ó. García-Algar³, O. Vall³, P. Zuccaro¹,

¹Department of Therapeutic Research and Medicines Evaluation, Istituto Superiore di Sanità, Rome, Italy, ²Bioanalysis and Analytical Services Research Group, Neuropsychopharmacology Program, Institut Municipal d'Investigació Mèdica IMIM-Hospital del Mar and Universitat Autònoma, Barcelona, Spain; ³Unitat de Recerca Infància i Entorn (URIE), Paediatric Service, IMIM-Hospital del Mar, Barcelona, Spain

Oral presentations on Testing in other alternative biological matrices

44. Looking for meconium and hair ethyl glucuronide and ethyl sulfate as potential markers of intrauterine exposure to alcohol.

L. Morini¹, E. Marchei², F. Vagnarelli³, O. Garcia Algar⁴, A. Groppi¹, P. Zuccaro², S. Pichini²

¹Department of Legal Medicine and Public Health, University of Pavia, Pavia, Italy; ²Department of Therapeutic Research and Medicine Evaluation, Istituto Superiore di Sanità, Roma, Italy; ³Arcispedale Santa Maria Nuova, Reggio Emilia, Italy; ⁴Unitat de Recerca Infància i Entorn (URIE), Paediatric Service, IMIM-Hospital del Mar, Barcelona, Spain

45. Drugs abuse in saliva: screening by biochip system and direct injection in LC/MS/MS.

S. Martello, M. Chiarotti

Laboratorio Analisi Tossicologiche, Università Cattolica Sacro Cuore, Roma

46. Fetal exposure to illicit drugs in the first trimester of gestation by analysis of placental tissue.

X.Joya^{1,2}, E.Civit², M. Falcón³, O.Garcia-Algar^{1,2}, O.Vall^{1,2}, S. Pichini⁴, A.Luna³, R. De la Torre²

¹Unitat de Recerca Infància i Entorn (URIE), Paediatric Service, IMIM-Hospital del Mar, Barcelona, Spain; ²Neuropsychopharmacology Program, Institut Municipal d'Investigació Mèdica IMIM-Hospital del Mar, Barcelona, Spain; ³Departamento de Medicina Forense, Universidad de Murcia, Murcia, Spain; ⁵Department of Therapeutic Research and Medicines Evaluation, Istituto Superiore di Sanità, Rome, Italy

47. Analytical aspects of ethyl glucuronide in meconium and hair: GC-MS-NCI or LC-MS/MS A.

L.N. van Nuijs¹, I. Tarcomnicu¹, K. Aerts¹, M. De Doncker², A.Covaci¹, H. Neels¹

¹Toxicological Centre, Department of Pharmaceutical Sciences, University of Antwerp (UA), Universiteitsplein 1, 2610 Wilrijk-Antwerp, Belgium; ²Laboratory of Toxicology, ZNA Stuivenberg, Lange Beeldekensstraat 267, 2060 Antwerp, Belgium

POSTERS SESSION. Testing in other alternative biological matrices.

48. Alcohol and illicit drugs in oral fluid/other biological matrices of inpatients in emergency hospitalized for acute intoxication.

R. Borriello¹, P. Cassandro¹, I. Cilento², E. Di Florio², C. Volpe²

¹Department of Public, Clinical and Preventive Medicine, Laboratory of Forensic Toxicology, Second University of Naples (SUN); Napoli, Italy; ²Antipoisons Center of Naples – Anaesthesiology and Reanimation Unit, AORN “A. Cardarelli”, Napoli, Italy

49. Post-mortem hair and adipose tissue: comparison of two biological alternative matrices to reveal illicit drug abuse.

A.P. Colucci, L. Aventaggiato, R. Gagliano-Candela

Forensic Toxicology Chair, Legal Medical Section, Department Internal Medicine and Public Health, University of Bari, Italy

50. Determination of opiates in the spinal cord of a charred corpse.

K. Bisogni, F. Bonacci, S. Maurotti, S. Melina, L.Rivalta, P. Seminara

ASP Catanzaro Laboratorio di Tossicologia Forense, Catanzaro, Italy