

CURRICULUM VITAE

MARTA CONCHEIRO-GUISAN

Assistant Professor in Toxicology
Department of Sciences
John Jay College of Criminal Justice
City University of New York
524 West 59th Street – Rm 5.66.02
New York, NY 10019
Tel.: 212-237-8492
Email: mconcheiro-guisan@jjay.cuny.edu

EDUCATION

- 2002-2006 Ph.D. in Forensic Toxicology, Department of Anatomical Pathology and Forensic Sciences, University of Santiago de Compostela, Spain
Dissertation: "Liquid chromatography tandem mass spectrometry for the determination of amphetamine derivatives and other illicit drugs in biological matrices"
- 1997-2002 Pharm.D. (*Licenciatura de Farmacia*), University of Santiago de Compostela, Spain

AWARDS & FELLOWSHIPS

- March 2019 CUNY Academy Stewart Travel Awards for Assistant Professors for National & International Conferences
- January 2009-December 2009 Postdoctoral INVEST Fellowship, National Institute on Drug Abuse International Program
- January 2008-December 2008 Postdoctoral Fellowship, *Fundación Española de Ciencia y Tecnología*
- January 2003-December 2006 Graduate Student Fellowship, *Ministerio de Ciencia y Educación de España*
- October 2002-December 2002 Graduate Student Fellowship, *Consellería de Educación e Ordenación Universitaria da Xunta de Galicia*
- October 2001-June 2002 Research Assistantship, *Consellería de Educación e Ordenación Universitaria da Xunta de Galicia*

PROFESSIONAL EXPERIENCE

January 2015-Present	Assistant Professor in Toxicology Department of Sciences, John Jay College of Criminal Justice, City University of New York, New York, NY
March 2012-December 2014	Research Scientist Chemistry and Drug Metabolism Section, National Institute on Drug Abuse, National Institutes of Health, Baltimore, MD
January 2010-March 2012	Lecturer and Researcher (<i>Investigador del Programa Isidro Parga Pondal</i>) Department of Anatomical Pathology and Forensic Sciences, University of Santiago de Compostela, Spain
January 2008-December 2009	Postdoctoral Fellow Chemistry and Drug Metabolism Section, National Institute on Drug Abuse, National Institutes of Health, Baltimore, MD
January 2007-December 2007	Staff Scientist Cientisol S.L., Santiago de Compostela, Spain
April 2007-December 2007	Postdoctoral Fellow Department of Anatomical Pathology and Forensic Sciences, University of Santiago de Compostela, Spain

HONORS

- 2020 Faculty Scholarly Excellence Award from the Office for the Advancement of Research, City University of New York.
- 2018 Achievement Award from The International Association of Forensic Toxicologists (TIAFT).
- 2006 Outstanding Ph.D. Student Award offered by the University of Santiago de Compostela (Spain).
- 2006 Outstanding Ph.D. Student Award "Eloy Diez" offered by the College of Pharmacists in Pontevedra (Spain).
- 2002 Outstanding Pharm.D. Student Award offered by the University of Santiago de Compostela (Spain).
- 2002 Outstanding Graduate Student Award offered by the Regional Government of Galicia (Spain).
- 2002 National Award for the best Graduate Student in Pharmacy School offered by the Government of Spain.

GRANTS & CONTRACTS

Contract with the Defense Health Agency (DHA), Department of Defense (DoD)

Effective date: August 1st 2019 –September 9th 2019
Name of PI: Marta Concheiro-Guisan
Project title: “Specimens for ethyl-glucuronide (ETG) levels for the Department of Defense HIV/AIDS prevention program Defense Health Agency (DHA)”
Funding Agency: Department of Defense through Leidos, Inc.
Total costs: \$39,975

Contract with Brown University

Effective date: March 14th 2019 –March 13th 2020
Name of PI: Marta Concheiro-Guisan
Project title: “Determination of Opioid Exposure During Pregnancy by Hair Analysis”.
Funding Agency: Brown University.
Total costs: \$2,400

Army Research Office (ARO) for Fundamental Research W911NF-17-S-0002

Effective date: January 1st 2019 –September 1st 2019
Name of PI: Brian Giebel
Name of co-PIs: Marta Concheiro-Guisan, Rinat Abzalimov
Project title: “Determining the recognition, provenance, and fate of anthropogenic chemicals in heterogeneous and complex environments using multiple mass spectrometry fingerprinting techniques”
Funding Agency: Department of Defense
Total costs: \$60,000

Cycle 49 PSC-CUNY Research Award

Effective date: July 1st 2018 –July 1st 2019
Name of PI: Marta Concheiro-Guisan
Project title: “Determination of Pharmaceuticals in Biofilm Samples from the Hudson River”
Funding Agency: The City University of New York
Total costs: \$3,500

FY2016 Department of Defense Research and Education Program of Historically Black Colleges and Universities and Minority-Serving Institution Equipment/Instrumentation Program W911NF-15-R-0025

Effective date: June 1st 2016 – June1st 2017
Name of PI: Marta Concheiro-Guisan
Project title: “Liquid Chromatography Tandem Mass Spectrometry in Toxicology and Environmental Sciences Research and Education Programs”
Funding Agency: Department of Defense
Total costs: \$231,182.01

Cycle 47 PSC-CUNY Research Award

Effective date: July 1st 2016 –July 1st 2017
Name of PI: Marta Concheiro-Guisan
Project title: “Wastewater-based epidemiology of tobacco and illicit drugs in New York City”
Funding Agency: The City University of New York
Total costs: \$3,484

Center for Drug Use and HIV/HCV Research (CDUHR) Pilot Project Award

Effective date: February 5th 2016 –February 7th 2017
Name of PI: Marta Concheiro-Guisan
Project title: “K2 Impact in Antiretroviral Therapy Discontinuation”
Funding Agency: Center for Drug Use and HIV/HCV Research (CDUHR) P30DA011041
Total costs: \$5,000

Shimadzu Equipment Grants for Research 2014-2015

Effective date: August 3rd 2015 – August 3rd 2016
Name of PI: Marta Concheiro-Guisan
Project title: Equipment Grants for Research. Mass Spectrometry Program.
Funding Agency: Shimadzu Corporation
Total costs: \$190,000

Seed Money Program

Effective date: May 14th 2015 – May 14th 2016
Name of PI: Marta Concheiro-Guisan and Shu-Yuan Cheng
Project title: “Analysis of marijuana, prescribed narcotics and their metabolites in wastewater in New York City areas by LC-MS/MS”
Funding Agency: Office for the Advancement of Research (OAR), John Jay College of Criminal Justice, CUNY
Total costs: \$2,000

CLINICAL TRIALS

Intramural Research Program (IRP) NIDA

Protocol Number: 13-DA-N482

ClinicalTrials.gov Identifier: NCT01851473

Effective date: 05/09/2013-01/03/2015

Clinical trial title: “Pharmacodynamic and pharmacokinetic interactions between intravenous cocaine and acetazolamide or quinine”

Role: Associate Investigator

Intramural Research Program (IRP) NIDA

Protocol Number: 12-DA-N481

ClinicalTrials.gov Identifier: NCT01736332

Effective date: 11/27/2012-10/24/2014

Clinical trial title: "Evidence-based drug policy and legislation: amphetamines and opiates in blood, oral fluid and urine following intranasal l-methamphetamine and oral poppy seeds"

Role: Associate Investigator

PEER-REVIEWED PUBLICATIONS

1. Hahn B., Harvey A.N., **Concheiro-Guisan M.**, Huestis M.A., Ross T.J., Stein E.A. Nicotinic receptor modulation of the default mode network. *Psychopharmacology (Berl.)* 238(2):589-597. doi: 10.1007/s00213-020-05711-9.
2. González-Colmenero E., Concheiro-Guisán A., Lorenzo-Martínez M., **Concheiro M.**, Lendoiro E., de-Castro-Ríos A., Cañizo-Vázquez D., Martínez-Reglero C., Fernández-Lorenzo J.R. Drug testing in biological samples vs. Maternal surveys for the detection of substance use during whole pregnancy. *Journal of Addictive Diseases*, 2020. doi: 10.1080/10550887.2020.1831137.
3. Platosz N.A., Binz T.M., Baumgartner M.R., Lendoiro E., de Castro A., **Concheiro M.** Quantification of classic, prescription, and synthetic opioids in hair by LC-MSMS. *Journal of Analytical Toxicology*. doi: 10.1093/jat/bkaa152.
4. Towler S., **Concheiro M.**, Pearring S., Rodda L.N. Evaluation and applicability of Alere iCup DX 14 for rapid postmortem urine drug screening at autopsy. *Journal of Forensic Sciences*, 2021, 66(1):375-382. doi: 10.1111/1556-4029.14577.
5. Lau T., **Concheiro M.**, Cooper G. Determination of 30 synthetic cathinones in postmortem blood using LC-MSMS. *Journal of Analytical Toxicology*, 2020; 44(7):679-687. doi: 10.1093/jat/bkaa071.
6. López-Rabuñal A., Lendoiro E., González-Colmenero E., Concheiro-Guisán A., **Concheiro-Guisán M.**, Peñas-Silva P., Macías-Cortiña M., López-Rivadulla M., Cruz A., de-Castro-Ríos A. Assessment of tobacco exposure during pregnancy by meconium analysis and maternal interview. *Journal of Analytical Toxicology*, 2020; 44(8):797-802. doi: 10.1093/jat/bkaa027.
7. López-Rabuñal A., Lendoiro E., **Concheiro M.**, López-Rivadulla M., Cruz A., de-Castro-Ríos A. LC-MS/MS method for the determination of antidepressants and benzodiazepines in meconium. *Journal of Analytical Toxicology*, 2020; 44(6):580-588. doi: 10.1093/jat/bkaa012.
8. Browne T., **Concheiro-Guisan M.**, Prinz M. Semiquantitative detection of signature peptides in body fluids by liquid chromatography tandem mass spectrometry (LC-MS/MS). *Forensic Science International: Genetics Supplement Series*, 2019; 7(1):208-210. Doi: 10.1016/j.fsigss.2019.09.080.
9. Chesser R., Pardi J., **Concheiro M.**, Cooper G. Distribution of synthetic opioids in postmortem blood, vitreous humor and brain. *Forensic Science International*, 2019; 305:109999. doi: 10.1016/j.forsciint.2019.109999.
10. Mei V., **Concheiro M.**, Pardi J., Cooper G. Validation of an LC-MS/MS method for the quantification of 13 designer benzodiazepines in blood. *Journal of Analytical Toxicology*, 2019; 43(9):688-695. doi: 10.1093/jat/bkz063.
11. Centazzo N., Frederick B.M., Jacox A., Cheng S.Y., **Concheiro-Guisan M.** Wastewater analysis for nicotine, cocaine, amphetamines, opioids and cannabis in New York City. *Forensic Sciences Research*, 2019;4(2):152-167. doi: 10.1080/20961790.2019.1609388.
12. López-Rabuñal A., Lendoiro E., **Concheiro M.**, López-Rivadulla M., Cruz A., de-Castro-Ríos A. A LC-MS/MS method for the determination of common synthetic cathinones in meconium. *Journal of*

- Chromatography B, Analytical technologies in the biomedical and life sciences, 2019;1124:349-355. doi: 10.1016/j.jchromb.2019.06.030.
13. He Y., **Concheiro-Guisan M.** Microextraction sample preparation techniques in forensic analytical toxicology. *Biomedical Chromatography*, 2019;33(1):e4444. doi: 10.1002/bmc.4444.
 14. Hanna J., Lendoiro E., de Castro A., González-Colmenero E., Concheiro-Guisan A., Peñas-Silva P., Macias-Cortiña M., Cruz-Landeira A., López-Rivadulla M., **Concheiro-Guisan M.** Detection of in utero ethanol exposure via ethyl glucuronide and ethyl sulfate analysis in umbilical cord and placenta. *Forensic Toxicology*, 2019; 37:90-103. Doi: 10.1007/s11419-018-0439-4.
 15. **Concheiro M.**, Chesser R., Pardi J., Cooper G. Postmortem Toxicology of New Synthetic Opioids. *Frontiers in Pharmacology*, 2018;9:1210. doi: 10.3389/fphar.2018.01210.
 16. **Concheiro M.**, Huestis M.A. Drug exposure during pregnancy: analytical methods and toxicological findings. *Bioanalysis*, 2018, 10(8):587-606. doi: 10.4155/bio-2017-0260.
 17. Paniagua-González L., Jiménez-Morigosa C., Lendoiro E., **Concheiro M.**, Cruz A., López-Rivadulla M., de Castro A. Development and validation of an LC-SM/MS method for the determination of nicotine and its metabolites in placenta and umbilical cord. *Drug Testing and Analysis*, 2018;10(8):1305-1314. doi: 10.1002/dta.2381.
 18. Kim J., de Castro A., Lendoiro E., Cruz-Landeira A., López-Rivadulla M., **Concheiro M.** Detection of in utero cannabis exposure by umbilical cord analysis. *Drug Testing and Analysis* 2018;10(4):636-643. doi: 10.1002/dta.2307.
 19. Blandino V., Wetzel J., Kim J., Haxhi P., Curtis R., **Concheiro M.** Oral fluid vs. urine analysis to monitor synthetic cannabinoids and classic drugs recent exposure. *Current Pharmaceutical Biotechnology*, 2017; 18(10): 796-805. doi: 10.2174/1389201018666171122113934.
 20. **Concheiro M.**, Lendoiro E., de Castro A., González-Colmenero E., Concheiro-Guisan A., Peñas-Silva P., Macias-Cortiña M., Cruz-Landeira A., López-Rivadulla M. Bioanalysis for cocaine, opiates, methadone and amphetamines exposure detection during pregnancy. *Drug Testing and Analysis*, 2017; 9(6):898-904. doi: 10.1002/dta.2087.
 21. Prego-Meleiro P., Lendoiro E., **Concheiro M.**, Cruz A., Lopez-Rivadulla M., de Castro A. Development and validation of a liquid chromatography tandem mass spectrometry method for the determination of cannabinoids and phase I and II metabolites in meconium. *Journal of Chromatography A*, 2017; 1497:118-126. doi: 10.1016/j.chroma.2017.03.066.
 22. Jacox A., Wetzel J., Cheng S.Y., **Concheiro M.** Quantitative analysis of opioids and cannabinoids in wastewater samples. *Forensic Sciences Research*, 2017; 2(1):18-25. doi: 10.1080/20961790.2016.1270812
 23. Miller B., Kim J., **Concheiro M.** Stability of synthetic cathinones in oral fluid samples. *Forensic Science International* 2017; 274:13-21. doi: 10.1016/j.forsciint.2016.11.034.
 24. Luchessi A.D., **Concheiro M.**, Germano J.F., Silbiger V.N., Bortolin R.H., Cruz A., Quintela O., Brion M., Carracedo A., Iñiguez A., Bravo M., López-Rivadulla M., Hirata R.D., Sousa A.G., Hirata M.H. ABCC3 Polymorphisms and mRNA Expression Influence the Concentration of a Carboxylic Acid Metabolite in Patients on Clopidogrel and Aspirin Therapy. *Basic and Clinical Pharmacology and Toxicology*, 2017; 120(5):466-474. doi: 10.1111/bcpt.12703.
 25. Elmore J., Dillon-Carter O., Partilla J., Ellefsen K.N., **Concheiro M.**, Suzuki M., Rice K.C., Huestis M.A., Baumann M.H. Pharmacokinetic Profiles and Pharmacodynamic Effects for Methylone and its Metabolites in Rats. *Neuropsychopharmacology*, 2017; 42(3):649-660. doi: 10.1038/npp.2016.213.
 26. Ellefsen K.N., **Concheiro M.**, Huestis M.A. Synthetic cathinone pharmacokinetics, analytical methods, and toxicological findings from human performance and postmortem cases. *Drug Metabolism Reviews*, 2016; 1:1-29. doi: 10.1080/03602532.2016.1188937.

27. Champeil E., Cheng S.Y., Huang B.T., **Concheiro-Guisan M.**, Martinez T., Paz M.M., Sapse A.M. Synthesis of Mitomycin C & Decarbamoylmitomycin C N² deoxyguanosine-adducts. *Bioorganic Chemistry*, 2016; 65:90-99. doi: 10.1016/j.bioorg.2016.02.003.
28. Ellefsen K.N., **Concheiro M.**, Pirard S., Gorelick D.A., Huestis M.A. Pharmacodynamic effects and relationships to plasma and oral fluid pharmacokinetics after intravenous cocaine administration. *Drug Alcohol Dependence*, 2016, 163:116-25. doi: 10.1016/j.drugalcdep.2016.04.004.
29. Ellefsen K.N., **Concheiro M.**, Pirard S., Gorelick D.A., Huestis M.A. Cocaine and benzoylecgonine oral fluid on-site screening and confirmation. *Drug Testing and Analysis*, 2016; 8(3-4): 296-303. doi: 10.1002/dta.1966.
30. Swortwood M.J., Ellefsen K.N., Wohlfarth A., Diao X., **Concheiro-Guisan M.**, Kronstrand R., Huestis M.A. First metabolic profile of PV8, a novel synthetic cathinone, in human hepatocytes and urine by high-resolution mass spectrometry. *Analytical and Bioanalytical Chemistry*, 2016; 408(18): 4845-4856. doi: 10.1007/s00216-016-9599-4.
31. Swortwood M.J., Carlier J., Ellefsen K.N., Wohlfarth A., Diao X., **Concheiro-Guisan M.**, Kronstrand R., Huestis M.A. *In vitro*, *in vivo* and *in silico* metabolic profiling of α -pyrrolidinopentiothiophenone, a novel thiophene stimulant. *Bioanalysis*, 2016; 8(1):65-82. doi: 10.4155/bio.15.237.
32. Marin S.J., Doyle K., Chang A., **Concheiro-Guisan M.**, Huestis M.A., Johnson-Davis K.L. One hundred false-positive amphetamines specimens characterized by liquid chromatography time-of-flight mass spectrometry. *Journal of Analytical Toxicology*, 2016; 40(1):37-42. doi: 10.1093/jat/bkv101.
33. Ellefsen K.N., **Concheiro M.**, Pirard S., Gorelick D.A., Huestis M.A. Oral fluid cocaine and benzoylecgonine concentrations following controlled intravenous cocaine administration. *Forensic Science International*, 2016; 260:95-101. doi: 10.1016/j.forsciint.2016.01.013.
34. Ellefsen K.N., Wohlfarth A., Swortwood M.J., Diao X., **Concheiro M.**, Huestis M.A. 4-Methoxy- α -PVP: *in silico* prediction, metabolic stability, and metabolites identification by human hepatocyte incubation and high-resolution mass spectrometry. *Forensic Toxicology*, 2016; 34:61-75. doi: 10.1007/s11419-015-0287-4.
35. Anizan S., **Concheiro M.**, Lehner K.R., Bukhari M.O., Suzuki M., Rice K.C., Baumann M.H., Huestis M.A. Linear pharmacokinetics of 3,4-methylenedioxypyrovalerone (MDPV) and its metabolites in the rat: relationship to pharmacodynamic effects. *Addiction Biology*, 2016; 21(2):339-347. doi: 10.1111/adb.12201.
36. Ellefsen K.N., da Costa J.L., **Concheiro M.**, Anizan S., Barnes A.J., Pirard S., Gorelick D.A., Huestis M.A. Cocaine and metabolites concentrations in DBS and venous blood after controlled intravenous cocaine administration. *Bioanalysis*, 2015; 7(16):2041-2056. doi: 10.4155/bio.15.127.
37. **Concheiro M.**, Castaneto M., Kronstrand R., Huestis M.A. Simultaneous determination of 40 novel psychoactive stimulants in urine by liquid chromatography-high resolution mass spectrometry and library matching. *Journal of Chromatography A*, 2015; 1397:32-42. doi: 10.1016/j.chroma.2015.04.002.
38. Castaneto M.S., Barnes A.J., **Concheiro M.**, Klette K.L., Martin T.A., Huestis M.A. Biochip array technology immunoassay performance and quantitative confirmation of designer piperazines for urine workplace drug testing. *Analytical and Bioanalytical Chemistry*, 2015; 407(6):4639-48. doi: 10.1007/s00216-015-8660-z.
39. Newmeyer M.N., **Concheiro M.**, da Costa J.L., Flegel R., Gorelick D.A., Huestis M.A. Oral fluid with three modes of collection and plasma methamphetamine and amphetamine enantiomer concentrations after controlled intranasal l-methamphetamine administration. *Drug Testing and Analysis*, 2015; 7(10):877-83. doi: 10.1002/dta.1784.
40. Newmeyer M.N., **Concheiro M.**, da Costa J.L., Lodico C., Gorelick D.A., Huestis M.A. Simultaneous plasma and oral fluid morphine and codeine concentrations after controlled administration of poppy seeds with known opiate content. *Forensic Toxicology*, 2015; 33(2):235-243. doi: 10.1007/s11419-015-0266-9.
41. Ellefsen KN, **Concheiro M.**, Suzuki M., Rice K.C., Elmore J.S., Baumann M.H., Huestis M.A. Quantification of methylone and metabolites in rat and human plasma by liquid chromatography-tandem mass spectrometry. *Forensic Toxicology*, 2015, 33(2): 202-212. doi: 10.1007/s11419-015-0263-z.

42. Kwako L.E., Spagnolo P.A., Schwandt M.L., Thorsell A., George D.T., Momenan R., Rio D.E., Huestis M., Anizan S., **Concheiro M.**, Sinha R., Heilig M. The Corticotropin Releasing Hormone-1 (CRH1) Receptor Antagonist Pexacerfont in Alcohol Dependence: A Randomized Controlled Experimental Medicine Study. *Neuropsychopharmacology*, 2015; 40:1053-63. doi: 10.1038/npp.2014.306.
43. **Concheiro M.**, Newmeyer M.N., da Costa J.L., Flegel R., Gorelick D.A., Huestis M.A. Morphine and codeine in oral fluid after controlled poppy seed administration. *Drug Testing and Analysis*, 2015; 7(7):586-91. doi: 10.1002/dta.1742.
44. Concheiro-Guisan A., **Concheiro M.** Bioanalysis during pregnancy: recent advances and novel sampling strategies. *Bioanalysis*, 2014; 6(23):3133-53. doi: 10.4155/bio.14.278.
45. Kuwabara H., Heishman S.J., Brasic J.R., Contoreggi C., Cascella N., Mackowick K.M., Taylor R., Rousset O., Willis W., Huestis M.A., **Concheiro M.**, Wand G., Wong D.F., Volkow N.D. Mu Opioid Receptor Binding Correlates with Nicotine Dependence and Reward in Smokers. *PLoS One*, 2014; 9(12):e113694. doi: 10.1371/journal.pone.0113694.
46. Smith M.L., Nichols D.C., Underwood P., Fuller Z., Moser M.A., Flegel R., Gorelick D.A., Newmeyer M.N., **Concheiro M.**, Huestis M.A. Methamphetamine and amphetamine isomer concentrations in human urine following controlled vicks vapoinhaler administration. *Journal of Analytical Toxicology*, 2014; 38(8):524-7. doi: 10.1093/jat/bku077.
47. Ellefsen K.N., **Concheiro M.**, Beck O., Gorelick D.A., Pirard S., Huestis M.A. Quantification of cocaine and metabolites in exhaled breath by liquid chromatography-high-resolution mass spectrometry following controlled administration of intravenous cocaine. *Analytical and Bioanalytical Chemistry*, 2014; 406(25):6213-23. doi: 10.1007/s00216-014-8051-x.
48. Newmeyer M.N., **Concheiro M.**, Huestis M.A. Rapid quantitative chiral amphetamines liquid chromatography-tandem mass spectrometry: method in plasma and oral fluid with a cost-effective chiral derivatizing reagent. *Journal of Chromatography A*, 2014; 1358:68-74. doi: 10.1016/j.chroma.2014.06.096.
49. Smith M.L., Nichols D.C., Underwood P., Fuller Z., Moser M.A., LoDico C., Gorelick D.A., Newmeyer M.N., **Concheiro M.**, Huestis M.A. Morphine and codeine concentrations in human urine following controlled poppy seeds administration of known opiate content. *Forensic Science International*, 2014; 241:87-90. doi: 10.1016/j.forsciint.2014.04.042.
50. Anizan S., Ellefsen K., **Concheiro M.**, Suzuki M., Rice K.C., Baumann M.H., Huestis M.A. 3,4-Methylenedioxypyrovalerone (MDPV) and metabolites quantification in human and rat plasma by liquid chromatography-high resolution mass spectrometry. *Analytica Chimica Acta*, 2014; 827:54-36. doi: 10.1016/j.aca.2014.04.015.
51. Himes S.K., **Concheiro M.**, Scheidweiler K.B., Huestis M.A. Validation of a novel method to identify in utero ethanol exposure: simultaneous meconium extraction of fatty acid ethyl esters, ethyl glucuronide, and ethyl sulfate followed by LC-MS/MS quantification. *Analytical and Bioanalytical Chemistry*, 2014; 406(7):1945-55. doi: 10.1007/s00216-013-7600-z.
52. Desrosiers N.A., Himes S.K., Scheidweiler K.B., **Concheiro-Guisan M.**, Gorelick D.A., Huestis M.A. Phase I and II cannabinoid disposition in blood and plasma of occasional and frequent smokers following controlled smoked cannabis. *Clinical Chemistry*, 2014, 60(4): 631-43. doi: 10.1373/clinchem.2013.216507.
53. Desrosiers N.A., Lee D., Scheidweiler K.B., **Concheiro-Guisan M.**, Gorelick D.A., Huestis M.A. In vitro stability of free and glucuronidated cannabinoids in urine following controlled smoked cannabis. *Analytical and Bioanalytical Chemistry*, 2014;406(3):785-92. doi: 10.1007/s00216-013-7524-7.
54. Desrosiers N.A., Lee D., **Concheiro-Guisan M.**, Scheidwieler K.B., Gorelick D.A., Huestis M.A. Urinary Cannabinoid Disposition in Occasional and Frequent Smokers: Is THC-Glucuronide in Sequential Urine Samples a Marker of Recent Use in Frequent Smokers? *Clinical Chemistry*, 2014; 60(2):361-72. doi: 10.1373/clinchem.2013.214106.
55. **Concheiro M.**, Baumann M.H., Scheidweiler K.B., Rothman R.R., Marrone G.F., Huestis M.A. Nonlinear pharmacokinetics of (\pm)-3,4-methylenedioxymethamphetamine (MDMA) and its pharmacodynamic

- consequences in rat. *Drug Metabolism and Disposition*, 2013; 42(1):119-25. doi: 10.1124/dmd.113.053678.
56. **Concheiro M.**, Anizan S., Ellefsen K., Huestis M.A. Simultaneous quantification of 28 synthetic cathinones and metabolites in urine by liquid chromatography-high resolution mass spectrometry. *Analytical and Bioanalytical Chemistry*, 2013; 405(29):9437-48. doi: 10.1007/s00216-013-7386-z.
 57. Hahn B., Harvey A.N., **Concheiro-Guisan M.**, Huestis M.A., Holcomb H.H., Gold J.M. A test of the cognitive self-medication hypothesis of tobacco smoking in schizophrenia. *Biological Psychiatry*, 2013; 74(6):436-43. Doi: 10.1016/j.biopsych.2013.03.017.
 58. **Concheiro M.**, González-Colmenero E., Lendoiro E., Concheiro-Guisán A., de Castro A., Cruz-Landeira A., López-Rivadulla M. Alternative matrices for cocaine, heroin, and methadone in utero drug exposure detection. *Therapeutic Drug Monitoring*, 2013; 35(4):502-509. doi: 10.1097/FTD.0b013e31828a6148.
 59. **Concheiro M.**, Lee D., Lendoiro E., Huestis M.A. Simultaneous quantification of $\Delta(9)$ -tetrahydrocannabinol, 11-nor-9-carboxy-tetrahydrocannabinol, cannabidiol and cannabinol in oral fluid by microflow-liquid chromatography-high resolution mass spectrometry. *Journal of Chromatography A*, 2013; 1297:123-130. doi: 10.1016/j.chroma.2013.04.071.
 60. Lendoiro E., González-Colmenero E., Concheiro-Guisán A., de Castro A., Cruz A., López-Rivadulla M., **Concheiro M.** Maternal hair analysis for the detection of illicit drugs, medicines, and alcohol exposure during pregnancy. *Therapeutic Drug Monitoring*, 2013; 35(3):296-304. doi: 10.1097/FTD.0b013e318288453f.
 61. de Castro A., Díaz A., Piñeiro B., Lendoiro E., Cruz A., López-Rivadulla M., **Concheiro M.** Simultaneous determination of opiates, methadone, amphetamines, cocaine, and metabolites in human placenta and umbilical cord by LC-MS/MS. *Analytical and Bioanalytical Chemistry*, 2013; 405(12):4295-4305. doi: 10.1007/s00216-013-6784-6.
 62. de Castro A., Lendoiro E., Quintela O., **Concheiro M.**, Lopez-Rivadulla M., Cruz A. Hair analysis interpretation of an unusual case of alleged scopolamine-facilitated sexual assault. *Forensic Toxicology*, 2012; 30:193-198. Doi: 10.1007/s11419-012-0141-x.
 63. Lendoiro E., Quintela O., de Castro A., Cruz A., Lopez-Rivadulla M., **Concheiro M.** Target screening and confirmation of 35 licit and illicit drugs and metabolites in hair by LC-MSMS. *Forensic Science International*, 2012; 217(1-3):207-215. doi: 10.1016/j.forsciint.2011.11.006.
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90. **Concheiro M.**, De Castro A., Quintela O., Cruz A., López-Rivadulla M. Development and validation of a method for the quantitation of Δ^9 tetrahydrocannabinol in oral fluid by liquid chromatography electrospray-mass-spectrometry. *Journal of Chromatography B*, 2004; 810:319-324. doi: 10.1016/j.jchromb.2004.08.017.

PEER-REVIEWED PUBLICATIONS IN SPANISH JOURNALS

1. Cruz A., Bouzas C.A., **Concheiro M.**, De Castro A., Quintela O., Bermejo A.M., Pereiro Gómez C. Drogas y Teratogenia. *Adicciones*, 2006; 18(1):1-18.
2. De Castro A., **Concheiro M.**, Quintela O., Cruz A., López-Rivadulla M. Detección de Fluoxetina y su metabolito activo Norfluoxetina mediante LC-MS en plasma y saliva. *Revista de Toxicología*, 2005; 22(Suplemento 1) ANA 03.
3. López-Rivadulla M., Cruz A., Quintela O., De Castro A., **Concheiro M.**, Bermejo A., Jurado C. Sumisión química: antecedentes, situación actual, y perspectivas. *Protocolos de actuación para estudios multicéntricos*. *Revista de Toxicología*, 2005; 22(Suplemento 1) FOR 03.
4. **Concheiro M.**, De Castro A., Quintela O., López-Rivadulla M., Cruz A. Estudio comparativo de dos técnicas cromatográficas de líquidos para la determinación de anfetaminas y derivados en sangre y orina: CLAR-Fluorescencia vs. CL-EM. *Revista de Toxicología*, 2005; 22(Suplemento 1) ANA 02.
5. Quintela O., Cruz A., **Concheiro M.**, De Castro A., López-Rivadulla M. Metodología LC-MS. Aspectos generales de la técnica y sus aplicaciones en el campo de la toxicología. *Revista de Toxicología*, 2005; 22:7-14.

BOOK CHAPTERS

1. Centazzo N., **Concheiro-Guisan M.** Analytical Techniques for the Identification and Quantification of Drugs and Metabolites in Wastewater Samples. Chapter 2 (28 pages) in "Wastewater-Based Epidemiology: Estimation of Community Consumption of Drugs and Diets". Editors: Subedi B., Burgard D.A., Loganathan B.G. Publisher: ACS Symposium Series; American Chemical Society, 2019, ISBN 9780841234406 | ISBN 9780841234413.
2. Baumann M.H., Bukhari M.O., Lehner K.R., Anizan S., Rice K.C., **Concheiro M.**, Huestis M.A. Neuropharmacology of 3,4-Methylenedioxypyrovalerone (MDPV), Its Metabolites, and Related Analogs. Chapter in "Current Topics in Behavioral Neurosciences". Editors: Baumann M.H., Glennon R.A., Wiley J.L. Publisher: Springer, 2017; 32:93-117.
3. López-Rivadulla M., Cruz A., Quintela O., de Castro A., **Concheiro M.** Evaluation of roadside oral fluid drug testing devices in Spain. ROSITA-2 Project. Final report. Editors: Verstraete A. & Raes E. Belgium, 2006.

BOOK CHAPTERS IN SPANISH

1. **Concheiro M.**, de Castro A., López-Rivadulla M. Psicoestimulantes: Cocaína, Anfetaminas y Éxtasis. Chapter 73 (16 pages) in "Tratado de Medicina Legal y Ciencias Forenses. Tomo II", Editor: Delgado Bueno S. Publisher: Bosch, 2012, ISBN-13-9788497905695.
2. de Castro A., **Concheiro M.**, López-Rivadulla M. Intoxicaciones originadas por opiáceos. Chapter 72 (16 pages) in "Tratado de Medicina Legal y Ciencias. Tomo II", Editor: Delgado Bueno S. Publisher: Bosch, 2012, ISBN-13-9788497905695.
3. López-Rivadulla, **Concheiro M.**, de Castro A., M. Análisis toxicológico: técnicas de extracción de los analitos según el tipo de muestra y sospecha diagnóstica. Chapter 66 (16 pages) in "Tratado de Medicina Legal y Ciencias Forenses. Tomo II", Editor: Delgado Bueno S. Publisher: Bosch, 2012, ISBN-13-9788497905695.
4. López-Rivadulla M., de Castro A., **Concheiro M.** Toma de muestras en los diversos casos de intoxicación para su ulterior remisión a los laboratorios con fines analíticos. Legislación. Cadena de custodia. Chapter 65 (16 pages) in "Tratado de Medicina Legal y Ciencias Forenses. Tomo II", Editor: Delgado Bueno S. Publisher: Bosch, 2012, ISBN-13-9788497905695.

SELECTED PEER-REVIEWED CONFERENCE PRESENTATIONS

1. Towler S., Acosta T., Elmore J.S., Chojnacki M., Baumann M., **Concheiro M.** "Brain concentrations of 3,4-methylenedioxypyrovalerone (MDPV) and its metabolites in male rats: the relationship to pharmacodynamic effects". Oral presentation at the American Academy of Forensic Sciences (AAFS) virtual meeting, February 15-19, 2021.
2. Towler S., **Concheiro M.**, Pearing S., Rodda L. "Evaluation and applicability of rapid point-of-care screening of postmortem urine at autopsy". Poster presentation at the 2020 Society of Forensic Toxicologists (SOFT) meeting, SOFTember, September 8-20, 2020 (virtual).
3. Platosz N., **Concheiro-Guisan M.** "Identification and quantification of classic, prescription and synthetic opioids in hair by liquid chromatography tandem mass spectrometry". Oral presentation at the 2020 American Academy of Forensic Sciences (AAFS) meeting in Anaheim, CA, February 17-22, 2020.

4. Giebel B.M., Abzalimov R., **Concheiro-Guisan M.** "Can multiple mass spectrometry platforms make indistinguishable organic micro-pollutants distinguishable in the natural environment?" Poster presentation at the 2019 AGU (American Geophysical Union) 100 meeting in San Francisco, CA, December 9-13, 2019.
5. Chesser R., Pardi J., **Concheiro-Guisan M.**, Cooper G. "Distribution of synthetic opioids in postmortem blood, vitreous humor and brain". Oral presentation at the 2019 Society of Forensic Toxicologists (SOFT) meeting in San Antonio, TX, October 14-18, 2019.
6. Lau T., **Concheiro M.**, Cooper G. "Determination of 30 synthetic cathinones in postmortem blood using liquid chromatography-tandem mass spectrometry (LC-MS/MS)". Oral presentation at the 2019 Society of Forensic Toxicologists (SOFT) meeting in San Antonio, TX, October 14-18, 2019.
7. Towler S., Centazzo N., **Concheiro-Guisan M.** "Determination of MDPV and its major metabolites in rat brain by liquid chromatography-mass spectrometry". Poster presentation at the 2019 Society of Forensic Toxicologists (SOFT) meeting in San Antonio, TX, October 14-18, 2019.
8. Mei V., **Concheiro M.**, Pardi J., Cooper G. "Validation of a liquid chromatography-tandem mass spectrometry (LC-MS/MS) method for the quantification of 13 designer benzodiazepines in postmortem blood". Oral presentation at the 2019 Society of Forensic Toxicologists (SOFT) meeting in San Antonio, TX, October 14-18, 2019.
9. Browne T., **Concheiro-Guisan M.**, Prinz M. "Quantitative detection of signature peptide in body fluids by liquid chromatography tandem mass spectrometry (LC-MS/MS)". Poster presented at the 28th International Society for Forensic Genetics (ISFG) meeting, Prague, Czech Republic, September 9-13, 2019.
10. Centazzo N., Rodriguez R., Acosta T., Baumann M., **Concheiro M.** "Pharmacokinetics of methylone and its metabolites in male rats: relationship to brain serotonin depletion". Poster presentation at the 2019 meeting of The International Association of Forensic Toxicologists (TIAFT), Birmingham, UK, September 2-6, 2019.
11. Rodriguez R., Centazzo N., **Concheiro M.** "Determination of methylone and its three major metabolites in rat brain by liquid chromatography-mass spectrometry". Poster presentation at the 2019 meeting of The International Association of Forensic Toxicologists (TIAFT), Birmingham, UK, September 2-6, 2019.
12. Hanna J., de Castro A., Lendoiro E., Cruz-Landeira A., López-Rivadulla M., **Concheiro M.**, "Detection of In-Utero Ethanol Exposure via Ethyl Glucuronide and Ethyl Sulfate Analysis in Placenta". Oral presentation at the 2019 American Academy of Forensic Sciences meeting, Baltimore, MD February 18-23, 2019.
13. Centazzo N., Frederick B.M., Korostyshevsky D., Wanders L., **Concheiro-Guisan M.**, "Fast and simple creatinine determination in wastewater by liquid chromatography-mass spectrometry". Poster presentation at the 2018 meeting of the Society of Forensic Toxicologists (SOFT) Minneapolis, MN, October 7-12, 2018.
14. Hanna J., de Castro A., Lendoiro E., Cruz-Landeira A., López-Rivadulla M., **Concheiro M.** "Determination of EtG and EtS in umbilical cord to detect alcohol exposure during pregnancy". Oral presentation at the 2018 meeting of The International Association of Forensic Toxicologists (TIAFT), Ghent, Belgium, August 26-30, 2018.
15. Centazzo N., Frederick B.M., Jacox A., Cheng S.Y., **Concheiro M.**, "Wastewater-based epidemiology of tobacco, prescription opioids and drugs of abuse in New York City". Oral presentation at the 2018 meeting of the American Chemistry Society (ACS) in Boston, MA, August 19-23, 2018.
16. Jacox A., Centazzo N., Frederick B.M., Gayle J., Cheng S.Y., **Concheiro M.**, "Wastewater Analysis for Tobacco and Drug Detection in New York City". Oral presentation at the 2018 American Academy of Forensic Sciences (AAFS) meeting, Seattle, WA, February 19-24, 2018.
17. Kim J., de Castro A., Lendoiro E., Cruz-Landeira A., Lopez-Rivadulla M., **Concheiro M.**, "Detection of neonatal cannabis exposure by umbilical cord analysis". Oral presentation at the 2017 joint meeting of the Society of Forensic Toxicologists (SOFT) and The International Association of Forensic Toxicologists (TIAFT), Boca Raton, FL, September 9-14, 2017 (*Rescheduled on January 7-11, 2018*).
18. Blandino V., Wetzel J., Haxhi P., Curtis R., **Concheiro M.**, "Oral fluid vs. urine analysis to monitor synthetic cannabinoids and classic drugs recent exposure". Poster presentation at the 2017 joint meeting of the

- Society of Forensic Toxicologists (SOFT) and The International Association of Forensic Toxicologists (TIAFT), Boca Raton, FL, September 9-14, 2017 (*Rescheduled on January 7-11, 2018*).
19. Lendoiro E., de Castro A., Gonzalez-Colmenero E., Concheiro-Guisan A., Peñas-Silva P., Macias-Cortiña M., Cruz A., Lopez-Rivadulla M., **Concheiro M.**, "Umbilical cord and placenta for drug exposure detection during pregnancy". Oral presentation at The International Association of Forensic Toxicologists (TIAFT) meeting, Brisbane, Australia, August 28-September 1, 2016.
 20. Miller B., Kim J., **Concheiro M.**, "Stability of synthetic cathinones in preserved oral fluid specimens". Oral presentation at The International Association of Forensic Toxicologists (TIAFT) meeting, Brisbane, Australia, August 28-September 1, 2016.
 21. Jacox A., Wetzel J., Cheng S.Y., **Concheiro M.**, "Quantitative Analysis of Licit and Illicit Drugs in River and Wastewater Samples". Oral presentation at the 2016 Middle Atlantic Regional Meeting, Riverdale, NY, June 9-12, 2016.
 22. **Concheiro M.**, Lendoiro E., de Castro A., González-Colmenero E., Concheiro-Guisan A., Peñas-Silva P., Macias-Cortiña M., Cruz-Landeira A., López-Rivadulla M., "Alternative Biological Samples for Drug Exposure Detection during Pregnancy". Poster presentation at "The addicted brain and new treatment frontiers" Sixth Annual Aspen Brain Forum, New York Academy of Sciences, New York, NY, May 18-20, 2016.
 23. **Concheiro M.**, Castaneto M., Kronstrand R., Huestis M.A., "Simultaneous determination of 40 novel psychoactive stimulants in urine by liquid chromatography high-resolution mass spectrometry and library matching". Oral presentation at The International Association of Forensic Toxicologists (TIAFT) meeting, Florence, Italy, August 30-September 4, 2015.
 24. **Concheiro M.**, Baumann M.H., Scheidweiler K.B., Huestis M.A., "Nonlinear plasma pharmacokinetics of MDMA and major metabolites in rats and accompanying short-term pharmacodynamic effects". Oral presentation at the Society of Forensic Toxicologists (SOFT) meeting, Orlando, FL, October 28-November 1, 2013.
 25. **Concheiro M.**, Lee D., Lendoiro E., Huetis M.A., "Simultaneous Quantification of delta-9-Tetrahydrocannabinol (THC), 11-nor-9-carboxy-THC, Cannabidiol and Cannabinol in Oral Fluid by MicroFlow-Liquid Chromatography-High Resolution Mass Spectrometry". Oral presentation at The International Association of Forensic Toxicologists (TIAFT) meeting, Funchal, Madeira, Portugal, September 2-6, 2013.
 26. **Concheiro M.**, Jones H.E., Johnson R.E., Choo R., Huestis M.A., "Sweat as Alternative Matrix to Monitor Buprenorphine Compliance, and Opioids, Cocaine and Tobacco Use in Opioid-Dependent Pregnant Women". Oral presentation at the American Academy of Forensic Sciences (AAFS) meeting, Washington, DC, February 18-23, 2013.
 27. **Concheiro M.**, Jones H.E., Johnson R.E., Choo R., Huestis M.A., "Oral fluid as an alternative matrix to monitor buprenorphine compliance, and opioids, cocaine and tobacco use in opioid-dependent pregnant women". Oral presentation at the Society of Forensic Toxicologists (SOFT) meeting, Boston, MA, July 1-6, 2012.
 28. **Concheiro M.**, Gonzalez-Colmenero E., Lendoiro-Belio E., Concheiro-Guisan A., de Castro A., Cruz-Landeira A., Lopez-Rivadulla M., "Alternative matrices for cocaine, opioids and methadone in utero drug-exposure detection". Oral presentation at the Society of Hair Testing (SoHT) meeting, Toronto, Canada, June 25-28, 2012.
 29. **Concheiro M.**, Jones H.E., Johnson R.E., Choo R., Huestis M.A., "Buprenorphine sublingual tablet pharmacokinetics in plasma, oral fluid and sweat during treatment of opioid-dependent pregnant women". Poster presentation at the International Association of Therapeutic Drug Monitoring and Clinical Toxicology (IATDMCT) Meeting 2011, Stuttgart, Germany, October 2-6, 2011.
 30. Lendoiro E., de Castro A., Cruz A., López-Rivadulla M., **Concheiro M.**, "Target screening of 35 licit and illicit drugs and metabolites in hair by LC-MSMS". Oral presentation at the Society of Hair Testing (SOHT) meeting, Chamonix, France, March 21-25, 2011.

31. **Concheiro M.**, Jones H.E., Johnson R.E., Choo R., Shakleya D.M., Huestis M.A., "Umbilical Cord monitoring of in utero drug exposure to buprenorphine, and correlation with maternal dose and neonatal outcomes". Oral presentation at the Society of Forensic Toxicologists (SOFT) meeting, Richmond, Virginia, USA, October 18-22, 2010.
32. **Concheiro M.**, Shakleya D.M., Huestis M.A., "Simultaneous analysis of buprenorphine, methadone, cocaine, opiates nicotine, and metabolites in sweat by liquid chromatography tandem mass spectrometry". Oral presentation at The International Association of Forensic Toxicologists (TIAFT) meeting, Bonn, Germany, August 29 – September 2, 2010.
33. **Concheiro M.**, Gray T.R., Shakleya D. M., Huestis M. A., "High Throughput Simultaneous Analysis of Buprenorphine, Methadone, Cocaine, Opiates, Nicotine, and Metabolites in Oral Fluid by Liquid Chromatography Tandem Mass Spectrometry". Oral presentation at the Society of Forensic Toxicologists (SOFT) meeting, Oklahoma City, OK, October 18-23, 2009.
34. **Concheiro M.**, Jones H. E., Johnson R. E., Shakleya D. M., Huestis M. A., "Placenta for monitoring in utero drug exposure to buprenorphine and correlation with neonatal outcomes". Oral presentation at the International Association of Therapeutic Drug Monitoring and Clinical Toxicology (IATDMCT). Montreal, Canada, October 3-8, 2009.
35. **Concheiro M.**, Shakleya D.M., Huestis M.A., "Comparison of placenta, umbilical cord, and meconium for detection of fetal buprenorphine exposure". Poster presentation at the NIDA International Forum, Reno, Nevada, USA, June 19-23, 2009.
36. **Concheiro M.**, Shakleya D.M., Huestis M.A., "A Novel Method for Simultaneous Quantification of Buprenorphine, Norbuprenorphine, Buprenorphine Glucuronide and Norbuprenorphine Glucuronide in Human Placenta by Liquid Chromatography Tandem Mass Spectrometry". Oral presentation at the Society of Forensic Toxicologists (SOFT) meeting, Phoenix, Arizona, USA, October 26-31, 2008.
37. **Concheiro M.**, Mon M., Cruz A., de Castro A., Quintela O., López-Rivadulla M., "Determinación de Etilglucurónido en orina y pelo mediante LC-MS/MS. Aplicación en pacientes a tratamiento de deshabituación alcohólica". Oral presentation at the XVII Congreso Español de Toxicología, Santiago de Compostela, Spain, September 26-28, 2007.
38. **Concheiro M.**, de Castro A., Quintela O., Cruz A., López-Rivadulla M., "Alcohol, illicit and medical drugs involved in fatal accidents in the northwest of Spain". Poster presentation at the Joint Meeting of The International Association of Forensic Toxicologists (TIAFT) and the International Council on Alcohol, Drugs and Traffic Safety (ICADTS), and featuring the 8th Interlock Symposium (IIS), Seattle, Washington, USA, August 26-30, 2007.
39. **Concheiro M.**, de Castro A., Quintela O., Cruz A., López-Rivadulla M., "Confirmation by LC-MS of drugs in oral fluid obtained from road side testing". Oral presentation at the The International Association of Forensic Toxicologists (TIAFT) Meeting, Ljubljana, Slovenia, August 26 – September 1, 2006.
40. **Concheiro M.**, de Castro A., Quintela O., Cruz A., López-Rivadulla M., "Estudio comparativo de dos técnicas cromatografía de líquidos para la determinación de anfetaminas y derivados en sangre y orina: CLAR-Fluorescencia vs. LC-MS". Oral presentation at the XVI Congreso Español de Toxicología, Cáceres, Spain, September 28-30, 2005.
41. **Concheiro M.**, Villain M., López-Rivadulla M., Kintz P., "Fenêtres de détection du tétrazépam dans les urines, la salive, la barbe et les cheveux, avec une attention particulière pour les cas de soumission chimique". Oral presentation at the XIIIe congrès annuel de la Société Française de Toxicologie Analytique, Pau, France, June 8-10, 2005.
42. **Concheiro M.**, Cruz A., De Castro A., Quintela O., López-Rivadulla M., "Methodology and laboratory results". Oral presentation at the ROSITA II Mid-Project Meeting, Santiago de Compostela, Spain, November 12-13, 2004.
43. **Concheiro M.**, Teixeira H., de Castro A., Quintela O., Cruz A., López-Rivadulla M., "Determinação de delta9- THC en fluido oral por LC-MS con electrosparry positivo, após previa extracção em fase sólida". Poster presentation at the 2º Congreso Nacional de Medicina Legal, Lisbon, Portugal, November 14-15, 2003.

44. **Concheiro M.**, Cruz A., Punín E., Quintela O., Bermejo A.M., López-Rivadulla M., “Determination of the designer drugs MDMA, MDA, MDEA and MBDB in whole blood, urine and saliva using HPLC system with native fluorescence detection”. Poster presentation at the 40th Meeting of The International Association of Forensic Toxicologists (TIAFT), Paris, France, August 26-30, 2002.

INVITED RESEARCH TALKS

1. “Cannabis exposure during pregnancy: analytical methods and toxicological findings”. Invited talk at the Eastern Analytical Symposium & Exposition, November 18, 2019.
2. “Detection of neonatal exposure to ethanol and cannabis through umbilical cord analysis”. Invited talk (Shimadzu Lunch & Learn) at Society of Forensic Toxicologists (SOFT) meeting in San Antonio, TX, October 15, 2019.
3. “Wastewater-based epidemiology of tobacco, prescription opioids and drugs of Abuse in NYC”. Invited talk at the Science Department of the Borough of Manhattan Community College, CUNY, New York, NY, November 21, 2018.
4. “Databases in Forensic Toxicology”. Invited talk at the Master of Forensic Sciences Seminar Series, John Jay College, CUNY, New York, NY, February 13, 2018.
5. “High Res Orbitrap MS for detecting new psychoactive drugs, a user’s perspective”. Invited talk at the Thermo Scientific seminar at the 2017 joint meeting of the Society of Forensic Toxicologists (SOFT) and The International Association of Forensic Toxicologists (TIAFT), Boca Raton, FL, September 9-14, 2017 (*Rescheduled on January 7-11, 2018*).
6. “Current Applications and New Trends of Liquid Chromatography-Mass Spectrometry in Forensic Toxicology”. Invited talk at CPSA (Clinical and Pharmaceutical Solutions through Analysis) meeting, Langhorne, PA, October 24, 2017.
7. “The Challenge of New Psychoactive Substances in Forensic Toxicology”. Invited talk at Queensborough Community College, New York, NY, October 30, 2015.
8. “Drugs of Abuse Bioanalysis During Pregnancy: Recent Advances and Novel Sampling Strategies”. Invited talk at the Metro Women Chemists Seminars, Pace University, New York, NY, April 2, 2015.
9. “Toxicology Research on Drugs and Traffic Safety”. Invited talk at the Master of Forensic Sciences Seminar Series, John Jay College, CUNY, New York, NY, February 24, 2015.
10. “Liquid Chromatography-High Resolution Mass Spectrometry Confirmation Methods”. Invited talk (Thermo Scientific Lunch & Learn) at the Society of Forensic Toxicologists (SOFT) meeting, Orlando, FL, October 28-November 1, 2013.
11. “Liquid Chromatography-High Resolution Mass Spectrometry Confirmation Methods”. Invited talk at the Symposium “Applications of Higher Resolution Mass Spectrometry in Drug Testing” conference organized by the New York State Division of Criminal Justice Services, Albany, NY, September 23-24, 2013.
12. “In utero drug exposure. Basic aspects and analytical methods”. Invited talk (workshop) at the International Association of Therapeutic Drug Monitoring and Clinical Toxicology (IATDMCT) Meeting 2011, Stuttgart, Germany, October 2-6, 2011.
13. “Analytical advances in oral fluid drug testing. Confirmation Testing”. Invited talk (workshop) at the Society of Forensic Toxicologists (SOFT) - The International Association of Forensic Toxicologists (TIAFT) joint Meeting 2011, San Francisco, CA, September 26-30, 2011.
14. “In utero drug exposure. Analysis of maternal and fetal biological matrices”. Invited talk (workshop) at *Jornadas Ibéricas de Toxicología*, Covilhã, Portugal, March 10-12, 2011.

EDITORIAL ROLES

- Guest Associate Editor in *Frontiers in Chemistry*. Research Topic: Current Analytical Trends in Drug Testing in Clinical and Forensic Toxicology (2021).
- Associate Editor-in-Chief of "Forensic Sciences Research" (Print ISSN: 2096-1790 Online ISSN: 2471-1411) since January 2017.

MEMBERSHIPS & COMMITTEES IN SCIENTIFIC ORGANIZATIONS

- Standard Member of the International Association of Forensic Toxicologists (TIAFT) since 2004.
 - TIAFT Young Scientist Committee Member from November 2014 to August 2018.
- Member of the Society of Hair Testing (SOHT) since 2009.
- Member of the International Association of Therapeutic Drug Monitoring and Clinical Toxicology (IATDMCT) since 2010.
- Full Member of the Society of Forensic Toxicologists (SOFT) since 2012.
 - SOFT Mentoring Committee Member since 2020.
- Member of the Council of Forensic Science Educators (COFSE) since 2017.
 - COFSE Higher Education Committee Member since 2018.
- Regular Member of the Northeastern Association of Forensic Scientists (NEAFS) since 2018.
- Associate Member of the American Academy of Forensic Sciences (AAFS) since 2019.