

SCIENTIFIC PROGRAM

Sunday, August 23, 2009

ROOM #3		
Welcome coffee for Young Scientists	08:30	
Young Scientists Meeting	09:00	
ROOM #14		
TIAFT Board meeting	09:00	
ROOM #4		
Regional Representatives Meeting	11:30	
Lunch for Young Scientists, Regional Representatives and TIAFT Board	12:00	
ROOM #2		
Workshop I - LC-MS/MS; GC-MS/MS	14:00	SGMS - ccCTA
ROOM #3		
Workshop II - Illicit Drug Profiling	14:00	ESC
ROOM #4		
Workshop III - Drugs and Driving	13:45	DRUID
ROOM #2		
Opening Ceremony	17:00	
Chair: Marc Augsburger and Christian Staub		
L01 – Intoxications with plants and methodologies for the safety assessment of herbal medicines	17:30	
<u>K. Hostettmann</u>		
L02 – Genomic medicine: impact on drug efficacy and toxicity	18:15	
<u>U.A. Meyer</u>		
1st floor		
Welcome reception	19:00	<i>Sponsored by Agilent Technologies</i>

Monday, August 24, 2009

ROOM #2		ROOM #3-4
Post mortem toxicology I		New trends in analysis of drugs, metabolites and natural products I
Chair: Robert Wennig and Patrice Mangin		Chair: Giampietro Frison and Jean-Luc Veuthey
L03. Best practice <i>post mortem</i> forensic toxicology <u>O.H. Drummer</u>	08:45	O17. Analysis of benzodiazepines in blood and urine with automated disposable pipette extraction and HPLC/MS/MS <u>W.E. Brewer</u> , F.D. Foster, T. Gluodenis
	09:00	O18. Rapid quantification of tilidine, nortilidine and naloxone in urine by LC-ESI-MS/MS <u>C. Köhler</u> , T. Grobosch, T. Binscheck
O01. Application of quantitative structure-activity relationships (QSARs) for modeling <i>post mortem</i> redistribution of structurally diverse drugs <u>C. Giaginis</u> , A. Tsantili-Kakoulidou, S. Theocharis	09:15	O19. Capillary liquid chromatography with nano-electrospray ionization tandem mass spectrometry for ultra-sensitive analysis of drugs in hair <u>M.C. Parkin</u> , S.C. Turfus, D.A. Cowan, R.A. Braithwaite, A.T. Kicman
O02. Drug interaction research on a <i>post mortem</i> database <u>T. Launiainen</u> , E. Vuori, I. Ojanperä	09:30	O20. Detection and identification of 700 drugs by multi target screening (MTS) with a QTRAP 3200 LC-MS/MS and library searching S. Dresen, N. Ferreirós Bouzas, H. Gnann, <u>W. Weinmann</u>
O03. Investigation of chronic cocaine consumption from <i>post mortem</i> hair analysis <u>R.E. Cordero</u> , S. Paterson	09:45	O21. Construction of calibration locking databases for rapid and reliable drug screening by gas chromatography – mass spectrometry <u>K. Kudo</u> , W. Hikiji, M. Hayashida, K. Uekusa, N. Ikeda
Coffee break	10:00	<i>Sponsored by Roche Diagnostics</i>
Chair: Helena Teixeira and Robert Kronstrand		Chair: Nerea Ferreirós and Jean-Luc Wolfender
O04. Methadone concentration in liver and <i>post mortem</i> blood <u>D. Kappatos</u> , M. Sage	11:00	L04. Application of high resolution LC/MS for the analysis of pharmaceutical compounds, biological fluids and natural products <u>R.S. Plumb</u> , J.K. Nicholson
O05. Problems of interpretation of <i>post mortem</i> toxicological findings in babies and young children: a report of two cases <u>H. Wollersen</u> , F. Erdmann, R. Dettmeyer	11:15	
O06. Fast targeted screening of drugs and poisons in <i>post mortem</i> blood <u>J. Beyer</u> , J.L. Woods, N. George, D. Gerostamoulos, O.H. Drummer	11:30	O22. Use of the biochip array technology in forensic toxicology – comparison with microplate EIA, GC-MS and LC-MS <u>K.Y. Rust</u> , S. Kunz, D. Bregel, J. Wilske, T. Kraemer
O07. Strychnine: old poison, new deaths <u>D. Gerostamoulos</u> , J. Beyer, V. Staikos, S. Parsons, M. Lynch, O.H. Drummer	11:45	O23. Evolution of liquid chromatography: current and future trends <u>D. Guillarme</u> , S. Rudaz, J.L. Wolfender, J.L. Veuthey
Lunch	12:00	
Hall		
Poster session I – poster P001 to P100	12:00	
		ROOM #3-4
	13:00	<i>Vendor seminar by Thermo Fisher Scientific GmbH</i>

ROOM #2		ROOM #3-4	
Alcohol, drugs and driving		New trends in analysis of drugs, metabolites and natural products II	
Chair: Alain Verstraete and Marc Augsburger		Chair: Heesun Chung and Thomas Kraemer	
L05. Alcohol, drugs and driving: situation and update in Sweden <u>A.W. Jones</u>	14:00	O24. Drug screening in whole blood with ultra performance liquid chromatography tandem mass spectrometry <u>E.L. Øiestad</u> , Å.M.L. Øiestad, U. Johansen, A.S. Christophersen	
	14:15	O25. Ketamine and norketamine detection in hair by molecularly imprinted solid phase extraction <i>versus</i> solid phase extraction prior to LC-/MS/MS <u>N. Harun</u> , E.I. Miller, R.A. Anderson, P.A. Cormack	
O33. The prevalence of drugs amongst drivers of motor vehicles in Shanghai <u>X. Zhuo</u> , Y. Cang, J. Bu, B. Shen	14:30	O26. MRM3 – a sophisticated tool for sensitive and selective detection of THC carboxylic acid directly from hair <u>J. Trafkowski</u> , D. Thieme, H. Sachs, B. Schlutt, A. Besa	
O34. First nationwide study on driving under the influence of drugs in Switzerland <u>M.C. Senna</u> , M. Augsburger, B. Aebi, T. Briellmann, N. Donzé, J.L. Dubugnon, P.X. Iten, C. Staub, W. Sturm, K. Sutter	14:45	O27. Towards genuine identification without reference standards: application of fragmentation prediction in designer drug analysis <u>A. Pelander</u> , E. Tyrkkö, I. Rasanen, I. Ojanperä	
O35. Mortality and causes of death among drugged drivers <u>P. Lillsunde</u> , K. Karjalainen, T. Lintonen, A. Impinen, P. Mäkalä, O. Rahkonen, A. Ostamo	15:00	O28. Simultaneous screening for and determination of 128 date-rape drugs in urine by GC-EI-MS <u>P. Adamowicz</u> , M. Kala	
Coffee break	15:15	<i>Sponsored by Roche Diagnostics</i>	
Chair: Cornelia Brehmer and Aldo Polettini		Chair: Osamu Suzuki and Frank Musshof	
O36. Quality assurance in road traffic analyses in Switzerland <u>T. Briellmann</u> , T. Sigrist, M. Augsburger, B. Favrat, A. Oestreich, A. Deom	16:15	O29. Comparison of rapid LC-MS/MS screening with conventional GC-MS screening in forensic toxicology <u>O.H. Drummer</u> , J. Beyer, D. Gerostamoulos	
O37. Statistical modeling of measurement errors in gas chromatographic analyses of blood alcohol content <u>R. Moroni</u> , J. Corander, P. Blomstedt, T. Reinikainen, E. Sippola	16:30	O30. Drug hair analysis by liquid chromatography – high resolution mass spectrometry in an Orbitrap <u>D. Favretto</u> , G. Frison, S. Vogliardi, G. Stocchero, F. Zancanaro, A. Nalesso, S.D. Ferrara	
O38. Selective detection of phosphatidyl-ethanol homologues in blood as biomarkers for alcohol misuse by LC-ESI-MS/MS <u>H. Gnamm</u> , W. Weinmann, C. Engelmann, A. Thierauf, F. Wurst, G. Skopp, M. Winkler, S. Dresen, N. Ferreiros Bouzas	16:45	O31. Development of mass spectrometric method for identifying novel enzymes targeted by anti-cholinesterase organophosphorus compounds using shotgun proteome strategies <u>K. Tsuge</u> , M. Kanamori-Kataoka, I. Ohsawa, S. Kishi, T. Ohmori, Y. Seto, H. Fukushima	
O39. Analysis of phosphatidylethanol in blood by non-aqueous capillary electrophoresis with on-line ESI-MS detection <u>A. Nalesso</u> , G. Viel, G. Cecchetto, M. Montisci, G. Frison, D. Favretto, S.D. Ferrara	17:00	O32. Radiological detection of dissolved cocaine <u>S. Grabherr</u> , G. Gambarota, A. Leimgruber, R. Meuli, P. Mangin, M. Augsburger	
	17:30	ROOM #3-4 <i>Vendor seminar by Agilent Technologies</i>	

Tuesday, August 25, 2009

ROOM #2		ROOM #3-4
Drugs of abuse		<i>Post mortem toxicology II</i>
Chair: Marilyn Huestis and Nicolas Donzé		Chair: Sue Paterson and Thomas Briellmann
L06. Neurobiology of addiction <u>L.P. Raymon</u>	08:45	O08. Metals distribution in tissues of deceased individuals <u>J.-P. Goullé</u> , L. Mahieu, J.G. Anagnostides, A. Roumajon, E. Saussereau, M. Guerbet, C. Lacroix
	09:00	O09. Platinum in internal organs and blood after cisplatin overdose <u>J.K. Sadlik</u>
O40. Formation of oxidation products of (-)-trans- Δ^9 -tetrahydrocannabinol-9-carboxylic acid (THC-COOH) after exposure to oxidizing adulterants <u>N. Charlton</u> , J. Lewis, M. Dawson, S. Fu	09:15	O10. <i>Post mortem</i> blood and vitreous ethyl glucuronide and ethyl sulphate <u>E. Jenkins</u> , J.H. Galloway, S. Morley
O41. Interest of qualitative and quantitative profiling of endocannabinoids for evaluation of their implication in drug addiction process <u>A. Thomas</u> , C. Giroud, E. Fornari, G. Hopfgartner, C. Staub	09:30	O11. Potassium chloride and gamma-hydroxybutyrate distribution: about an unusual case <u>A.L. Pelissier-Alicot</u> , P. Kintz, V. Coste, J. Desfeux, G. Leonetti
O42. Quantitative determination of the active 'Spice' ingredient JWH-018 in blood and hair by liquid chromatography – tandem mass spectrometry <u>M.A. Neukamm</u> , T.E. Mürdter, H.-D. Wehner, F. Wehner, M. Renge, D. Ratge, H. Sachs, C. Knabbe	09:45	O12. Determination of ethylene glycol, glycolic acid and formic acid in blood and urine by in-tube extraction and gas chromatography – mass spectrometry J. Viinämäki, I. Rasanen, E. Vuori, <u>I.Ojanperä</u>
Coffee break	10:00	
Chair: Lionel Raymon and Frank Sporkert		Chair: Ilkka Ojanperä and Werner Bernhard
O43. Studies on the metabolism of JWH-018 and of a homologue of CP 47,497, pharmacologically active ingredients of different misused incense ("Spice") using GC-MS and LC-MSn techniques <u>T. Kraemer</u> , K.Y. Rust, M.R. Meyer, D.K. Wissenbach, D. Bregel, M. Hopf, H.H. Maurer, J. Wilske	11:00	O13. Establishment of a simple and rapid determination method for a small amount of propofol in biological samples by gas chromatography – mass spectrometry <u>W. Hikiji</u> , K. Kudo
O44. Cannabis intoxication with perceptual disturbances under clinical setting C. Giroud, A. Thomas, J.-F. Mall, <u>B. Favrat</u> , M. Appenzeller, T. Buclin, E. Fornari, G. Battistella, P. Maeder, C. Staub, J.-M. Annoni, P. Mangin	11:15	O14. Analysis of hair after contamination with blood containing cocaine and blood containing benzoylcegonine <u>S. Paterson</u> , S. Lee, R. Cordero
O45. Metabolism of the new designer drug mephedrone and toxicological detection of the beta keto designer drugs mephedrone, butylone and methylone in urine <u>M.R. Meyer</u> , F.T. Peters, H.H. Maurer	11:30	O15. The role of oxycodone metabolites in oxycodone related fatalities in the West of Scotland <u>A.I. Al-Asmari</u> , R.A. Anderson, G. Cooper
O46. Studies on the metabolism of the Kratom alkaloid paynantheine in rat and human urine using liquid chromatography-linear ion trap mass spectrometry <u>A.A. Philipp</u> , D.K. Wissenbach, A.A. Weber, S.W. Zoerntlein, J. Kanogsunthornrat, H.H. Maurer	11:45	O16. Confession of a murder – Acquittal by a hair's breadth K.Y. Rust, C. Schyma, M. Hopf, S. Warth, D. Bregel, J. Wilske, <u>T. Kraemer</u>
Excursion		
Lunch – excursion to Gruyères and Lausanne	12:00	
Dinner Cruise on the Lake of Geneva	19:30	

Wednesday, August 26, 2009

ROOM #2	ROOM #3-4
Doping analysis I	
Chair: Olaf Drummer and Martial Saugy	
L07. Past, present and future of anti-doping analyses <u>D.H. Catlin</u>	09:00
L08. The athlete's biological passport <u>P.-E. Sottas</u>	09:30
Coffee break	10:00
<i>Sponsored by BGB Analytik AG</i>	
L09. Doping control analysis of peptides and proteins using LC-MS/MS <u>M. Thevis</u>	11:00
L10. Cannabis testing in sport <u>M. Huestis</u>	11:30
Lunch	12:00
Hall	
Poster session II – poster P100 to P171 and last minute poster	12:00
ROOM #2	ROOM #3-4
<i>Vendor seminar by Roche Diagnostics and OraSure Technologies</i>	13:00
<i>Vendor seminar by Waters</i>	
Alternative matrices in forensic, clinical and food toxicology II	Doping analysis II
Chair: Pierre Margot and Christian Staub	Chair: Mario Thevis and Christophe Saudan
L11. Alternatives matrices (oral fluid, hair) in forensic toxicology and doping control: revolution with political issues or other specimens with financial issues? <u>P. Kintz</u>	O47. Analysis of sulfate conjugates improves detection of some anabolic steroids in urine <u>V. Uralets</u>
O52. Ethyl glucuronide in hair: sensitivity, specificity, and factors potentially influencing its performance <u>L. Politi, L. Morini, A. Poletti</u>	O48. Determination of testosterone misuse in sport, an international comparative study <u>E. Strahm, P.-E. Sottas, J. Dvorak, M. Saugy, C. Saudan</u>
O53. Hair analysis for anabolic steroids: the time courses in guinea pigs <u>M. Shen, P. Xiang, B. Shen, J. Bu, H. Yan</u>	O49. Doping control analysis of recombinant human erythropoietin and darbepoetin alfa in equine plasma by nano liquid chromatography-tandem mass spectrometry <u>N.H. Yu, E.N.M. Ho, T.S.M. Wan, A.S.Y. Wong</u>
O54. Hair analysis for the most common drugs of abuse in young children <u>V. Staikos, J. Beyer, D. Gerostamoulos, O.H. Drummer</u>	O50. Fast screening and confirmation of doping agents by UHPLC-QTOF-MS/MS <u>E. Badoud, E. Grata, L. Perrenoud, M. Saugy, S. Rudaz, J.-L. Veuthey</u>
O51. Smoked cannabis and doping control: looking for the wrong target analyte? <u>R. Brenneisen, P. Meyer, H. Chtioui, M. Saugy, C. Schweizer, M. Kamber</u>	
Coffee break	15:15
<i>Sponsored by BGB Analytik AG</i>	

Chair: Christèle Widmer and Pascal Kintz		
O55. Qualitative identification of ten benzodiazepines and ketamine in hair samples with application to drug-facilitated sexual assault investigations	16:15	
<u>M. Montgomery</u> , M. LeBeau		
O56. Interpretation of GHB concentrations in hair. Application in drug-facilitated crime and abuse cases	16:30	
<u>V. Cirimele</u> , E. Vallet, M. Villain, P. Kintz		
O57. Use of Rivotril® in drug-facilitated sexual assault: victim and/or user?	16:45	
<u>E. Aknouche</u> , T. Besnard, V. Maignant, R. Buti, H.-P. Duval		
O58. Validation of a MALDI-based screening method for the detection of cocaine in hair	17:00	
<u>S. Vogliardi</u> , D. Favretto, G. Frison, S. Maietti, G. Viel, R. Seraglia, P. Traldi, S.D. Ferrara		
Pittoef Theatre		
Gala dinner	19:00	<i>Sponsored by Siemens</i>

Thursday, August 27, 2009

ROOM #2	ROOM #3-4
Clinical toxicology and therapeutic drug monitoring	Alternative matrices in forensic, clinical and food toxicology II
Chair: Katharina Rentsch and Hans H. Maurer	Chair: Marc Deveaux and Patrick Edder
L12. Clinical chemistry and toxicology <u>D. Hochstrasser</u>	O59. Liquid chromatography – ion trap – mass spectrometry assay for the simultaneous determination of methadone, cocaine, opiates and metabolites in human umbilical cord <u>A. de Castro</u> , M. Concheiro, D.M. Shakleya, M.A. Huestis
	O60. Concentration profiles of methylphenidate in serum and oral fluid of children under medical treatment with an extended-release preparation J. Kempf, R. Kuhn, C. Fleischhaker, K. Schneider-Momm, <u>W. Weinmann</u>
O67. Fast and simple liquid-liquid extraction method for LC-MS/MS Quantification of 140 analytes from different drug classes in human plasma <u>D. Remane</u> , M.R. Meyer, F.T. Peters, H.H. Maurer	O61. Screening of 17 benzodiazepines in artificial lachrymal fluids using liquid chromatography coupled to tandem mass spectrometry <u>T. Besnard</u> , F. Aknouche, H.P. Duval, J. Chofflet
O68. General unknown screening of illicit drugs: a novel approach using high resolution and accurate mass <u>B. Duret</u> , E. Génin, S. Scurati, S. Robinson	O62. On-line desorption of dried blood spot: a novel approach for the direct LC/MS analysis of μ -whole blood samples <u>J. Déglon</u> , A. Thomas, C. Staub

O69. Development and validation of a drugs screening method in biological matrices using an hybrid LC-MS/MS system <u>V.Viette</u> , M. Fathi, D. Hochstrasser, R. Mylonas, Y. Mauron, S. Rudaz, J.-L. Veuthey	09:30	O63. The detection and quantification of lorazepam and its phase II metabolite in fingerprint deposits by LC-MS/MS <u>E. Goucher</u> , A. Kicman, N. Smith, S. Jickells
Coffee break	09:45	
Chair: Jean-Pierre Goullé and Marc Fathi		Chair: Marc A. LeBeau and Christian Staub
O70. Therapeutic drug monitoring of 14 antiretroviral drugs using LC-MS U. Gutteck-Amsler, <u>K.M. Rentsch</u>	10:15	O64. Prenatal tobacco exposure, meconium nicotine biomarkers and infant outcomes T.R. Gray, R.D. Eiden, <u>M.A. Huestis</u>
O71. Workup of urine samples for systematic toxicological analysis using GC-MS: acid hydrolysis/liquid-liquid extraction/acetylation versus miniaturized enzymatic hydrolysis/liquid-liquid extraction/acetylation <u>C. Sauer</u> , K. Hoffmann, L. Messerschmidt, M.R. Meyer, H.H. Maurer, F.T. Peters	10:30	O65. Munchausen syndrome by proxy. A special forensic toxicological analysis challenge <u>M. Deveaux</u> , J. Schwarz, M. Chêze, G. Hoizey, G. Pépin
O72. Normetabolites of hydrocodone, oxycodone and codeine are useful biological markers for interpretation of drug source in pain patients <u>E.I. Cone</u> , Y.H. Caplan, A. Zichterman, T. Robert, R.M. Heltsley, B.S. Cawthon, D.L. Black	10:45	O66. The minimal dosage of ketamine and triazolam detectable in hair after administration <u>P. Xiang</u> , M. Shen, Q. Sun
O73. Acute propylene glycol ingestion treated with fomepizole and haemodialysis <u>B. Brunet</u> , O. Longuet, M. Labadie, P. Mura	11:00	
		ROOM #3-4
	11:15	<i>Vendor seminar by Applied Biosystems Europe BV</i>
Lunch	11:45	
ROOM #2		ROOM #3-4
Chemometry and method validation		Free topics
Chair: Corinne Charlier and Serge Rudaz		Chair: Daniel Isenschmid and Olivier Plaut
L13. The necessity and interest of chemometrics <u>D. Rutledge</u>	13:15	
O74. Comparison of bias/precision- and beta-expectation interval-based accuracy evaluation for six-point and one-point calibration – a retrospective analysis of six validated assays <u>F.T. Peters</u>	13:45	O81. Dosis facit venenum? <u>R.K. Mueller</u>
O75. Total error for the validation of bioanalytical methods <u>E. Rozet</u> , B. Boulanger, S. Rudaz, R. Marini, E. Ziemons, P. Hubert	14:00	O82. Determination of 4 pyrethroids pesticides in blood by solid-phase extraction and negative-ion chemical ionization gas chromatography/tandem mass spectrometry <u>Y. Wang</u>
O76. Use of accuracy profile for the validation of a gas chromatography-negative chemical ionization tandem mass spectrometry method: quantification of ethyl glucuronide in hair <u>H. Kharbouche</u> , F. Sporkert, M. Augsburger, P. Mangin, C. Staub	14:15	O83. Impact of lead exposure on serum paraoxonase 1 (PON1) activity and genotype in occupationally exposed Egyptian workers <u>S.S. Ghaleb</u> , M. Elkhatib, M. Kamal, M. Fathy, M. Hasan
Coffee break	14:30	

Chair: Frank Peters and Pierre Esseiva		
O77. Screening for pharmaco/toxicologically relevant compounds in biosamples using high mass resolution. A metabolomic approach E. Liotta, R. Gottardo, A. Bertaso, <u>A. Poletti</u>	15:00	O84. Evaluation method for linking drug seizures using stable carbon and nitrogen isotopic compositions: a complementary study with impurity profiling <u>Y.T. Iwata</u> , H. Inoue, K. Kuwayama, K. Tsujikawa, H. Miyaguchi, T. Kanamori, H. Fukushima
O78. Searching for biomarkers of disease through an untargeted metabolomic approach <u>D. Favretto</u> , G. Cecchetto, E. Cosmi, G. Stochero, S. Vogliardi, G. Frison, C. Terranova, E. Ragazzi, S.D. Ferrara	15:15	O85. Sample preparation in systematic toxicological analysis <u>T. Stimpfl</u>
O79. Characterization of illicit amphetamines through ¹³ C/ ¹² C and ¹⁵ N/ ¹⁴ N isotopic ratio measurements <u>A. Salomone</u> , M. Franzoni, D. Caneparo, M. Vincenti	15:30	O86. Monitoring of herbal mixtures potentially containing cannabinoid designer drugs as psychoactive adulterants <u>N. Ferreirós</u> , S. Dresen, M. Pütz, V. Auwärter
O80. Transfer of heroin profiling method from conventional GC-MS to fast-GC-MS & UHPLC-MS/MS <u>B. Debrus</u> , J. Broséus, D. Guillaume, P. Hubert, J.-L. Veuthey, P. Esseiva, S. Rudaz	15:45	
ROOM #2		
Closing ceremony	16:00	
ROOM #2		
TIAFT Business meeting	16:30	