

EXHIBIT 30

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**UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF LOUISIANA**

KATHLEEN MOLLER,
Plaintiff,

v.

**MARTIAN SALES, INC.; JOPEN,
LLC; JOHNSON FOODS, LLC; LP
IND., LLC; CAG HOLDINGS, LLC;
RMH HOLDINGS, INC.; ABC
INSURANCE COMPANY and John
Does 1-4,**
Defendants.

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CIVIL ACTION NO. 2:24-cv-228-WBV-DPC

THE HONORABLE WENDY B. VITTER

**MAGISTRATE DONNA PHILLIPS
CURRAULT**

EXPERT REPORT OF MARILYN A. HUESTIS, PH.D.

1. I was retained by the counsel for Defendant to render an opinion in the above captioned case. I am compensated at a rate of \$500 per hour for any deposition or trial testimony, \$450 per hour for any other work, plus any actual, reasonable out-of-pocket expenses that I incur. My compensation is neither contingent on the outcome of this matter nor the conclusions reached in this report.

2. My opinions below are based on my background, education, training, experience; randomized, placebo-controlled, double blind kratom administration studies and the information available to me as of the date of this report. The opinions in this report are given to a reasonable

degree of scientific certainty. I reserve the right to amend or supplement my opinions to the extent that new information becomes available.

3. A copy of my current curriculum vitae is attached as Appendix A, and a list of all cited references and records and documents reviewed in relation to this case is attached as Appendix B.

QUALIFICATIONS

4. I am the author of 593 peer-reviewed manuscripts in high-impact scientific journals, am currently a member of five scientific editorial boards including Forensic Science Research, Cannabis and Cannabinoid Research, Therapeutic Drug Monitoring, Forensic Science International and the Journal of Analytical Toxicology and perform expert reviews for dozens of scientific journals. The journal Clinical Chemistry featured me as an “Inspiring Mind”. My research program focuses on the neurobiology and pharmacokinetics of cannabinoid agonists, kratom/mitragynine, oral fluid drug testing, and driving under the influence of drugs. Recent prestigious awards include the 2025 Distinguished Service, Society of Forensic Toxicologists (SOFT), the 2025 International Council on Alcohol, Drugs and Traffic Safety (ICADTS) Widmark Award, 2023 International Cannabinoid Research Society (ICRS) Mechoulam Lifetime Award, 2023 CMCR Pioneer in Medicinal Cannabis Research Award, 2021 Distinguished Service to Safety Award, National Safety Council, 2021 Alexander O. Gettler Award, Toxicology Section, American Academy of Forensic Sciences, 2021 AACC Outstanding Lifetime Achievement Award Distinguished Service, Society of Forensic Toxicologists (SOFT), 2018 Robert F. Borkenstein Award, Alcohol, Drugs and Impairment Division, National Safety Council, 2016 Victorian Institute of Forensic Medicine Orator, Melbourne, Australia, 2016 Marian W. Fischman Lectureship Award, The College on Problems of Drug Dependence, Palm Springs, CA, and the 2015 Distinguished Fellow of the American Academy of Forensic Sciences Award. I am also past president of the International Association of Forensic Toxicologists (TIAFT), past president of the Society of Forensic Toxicologists (SOFT) and past Chair of the Toxicology Section and Board of

Directors of the American Academy of Forensic Sciences (AAFS). I was an Adjunct Professor, University of Maryland School of Medicine, Baltimore, MD from 1999-2017. Currently, I am a Senior Fellow at the Institute for Emerging Health Professions, Thomas Jefferson University, and honorary professor at Barts & London School of Medicine & Dentistry, Queen Mary University of London, England, and adjunct professor at the University of New Mexico, College of Pharmacy and president of Huestis & Smith Toxicology, LLC. I currently serve on the World Anti-Doping Agency's Expert List Group, and the National Safety Council's Alcohol, Drugs and Impairment Division Executive Board.

5. I previously testified as an expert witness (1) at the Court of Arbitration for Sport in a deposition for a confidential proceeding; (2) in Phoenix, Arizona in 2023 Mustedanagic v. Nissan North America, Inc., No. 2022-CC-00244-01; (3) in a deposition in 2025, in Weber v. Martian Sales, Inc. et al., Case No. 23EV000485, Fulton County, Georgia, and in a deposition in Ottawa, Canada on September 8-9, 2025 and October 7-8, 2025, in Teamsters Canada Rail Conference – RCTC, International Brotherhood of Electrical Workers– System Council #11, Unifor Local 101R and United Steelworkers Local 1976 vs Canadian Pacific Kansas City. I have no other testimonial history in the last five years.

FACTUAL BASIS FOR OPINIONS

Factual Background on Kratom

6. Kratom is legal in the United States and in most countries worldwide. The kratom tree from Southeast Asia is related to the coffee tree, with kratom leaf powder ingested traditionally as a tea to increase energy and improve mood, like coffee. Kratom users also self-report using kratom for analgesia and to help in managing their opioid or other drug use disorder and drug withdrawal (Henningfield 2023). Kratom contains multiple alkaloids, with the primary alkaloid being mitragynine, representing approximately 2% of the plant weight (Hassan 2013).

7. Basic research, epidemiological and surveillance kratom data, and recent clinical kratom research indicate that kratom has a diverse and complex pharmacology and is not an opioid based on its chemistry, structure, or pharmacology (Kruegel 2016).

8. Scientific evidence indicates that kratom should not be scheduled. After a thorough review of the evidence, the Assistant Secretary of the Department of Health and Human Services (“DHHS”), Admiral Giroir, rescinded the Food and Drug Administration (“FDA”) request to schedule kratom, mitragynine, and 7-hydroxy-mitragynine (Giroir 2018). He refuted the claims of an imminent public health risk, refuted claims of mitragynine as cause of death in FDA-cited overdoses and stated that opioid overdoses and deaths would likely increase if kratom was scheduled.

9. In a recent independent review of kratom, mitragynine, and 7-hydroxy-mitragynine, the Expert Committee on Drug Dependence, as part of the United Nations Commission on Narcotic Drugs also determined that these substances should not be scheduled due to the lack of data supporting harm (United Nations Commission on Narcotic Drugs, 2021).

10. The scientific evidence on the abuse potential of kratom, mitragynine, and 7-hydroxy-mitragynine is like many other non-scheduled compounds (Henningfield 2022a). These authors updated the 8-factor analysis for kratom, finding that there was no evidence of an imminent risk to public health, and that a Schedule I listing (the only option for substances that are not FDA-approved for therapeutic use) could produce a public health risk by increasing drug overdoses by people using kratom to abstain from opioids. We concluded that public health was better served by assuring continued access to kratom products by consumers. Kratom alkaloids and derivatives are also in development as safer and/or more effective medicines for treating pain, substance use disorders, and mood disorders. Scheduling kratom would criminalize consumers, seriously impede research, and could increase drug overdose deaths.

11. When taken responsibly, kratom offers a harm reduction tool for opioid use disorder. Dr. Nora Volkow, Director of the National Institute on Drug Abuse, testified before the U.S. Congress in May 2022 on the importance of kratom as a harm reduction tool amid the opioid overdose epidemic. In addition, individuals self-report use of kratom to help manage their opioid or other drug use disorders (NIDA 2025). Individuals who frequently consume large doses of kratom can develop kratom dependence and experience withdrawal during abstinence; however,

the withdrawal is considered much milder than opioid withdrawal and is generally self-managed (Henningfield 2022a).

12. Recent preclinical data showed no respiratory depression in rats that received doses much higher than equivalent human kratom doses. Drs. Henningfield, Rodricks, Magnuson and I conducted research on the high kratom doses (up to 400 mg/kg) orally administered to rats and compared its effects to those administered oxycodone, a potent opioid (Henningfield 2022b). Oxycodone administration produced significant dose-related respiratory depressant effects and pronounced sedation with one death each at 60 and 150 mg/kg. Mitragynine did not yield significant dose-related respiratory depressant or life-threatening effects, even at the highest doses. Sedative-like effects, milder than produced by oxycodone, were evident at the 400 mg/kg dose. Consistent with mitragynine's pharmacology that includes partial μ -opioid receptor agonism with little recruitment of the respiratory depressant activating β -arrestin pathway, mitragynine produced no evidence of respiratory depression at equivalent doses many times higher than taken by humans.

13. Recent human controlled kratom administration data established the safety and lack of abuse liability of 4000 mg oral dried kratom leaf powder doses containing up to 53.2 mg mitragynine in the first large-scale randomized, placebo-controlled, escalating single and multiple 15-day oral kratom double blind administration study in 200 healthy normal participants (Huestis 2024a). Four thousand mg dried kratom leaf powder containing 6.65 to 53.2 mg mitragynine was administered as a single dose or as 15 consecutive daily doses. As the dose of mitragynine increased, the peak concentrations of mitragynine and its metabolite, 7-hydroxy-mitragynine, increased dose-proportionally. Following a single 53.2 mg mitragynine dose in 4000 mg dried kratom leaf powder, the mean mitragynine concentration in 12 healthy normal volunteers was 130 ng/mL (range 34.2-204 ng/mL).

14. There was extensive safety monitoring of the participants throughout the 47-day study that found no serious adverse events following active single or multiple dose dried kratom leaf powder or placebo (Huestis 2024b). Treatment emergent adverse events (TEAE) were recorded if a study participant's pre-existing condition or state changed or worsened at any time

during the study regardless of whether they received a placebo or test article, therefore, TEAE may or may not be related to the study intervention. TEAE generally increased as dose increased. Steady state mitragynine and 7-hydroxy-mitragynine concentrations were achieved within seven to nine days, and drug concentrations did not accumulate greater than two-fold after multiple dosing. Dizziness, nausea and feeling of relaxation were the most common TEAE following the single kratom leaf powder dose. For context, the dietary supplement melatonin can also potentially cause dizziness, nausea, and feelings of relaxation (Mayo Clinic melatonin 2025). After multiple kratom leaf powder doses, headache, feeling hot, increased alanine transaminase concentrations and nausea were the most common TEAE (Huestis 2023). Overall, oral kratom was well-tolerated without significant cardiovascular, neurological, or hepatic adverse events. There were no seizure events in any participant across the study. The TEAE that is most closely aligned with abuse potential is euphoric mood, or an exaggerated feeling of physical and emotional well-being and optimism. Although there were sporadic, single reports of euphoric mood, there was no dose-abuse liability relationship following single kratom doses. Following the highest multiple kratom dose, there were no reports of euphoric mood, suggesting low abuse potential at the investigated doses. This study provides new safety data in humans and shows a low abuse potential at kratom doses up to 4000 mg kratom leaf powder.

15. There are few reports of kratom poisonings and overdoses in which kratom is the sole cause or a contributing cause of injuries in the United States over the past ten years based on the 2022 National Poison Data System report (Gummin 2023). In 2022, 2,064,875 human drug exposures were reported, with analgesics representing 29.6% of drug-involved exposures. Kratom/mitragynine was not classified as an analgesic in this report. Of over two million human exposures, 2,622 resulted in death that was judged to be drug-exposure related. Of these 2,622 drug exposure deaths, mitragynine was listed in only one death report (0.04%): a 25-year-old female died of a propranolol overdose with a 2000 ng/mL highly toxic propranolol blood concentration. Mitragynine was listed as contributory with a 330 ng/mL blood concentration.

16. NMS Labs (Horsham, PA) performs most mitragynine impaired-driving and postmortem analyses in the United States and recently published data on mitragynine concentrations in driving under the influence of drugs (DUID) and postmortem death investigations (Papsun 2023). In 127 mitragynine impaired-driving cases in living individuals, mean and median blood mitragynine concentrations were 133 and 62 ng/mL (8.8–1000 ng/mL). In 5413 postmortem cases, mean and median mitragynine were 360 and 120 ng/mL (5.4–11,000 ng/mL). Prior to these published NMS Labs data, many deaths with mitragynine concentrations far less than 1000 ng/mL listed mitragynine as the cause of death, leading many to overestimate the toxicity of kratom/mitragynine. The Papsun 2023 manuscript suggests that blood mitragynine concentrations alone up to 1000 ng/mL are unlikely to cause death. There are no scientific data available to suggest what mitragynine concentration produces toxicity.

17. Currently, there are no scientific data available to suggest what blood mitragynine concentration produces lethality. In addition, in our controlled kratom administration study (Huestis 2024a), we dosed healthy normal participants with up to 89.2 mg mitragynine isolate, achieving concentrations of mitragynine after 15 multiple doses of median 336 ng/mL with a maximum of 753 ng/mL (Huestis 2024b). After 15 daily multiple 59.2 mg kratom extract doses, the median C_{max} was 304 ng/mL with a range from 207–317 ng/mL at 2.0 h (range 1.33–2.33 h). Doses were well tolerated, there were no serious adverse events or seizures in the study, and all participants were gainfully employed or students who returned to their schools or jobs after each observed dose administered for 15 consecutive days.

18. Recently documented postmortem redistribution of mitragynine presented at the 2025 The International Association of Forensic Toxicologists' meeting in Auckland, New Zealand, presented by Kai Osawa from the Tarrant County Medical Examiner's Office, showed that mitragynine concentrations could increase after death and be higher than antemortem concentrations obtained just prior to death due to postmortem redistribution (Osawa 2025).

Factual Background on Ms. Harmony Moller

19. Ms. Harmony Moller was born on February 18, 1986 to her mother, Kathleen Moller and father Albert Ivan Moeller. Little background information is provided prior to her death other than she spent multiple years abroad, including in Vietnam, where she was employed as a teacher. Her father, Mr. Ivan Moller served in Vietnam and had health problems due to Agent Orange exposure. Ms. Harmony Moller returned to her parent's home in Mandeville, LA approximately two years before his death in 2023 to help care for him (Facebook Posts. pdf p.7).

20. At the time of Ms. Harmony Moller's death on February 6, 2023, she was employed by Mande's Restaurant in Mandeville, LA (2025-09-09 PL SX RSP JOpen RFP.pdf p.8). Ms. Moller returned home from work at the restaurant on February 5, 2023 and told her mother that she didn't feel well and was vomiting (2023-001310__Incident_R.pdf p.3). Ms. Harmony Moller told her mother, Ms. Kathleen Moller, that she ingested a hydrocodone tablet and that she might have food poisoning. Ms. Harmony Moller stated that she wanted to take a shower to help with her vomiting symptoms. Ms. Harmony Moller was a cannabis user, substantiated by her mother's report, and the investigator's finding of a nuERA bottle with cannabis residue in her room that appeared to be from a cannabis prescription. Furthermore, Δ^9 -tetrahydrocannabinol (THC) and its metabolite, 11-nor-9-carboxy-THC (THCCOOH) were quantified in her postmortem femoral blood at 8.6 ng/mL for Δ^9 -THC and 10 ng/mL for its inactive metabolite 11-nor-9-carboxy- Δ^9 -THC (2023-001310__Incident_R.pdf p.16). It is unclear if Ms. Moller may have felt unwell with nausea and vomiting from cannabinoid hyperemesis syndrome. Hot showers are helpful to reduce nausea and vomiting associated with cannabinoid hyperemesis syndrome.

21. On February 6, 2023, Ms. Kathleen Moller, Harmony's mother and a nurse, saw her alive at 13:15 (2023-001310__Incident_R.pdf p.5). Fifteen minutes later at 13:30, she observed Ms. Harmony Moller unresponsive on the floor. Ms. Kathleen Moller immediately began CPR on her daughter and asked her husband, Mr. Ivan Moller, to call 911. The Emergency Medical Records indicate the call was received at 14:08, and CPR initiated at about this time. Emergency Medical Services personnel attempted all lifesaving measures but Ms. Harmony Moller, 36 years

old, was declared deceased at 14:58. Different records contain different timings on when she was found unresponsive, when CPR was started, and when she was declared dead.

22. Forensic Technician Jonathan Smith from the medical examiner performed the death investigation. He described a cluttered bedroom, with pill bottles, drug paraphernalia, and trash found on the bureau (2023-001310 __Incident_R.pdf p.9). The prescription pill bottles were all empty and included acyclovir prescribed to her mother Ms. Kathleen Moller (9/26/22), Concerta (methylphenidate- for ADHD) prescribed to Trenton McNab (4/12/22), Hydrocodeine-acetaminophen prescribed to Kathleen Moller (12/16/15), and Gabapentin with half label missing prescribed to J Houser (12/8/21). There also was an empty bottle labeled nuEra, that appeared to be a marijuana prescription (Photos.pdf). Mr. Smith found five empty Jameson and other liquor bottles in several drawers and a glass pipe in a pouch, marijuana grinding apparatus, a lighter, and vaping devices for inhaling cannabis. On the floor was a Rouse bag with over the counter drugs, a Knob Creek whiskey bottle and 1 bag of Maeng Da kratom (30 capsules containing 7.8 mg mitragynine per capsule) (MOLLER_000023.pdf) and 1 4 oz. bag of Maeng Da silver kratom powder (containing 13 mg mitragynine per gm kratom powder) (MOLLER_000025.pdf). Ms. Kathleen Moller stated in her response to defendant's interrogatories that kratom products were purchased usually, but not necessarily exclusively, at the Ra shop in Mandeville, LA and she has no personal knowledge of the dates of kratom purchases by her daughter, Ms. Harmony Moller (2025-01-02 Pltf's Answers to Def JOpen's 1st ROGs.pdf.) Ms. Kathleen Moller also stated in response to other interrogatories that she had little knowledge of what medications her daughter took because Ms. Harmony Moller was a grown woman who did not disclose this information to her.

23. Mr. Jonathan Smith's initial clinical impression in the Fire Department EMS Report was "Primary Impression: Cardiac arrest. Pulseless and apneic. Dead without resuscitation efforts. Administered Phenergan (promethazine), epinephrine, naloxone" (St. Tammany FD EMS Records Responsive to Def JOpen's SDT.pdf p.1). In Mr. Jonathan Smith's investigation report of Ms. Harmony Moller's death, he included a history of spina bifida that her mother, Ms. Kathleen

Moller, believed she may have had (2025-09-09 PL SX AN to JOpen OG.pdf p.6). Ms. Kathleen Moller generously donated her daughter's organs after her death. Evaluation of Ms. Harmony Moller's heart by the Jesse E. Edwards Registry of Cardiovascular Disease heart donor review on 2/10/2023 disclosed a high origin of left coronary artery (St. Tammany Parish Coroner's Office Records.pdf p.11). Ms. Kathleen Moller was unaware of these medical issues prior to Ms. Harmony Moller's death (2025-09-09 PL SX AN to JOpen OG.pdf p.6). Ms. Harmony Moller had a heart abnormality termed an abnormally high left coronary ostia. This is a rare congenital heart defect where the left coronary artery originates from the aorta much higher than normal. In Ms. Harmony Moller's case, the left coronary artery originated 5 mm above the sinotubular junction. In addition, based on her heart examination, Ms. Moller's heart was enlarged at 421 grams (normal heart weight reference range for her body height, 173-411 grams and for her body weight 191-411 grams) with mild biventricular hypertrophy. Furthermore, the autopsy report noted hypertrophic atrial and ventricular myocytes and scattered hypereosinophilic myocytes. A section from the posterior wall of the left ventricle had hypertrophic myocytes and scattered hypereosinophilic myocytes. Subendocardial arteries had medial hypertrophy and there was a mild increase in interstitial and perivascular fibrosis. The diffuse distribution of hypereosinophilic myocytes is consistent with global myocardial hypoperfusion.

24. A further complication is that multiple organs, including important cardiac components were removed prior to the autopsy, hindering critical evaluation of cardiac function (D-23-213, LifeNet 2311242, LA Organ Procurement Agency 2302-0334). Ms. Kathleen Moller posted on Facebook on August 6, 2023 that her daughter, Ms. Harmony Moller, died of a physical flaw in her heart (Facebook Posts, pdf p.2); "Despite medications and every attempt possible to save her live, her heart just stopped beating and she passed away...." Furthermore, Ms. Kathleen Moller also posted "It was a long 5 months before we found out that her death was caused by a cardiac anomaly that caused her heart to suddenly stop beating from lack of blood flow in a cardiac artery. Nobody was aware of this condition. We tried to save her, but the damage couldn't be reversed" (Facebook Posts, pdf p.10). A further post indicated that "Ivan's daughter, Harmony,

also suffered the effects of Agent Orange she inherited. She also was quiet about it but the struggle was real and never compensated by our military” (Facebook Posts, pdf p.12).

25. Dr. Michael DeFatta, M.D. performed the autopsy and signed the final report on June 6, 2023 with the listed cause of death “Abnormally high left coronary ostia takeoff exacerbated by mitragynine use.” Dr. DeFatta also listed pulmonary edema and congestion, chronic passive congestion of the liver, and mild nephrosclerosis (2025-03-31 St. Tammany Parish Coroner's Office Records.pdf Postmortem Forensic Medical Examiner Report). NMS Labs, Horsham, PA, performed the toxicology analysis on Ms. Harmony Moller’s postmortem femoral blood (NMS Labs Records.pdf). As previously mentioned above, 8.6 ng/mL for Δ^9 -THC and 10 ng/mL 11-nor-9-carboxy- Δ^9 -THC were found indicating cannabis intake, and 64 ng/mL diphenhydramine, 18 ng/mL promethazine, and 150 ng/mL mitragynine (NMS Labs Records.pdf p.4). The diphenhydramine and promethazine concentrations were within therapeutic ranges based on the NMS report. The mitragynine concentration was within the range of concentrations 34.2-204 ng/mL found in healthy normal volunteers after receiving a single oral 53.2 mg mitragynine dose of dried kratom leaf powder (Huestis 2024). After observed ingestion of 53.2 mg kratom powder, participants returned to work or school without problems. The measured concentration of the 7-OH-mitragynine metabolite found in Ms. Harmony Moller’s postmortem femoral blood was below the limit of quantification of the method.

26. Ms. Harmony Moller’s postmortem femoral mitragynine blood concentration may have increased after her death due to postmortem distribution. Data were recently presented on large postmortem mitragynine redistribution noted in several cases from the Tarrant County Medical Examiner’s Office in Fort Worth, TX (TIAFT 2025). These data suggest that postmortem redistribution could falsely increase the concentration of mitragynine in blood after death compared to the true concentration in antemortem blood just prior to death.

OPINIONS

27. The opinions in this report are based on my review of the materials provided to date, the currently available published literature and my knowledge, education and experience in

the field. I reserve the right to change those opinions should additional information become available.

28. The concentration of mitragynine in Ms. Harmony Moller's postmortem femoral blood (150 ng/mL) was within the range of mitragynine concentrations measured in healthy normal mitragynine users after a single 53.2 mg mitragynine dose contained within 4000 mg dried kratom leaf powder (mean 130 ng/mL, range 34.2-204 ng/mL). These healthy normal participants returned to work or school without problems or incidents after receiving these doses (Huestis 2024). Ms. Harmony Moller's postmortem femoral blood concentration is not associated with toxicity.

29. Ms. Harmony Moller's postmortem femoral blood also contained THC at 8.6 ng/mL. THC is a cardiac stimulant and could contribute to tachycardia and potential arrhythmia. However, the THC was not included in the report as a drug that could exacerbate cardiovascular effects.

30. Ms. Harmony Moller's postmortem femoral blood also contained therapeutic concentrations of promethazine and diphenhydramine.

31. Recently documented postmortem redistribution of mitragynine presented at the 2025 The International Association of Forensic Toxicologists' meeting in Auckland, New Zealand, presented by Kai Osawa from the Tarrant County Medical Examiner's Office, showed that mitragynine concentrations could increase after death and be higher than antemortem concentrations obtained just prior to death due to postmortem redistribution (Osawa 2025). Therefore, although Ms. Harmony Moller's reported blood concentration of 150 ng/mL was within the expected range of participants taking 53.2 mg mitragynine per day in 4000 mg kratom, her antemortem femoral blood mitragynine concentration could have been even lower since the measurement was in postmortem blood.

32. It is inappropriate to add to the cause of death "exacerbated by mitragynine" based on Ms. Harmony Moller's postmortem femoral blood mitragynine concentration due to the low concentration and without also considering THC with known tachycardia effects as a contributing factor.

33. Ms. Harmony Moller died on February 6, 2023 due to an “Abnormally high left coronary ostia takeoff exacerbated by mitragynine use” according to the Tarrant County Medical Examiner, Fort Worth, TX. The medical examiner failed to include the other drugs present in Ms. Harmony Moller’s postmortem blood that included THC, diphenhydramine and promethazine. The medical examiner provided no references for exacerbation of Ms. Moller’s cardiovascular abnormalities by mitragynine use. Furthermore, the Medical Examiner did not appear to be aware of our publication detailing mitragynine and 7-hydroxy-mitragynine concentrations following controlled kratom/mitragynine administration of a well-characterized dried kratom leaf powder to healthy normal participants that was published in January 2024 (Huestis 2024).

34. When Ms. Harmony Moller’s donated heart was examined after her death on February 10, 2023 by the Jesse E. Edwards Registry of Cardiovascular Disease expert cardiologists her cardiac abnormality was termed an abnormally high left coronary ostia. This is a rare congenital heart defect where the left coronary artery originates from the aorta much higher than normal. In Ms. Harmony Moller’s case, the left coronary artery originated 5 mm above the sinotubular junction. In addition, based on the autopsy report, Ms. Moller’s heart was enlarged at 421 grams (normal heart weight reference range for her body height, 173-411 grams and for her body weight 191-411 grams) with mild biventricular hypertrophy. Furthermore, the autopsy report noted hypertrophic atrial and ventricular myocytes and scattered hypereosinophilic myocytes. A section from the posterior wall of the left ventricle had hypertrophic myocytes and scattered hypereosinophilic myocytes. Subendocardial arteries had medial hypertrophy and there was a mild increase in interstitial and perivascular fibrosis. The pathologist determined that diffuse distribution of hypereosinophilic myocytes was consistent with global myocardial hypoperfusion.

CONCLUSION

35. Ms. Harmony Moller died of a cardiac abnormality termed high left coronary ostia according to the Tarrant County Medical Examiner. It was inappropriate for the Medical Examiner to add “exacerbated by mitragynine” because a postmortem femoral blood mitragynine concentration of 150 ng/mL is within the range observed in a controlled administration study of a

single 53.2 mg dried kratom leaf powder dose administered to normal healthy volunteers who experienced no serious toxicity.

Sincerely,

Marilyn A. Huestis, Ph.D.

Professor Dr. Dr. (h.c.) Marilyn A. Huestis

REFERENCES

1. Giroir, B. P. (2018). 2018 letter from the US Assistant Secretary of Health to the administrator of the Drug Enforcement Administration to rescind previous support to permanently place mitragynine and 7-hydroxy-mitragynine in Schedule I of the Controlled Substances Act. Available at: https://images.go02.informamarkets.com/Web/Informa02/%7b548e6d56-2ea4-4da4-9404-0348b56e9a88%7d_dhillon-8.16.2018-response-letterfrom-ash-radm-giroir.pdf (accessed January 6, 2025).
2. Gummin DD, Mowry JB, Beuhler MC, Spyker DA, Rivers LJ, Feldman R, Brown K, Pham NPT, Bronstein AC, DesLauriers C. 2022 Annual Report of the National Poison Data System[®] (NPDS) from America's Poison Centers[®]: 40th Annual Report. Clin Toxicol (Phila). 2023 Oct;61(10):717-939.
3. Hassan Z, Muzaimi M, Navaratnam V, Yusoff NHM, Suhaimi FW, Vadivelu R, Vicknasingam BK, Amato D, von Horsten S, Ismail NIW, Jayabalan N, Hazim AI, Mansor SM, Mullen CP (2013) From Kratom to mitragynine and its derivatives: physiological and behavioural effects related to use, abuse, and addiction. Neurosci Biobehav Rev 37:138–151.
4. Henningfield JE, Chawarski MC, Garcia-Romeu A, Grundmann O, Harun N, Hassan Z, McCurdy CR, McMahon LR, Sharma A, Shoaib M, Singh D, Smith KE, Swogger MT, Vicknasingam B, Walsh Z, Wang DW, Huestis MA. Kratom withdrawal: Discussions and conclusions of a scientific expert forum. Drug Alcohol Dependence 2023 Mar15;7:100142.
5. Henningfield JE, Wang DW, Huestis MA. Kratom Abuse Potential 2021: An updated eight factor analysis. Frontiers in Pharmacology 2022a Jan 28;12:775073.
6. Henningfield JE, Rodricks JV, Magnuson AM, Huestis MA. Respiratory effects of oral mitragynine and oxycodone in a rodent model. Psychopharmacology 2022b Dec;239(12):3793-3804
7. Huestis MA, Brett MA, Bothmer J, Atallah R. Human mitragynine and 7-Hydroxymitragynine pharmacokinetics after single and multiple daily doses of oral encapsulated dried kratom leaf powder. Molecules 2024a Feb 23;29(5):984.
8. Huestis MA, Brett MA, Bothmer J, Hudzik T, Henningfield JE, Atallah R. Mitragynine and 7-hydroxymitragynine plasma pharmacokinetics after controlled oral mitragynine isolate administration to healthy human subjects. TIAFT 2024b, St. Gallen, Switzerland September 1-6, 2024.
9. Huestis MA. Society of Forensic Toxicologists annual meeting, Denver, CO, October 2023.
10. Kruegel AC, Gassaway MM, Kapoor A, Varadi A, Majumdar S, Filizola M, Javitch JA, Sames D. Synthetic and Receptor Signaling Explorations of the Mitragyna Alkaloids:

- Mitragynine as an Atypical Molecular Framework for Opioid Receptor Modulators, J. Am. Chem. Soc. 138 (21) (2016) 6754–6764.
11. Mayo Clinic melatonin (<https://www.mayoclinic.org/healthy-lifestyle/adult-health/expert-answers/melatonin-side-effects/faq-20057874>) Accessed 28July2025.
 12. NIDA, National Institute on Drug Abuse website, (<https://nida.nih.gov/research-topics/kratom#medicine>) Accessed January 10, 2025).
 13. Osawa Kei, Mitragynine: Distribution in Postmortem Specimens Plus Three Interesting Cases, TIAFT 2025, Auckland, NZ.
 14. Papsun D, Schroeder W, Brower J, Logan B. Forensic Implications of Kratom: Kratom Toxicity, Correlation with Mitragynine Concentrations, and Polypharmacy. Current addiction reports. 2023;10(2):272-281. doi:10.1007/s40429-023-00477-4.
 15. United Nations Commission on Narcotic Drugs (2021). Summary of assessments, findings and recommendations of the 44th World Health Organization's (WHO) Expert Committee on Drug Dependence (ECDD). 11–15 October 2021. (Vienna).

APPENDIX A

Updated 12-10-25

CURRICULUM VITAE**Professor Dr. Dr. (h.c.) MARILYN A. HUESTIS**

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EDUCATION:

<u>Dates</u>	<u>Institution</u>	<u>Degree</u>
2010	University of Helsinki, Faculty of Medicine	Doctor Honoris causa in Medicine and Surgery
1988-1992	University of Maryland, Baltimore, MD	Ph.D. in Toxicology (with honors)
1977-1979	University of New Mexico, Albuquerque, NM	M.S. in Clinical Chemistry (with honors)
1966-1970	Mount Holyoke College, South Hadley, MA	A.B. in Biochemistry (cum laude)

PROFESSIONAL POSITIONS:

2022-present	Adjunct Professor, University of New Mexico, College of Pharmacy
2019-present	Honorary Professor, Barts & London School of Medicine & Dentistry, Queen Mary University of London, England
2019-2024	Science and Policy Advisor, PinneyAssociates
2018-present	Senior Fellow, Institute for Emerging Health Professionals, Thomas Jefferson University, Philadelphia, PA
2017-present	Smart Approaches to Marijuana (SAM) Science Advisory Board
2016-present	President, Huestis & Smith Toxicology, LLC
2014-present	World Health Organization Consultation on Drug Use and Safety
2016-2025	Fellow, Center for Forensic Science Research and Education
2011-2025	Sports Medicine Research and Testing Laboratory Board of Directors- World Anti-doping Agency certified laboratory
2016-2022	Scientific Advisor, Cannabix Technologies, Inc., Vancouver, Canada
2019-2021	Scientific Committee, Novella Fronda Foundation, Padua, Italy
2018-2021	Science Advisory Board, National Families in Action
2014-2021	Organization of Scientific Area Committees- Toxicology Subcommittee
2016-2021	Consultant, Intelligent Fingerprinting Limited, Cambridge, England
2016-2020	Senior Scientific Advisor, NMS Labs, Willow Grove, PA
2017-2019	Steering Committee, The Lambert Center for the Study of Medicinal Cannabis and Hemp, Thomas Jefferson Medical School, Philadelphia, PA
2017-2019	Consultant, Thermo Fisher Scientific, San Jose, CA
2016-2021	Adjunct Professor, Oklahoma State University Health Sciences, Tulsa, OK
2016-2017	Special Volunteer, National Institute on Drug Abuse, National Institutes of Health
2014-2017	Ex officio member of the US National Commission on Forensic Science
2013-2018	Partnership for Clean Competition, Oral Fluid Working Group
2010-2015	Scientific Working Group-Toxicology
2009-2018	Transportation Research Board Committee on Alcohol and Other Drugs

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2008-2017	Adjunct Professor, University of Maryland School of Medicine
2008-present	World Anti-doping Agency Prohibited Drug List Committee
2006-present	National Safety Council Alcohol, Drugs and Impairment Division, Executive Board
2002-present	Faculty, Borkenstein Course on “Effects of Drugs on Human Performance”
2005-2016	Tenured Senior Investigator, National Institute on Drug Abuse, National Institutes of Health
2005-2016	Chief, Chemistry and Drug Metabolism, Intramural Research Program, National Institute on Drug Abuse, NIH
2005-2016	Child and Adolescent Workgroup, National Institute on Drug Abuse
2013-2016	Cannabis Interest Group, National Institute on Drug Abuse
2014-2015	Technical Review Panel, National Institute on Standards and Technology
2011-2016	Drug Testing Advisory Board, Substance Abuse Mental Health Services Administration
2010-2013	White House Forensic Science Subcommittee, Education, Ethics, and Terminology Interagency Working Group
2010-2013	White House Forensic Science Subcommittee, Liaison to the Research, Development, Technology and Evaluation Interagency Working Group
2010-2011	National Institute of Justice’s General Forensics Research and Development Technology Working Group (TWG)
1998-2005	Acting Chief, Chemistry and Drug Metabolism, Clinical Pharmacology and Therapeutics Research Branch, Intramural Research Program, National Institute on Drug Abuse, NIH
2001-2008	Research Advisory Board for United States Anti-Doping Agency (USADA)
1995-2008	Adjunct Associate Professor, University of Maryland at Baltimore, School of Medicine
1995-1998	Senior Research Scientist, Chemistry & Drug Metabolism, Clinical Pharmacology Branch, Intramural Research Program, National Institute on Drug Abuse, NIH
1994	Acting Associate Director, National Laboratory Certification Program, Research Triangle Institute, Research Triangle Park, NC.
1992-1995	Independent toxicology consultant for government agencies and private industry
1992-1995	Toxicology Consultant, National Laboratory Certification Program (NLCP), Research Triangle Institute, Research Triangle Park, NC. Preparation of inspection critiques, Faculty for NLCP Inspector Training, Special Projects
1992-1995	Inspector for the College of American Pathologists Forensic Urine Drug Testing Laboratory Accreditation Program
1992-1995	Inspector for the College of American Pathologists Athletic Drug Testing Laboratory Accreditation Program
1989-1995	Inspector and Team Leader for the National Laboratory Certification Program
1989-1992	Research Staff Fellow, Addiction Research Center, National Institute on Drug Abuse, Lead investigator on the protocol “Fast action pharmacokinetics and pharmacodynamics of marijuana use in humans”
1989-1992	Staff Scientist, Duo Research Inc., Annapolis, MD
1988-1989	Assistant Toxicologist, Office of the Chief Medical Examiner, Baltimore, MD
1983-1988	Chief Toxicologist-Toxicology Department Head, Nichols Institute, San Diego, CA
1980-1982	Technical Director, Meridian Pathology Laboratory, Meridian, MS
1979-1980	Clinical Chemist/Toxicologist, New Mexico Medical Reference Laboratory, Albuquerque, NM

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1969-1971 Clinical Chemist/Toxicologist, Pen-Bay Biological Laboratory, Pensacola, FL

ACADEMIC EXPERIENCE

University of New Mexico School of Pharmacy 2022-present

Thomas Jefferson University, Senior Fellow, 2018-present
Institute of Emerging Health Professions

Oklahoma State University Health Sciences Adjunct Professor 2016-2021

University of Maryland School of Medicine, Adjunct Professor 2005-2016

University of Maryland at Baltimore Adjunct Associate 1995 – 2005
Professor, School of Medicine**Toxicology Doctoral Students****Primary Mentor and Committee Chair**

Richard A. Gustafson, CDR, USN, Ph.D.	1999 - 2003
Robin E. Choo, Ph.D., LPN	1999 - 2005
Erin A. Kolbrich, Ph.D.	2002 - 2007
Sherri L. Kacinko, Ph.D.	2002 - 2008
Eugene Schwilke, Ph.D.	2003 - 2010
Teresa Gray, Ph.D.	2006 - 2010
Erin Karschner, Ph.D.	2005 - 2010
David Schwope, Ph.D.	2007 – 2011
Dayong Lee, Ph.D.	2009 – 2013
Nathalie Desrosiers, Ph.D.	2010 – 2014
Sarah Himes, Ph.D.	2010 - 2014
Marisol Castaneto, PhD	2011 - 2015
Rebecca Hartman, PhD	2010 – 2015
Kayla Ellefsen, PhD	2012 – 2016
Matthew Newmeyer, PhD	2012 – 2017

Co-mentor

Kacey Cliburn, PhD	Oklahoma State University Health Sciences 2015 - present
Mateus Bergamaschi, PhD	University of Sao Paulo, Ribeiro Preto, Brazil 2012
Andrea Schwaninger, PhD	University of Saarland, Homburg, Germany 2011
Wendy Bosker, PhD	University of Maastrich, Maastricht, The Netherlands 2011
Riet Dams, Ph.D.	University of Gent 2001 - 2003
Marc LeBeau, PhD	University Maryland Baltimore, Baltimore, MD 2002

External Examiner

Michelle Williams, MS	The University of Newcastle, Callaghan NSW Australia
Joey Gareri, PhD	University of Toronto, Toronto, Canada
Mark Hok Chu, PhD	Monash University, Melbourne, Australia
Beata Silber, PhD	Swinburne University of Technology, Hawthorne, Australia
Elizabeth McArdle, PhD	University of Aberdeen, Aberdeen, Scotland

HONORS AND AWARDS:

2025 Distinguished Service, Society of Forensic Toxicologists (SOFT)
 2025 Widmark Award, International Council on Alcohol, Drugs and Traffic Safety (ICADTS)
 2023 CMCR Pioneer in Medicinal Cannabis Research Award
 2023 Mechoulam Lifetime Achievement Award for Cannabinoid Research, International Cannabinoid Research Society
 2021 Distinguished Service to Safety Award, National Safety Council
 2021 AACC's Outstanding Lifetime Achievement Award
 2021 Alexander O. Gettler Award, Toxicology Section, American Academy of Forensic Sciences
 2019 Lyons-Voorhees Endowed Lectureship at the University of Colorado Medical School, Department of Psychiatry, Aurora, CO
 2018 Robert F. Borkenstein Award, Alcohol, Drugs and Impairment Division, National Safety Council.
 2017 Sir Kenneth Standard Distinguished Lecturer for the Faculty of Medical Sciences, University of the West Indies
 2016 Victorian Institute of Forensic Medicine Orator, Melbourne, Australia
 2016 Marian W. Fischman Lectureship Award, The College on Problems of Drug Dependence, Palm Springs, CA.
 2016 Saferstein Memorial Distinguished Lecturer at Northeastern University, Boston, MA
 2015 Excellence in Scientific Research, Women Scientist Advisory NIDA Investigator Award
 2015 Norman P. Kubasik Lectureship Award, AACC Upstate New York Section
 2015 Distinguished Fellow of the American Academy of Forensic Sciences
 2013 Meyer Bodansky Visiting Professorship of Experimental Pathology, University of Texas Medical Branch, Galveston, TX
 2012 Distinguished Visiting Scholar, Australia
 2012 Coy W. Waller Distinguished Lecturer University of Mississippi, Oxford, MS
 2011 *Clinical Chemistry* "Inspiring Mind"
 2011 Best manuscript of the Quarter for NIDA IRP for manuscript entitled "Reversible and regionally selective downregulation of brain cannabinoid CB1 receptors in chronic daily cannabis smokers." *Molecular Psychiatry*.
 2010 *Therapeutic Drug Monitoring* Best manuscript "Pharmacokinetics of Cocaine and Metabolites in Human Oral Fluid and Correlation with Plasma Concentrations following Controlled Administration. 2010 Oct;32(5) 628-37.
 2010 Alan Curry Award, The International Association of Forensic Toxicologists (TIAFT) Lifetime Achievement Award for Service to the Organization and Contributions to Forensic Toxicology
 2010 Doctor Honoris causa, Doctor of Medicine and Surgery, University of Helsinki, Faculty of Medicine
 2008 Award for Outstanding Contributions in a Selected Area of Research, American Association for Clinical Chemistry
 2007 Irving Sunshine Award, International Association of Therapeutic Drug Monitoring and Clinical Toxicology
 2007 Women in Science at NIH
 2005 Rolla N. Harger Award, Toxicology Section, American Academy of Forensic Sciences
 2002-2005 President of The International Association of Forensic Toxicologists,
 1999-2000 President of Society of Forensic Toxicologists

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1999-2000 Chair of Toxicology Section of the American Academy of Forensic Sciences
 1988-1992 Research Fellowship and Academic Scholarship, University of Maryland at Baltimore
 1992 Irving Sunshine Award for Outstanding Research in Toxicology, American Academy of Forensic Sciences
 1992 Phi Kappa Phi Honor Society for outstanding academic achievement
 1970 Mary Lyon Award Mount Holyoke College for outstanding biology student
 1969 Mary Lyon Award Mount Holyoke College for outstanding biology student

EDITORIAL TASKS:

Forensic Science Research: Editorial Board	2015 – present
Cannabis and Cannabinoid Research: Editorial Board	2015 - present
Toxicologie Analytique & Clinique: Editorial Board	2013 - 2020
Therapeutic Drug Monitoring: Editorial Board	2007 – present
Forensic Science International: Editorial Board	2005 – present
Journal of Analytical Toxicology: Editorial Board	1994 – present
Clinical Chemistry: Editorial Board	2006 – 2018
Analytical Bioanalytical Chemistry Editorial Board	2013 – 2016
TDM/Tox In-Service Training and Continuing Education Program: Editorial Board	1996-2001

Invited Reviewer (This is not updated due to too many to list)

Journal of the American Medical Association, Biological Psychiatry, JAMA Psychiatry, Addiction Biology, Clinical Chemistry, PLOS One, Frontiers Chemistry, Frontiers Psychiatry, Addiction, Journal of Chromatography A, Psychopharmacology, Pediatrics, Clinical Pharmacology and Therapeutics, Drug and Alcohol Dependence, Analytical Chemistry, Annals of Internal Medicine, Neuropsychopharmacology, Clinical Chemistry and Laboratory Medicine, Chemistry, Bioanalysis, Journal of Pharmaceutical and Biomedical Analysis, Clinical Pharmacokinetics, Forensic Science International, Journal of Mass Spectrometry, Rapid Communications in Mass Spectrometry, Journal of Clinical Pharmacology, Drug Metabolism and Disposition, Biochemical Pharmacology, British Journal of Clinical Pharmacology, Journal of Pharmaceutical Sciences, Nicotine and Tobacco Research, Journal of Chromatography B, Therapeutic Drug Monitoring, Journal of Chromatographic Science, Critical Reviews in Toxicology, Pain Management, International Journal of Neuropsychopharmacology, Biomedical Chromatography, Reproductive Toxicology, American Journal of Alcohol and Drug Abuse, Journal of Analytical Toxicology, Journal of Clinical Psychopharmacology, Human and Experimental Toxicology, Analytical Methods, Acta Paediatrica, Journal of Psychopharmacology, Drug Testing and Analysis, Journal of Separation Science, American Journal of Drug and Alcohol Abuse, Human Psychopharmacology, Life Sciences, Chemistry and Ecology, Forensic Science Review, Forensic Science Communications, Annales de Toxicologie Analytique, International Journal of Psychopharmacology, Forensic Science Research Journal of Forensic Sciences, and American Journal of Drug Delivery.

SERVICE TO OTHER FEDERAL GOVERNMENT AGENCIES:

US Department of Defense	2025
Federal Aviation Administration	2023
Consultant, Canadian Nuclear Safety Commission	2019-present
Consultant, Department of Transportation	2016-2020
National Safety Council, Alcohol, Drugs and Impairment	2006 – present

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Division, Executive Committee	
National Commission on Forensic Sciences	2015-2017
Substance Abuse Mental Health Services Administration Drug Testing Advisory Board	2011-2016
Interagency Agreement Substance Abuse Mental Health Services Agreement	2012-2013
Interagency Agreement Substance Abuse Mental Health Services Agreement	2012-2013
Interagency Agreement Department of Defense	2013
Interagency Agreement Department of Defense	2011-2013
Interagency Agreement Office of the National Drug Control Policy	2011 – 2015
Scientific Working Group Toxicology (SWGTOX), National Institute of Justice	2011-2015
White House Forensic Science Subcommittee, Education, Ethics, and Terminology Interagency Working Group	2010 – 2014
White House Forensic Science Subcommittee, Liaison to the Research, Development, Technology and Evaluation Interagency Working Group	2010 – 2014
Transportation Research Board Committee on Alcohol and Other Drugs	2009 – 2014
National Institute of Justice's General Forensics Research and Development Technology Working Group (TWG)	2010
Consultant for Office of National Drug Control Policy	1998 – 2016
Consultant, Maternal Lifestyle Study, National Institute of Child Health and Human Development, NIH	1992 – 2016
Interagency Agreements Department of Defense	1998 – 2001, 2011-2013
Interagency Agreements Office of the National Drug Control Policy	2011-2014
Interagency Agreements National Highway Traffic Safety Administration	2011-2014
Interagency Agreement Department of Transportation	1998 – 2001
Interagency Agreement Substance Abuse Mental Health Services Administration	1998-2001, 2012, 2013
Consultant to the Clinical Chemistry and Clinical Toxicology Devices Panel of the Medical Devices Advisory Committee, Center for Devices and Radiological Health, Food and Drug Administration	2000 – 2001

COOPERATIVE RESEARCH AND DEVELOPMENT AGREEMENT (CRADA)

Principal Investigator, CRADA with Sanofi Aventis “Antagonist-elicited Withdrawal”	2006 - (NIH#410)
Principal Investigator, CRADA with Sanofi Synthelabo “Antagonism of Inhaled Δ9-THC by Single and Multiple Doses of SR141716”	2000 – 2001 (NIH#805)
Principal Investigator, CRADA with Sanofi Winthrop “Antagonism of Delta-9-THC by SR141716 in Healthy	1997 – 1999 (NIH#362)

Marilyn A. Huestis, Ph.D.

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Male Subjects”, this was the first CRADA in the clinical research program of the IRP, NIDA

PROFESSIONAL MEMBERSHIPS AND ACTIVITIES:

International:

The International Association of Forensic Toxicologists (TIAFT)

TIAFT Iguazu Falls, Brazil Scientific Chair	2024-present
TIAFT Rome 2023 Scientific Chair	2020-present
Continuing Education Committee	2021-present
TIAFT Mentor	2016-present
US Regional Representative	2006-present
50 th Anniversary TIAFT meeting- Invited Speaker	2013
Scientific Chair, SOFT-TIAFT Joint Congress	2011
Past-President	2005 – 2008
President	2002 – 2005
Member	1990 – present
Co-Chair TIAFT-SOFT Joint Congress	1994, 2004
Scientific Committee	1994, 1996, 1997- 1999, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2011, 2013, 2014, 2015, 2023, 2024.
Plenary speaker	2001, 2003, 2005, 2013, 2014, 2015, 2023.
Alan Curry Lifetime Achievement Award	2010

International Association of Therapeutic Drug Monitoring and Clinical Toxicology

Board of Editors	2007 – present
Clinical Toxicology (IATDMCT) Symposium Chair,	2015
Symposium speaker, Workshop	
Organizing Committee Biannual Meeting - Plenary Lectures	2011-2013
Director of Education	2007 – 2009
Chair, Addiction as a Disease (Workshop)	2001
Chair, Biochemical Mechanisms of Addiction (Workshop)	2005
Member	1990 – 2018

International Cannabinoid Research Society

Mechoulam Lifetime Achievement Award	2023
Member	1994 – 2008

International Council on Alcohol, Drugs and Traffic Safety (ICADTS)

Widmark Lifetime Achievement Award	2025
Chair, Illegal Drugs and Driving Workgroup	2013 – 2018
Member	2006 – 2018

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Meeting Organizing Committee ICADTS-TIAFT-T2007

2007

National:

American Academy of Forensic Sciences (AAFS)

Academy Activities

Alexander O. Gettler Award	2021
Awards Committee	2016-present
Distinguished Scientist	2015
Organizing Committee Annual Meeting- Plenary Lectures	2012-2013
Organizing Committee Annual Meeting- Plenary Lectures	2011-2012
International Committee	2009 - present
Chair, International Committee	2013 - present
Board of Directors	2008 – 2011
Rolla N. Harger Award	2005
Fellow	1987 – present
Program Committee	1997 – 1998
Council	1998 – 2000
Nominating Committee	1999 – 2000

Toxicology Section Activities

Chair	1999 – 2000
Chair, Nominating Committee	2000 – 2001
Secretary	1998 – 1999
Chair, Policies and Procedures Committee	1992 – 1997
Program Chair	1997 – 1998
Program Committee	1995 – 2012
Awards and Scholarship Committee	2003, 2007 – 2009
Minutes Review Committee	1996, 1998, 2001
Steering Committee	1996 – 2012
Drugs and Driving Committee	1995 – present
Co-chair Medical Toxicology Workshop	1995
Co-chair Neurobiology and Toxicology of Aggression	2021
Member	1985-present

Society of Forensic Toxicology (SOFT)

Counselor	2023-2024
President	1999 – 2000
Vice President	1998 – 1999
Secretary	1996 – 1997
Board of Directors	1993 – 1995
Meeting Chair	1994
Meeting Co-chair, Organizing Committee	2004
Meeting Scientific Chair, Organizing Committee	2011
Meeting Hosts Guidelines Committee	1993 – 2004
Chair, Nominating Committee	2000 – 2001
Culture, Diversity and Inclusion Committee	2020 – present
Designer Drug Committee	2015 – 2022
Oral Fluid Committee	2018 – 2023

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Ethics Committee	2000
Educational Research Awards Committee	1999 – 2000
Joint Committee on Education and Training in Toxicology	1996 – 1998
Drugs and Driving Committee	1995 – 2023
Advisory Committee on Hair Analysis	1991 – 1992
Chairperson, Health and Safety Committee	1992 – 1993
Member	1989 – present

American Association for Clinical Chemistry (AACC)	
AACC's Outstanding Lifetime Achievement Award	2021
Plenary Speaker	2016
Board of Editors	2006 – 2018
Therapeutic Drug Monitoring and Clinical Toxicology Committee	1996 – 2003
Treasurer, San Diego Section	1985
San Diego Molecular Biology Conference Committee	1987 – 1988
Member	1979 – 2018
Emeritus member	2018-present

Society of Hair Testing	
Member	1996 – 2014

California Association of Toxicologists (CAT)	
Secretary	1993 – 1995
Membership Chair	1993 – 1995
Member	1983 – 2017

RESEARCH BIOGRAPHY:

Professor Dr. Dr. (h.c.) Marilyn A. Huestis retired as a tenured senior investigator and Chief, Chemistry and Drug Metabolism Section, IRP, National Institute on Drug Abuse, National Institutes of Health in 2016 after 23 years of conducting controlled drug administration studies. She was an Adjunct Professor, University of Maryland School of Medicine, Baltimore, MD from 1999-2017. Currently, she is a Senior Fellow at the Institute on Emerging Health Professions, Thomas Jefferson University, Philadelphia, PA, Adjunct Professor, University of New Mexico, College of Pharmacy, Honorary Professor, Barts & London School of Medicine & Dentistry, Queen Mary University of London, England on the Smart Approaches to Marijuana (SAM) Science Advisory Board, and President of Huestis & Smith Toxicology, LLC. Her research program focuses on the neurobiology and pharmacokinetics of cannabinoid agonists, kratom/mitragynine, oral fluid drug testing, and driving under the influence of drugs. She published 595 peer-reviewed manuscripts and book chapters and hundreds of invited lectures and abstracts were presented at national and international meetings. Professor Huestis has an AB in biochemistry from Mount Holyoke College, a MS in clinical chemistry from the University of New Mexico, and a PhD in toxicology from the University of Maryland. Professor Huestis received a Doctor Honoris Causa from the Faculty of Medicine, University of Helsinki in Finland. Other important awards include the 2025 Widmark Award from ICADTS, 2023 CMCR Pioneer in Medicinal Cannabis Research Award, 2023 Mechoulam Award from ICRS, 2021 AACC Outstanding Lifetime Achievement Award, 2021 NSC Distinguished Service to Safety Award, 2021 AAFS Alexander O. Gettler Award, 2018 NSC Borkenstein Award, 2016 Victorian Institute of Forensic Medicine Orator, Melbourne, Australia, 2016 Marian W. Fischman Lectureship Award from the College on Problems of Drug Dependence, 2015 Distinguished Fellow from AAFS, 2010 TIAFT

Marilyn A. Huestis, Ph.D.

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Alan Curry Award, 2007 IATDMCT Irving Sunshine Award, 2005 AAFS Rolla N. Harger Award, and 1992 Irving Sunshine Award for Outstanding Research in Forensic Toxicology. The journal *Clinical Chemistry* featured her as an “Inspiring Mind”. She currently serves on the World Anti-doping Agency’s Prohibited List Committee, and the National Safety Council’s Alcohol, Drugs and Impairment Division Executive Board. She is a SOFT past president, past Toxicology Chair and Board of Directors, AAFS, and TIAFT past president.

PUBLICATIONS:

1. **Huestis MA**, Bothmer J, Hudzik T, Henningfield JE, Swift S. Safety and tolerability of single and multiple daily doses of oral dried kratom leaf powder in a randomized trial in healthy volunteers. *Therapeutic Drug Monitoring* in press.
2. Gameli PS, Taoussi O, Trana AD, Tronconi LP, Pichini S, Carlier J, Huestis MA, Busardò FP. Human diagnostic markers for intake of semi-synthetic cannabinoids (9R)- and (9S)-hexahydrocannabinol. *Clin Chim Acta*. 2026 Jan 1;578:120480.
3. Jorgenson KM, Middleberg RA, Young BL, Krotulski AJ, Nacca NE, Love TM, Marvald J, Becker R, **Huestis MA**, Zhang YV. Emerging Threat of Xylazine. 2025 *Clinical Chemistry* epub Nov 11.
4. D'Orazio AL, Mohr ALA, Chan-Hosokawa A, Harper C, Huestis MA, Kerrigan S, Limoges J, Miles A, Scarneo C, Scott KS, Logan BK. Recommendations for Toxicological Investigation of Drug-Impaired Driving and Motor Vehicle Fatalities-2025 Update. 2025 *J Analytical Toxicology* epub Sep 16
5. Wade NE, Si Y, Tapert SF, Linkersdörfer J, Lisdahl KM, Moore HR, Tally L, Das B, Huestis MA, Wallace AL, Sullivan RM, Szpak V, Zhang L, Ziemer LR, Thompson WK. Prevalence of Biochemically-Verified Substance Use in Healthy Adolescents Across the United States: Hair Toxicology Results in the ABCD Study. medRxiv [Preprint]. 2025 Sep 21:2025.09.19.25336190.
6. Daziani G, Taoussi O, Berardinelli D, Bambagiotti G, **Huestis MA**, Busardò, FP, Carlier J. Comparison of authentic urine *N*-ethylpentadron metabolites to predicted *in silico* and *in vitro* human hepatocyte metabolism. 2026 *Journal Pharmaceutical Biomedical Analysis* 267:117170.
7. Fitzgerald RL, Umlauf A, Suhandynata RT, Grelotti DJ, **Huestis MA**, Mastropietro KF, Grant I, Marcotte TD. Per Se Driving Under the Influence of Cannabis Statutes and Blood Delta-9-Tetrahydrocannabinol Concentrations Following Short-term Cannabis Abstinence. 2025 *Clinical Chemistry* 71(12):1225-1233.
8. Mastropietro KF, Rattigan JA, Umlauf A, Grelotti DJ, **Huestis MA**, Suhandynata RT, Grant I, Fitzgerald RL, Marcotte TD. Short-term residual effects of smoked cannabis on simulated driving performance. 2025 *Psychopharmacology* in press.
9. Samet JM, Barrington-Trimis J, Bero L, Brooks-Russell A, Buran M, Dilley J, Erickson D, **Huestis MA**, Hutchison K, Jeanne TL, Kosnett M, Kroll DJ, Lankenau S, Miech R, Liccardo R, Pacula RL, Riggs P, Soleimanpour N, Teutsch S, Tung G, Wang GW. Enhancing Methods for

Research on Cannabis: A Workshop Report. 2025 *Journal of Cannabis Science* in press.

10. Crume TL, Kim P, Shen X, Lisa E, **Huestis MA**, Fried P, Stickrath EH, Conageski C, Phipers JE, Kinney G, Sempio C, Klawitter J, Dufford AJ. *In utero* chronic cannabis exposure is associated with lower total brain volume in the first month of postnatal life. *Am J Drug Alcohol Abuse*. 2025 Jul 23:1-13.
11. Wade NE, Wallace AL, Baca R, Andrade G, Happer JP, Courtney KE, Christians U, Sempio C, Klawitter J, **Huestis MA**, Jacobus J. Cannabinoid Profiling Across Toxicology Samples in Adolescents and Young Adults by Route of Administration and in Relation to Depression Symptoms. *Journal Analytical Toxicology* 2025 Epub Jun 19.
12. Pereira Dos Santos B, Scherer JN, Viola PP, Govoni B, Vasconcelos M, Dalanhil CS, Borges GR, de Gouveia GC, Arantes ACF, Martins AF, da Costa JL, **Huestis MA**, Pechansky F. Oral fluid device performance in identifying amphetamine, methamphetamine, and cocaine use in Brazilian drivers. *Journal Analytical Toxicology* 2025 Epub Apr 25.
13. D'Orazio AL, Mohr ALA, Chan-Hosokawa A, Harper C, **Huestis MA**, Kerrigan S, Limoges J, Miles A, Scarneo C, Scott K. Logan BK. Laboratory Survey Data for Drug Testing in Drug Impaired Driving and Traffic Fatality Investigations. *Journal Analytical Toxicology* 2025 Epub Apr 23.
14. Meda SA, Stevens MC, Boer ER, Pittman B, Gueorguieva R, **Huestis MA**, Pearlson GD. A randomized, placebo-controlled, double-blind, pilot study of cannabis-related driving impairment assessed by driving simulator and self-report. *Psychopharmacology* 2025 Apr;39(4):364-372.
15. Behzad D, Zhao S, Besa R, Brands B, Wickens C, **Huestis MA**, Sproule B, Sanches M, Le Foll B, Di Ciano P. Association of driving with blood THC: A systematic review. *International Journal of Neuropsychopharmacology* 2025 Apr 11;28(4).
16. Aks IR*, Patel H*, Pelham WE, **Huestis MA**, Wade NE. Cannabinoids in hair and their prospective association with mental and physical health outcomes in adolescents. *Neurotoxicology and Teratology*, 2025 Feb 8;108:107433. *indicates co-first authorship
17. Sempio C, Campos-Palomino J, Klawitter J, Harrison A, Peters E, MacNair L, Bonn-Miller M, **Huestis MA**, Christians U, Klawitter J. Quantification of eleven kratom alkaloids including mitragynine and its main metabolites in human plasma using LC-MS/MS. *Analytical Bioanalytical Chemistry* 2025 Feb;417(4):761-769.
18. **Huestis MA**, Smith W, Leonowens C, Blanchard R, Viaccoz A, Spargo E, Miner N, Yazar-Klosinski B. MDMA Pharmacokinetics: A Population and Physiologically-based Pharmacokinetics Model-Informed Analysis. *CPT: Pharmacometrics & Systems Pharmacology*. 2025 Feb;14(2):376-388.
19. Snozek C, Yee CI, Bryksin J, Cheng Q, Dahal R, Dunn W, Frederick D, Gerson B, Gherasim C, Hauff K, Heger N, **Huestis MA**, Johnson-Davis K, Knexevic C, Love S, Melanson S, Noguez J, Pikulski M, Roper S. Assessing Knowledge Gaps and Educational Needs in Urine Drug Test

- Interpretation Among Healthcare Professionals. *American Journal Clinical Pathology* 2025 Jan 28;163(1):69-79. Epub Jul 26.
20. Couper F, **Huestis MA**, Fulford J, Perkinson N, Miller S, Raymond P, Katz A, Symoun J, Smither DD, Berning A. (2024, December, revised). Drugs and human performance fact sheets: 2024 (Report No. DOT HS 813 650). National Highway Traffic Safety Administration.
 21. Bergh M, Bogen IL, Grafinger KE, **Huestis MA**, Øiestad AML. Metabolite markers for three synthetic tryptamines N -ethyl- N -propyltryptamine, 4-hydroxy- N -ethyl-N-propyltryptamine, and 5-methoxy-N-ethyl-N-propyltryptamine. *Drug Testing Analysis* 2024 Dec;16(12):1544-1557 Epub Mar 9.
 22. Scherer JN, Vasconcelos M, Dalanhol CS, Govoni B, Borges GR, dos Santos BP, de Gouveia GC, Viola PP, Carlson RLR, Martins AF, Costa JL, **Huestis MA**, Pechansky F. Reliability of roadside oral fluid testing devices for Δ^9 -tetrahydrocannabinol (Δ^9 -THC) detection. *Drug Testing Analysis* 2024 Dec;16(12):1528-1536 Epub Mar 5.
 23. Gameli PS, **Huestis MA**, Balloni A, Busardò FP, and Carlier J. Metabolism and detection of designer benzodiazepines; A systematic review. *Drug Metabolism Reviews*. 2024 Oct 14:1-26.
 24. Arndt C, **Huestis MA**, Jarvis H, Gray TR. Assessment of urine drug screen utility at autopsy to forecast blood toxicology. *Journal Forensic Sciences* 2024 Sep;69(5):1815-1825 Epub June 19.
 25. Torrens A, Tagne AM, Tran A, Ahmed F, **Huestis MA**, Piomelli D. Comparative Pharmacokinetics of Δ^9 -Tetrahydrocannabinol in Adolescent and Adult Female Mice. *Cannabis Cannabinoid Research* 2024 Dec;9(6):1537-1542. Epub Aug 20.
 26. Wallace AL, **Huestis MA**, Sullivan RM, Wade NE. Amygdala Volume and Depression Symptoms in Young Adolescents Who Use Cannabis. *Behavioral Brain Research* 2024 Aug 24;472:115150. Epub Jul 13.
 27. Sempio C, Campos-Palomino J, Klawitter J, Zhao MA, Atallah R, **Huestis MA**, Christians U, Klawitter J. LC-MS/MS quantification of Δ^8 -THC, Δ^9 -THC, THCV isomers and their main metabolites in human plasma. *Journal Analytical Toxicology* 2024 Aug 21;48(7):499-506 Epub June 5.
 28. Brands B, Wright M, Fares A, Hasan O, Matheson J, Di Ciano P, Wickens C, **Huestis MA**, Brown T, Zaweel A, Sproule B, Sanches M, Le Foll B. Dose-dependent effects of smoked cannabis on simulated driver performance: preliminary findings. *Drug Alcohol Dependence* 2024 July 1:260;110035.
 29. Henningfield JE, Grundmann O, **Huestis MA**, Smith KE. Kratom safety and toxicology in the public health context: research needs to better inform regulation. *Frontiers in Pharmacology* 2024 Jun 3;15:1403140.
 30. Rozanc J, Klumpers L, **Huestis MA**, Tagen M. Tolerability of high-dose Δ^9 -THC: Implications for human laboratory study design. *Cannabis Cannabinoid Research* 2024 Apr;9(2):437-448.
 31. Balloni A, Tini A, Prospero E, Busardò FP, **Huestis MA**, Lo Faro AF. Emerging Synthetic Psychoactive Substances: an alternative explanation for increased human hepatotoxicity markers. *Clinical Chemistry* 2024 Apr 3;70(4):597-628.

32. Wade NE, Wallace AL, **Huestis MA**, Lisdahl KM, Sullivan RM, Tapert SF. (In Press). Cannabis Use and Neurocognitive Performance at 13-14 Years-Old: Optimizing Assessment with Hair Toxicology in the Adolescent Brain Cognitive Development (ABCD) Study. *Addictive Behaviors* 2024 Mar;150:107930.
33. **Huestis MA**, Brett MA, Bothmer J, Atallah R. Human mitragynine and 7-Hydroxymitragynine pharmacokinetics after single and multiple daily doses of oral encapsulated dried kratom leaf powder. *Molecules* 2024 Feb 23;29(5):984.
34. Godoi AB, Antunes NJ, Cunha KF, Martins AF, **Huestis MA**, Costa JL. Metabolic Stability and Metabolite Identification of N-Ethyl Pentedrone Using Rat, Mouse and Human Liver Microsomes. *Pharmaceutics*. 2024 Feb 9;16(2):257.
35. Gjerde H, **Huestis MA**, Mulima G, Kajombo C, Sundet M, Pechansky F. Recommendations for effective collaboration and capacity building in epidemiological studies on the effect of alcohol and drug use on traffic safety in low- and middle-income countries. *Traffic Injury Prevention* 2024;25(3):313-321.
36. Ahmed F, Torrens A, Mahler SV, Ferlenghi F, **Huestis MA**, Piomelli D. A sensitive UHPLC-MS/MS method for the simultaneous analysis of phytocannabinoids and endocannabinoids in plasma and brain. *Cannabinoids Cannabis Research* 2024 Feb;9(1):371-385. 2022 Epub Nov 11.
37. Cliburn KD, Kemp PM, **Huestis MA**, Wagner JR, Payton M, Liu L, Liang Y, Maxwell L. Time- and Temperature-Dependent Postmortem Δ^9 -Tetrahydrocannabinol Concentration Changes in Rabbits following Controlled Inhaled Cannabis Administration. *J Analytical Toxicology* 2023 Dec 12;47(9):850-857.
38. Hudzik, T, **Huestis MA**, Strano-Rossi S, Schumacher YO, Harcourt P, Budgett R, Stuart M, Tettey J, Mazzoni I, Danion A, Rabin O, Culler M, Handelsman D, Thevis M, Kinahan A. Cannabis in Sport: A World Anti-Doping Perspective. *Addiction* 2023 Nov;118(11):2040-2042.
39. Boachie N, Gaudette E, Bazinet RP, Lin L, Tyndale RF, Mansouri E, **Huestis MA**, Tong J, Le Foll B, Kish SJ, George TP, Boileau I. Circulating Endocannabinoids and N-Acylethanolamines during Early Abstinence from Cannabis in Individuals with Cannabis Use Disorder. *Brain Sciences* 2023 Sep 27;13(10):1375.
40. Marcotte TD, Umlauf A, Grelotti DJ, Sones EG, Mastropietro KF, Suhandynata RT, **Huestis MA**, Grant I, Fitzgerald RL. Evaluation of the field sobriety tests in identifying drivers under the influence of cannabis: A randomized clinical trial. *JAMA Psychiatry* 2023 Sep 1;80(9):914-923.
41. Fitzgerald RL, Umlauf A, Hubbard JA, Hoffman MA, Sobolesky PM, Ellis SE, Grelotti DJ, Suhandynata RT, **Huestis MA**, Grant I, Marcotte TD. Driving Under the Influence of Cannabis: Impact of Combining Toxicology Testing with Field Sobriety Tests. *Clinical Chemistry* 2023 Jul 5;69(7):724-733.
42. Henningfield JE, Chawarski MC, Garcia-Romeu A, Grundmann O, Harun N, Hassan Z, McCurdy CR, McMahon LR, Sharma A, Shoaib M, Singh D, Smith KE, Swogger MT, Vicknasingam B, Walsh Z, Wang DW, **Huestis MA**. Kratom withdrawal: Discussions and conclusions of a scientific expert forum. *Drug Alcohol Dependence* 2023 Mar 15;7:100142.
43. Kong KL, Lee JK, Shissler S, Thanos PK, **Huestis MA**, Hawks L, Eiden RD. Prenatal tobacco and cannabis co-exposure and offspring obesity development from birth to mid-childhood. *Pediatric Obesity* 2023 May;18(5):e13010.

44. Lo Faro AF, Berardinelli D, Cassano T, Dendramis G, Montanari E, Montana A, Beretta P, Zaami S, Busardo FP, **Huestis MA**. New psychoactive substance intoxications and fatalities during the COVID-19 epidemic. *Biology* 2023 Feb 8;12(2):273.
45. Wade NE, Sullivan RM, Tapert SF, Pelham III WE, **Huestis MA**, Lisdahl, KM, & Haist F. Concordance between substance use self-report and hair analysis in community-based adolescents. *American Journal of Drug and Alcohol Abuse* 2023 Jan 2;49(1):76-84.
46. Torrens A, Ruiz CM, Martinez MX, Tagne AM, Roy P, Grimes D, Ahmed F, Lallai V, Inshishian V, Bautista M, Chen YC, **Huestis MA**, Das A, Fowler CD, Mahler SV, Piomelli D. Nasal accumulation and metabolism of Δ^9 -tetrahydrocannabinol following aerosol ('vaping') administration in an adolescent rat model. *Pharmacological Research* 2023 Jan;187:106600. 2022 Epub Dec 5.
47. Simon SG, Eiden RD, Molnar DS, **Huestis MA**, Riis JL. Associations Between Prenatal and Postnatal Substance Exposure and Salivary C-reactive Protein in Early Childhood. *Neurotoxicology Teratology* 2023 Jan-Feb;95:107134. 2022 Epub Nov 14.
48. Mareck U, Fusshöller G, Schertel T, Petring S, **Huestis MA**, Thevis M. Risk of unintentional antidoping rule violations by consumption of hemp products. *Drug Testing Analysis* 2023 Jan;15(1):27-41. 2022 Epub May 28.
49. Carlier J, Malaca S, **Huestis MA**, Tagliabracci A, Tini A, Busardò FP. Biomarkers of 4-Hydroxy-*N,N*-methylpropyltryptamine (4-OH-MPT) intake identified from human hepatocyte incubations. *Expert Opinion Drug Metabolism Toxicology* 2022 Dec;18(12):831-840. 2023 Epub Jan 26.
50. Poyatos L, Lo Faro AF, Berardinelli D, Sprega G, Malaca S, Pichini S, **Huestis MA**, Papaseit E, Perez-Maña C, Busardò FP, Magi F. Methylone and MDMA pharmacokinetics following controlled administration in humans. *International Journal of Molecular Sciences* 2022 Nov 23;23(23):14636.
51. Di Trana A, Berardinelli D, Montanari E, Berretta P, Basile G, Huestis MA, Busardò FP. Molecular insights and clinical outcomes of drugs of abuse adulteration: new trends and new psychoactive substances. *International J Molecular Sci.* 2022 Nov 23;23(23):14619.
52. La Maida N, Di Giorgi A, Pichini S, Busardò FP, **Huestis MA**. Recent challenges and trends in forensic analysis: Δ^9 -THC isomers pharmacology, toxicology and analysis. *J Pharmaceutical Biomedical Analysis* 2022 Oct 25;220:114987. 2022 Epub October 25.
53. Pigliasco F, Malaca S, Lo Faro AF, Tini A, Cangemi G, Cafaro A, Barco S, Riva A, Pisati A, Amadori E, Striano P, Tagliabracci A, **Huestis MA**, Busardò FP. Cannabidiol, Δ^9 -tetrahydrocannabinol, and metabolites in human blood by volumetric absorptive microsampling and LC-MS/MS following controlled administration in epilepsy patients. *Frontiers Pharmacology* 2022 Oct 24;13:1038754.
54. Di Trana A, Berardinelli D, Montanari E, Berretta P, Basile G, **Huestis MA**, Busardò FP. Molecular insights and clinical outcomes of drugs of abuse adulteration: new trends and new psychoactive substances. *International Journal of Molecular Sciences* 2022 Nov 23;23(23):14619.

55. Henningfield JE, Rodricks JV, Magnuson AM, **Huestis MA**. Respiratory effects of oral mitragynine and oxycodone in a rodent model. *Psychopharmacology* 2022 Dec;239(12):3793-3804.
56. Malaca S, **Huestis MA**, Lattanzio, L. Marsella LT, Carlier J, Tagliabracchi A, Busardo FP. Human hepatocyte 4-acetoxy-N,N-diisopropyltryptamine metabolite profiling by reversed-phase liquid chromatography coupled with high-resolution tandem mass spectrometry. *Metabolites* 2022 Jul 29;12(8):705.
57. Wickens CM, Wright M, Mann RE, Brands B, Di Ciano P, Stoduto G, Fares A, Matheson J, George T, Rehm J, Shuper PA, Sproule B, Samokhvalov A, **Huestis MA**, Le Foll B. Separate and Combined Effects of Alcohol and Cannabis on Mood, Subjective Experience, Cognition and Psychomotor Performance. *Progress Neuropsychopharmacology Biological Psychiatry*. 2022 Aug 30;118:110570.
58. Mohr ALA, Logan BK, Fogarty MF, Krotulski AJ, Papsun DM, Kacinko SL, **Huestis MA**, Roper-Miller JD. Reports of adverse events associated with use of novel psychoactive substances, 2017-2020: A Review. *J Analytical Toxicology* 2022 Jul 14;46(6):e116-e185.
59. Torrens A, Roy P, Lin L, Vu C, Grimes D, Inshishian VC, Montesinos JS, Ahmed F, Mahler SV, **Huestis MA**, Das A, Piomelli D. Comparative Pharmacokinetics of Δ^9 -Tetrahydrocannabinol in Adolescent and Adult Male and Female Rats. *Cannabis Cannabinoid Research* 2022 Dec;7(6):814-826.
60. Sempio C, Huestis MA, Kaplan B, Klawitter J, Christians U, Henthorn TK. Urinary clearance of 11-nor-9-carboxy- Δ^9 -tetrahydrocannabinol: A detailed pharmacokinetic analysis. *Drug Testing Analysis* 2022 Aug;14(8):1368-1376.
61. Wickens CM, Mann RE, Brands B, Stoduto G, Matheson J, Sayer G, Burston J, Pan JF, Di Ciano P, George T, Rehm J, Kenney C, Soule D, **Huestis MA**, Le Foll B. Influence of Personality on Acute Smoked Cannabis Effects on Simulated Driving. *Experimental Clinical Psychopharmacology* 2022 Oct;30(5):547-559.
62. Wade NE, Tapert SF, Lisdahl KM, **Huestis MA**, Haist F. Substance use onset in high-risk 9-13 year-olds in the ABCD Study. *Neurotoxicology Teratology* 2022 May-Jun;91:107090.
63. Marcotte TD, Umlauf A, Grelotti DJ, Sones EG, Sobolesky PM, Smith BE, Hoffman MA, Hubbard JA, Severson J, **Huestis MA**, Grant I, Fitzgerald RL. Driving performance and cannabis users' perception of safety: A randomized clinical trial of smoked cannabis of different THC content. *JAMA Psychiatry* 2022 Mar 1;79(3):201-209.
64. Gilman JM, Schmitt WA, Potter K, Kendzior B, Pachas GN, Hickey S, Makary M, **Huestis MA**, Evins AE. Identification of Δ^9 -tetrahydrocannabinol (THC) impairment using functional brain imaging. *Neuropsychopharmacology*. 2022 Mar;47(4):944-952.
65. Fares A, Wickens CM, Mann RE, Di Ciano P, Wright M, Matheson J, Omer S, Hasan M, Rehm J, George T, Andriy V, Samokhvalov AV, Shuper PA, **Huestis MA**, Stoduto G, Brown T, Stefan C, Rubin-Kahana DS, Le Foll B, Brands B. Sex differences in the acute pharmacological effects of cannabis combined with alcohol in young adults. Combined effect of alcohol and cannabis on simulated driving. *Psychopharmacology* 2022 May;239(5):1263-1277.
66. Henningfield JE, Wang DW, **Huestis MA**. Kratom Abuse Potential 2021: An updated eight factor analysis. *Frontiers in Pharmacology* 2022 Jan 28;12:775073.

67. Cliburn KD, **Huestis MA**, Wagner JR, Kemp PM. Cannabinoid distribution in fatally-injured pilots' postmortem fluids and tissues. *Forensic Science International* 2021 Dec;329:111075.
68. Tuv SS, Skov-Skov Bergh M, Andersen JM, Steinsland S, Vindenes V, Baumann MH, **Huestis MA**, Bogen IL. Comparative neuropharmacology and pharmacokinetics of methamphetamine and its thiophene analogue methiopropamine in rodents. *International J Molecular Sciences* 2021 Nov 5;22(21):12002. 2021 Nov 5;22(21):12002. Epub Oct 29.
69. Da Cunha KF, Oliveira KD, Cardoso MS, Arantes ACF, Coser PHPC, Lima KdN, Maluf ACS, Comis MAdC, **Huestis MA**, Costa JL. Prevalence of new psychoactive substances (NPS) in Brazil based on oral fluid analysis of samples collected at electronic music festivals and parties, *Drug Alcohol Dependence* 2021 Oct 1;227:108962. Epub 2021 Aug 12.
70. Hoffman MA, Hubbard JA, Sobolesky PM, Smith BE, Suhandynata RT, Sanford S, Sones E, Ellis S, Umlauf A, **Huestis MA**, Grelotti DJ, Grant I, Marcotte TD, Fitzgerald RL. Blood and Oral Fluid Cannabinoid Profiles of Frequent and Occasional Cannabis Smokers. *J Analytical Toxicology* 2021 Sep 17;45(8):851-862. Epub 2021 Jun 26.
71. Hubbard JA, Hoffman MA, Ellis SE, Sobolesky PM, Smith BE, Suhandynata RT, Sones EG, Sanford SK, Umlauf A, **Huestis MA**, Grelotti DJ, Grant I, Marcotte TD, Fitzgerald RL. Biomarkers of Recent Cannabis Use in Blood, Oral Fluid and Breath. *J Analytical Toxicology* 2021 Sep 17;45(8):820-828. Epub 2021 Jun 30.
72. Wright M, Wickens CM, Di Ciano P, Sproule B, Fares A, Matheson J, Mann RE, Rehm J, Shuper PA, George T, **Huestis MA**, Stoduto G, Le Foll B, Brands B. Sex differences in the acute pharmacological effects of cannabis combined with alcohol in young adults. *Psychology of Addictive Behaviors* 2021 Aug;35(5):536-552. Epub 2021 Jun 3.
73. Lisdahl KM, Tapert S, Sher KJ, Gonzalez R, Nixon SJ, Feldstein Ewing SW, Conway KP, Wallace A, Sullivan R, Hatcher K, Kaiver C, Thompson W, Reuter C, Bartsch H, Wade NE, Jacobus J, Albaugh MD, Allgaier N, Anokhin AP, Bagot K, Baker FC, Banich MT, Barch DM, Baskin-Sommers A, Breslin FJ, Brown SA, Calhoun V, Casey BJ, Chaarani B, Chang L, Clark DB, Cloak C, Constable RT, Cottler LB, Dagher RK, Dapretto M, Dick A, Do EK, Dosenbach NUF, Dowling GJ, Fair DA, Florsheim P, Foxe JJ, Freedman EG, Friedman NP, Garavan HP, Gee DG, Glantz MD, Glaser P, Gonzalez MR, Gray KM, Grant S, Haist F, Hawes S, Heeringa SG, Hermosillo R, Herting MM, Hettema JM, Hewitt JK, Heyser C, Hoffman EA, Howlett KD, Huber RS, Huestis MA, Hyde LW, Iacono WG, Isaiah A, Ivanova MY, James RS, Jernigan TL, Karcher NR, Kuperman JM, Laird AR, Larson CL, LeBlanc KH, Lopez MF, Luciana M, Luna B, Maes HH, Marshall AT, Mason MJ, McGlade E, Morris AS, Mulford C, Nagel BJ, Neigh G, Palmer CE, Paulus MP, Pecheva D, Prouty D, Potter A, Puttler LI, Rajapakse N, Ross JM, Sanchez M, Schirda C, Schulenberg J, Sheth C, Shilling PD, Sowell ER, Speer N, Squeglia L, Sripada C, Steinberg J, Sutherland MT, Tomko R, Uban K, Vrieze S, Weiss SRB, Wing D, Yurgelun-Todd DA, Zucker RA, Heitzeg MM; ABCD Consortium. Substance use patterns in 9-10 year olds: Baseline findings from the adolescent brain cognitive development (ABCD) study. *Drug Alcohol Dependence* 2021 Oct 1;227:108946. Epub 2021 Jul 29.
74. Chaarani B, Allgaier N, Hahn S, Adise S, Owens MM, Juliano A, Yuan DK, Loso H, Ivanciu A, Albaugh MD, Dumas J, Mackey S, Laurent J, Ivanova M, Hagler DJ, Cornejo MD, Hatton S, Agrawal A, Aguinaldo L, Ahonen L, Aklin W, Anokhin AP, Arroyo J, Avenevoli S, Babcock D, Bagot K, Baker FC, Banich MT, Barch DM, Bartsch H, Baskin-Sommers A, Bjork J, Blachman-Demmer D, Bloch M, Bogdan R, Bookheimer SY, Breslin F, Brown S, Calabro F, Calhoun V,

- Casey BJ, Chang L, Clark DB, Cloak C, Constable RT, Conway K, Corley R, Cottler LB, Cox S, Dagher R, Dale AM, Dapretto M, Delcarmen-Wiggins R, Dick AS, Do EK, Dosenbach NUF, Dowling, G.¹³, Edwards, S.¹², Ernst, T.M.¹², Fair, D.A.¹⁶, Fan, C.C.³, Feczko, E.¹⁶, Feldstein-Ewing, S.W.¹⁶, Florsheim, P.¹⁷, Foxe, J.¹⁸, Freedman, E.¹⁸, Friedman, N.P.⁷, Friedman-Hill, S.³⁶, Fuemmeler, B.F.⁹, Galvan, A.¹⁰, Gee, D.G.⁸, Giedd, J.², Glantz, M.¹³, Glaser, P.³, Godino, J.², Wilbur, A.⁶, Gonzalez, M.¹⁹, Gonzalez, R.¹⁵, Grant, S.¹³, Gray, K. M.²⁰, Haist, F.², Harms, M.P.³, Hawes, S.¹⁵, Heath, A.C.², Heeringa, S.²¹, Heitzeg, M.M.²¹, Hermosillo, R.¹⁶, Herting, M.M.²², Hettema, J.M.⁹, Hewitt, J.K.⁷, Heyser, C.², Hoffman, E.¹³, Howlett, K.¹³, Huber, R.S.²³, Huestis MA, Hyde, L.²¹, Iacono, W.G.²⁵, Infante, M.A.², Irfanoglu, O.⁴⁴, Isaiah, A.²⁶, Iyengar, S.⁴⁵, Jacobus, J.², James, R.⁹, Jean-Francois, B.⁴², Jernigan, T.², Karcher, N.R.³, Kaufmann, A.²⁹, Kelley, B.⁴⁶, Kit, B.⁴⁷, Ksinan, A.⁹, Kuperman, J.², Laird, A.R.¹⁵, Larson, C.¹⁷, LeBlanc, K.¹³, Lessem, J.⁷, Lessov-Schlagger, C.³, Lever, N.²⁶, Lewis, D.A.⁴, Lisdahl, K.¹⁷, Little, A.R.¹³, Lopez, M.¹³, Luciana, M.M.²⁵, Luna, B.⁴, Madden, P.A.³, Maes, H.⁹, Makowski, C.², Marshall, A.T.¹⁹, Mason, M.J.²⁷, Matochik, J.³¹, McCandliss, B.²⁸, McGlade, E.²³, Montoya, I.¹³, Morgan, G.²⁹, Morris, A.³⁰, Mulford, C.¹³, Murray, P.³¹, Nagel, B.J.¹⁶, Neale, M.C.⁹, Neigh, G.⁹, Nencka, A.³², Noronha, A.³¹, Nixon, S.J.¹⁴, Palmer, C.E.², Pariyadath, V.¹³, Paulus, M.P.¹¹, Pelham, W.E.¹⁵, Pfefferbaum, D.⁶, Pierpaoli, C.⁵, Prescott, A.²³, Prouty, D.⁶, Puttler, L.I.²¹, Rajapaske, N.⁴², Rapuano, K.M.⁸, Reeves, G.¹², Renshaw, P.F.²³, Riedel, M.C.¹⁵, Rojas, P.¹⁵, de la Rosa, M.¹⁵, Rosenberg, M.D.³³, Ross, M.⁷, Sanchez, M.¹⁵, Schirda, C.⁴, Schloesser, D.⁴¹, Schulenberg, J.²¹, Sher, K.J.³⁴, Sheth, C.²³, Shilling, P.D.², Simmons, K.¹¹, Sowell, E.R.¹⁹, Speer, N.⁷, Spittel, M.⁴¹, Squeglia, L. M.²⁰, Sripada, C.²¹, Steinberg, J.⁹, Striley, C.¹⁴, Sutherland, M.T.¹⁵, Tanabe, J.⁷, Tapert, S.F.², Thompson, W.², Tomko, RL, Uban, K.³⁵, Vrieze, S.²⁵, Wade, N.E.², Watts, R.⁸, Weiss, S.¹³, Wiens, B.A.¹⁴, Williams, O.D.¹⁵, Wilbur, A.⁶, Wing, D.², Wolff-Hughes, D.⁴¹, Yang, R.², Yurgelun-Todd, D.A.²³, Zucker, R.A.²¹, Potter, A.¹, Garavan, H.P.¹ & the ABCD Consortium. Baseline Brain Function in the Pre-Adolescent Brain: Results from the ABCD Study. *Nature Neuroscience* 2021 Aug;24(8):1176-1186. Epub 2021 Jun 7.
75. D'Orazio AL, Mohr ALA, Chan-Hosokawa A, Harper C, **Huestis MA**, Limoges JF, Miles AK, Scarneo CE, Kerrigan S, Liddicoat LJ, Scott KS, Logan BK. Recommendations for Toxicological Investigation of Drug-Impaired Driving and Motor Vehicle Fatalities - 2021 Update. *J Analytical Toxicology* Jul 10;45(6):529-536. Epub 2021 Jun 4.
 76. Sempio C, Bidwell C, Hutchison K, **Huestis MA**, Klawitter J, Christians U, Henthorn TK. Using Population Pharmacokinetic Modeling to Estimate Exposure to Δ^9 -tetrahydrocannabinol in an Observational Study of Cannabis Smokers in Colorado. *Therapeutic Drug Monitoring* 2021 Aug 1;43(4):536-545. Epub 2021 Feb 25.
 77. Cliburn KD, **Huestis MA**, Wagner JR, Kemp PM. Identification and quantification of cannabinoids in postmortem fluids and tissues by liquid chromatography-tandem mass spectrometry. *J Chromatography A*. 2021 Aug 30;1652:462345. Epub 2021 Jun 15.
 78. Wade NE, Baca R, Courtney KE, Infante MA, **Huestis MA**, Jacobus J. Preliminary evidence for cannabis and nicotine urinary metabolites as predictors of verbal memory performance and learning among young adults. *J International Neuropsychological Society* 2021 Jul;27(6):546-558.
 79. Brunetti P, Giorgetti R, Tagliabracci A, **Huestis MA**, Busardo FP. Designer Benzodiazepines: A Review of Toxicology and Public Health Risks. *Pharmaceuticals* 2021 June 11;14(6):560.
 80. Preuss UW, **Huestis MA**, Schneider M, Hermann D, Lutz B, Hassan A, Kambeiz J, Wong JWM, Hoch E. Cannabis use and Car crashes: a review. *Frontiers Psychiatry* 2021 May 28;12:643315.

81. Ruiz C, Torrens A, Castillo E, Perrone C, Cevallos J, Inshishian V, Harder E, Justeson D, **Huestis MA**, Swarup V, Piomelli D, Mahler S. Pharmacokinetic, behavioral, and brain activity effects of Δ^9 -Tetrahydrocannabinol in adolescent male and female rats. *Neuropsychopharmacology* 2021 Apr;46(5):959-969. Epub 2020 Sep 14.
82. Mareck U, Fussholler G, Geyer H, **Huestis MA**, Scheiff A, Thevis M. Preliminary data on the potential for unintentional anti-doping rule violations by permitted CBD use. *Drug Testing Analysis* 2021 Mar;13(3):539-549.
83. Herting MM, Uban KA, Gonzalez MR, Baker FC, Kan EC, Thompson WK, Granger DA, Albaugh MD, Anokhin AP, Bagot KS, Banich MT, Barch DM, Baskin-Sommers A, Breslin FJ, Casey BJ, Chaarani B, Chang L, Clark DB, Cloak CC, Constable RT, Cottler LB, Dagher RK, Dapretto M, Dick AS, Dosenbach N, Dowling GJ, Dumas JA, Edwards S, Ernst T, Fair DA, Feldstein-Ewing SW, Freedman EG, Fuemmeler BF, Garavan H, Gee DG, Giedd JN, Glaser PEA, Goldstone A, Gray KM, Hawes SW, Heath AC, Heitzeg MM, Hewitt JK, Heyser CJ, Hoffman EA, Huber RS, **Huestis MA**, Hyde LW, Infante MA, Ivanova MY, Jacobus J, Jernigan TL, Karcher NR, Laird AR, LeBlanc KH, Lisdahl K, Luciana M, Luna B, Maes HH, Marshall AT, Mason MJ, McGlade EC, Morris AS, Nagel BJ, Neigh GN, Palmer CE, Paulus MP, Potter AS, Puttler LI, Rajapakse N, Rapuano K, Reeves G, Renshaw PF, Schirda C, Sher KJ, Sheth C, Shilling PD, Squeglia LM, Sutherland MT, Tapert SF, Tomko RL, Yurgelun-Todd D, Wade NE, Weiss SRB, Zucker RA, Sowell ER. Correspondence Between Perceived Pubertal Development and Hormone Levels in 9-10 Year-Olds From the Adolescent Brain Cognitive Development Study. *Frontiers in Endocrinology* 2021 Feb 18;11:549928. Epub 2021 Feb 18.
84. Hahn B, Harvey AN, Concheiro-Guisan M, **Huestis MA**, Ross TJ, Stein EA. Modulation of the default mode network with a nicotinic agonist and antagonist. *Psychopharmacology* 2021 Feb;238(2):589-597.
85. La Maida N, Di Trana A, Giorgetti G, Tagliabracci A, Busardò F, **Huestis MA**. A review of synthetic cathinones fatal cases from 2017 to 2020. *Therapeutic Drug Monitoring* 2021 Feb 1;43(1):52-68. Epub 2020 Aug 31.
86. Withey SL, Bergman J, **Huestis MA**, George SR, Madras BK. THC and CBD blood and brain concentrations following daily administration to adolescent primates. *Drug Alcohol Dependence* 2020;213:108129.
87. Carlier J, Diao XX, Giorgetti R, Busardò FP, **Huestis MA**. Pyrrolidinyl synthetic cathinones α -PHP and 4F- α -PVP metabolite profiling using human hepatocyte incubations. *International Journal of Molecular Sciences* 2020 Dec 28;22(1):230.
88. Chu EK, Smith LM, Chris Derauf C, Newman E, Neal CR, Arria AM, **Huestis MA**, DellaGrotta, SA, Roberts MB, Dansereau LM, Lester BM. Behavior Problems During Early Childhood In Children with Prenatal Methamphetamine Exposure. *Pediatrics* 2020 Dec;146(6):e20190270.
89. Sholler DJ, **Huestis MA**, Amendolara B, Vandrey R, Cooper ZD. Therapeutic Potential and Safety Considerations for the Clinical Use of Synthetic Cannabinoids. *Pharmacology, Biochemistry and Behavior* 2020 Dec;199:173059.
90. Malaca S, Lo Faro AF, Tamborra A, Pichini S, Busardò FP, **Huestis MA**. Toxicology and analysis of psychoactive tryptamines. *International J Molecular Science* 2020 Dec 4;21(23):E9279.

91. Sezer Y, Jannuzzi AT, **Huestis MA**, Alpertunga B. *In vitro* assessment of the cytotoxic, genotoxic and oxidative stress effects of the synthetic cannabinoid JWH-018 in human SH-SY5Y neuronal cells. *Toxicology Research* 2020 Nov 4;9(6):734-74.
92. Miller RE, Brown TL, Lee S, Tibrewal I, Gaffney GG, Milavetz G, Hartman RL, Gorelick DA, Compton R, **Huestis MA**. Impact of Cannabis and Low Alcohol Concentration on Divided Attention Tasks during Driving. *Traffic Inj Prev* 2020 Oct 12;21(sup1):S123-S129.
93. Rodrigues TB, Morais DR, Gianvecchio VAP, Aquino EM, Cunha RL, **Huestis MA**, Costa JL. Development and validation of a method for quantification of 28 psychotropic drugs in postmortem blood samples by modified micro-QuEChERS and LC-MS/MS. *Journal of Analytical Toxicology* 2020 Sep 30;bkaa138. Epub 2020 Sep 30.
94. Ashley DL, De Jesús VR, Abulseoud OA, **Huestis MA**, Daniel F. Milan DF, Benjamin C. Blount BC. Urinary acrylonitrile metabolite concentrations before and after smoked, vaporized, and oral cannabis in frequent and occasional cannabis users. *International Journal Environmental Health Research* 2020 Sep 4;17(18):6438.
95. Da Cunha KF, Rodrigues LC, **Huestis MA**, Costa JL. Miniaturized extraction method for analysis of synthetic opioids in urine by microextraction with packed sorbent and liquid chromatography-tandem mass spectrometry *Journal Chromatography A*. 2020 Aug 2;1624:461241.
96. Sofalvi S, Lavins ES, Kaspar CK, Michel HM, Mitchell-Mata CL, **Huestis MA**, Apollonio LG. Development and validation of an LC—MS/MS method for the detection of 40 benzodiazepines and three Z-drugs in blood and urine by solid-phase extraction. *Journal of Analytical Toxicology* 2020 Oct 12;44(7):708-717.
97. Da Cunha KF, Oliveira KD, **Huestis MA**, Costa JL. Screening of 104 new psychoactive substances (NPS) and other drugs of abuse in oral fluid by LC-MS/MS. *Journal of Analytical Toxicology* 2020 Oct 12;44(7):697-707.
98. Hampson AJ, Schroeder J, Ellefsen KN, Yammine L, Epstein D, Preston KL, **Huestis MA**, Verrico C. Sub-Therapeutic Acetazolamide Doses as a Non-Invasive Method for Assessing Medication Adherence. *Clinical Pharmacology Therapeutics* 2020 Dec;108(6):1203-1212.
99. **Huestis MA**, Sempio C, Newmeyer MN, Andersson M, Barnes AJ, Abulseoud OA, Blount BC, Schroeder J, Smith ML. Free and glucuronide urine cannabinoids after controlled smoked, vaporized, and oral cannabis administration in frequent and occasional cannabis users. *Journal of Analytical Toxicology* 2020 Oct 12;44(7):651-660.
100. Karschner EL*, Swortwood MJ*, **Huestis MA**. Identifying and Quantifying Cannabinoids in Biological Matrices in the Medical and Legal Cannabis Era. *Clinical Chemistry* 2020 Jul 1;66(7):888-914. *(authors contributed equally to manuscript)
101. Schuetze P, Molnar D, Shisler S, Colder CR, **Huestis MA**, Eiden RD. The Effect of Prenatal Adversity on Externalizing Behaviors at 24-Months of Age in a High-Risk Sample: Maternal Sensitivity as a Moderator. *Infant Mental Health Journal* 2020 Jul;41(4):530-542.
102. Torrens A, Vozella V, Huff H, McNeil B, Ahmed F, Ghidini A, Mahler S, **Huestis MA**, Das A, Piomelli D. Comparative Pharmacokinetics of Δ^9 -Tetrahydrocannabinol in Adolescent and Adult

Male Mice. *Journal of Pharmacology Experimental Therapeutics* 2020 Jul;374(1):151-160.

103. Loflin M, Kiluk B, **Huestis MA**, Aklin WM, Budney AJ, Carroll KM, D'Souza DC, Dworkin RH, Gray KM, Hasin DS, Lee DC, LeFoll B, Levin FR, Lile JA, Mason BJ, McRae-Clark AL, Montoya I, Peters EN, Ramey T, Turk DC, Vandrey R, Weiss RD, Strain EC. The state of clinical outcome assessments for cannabis use disorder clinical trials: a review and research agenda. *Drug Alcohol Dependence* 2020 Jul 1;212:107993.
104. Eiden RD, Granger DA, Schuetze P, Colangelo J, **Huestis MA**. Prenatal tobacco and cannabis exposure: associations with cortisol reactivity in early school age children. *International Journal of Behavioral Medicine* 2020 Jun;27(3):343-356.
105. Matheson J, Mann RE, Sproule B, **Huestis MA**, Wickens CM, Stoduto G, George TP, Rehm J, Le Foll B, Brands B. Acute and residual effects of smoked cannabis on mood and cognitive performance of young adults. *Pharmacology Brain Behavior* 2020 May 1;194:172937.
106. Hubbard M, Smith B, Sobolesky P, Kim S, Hoffman M, Stone J, **Huestis MA**, Grelotti D, Grant I, Marcotte T, Fitzgerald R. Validation of a liquid-liquid tandem mass spectrometry (LC-MS/MS) method to detect cannabinoids in whole blood and breath. *Clin Chem Lab Medicine* 2020 Apr 28;58(5):673-681.
107. Pacifici R, Pichini S, Pellegrini M, Rotolo MC, Giorgetti R, Tagliabracci A, Busardo FP, **Huestis MA**. THC and CBD Concentrations in blood, oral fluid and urine following a single and repeated administration of "Light Cannabis". *Clinical Chemistry and Laboratory Medicine*. 2020 Apr 28;58(5):682-689.
108. Stroud L, Papandonatos G, Jao N, Vergara-Lopez, **Huestis MA**, Salisbury A. Prenatal tobacco and marijuana co-use: Sex-specific influences on infant cortisol stress response. *Neurotoxicology Teratology* 2020 Apr 11;79:106882.
109. Di Trana A, La Maida N, Tittarelli R, **Huestis MA**, Pichini S, Busardo FP, Carlier J. Monitoring prenatal exposure to buprenorphine and methadone. *Therapeutic Drug Monitoring* 2020 Apr;42(2):181-193.
110. Carlier J, La Maida N, DiTrana AG, **Huestis MA**, Pichini S, Busardò FP. Testing unconventional matrices to monitor prenatal exposure to heroin, cocaine, amphetamines, synthetic cathinones, and synthetic opioids. *Therapeutic Drug Monitoring* 2020 Apr;42(2):205-221.
111. Carlier J, **Huestis MA**, Zaami S, Pichini S, Busardo FP. Monitoring perinatal exposure to cannabis and synthetic cannabinoids. *Therapeutic Drug Monitoring* 2020 Apr;42(2):194-204.
112. Sempio C, **Huestis MA**, Mikulich-Gilbertson SK, Klawitter J, Christians U and Henthorn TK. Population pharmacokinetic modeling of plasma δ^9 -tetrahydrocannabinol and an active and inactive metabolite following controlled smoked cannabis administration. *British Journal Clinical Pharmacology* 2020 Mar;86(3):611-619.
113. Farokhnia M, McDiarmid GR, Newmeyer MN, Munjal , Abulseoud OA, **Huestis MA**, Leggio L. Effects of oral, smoked, and vaporized cannabis on endocrine pathways related to appetite and metabolism: A randomized, double-blind, placebo-controlled, human laboratory study. *Translational Psychiatry* 2020 Feb 19;10(1):71.

114. Tomko RL, Gray KM, **Huestis MA**, Squeglia LM, Baker NL, McClure EA. Measuring within-individual cannabis reduction in clinical trials: a review of the methodological challenges. *Current Addiction Reports* 2019 Dec;6(4):429-436.
115. Brands B, Mann RE, Wickens CM, Sproule B, Stoduto G, Sayer GS, Burston J, Pan JF, Matheson J, Stefan C, George TP, **Huestis MA**, Rehm J, Le Foll B. Acute and residual effects of smoked cannabis: impact on driving speed and lateral control, heart rate, and self-reported drug effects. *Drug Alcohol Dependence* 2019 Dec 1;205:107641.
116. Schuetze P, Zhao J, Eiden RD, Shisler S, **Huestis MA**. Prenatal exposure to tobacco and marijuana and child autonomic regulation and reactivity: An analysis of indirect pathways via maternal psychopathology and parenting. *Developmental Psychobiology* 2019 Nov;61(7):1022-1034.
117. **Huestis MA**, Solomini R, Pichini S, Pacifici R, Carlier J, Busardo FP. Cannabidiol adverse events and toxicity. *Current Neuropharmacology* 2019;17(10):974-989.
118. Bonn-Miller M, Pollack CV, Casarett D, Dart R, ElSohly M, Good L, Guzman M, Hanus L, Hill K, **Huestis MA**, Sisley S, Skinner N, Spahr J, Vandrey R, Viscusi E, Ware MA, Abrams D. Priority considerations for medicinal cannabis-related research: a white paper from the Lambert Center for the study of medicinal cannabis and hemp. *Cannabis Cannabinoid Research* 2019; Sept 23;4(3):139-157.
119. Desrosiers NA, **Huestis MA**. Oral Fluid Drug Testing: Analytical Approaches, Issues & Interpretation of Results. *Journal Analytical Toxicology* 2019 Jul 24;43(6):415-443.
120. **Huestis MA**, Blount BC, Milan DF, Newmeyer MN, Schroeder J, Smith ML. Correlation of creatinine- and specific gravity-normalized free & glucuronidated urine cannabinoid concentrations following smoked, vaporized and oral cannabis in frequent and occasional cannabis users. *Drug Testing Analysis* 2019 Jul;11(7):968-975.
121. da Cunha KF, Eberlin MN, **Huestis MA**, Costa JL. NBOMe instability in whole blood. *Forensic Toxicology* 2019 Vol 37:82-89.
122. Øiestad EL, Hege-Merete Krabseth HM, **Huestis MA**, Skulberg A, Vindenes V. Interpreting oral fluid drug results from prisoners: monitoring current drug intake and detection times for drugs self-administered prior to detention. *Forensic Toxicology* 2019 Vol 37:59-74.
123. Baggott MJ, Garrison KJ, Coyle JR, Galloway GP, Barnes AJ, **Huestis MA**, Mendelson JE. Effects of the Psychedelic Amphetamine MDA (3,4-Methylenedioxyamphetamine) in Healthy Volunteers. *Journal Psychoactive Drugs* 2019 Apr-Jun;51(2):108-117.
124. Diao XX, **Huestis MA**. New Synthetic Cannabinoids Metabolism and Strategies to Best Identify Optimal Marker Metabolites. *Frontiers in Chemistry* 2019 Mar 4;7:109.
125. Semick SA, Collado-Torres L, Markunas CA, Shin JH, Deep-Soboslay A, Tao R, Huestis M, Bierut LJ, Maher BS, Johnson EO, Hyde TM, Weinberger DR, Hancock DB, Kleinman JE, Jaffe AE. Developmental effects of maternal smoking during pregnancy on the human frontal cortex transcriptome. *Molecular Psychiatry* 2018;10.1038.
126. Carlier J, Wohlfarth A, Salmeron BD, Scheidweiler KB, Huestis MA, Baumann MH. Pharmacodynamic effects, pharmacokinetics, and metabolism of the synthetic cannabinoid AM-2201 in male rats. *J Pharmacology Experimental Therapeutics* 2018 Dec;367(3):543-550.

127. Diao XX, Carlier J, Zhu M, **Huestis MA**. Metabolism of the new synthetic cannabinoid EG-018 in human hepatocytes by high-resolution mass spectrometry. *Forensic Toxicology* 2018 Vol 36:304-312.
128. Jannetto PJ, Bratanow NC, Clarke WA, Hamill-Ruth RJ, Hammett-Stabler CA, **Huestis MA**, Kassed C, McMillin GA, Melanson SE, Langman LJ. Executive Summary of the American Association of Clinical Chemistry Laboratory Medicine Practice Guideline: Using Clinical Laboratory Tests to Monitor Drug Therapy in Pain Management Patients. *The Journal of Applied Laboratory Medicine*. 2018 Vol2(4):489-526.
129. Swortwood MJ, Bartock SH, Scheidweiler KB, Shaw S, Filis Panagiotis F, Douglas A, O'Shaughnessy PJ, Soffientini U, Lucendo-Villarin B, Iredale JP, Fowler PA, **Huestis MA**. Quantification of Ethyl Glucuronide, Ethyl Sulfate, and Nicotine and Metabolites in Human Fetal Liver and Placenta. *Forensic Toxicology* 2018 Vol 36:102-112.
130. Hirvonen J, Zanotti-Fregonara P, Gorelick DA, Hyoung Lyoo C, Rallis-Frutos D, Morse C, Zoghbi SS, Pike VW, Volkow ND, **Huestis MA**, Innis RB. Decreased Cannabinoid CB1 Receptors in Male Tobacco Smokers Examined with Positron Emission Tomography. *Biological Psychiatry* 2018 Nov 15;84(10):715-721.
131. Stroud LR, Papandonatos GD, McCallum M, Kehoe T, Salisbury AL, **Huestis MA**. Prenatal tobacco and marijuana co-use: Impact on newborn neurobehavior. *Neurotoxicology Teratology* 2018 Sep 26;70:28-39.
132. Godleski SA, Shisler S, Eiden RD, **Huestis MA**. Co-use of tobacco and marijuana during pregnancy: Pathways to externalizing behavior problems in early childhood. *Neurotoxicology Teratology* 2018 Sep - Oct;69:39-48.
133. Massey SH, Mroczek DK, Reiss D, Miller ES, Jakubowski JA, Graham EK, Shisler SM, McCallum M, **Huestis MA**, Ganiban JM, Shaw DS, Leve LD, Eiden RD, Stroud LR, Neiderhiser JM. Additive Drug-Specific and Sex-Specific Risks Associated with Co-Use of Marijuana and Tobacco during Pregnancy: Evidence from 3 Recent Developmental Cohorts (2003 – 2015) *Neurotoxicology Teratology* 2018 July-Aug 1;68:97-106.
134. Carlier J, Diao XX, **Huestis MA**. Synthetic cannabinoid BB-22 (QUCHIC): human hepatocytes metabolism with liquid chromatography-high resolution mass spectrometry detection. *Journal of Pharmaceutical Biomedical Analysis* 2018 Aug 5;157:27-35.
135. Eiden RD, Schuetze P, Shisler S, **Huestis MA**. Prenatal exposure to tobacco and cannabis: effects on autonomic and emotion regulation. *Neurotoxicology Teratology* 2018 Jul - Aug;68:47-56.
136. Smith MJ, Alden EC, Herrold AA, Roberts A, Stern D, Jones J, Barnes A, O'Connor KP, **Huestis MA**, Breiter HC. Recent self-reported cannabis use is associated with the biometrics of delta-9-tetrahydrocannabinol. *Journal of Studies on Alcohol and Drugs*. 2018 May;79(3):441-446.
137. Concheiro M, **Huestis MA**. Drug exposure during pregnancy: analytical methods and toxicological findings. *Bioanalysis* 2018 Apr 1;10(8):587-606.
138. Schuetze P, Eiden RD, Colder CR, **Huestis MA**, Leonard KE. Prenatal risk and infant regulation: indirect pathways via fetal growth, maternal prenatal stress and anger. *Child Development* 2018 March-April;89(2):e123–e137.

139. Sempio C, Scheidweiler KB, Barnes AJ, **Huestis MA**. Optimization of recombinant β -glucuronidase hydrolysis and quantification of eight urinary cannabinoids and metabolites by liquid chromatography tandem mass spectrometry. *Drug Testing Analysis* 2018 Mar;10(3):518-529.
140. Logan BK, D'Orazio AL, Mohr ALA, Limoges JF, Miles AK, Scarneo CE, Kerrigan S, Liddicoat LJ, Scott KS, **Huestis MA**. Recommendations for toxicological investigation of drug-impaired driving and motor vehicle fatalities-2017 update. *J Analytical Toxicology* 2018 Mar 1;42(2):63-68.
141. **Huestis MA**, Smith ML. Cannabinoid Markers in Biological Fluids and Tissues: Revealing Intake. *Trends in Molecular Medicine* 2018 Feb;24(2):156-172.
142. Trigo JM, Soliman A, Quilty L, Fischer B, Rehm J, Selby P, Barnes AJ, **Huestis MA**, George TP, Streiner DL, Staios G, Le Foll B. Nabiximols combined with Motivational Enhancement/Cognitive Behavioral Therapy for the treatment of Cannabis Dependence: A Pilot Randomized Clinical Trial. *PLOS One* 2018 Jan 31;13(1):e0190768.
143. Lee MR, Scheidweiler KB, Diao XX, Akhlaghi F, Cummins A, **Huestis MA**, Leggio L, Averbeck BB. Oxytocin by intranasal and intravenous routes reaches the cerebrospinal fluid in rhesus macaques: determination using a novel oxytocin assay. *Molecular Psychiatry* 2018 Jan;23(1):115-122.
144. Jacobus J, Squeglia LM, Escobar S, McKenna BM, Hernandez MM, Bagot KS, Taylor CT, **Huestis MA**. Changes in Marijuana Use Symptoms and Emotional Functioning over 28-Days of Monitored Abstinence in Adolescent Marijuana Users. *Psychopharmacology* 2017 Dec;234(23-24):3431-3442.
145. Lucendo-Villarin B, Filis P, Swortwood MJ, **Huestis MA**, Meseguer-Ripolles J, Cameron K, Iredale J, O'Shaughnesy P, Fowler P, Hay DC. Modelling foetal exposure to maternal smoking using hepatoblasts from pluripotent stem cells. *Archives Toxicology* 2017 Nov;91(11):3633-3643.
146. Diao XX, Carlier J, Zhu M, **Huestis MA**. Human hepatocyte metabolism of novel synthetic cannabinoids MN-18 and its 5-Fluoro Analog 5F-MN-18. *Clinical Chemistry* 2017 Nov;63(11):1753-1763.
147. Bouhlal S, Ellefsen KN, Sheskier MB, Singley E, Pirard S, Gorelick DA, **Huestis MA**, Leggio L. Acute effects of intravenous cocaine administration on serum concentrations of ghrelin, amylin, glucagon-like peptide-1, insulin, leptin and peptide YY and relationships with cardiorespiratory and subjective responses: preliminary findings. *Drug Alcohol Dependence* 2017 November 1;180:68-75.
148. Swortwood MJ, Newmeyer MN, Abulseoud OA, Andersson M, Barnes AJ, Scheidweiler KB, **Huestis MA**. On-site oral fluid Δ^9 -tetrahydrocannabinol (THC) screening after controlled smoked, vaporized, and oral cannabis administration. *Forensic Toxicology* 2017, Vol 35:133-145.
149. **Huestis MA**, Brandt SD, Rana Sumandeep, Auwärter V, Baumann MH. Impact of novel psychoactive substances on clinical and forensic toxicology. *Clinical Chemistry* 2017 Oct;63(10):1564-1569.
150. Newmeyer MN, Swortwood MJ, Taylor ME, Abulseoud OA, Woodward TH, **Huestis MA**. Evaluation of divided attention psychophysical task performance and effects on pupil sizes

- following smoked, vaporized, and oral cannabis administration. *Journal Applied Toxicology* 2017 Aug;37(8):922-932.
151. Carlier J, Diao XX, Wohlfarth A, Scheidweiler KB, Huestis MA. *In Vitro* Metabolite Profiling of ADB-FUBINACA, a New Synthetic Cannabinoid. *Current Neuropharmacology* 2017 Jul;15(5):682-691.
 152. Abulseoud OA, Zuccoli ML, Zhang L, Barnes AJ, **Huestis MA**, Lin DT. The acute effect of cannabis on plasma, liver and brain ammonia dynamics, a translational study. *European Neuropsychopharmacology* 2017 Jul;27(7):679-690.
 153. Molnar DS, Rancourt D, Schlauch R, Wen X, **Huestis MA**, Eiden RD. Tobacco exposure and conditional weight-for-length-gain by 2 years of age. *Journal Pediatric Psychology* 2017 Jul 1;42(6):679-688.
 154. Baumann MH, Bukhari MO, Lehner KR, Anizan S, Rice KC, Concheiro M, **Huestis MA**. Neuropharmacology of 3,4-Methylenedioxypyrovalerone (MDPV), Its Metabolites and Related Analogs. *Current Topics Behavioral Neuroscience* 2017 32:93-117.
 155. Logan BK, Mohr ALA, Friscia M, Krotulski AJ, Papsun DM, Kacinko SL, Roper-Miller JD, **Huestis MA**. Reports of adverse events associated with use of novel psychoactive substances, 2013-2016: a review. *Journal Analytical Toxicology* 2017 Sep 1;41(7):573-610.
 156. Swortwood MJ, Newmeyer MN, Abulseoud OA, Scheidweiler KB, **Huestis MA**. Cannabinoid disposition in oral fluid after controlled smoked, vaporized and oral cannabis administration. *Drug Testing Analysis* 2017 Jun;9(6):905-915.
 157. Carlier J, Diao X, Scheidweiler KB, **Huestis MA**. Distinguishing Intake of New Synthetic Cannabinoids ADB-PINACA and 5F-ADB-PINACA with Human Hepatocyte Metabolites and High-Resolution Mass Spectrometry. *Clinical Chemistry* 2017 May;63(5):1008-1021.
 158. Wohlfarth A, Roman M, Andersson M, Kugelberg FC, Diao XX, Carlier J, Eriksson C, Wu X, Konradsson P, Josefsson M, **Huestis MA**, Kronstrand R. 25C-NBOMe and 25I-NBOMe metabolite studies in human hepatocytes, *in vivo* mouse and human urine with high-resolution mass spectrometry. *Drug Testing Analysis* 2017 May;9(5):680-698.
 159. Shisler S, Eiden RD, Molnar DS, Schuetze P, **Huestis M**, Homish G. Smoking in pregnancy and fetal growth: the case for more intensive assessment. *Nicotine Tobacco Research* 2017 May 1;19(5):525-531.
 160. Newmeyer MN, Swortwood MJ, Abulseoud OA, **Huestis MA**. Subjective and physiological effects, and expired carbon monoxide concentrations following smoked, vaporized, and oral cannabis administration. *Drug Alcohol Dependence* 2017 Mar 29;175:67-76.
 161. Carlier J, Diao XX, Sempio C, **Huestis MA**. Identification of new synthetic cannabinoid ADB-CHMINACA (MAB-CHMINACA) metabolites in human hepatocytes. *AAPS Journal* 2017 Mar;19(2):568-577.
 162. Newmeyer MN, Swortwood MJ, Andersson M, Abulseoud OA, Scheidweiler KB, **Huestis MA**. Cannabis Edibles: Blood and Oral Fluid Cannabinoid Pharmacokinetics and Evaluation of Oral Fluid Screening Devices for Predicting Δ^9 -Tetrahydrocannabinol in Blood and Oral Fluid Following Cannabis Brownie Administration. *Clinical Chemistry* 2017 Mar;63(3):647-662.

163. **Huestis MA**, Tyndale RF. Designer Drugs 2.0. *Clinical Pharmacology Therapeutics* 2017 Feb;101(2):152-157.
164. Elmore J, Dillon-Carter O, Partilla J, Ellefsen KN, Concheiro M, Suzuki M, Rice KC, **Huestis MA**, Baumann MH. Pharmacokinetic profiles and pharmacodynamic effects for methyllone and its metabolites in rats. *Neuropsychopharmacology* 2017 Feb;42(3):649-660.
165. Diao XX, **Huestis MA**. Approaches, challenges and advances in metabolism of new synthetic cannabinoids and identification of optimal urinary marker metabolites. *Clinical Pharmacology Therapeutics* 2017 Feb;101(2):239-253.
166. Diao XX, Carlier J, Scheidweiler KB, **Huestis MA**. In vitro metabolism of new synthetic cannabinoid SDB-006 in human hepatocytes by high-resolution mass spectrometry. *Forensic Toxicology* 2017 Jan;35(1):20-32.
167. Scheidweiler KB, Andersson M, Swortwood MJ, Sempio C, **Huestis MA**. Long-term stability of cannabinoids in oral fluid after controlled cannabis administration. *Drug Test Analysis* 2017 Jan;9(1):143-147.
168. Diao XX, Carlier J, Zhu M, Pang S, Kronstrand R, Scheidweiler KB, **Huestis MA**. In vitro and in vivo human metabolism of a new synthetic cannabinoid NM-2201 (CBL-2201). *Forensic Toxicology* 2017;35(1):20-32.
169. Newmeyer MN, Swortwood MJ, Barnes AJ, Abulseoud OA, Scheidweiler KB, **Huestis MA**. Free and glucuronide whole blood cannabinoids' pharmacokinetics after controlled smoked, vaporized and oral cannabis administration in frequent and occasional cannabis users: identification of recent cannabis intake. *Clinical Chemistry* 2016 Dec;62(12):1579-1592.
170. Diao XX, Scheidweiler KB, Wohlfarth A, Zhu M, Pang S, **Huestis MA**. Strategies to distinguish new synthetic cannabinoid FUBIMINA (BIM-2201) intake from its isomer THJ-2201: Metabolism of FUBIMINA in human hepatocytes. *Forensic Toxicology* 2016;34:256-267.
171. Baggott MJ, Garrison KJ, Coyle JR, Galloway GP, Barnes AJ, **Huestis MA**, Mendelson JE. MDMA impairs response to water intake in healthy volunteers. *Advances Pharmacological Sciences* 2016:2175896.
172. Jansson LM, Velez M, Tuten M, Spencer N, McConnell K, Harrow C, Swortwood MJ, Barnes AJ, Scheidweiler KB, **Huestis MA**. Maternal buprenorphine maintenance and lactation. *Journal Human Lactation* 2016 Nov;32(4):675-681.
173. Feasel MG, Wohlfarth A, Nilles JM, Shaokun P, Kristovich RL, **Huestis MA**. Metabolism of carfentanil, an ultra-potent opioid, in human liver microsomes and human hepatocytes by high-resolution mass spectrometry. *Chemical Research Toxicology* 2016 Nov;18(6):1489-1499.
174. Hartman RL, Brown TL, Milavetz G, Spurgin A, Pierce RS, Gorelick DA, Gaffney G, **Huestis MA**. Cannabis effects on driving longitudinal control with and without alcohol. *Journal Applied Toxicology* 2016 Nov;36(11):1418-29.
175. Boileau I, Mansouri E, Williams B, Le Foll B, Rusjan P, Mizrahi R, Tyndale RF, **Huestis MA**, Payer DE, Wilson AA, Houle S, Kish SJ, Tong J. Fatty acid amide hydrolase binding in brain of cannabis users: imaging with the novel radiotracer [¹¹C]CURB. *Biological Psychiatry*. 2016 Nov 1;80(9):691-701.

176. **Shisler S**, Eiden RD, Molnar DS, Schuetze P, Coles CD, **Huestis M**, Colder CR. Effects of fetal tobacco exposure on focused attention in infancy. *Infant Behavior Development* 2016 Nov;45(Pt A):1-10.
177. Wiegand SL, Swortwood MJ, **Huestis MA**, Thorp J, Jones HE, Vora NL. Naloxone and metabolites quantification in cord blood of prenatally exposed newborns and correlations with maternal concentrations. *Obstetrics Gynecology AJP Reports* 2016 Oct;6(4):e385-e390.
178. Jacobus J, Castro N, Squeglia LM, Meloy MJ, Brumback T, **Huestis MA**, Tapert SF. Adolescent cortical thickness pre- and post marijuana and alcohol initiation. *Neurotoxicology Teratology* 2016 Sep - Oct;57:20-29.
179. Andersson M, Scheidweiler KB, Sempio C, Barnes AJ, **Huestis MA**. Simultaneous quantification of 11 cannabinoids and metabolites in human urine by liquid chromatography tandem mass spectrometry using WAX-S tips. *Analytical Bioanalytical Chemistry*. 2016 Sep;408(23):6461-71.
180. Godleski SA, Eiden RD, Schuetze P, Colder C, **Huestis MA**. Tobacco exposure and maternal psychopathology: Impact on toddler problem behavior. *Neurotoxicology Teratology* 2016 Sep - Oct;57:87-94.
181. Wilsey BL, Deutsch R, Samara E, Marcotte TD, Barnes A, **Huestis MA**, Le D. A preliminary evaluation of the relationship of cannabinoid blood concentrations with the analgesic response to vaporized cannabis. *Journal Pain Research* 2016 Aug 31;9:587-98.
182. Wohlfarth A, Scheidweiler KB, Pang S, Zhu M, Castaneto M, Kronstrand R, **Huestis MA**. Metabolic characterization of AH-7921, a synthetic opioid designer drug: *in vitro* metabolic stability assessment and metabolite identification, evaluation of *in silico* prediction, and *in vivo* confirmation. *Drug Testing Analysis*. 2016 Aug;8(8):779-91.
183. Trigo JM, Soliman A, Staïos G, Quilty L, Fischer B, George TP, Rehm J, Selby P, Barnes AJ, **Huestis MA**, Le Foll B. Sativex associated with behavioral-relapse prevention strategy as treatment for cannabis dependence: a case series. *Journal Addiction Medicine*. 2016 Jul-Aug;10(4):274-9.
184. Karschner EL, Swortwood MJ, Hirvonen J, Goodwin RS, Bosker WM, Ramaekers JG, **Huestis MA**. Extended plasma cannabinoid excretion in chronic frequent cannabis smokers during sustained abstinence and correlation with psychomotor performance *Drug Testing Analysis* 2016 Jul;8(7):682-9.
185. Hartman RL, Brown TL, Milavetz G, Spurgin A, Gorelick DA, Gaffney G, **Huestis MA**. Controlled vaporized cannabis, with and without alcohol: subjective effects and oral fluid-blood cannabinoid relationships. *Drug Testing Analysis*. 2016 Jul;8(7):690-701.
186. Shisler SM, Eiden RD, Molnar D, Schuetze P, Coles CD, **Huestis MA**, Colder CR. Effects of fetal tobacco exposure on focused attention in infancy. *Infant Behavior & Neurodevelopment* 2016;46:1-10.
187. Eriksen GS, Andersen JM, Boix F, Bergh MSS, Vindenes V, Rice KC, **Huestis MA**, Mørland J. Comparison of (+) and (-)-naloxone on the acute psychomotor stimulating effects of heroin, 6-acetylmorphine, and morphine in mice. *Journal Pharmacology Experimental Therapeutics* 2016 Aug;358(2):209-15.

188. Scheidweiler KB, Newmeyer MN, Barnes AJ, **Huestis MA**. Quantification of cannabinoids and their free and glucuronide metabolites in whole blood by disposable pipette extraction and liquid chromatography tandem mass spectrometry. *Journal Chromatography A*. 2016 Jul 1;1453:34-42.
189. Scheidweiler KB, Himes SK, Desrosiers NA, **Huestis MA**. In vitro stability of free and glucuronidated cannabinoids in blood and plasma collected in plastic gray-top sodium fluoride tubes following controlled smoked cannabis. *Forensic Toxicology*. 2016 Jul 1;1453:34-42.
190. Swortwood MJ, Ellefsen KN, Wohlfarth A, Diao XX, Concheiro-Guisan M, Kronstrand R, **Huestis MA**. First metabolic profile of PV8, a novel synthetic cathinone, in human hepatocytes and urine by high-resolution mass spectrometry. *Analytical Bioanalytical Chemistry*. 2016 Jul;408(18):4845-56.
191. Hartman RL, Richman JE, Hayes CE, **Huestis MA**. Drug Recognition Expert (DRE) examination characteristics of cannabis impairment. *Accident Analysis Prevention*. 2016 Jul;92:219-29.
192. Carlier J, Scheidweiler KB, Wohlfarth A, Salmeron BD, Baumann MH, **Huestis MA**. Quantification of AM-2201 and 13 metabolites in human and rat plasma by liquid chromatography-tandem mass spectrometry. *Journal Chromatography A*. 2016 Jun 17;1451:97-106.
193. Ellefsen KE, Concheiro M, Pirard S, Gorelick DA, **Huestis MA**. Pharmacodynamic Effects and Relationships to Plasma and Oral Fluid Pharmacokinetics after Intravenous Cocaine Administration. *Drug Alcohol Dependence*. 2016 Jun 1;163:116-25.
194. Ellefsen KE, Concheiro M, **Huestis MA**. Synthetic cathinone pharmacokinetics, analytical methods, and toxicological findings from human performance and postmortem cases. *Drug Metabolism Reviews*. 2016 May;48(2):237-65.
195. Swortwood MJ, Scheidweiler KB, Barnes AJ, Jansson LM, **Huestis MA**. Simultaneous Quantification of Buprenorphine, Naloxone and Phase I and II Metabolites in Plasma and Breastmilk by Liquid Chromatography-Tandem Mass Spectrometry. *Journal Chromatography A*. 2016 May 13;1446:70-7.
196. Andersson M, Diao XX, Wohlfarth A, Scheidweiler KB, **Huestis MA**. Metabolic profiling of new synthetic cannabinoids AMB and 5F-AMB by human hepatocyte and liver microsome incubations and high-resolution mass spectrometry. *Rapid Communications Mass Spectrometry*. 2016 Apr 30;30(8):1067-78.
197. Trigo JM, Lagzdins D, Rehm J, Selby P, Gamaledin I, Fischer B, Barnes AJ, **Huestis MA**, Le Foll B. Effects of fixed or self-titrated dosages of Sativex on cannabis withdrawal and cravings. *Drug Alcohol Dependence*. 2016 Apr 1;161:298-306.
198. Ellefsen KN, Concheiro M, Pirard S, Gorelick DA, **Huestis MA**. Cocaine and Benzoylecgonine Oral Fluid On-Site Screening and Confirmation. *Drug Testing Analysis*. 2016 Mar;8(3-4):296-303.
199. Ellefsen KN, Concheiro M, Pirard S, Gorelick DA, **Huestis MA**. Oral Fluid Cocaine and Benzoylecgonine Concentrations Following Controlled Intravenous Cocaine Administration. *Forensic Science International*. 2016 Mar;260:95-101.

200. Diao X, Scheidweiler KB, Wohlfarth A, Pang S, Kronstrand R, **Huestis MA**. In vitro and in vivo Human Metabolism of Synthetic Cannabinoids FDU-PB-22 and FUB-PB-22. *AAPS Journal*. 2016 Mar;18(2):455-64.
201. Anizan S, Concheiro M, Lehner KR, Bukhari MO, Suzuki M, Rice KC, Baumann MH, **Huestis MA**. Linear pharmacokinetics of 3,4-methylenedioxypyrovalerone (MDPV) and its metabolites in the rat in the rat: relationship to pharmacodynamic effects. *Addiction Biology*. 2016 Mar;21(2):339-47. Epub 2014 Dec 5.
202. Eze N, Smith LM, LaGasse LL, Derauf C, Newman E, Arria A, **Huestis MA**, Della Grotta SA, Dansereau LM, Neal C, Lester BM. Childhood Behavioral Problems and Early Adversity In School- Aged Children With Prenatal Methamphetamine Exposure: 7.5 Year Follow-Up From The Infant Development, Environment, and Lifestyle (IDEAL) Study. *Journal Pediatrics*. 2016 Mar;170:34-38.
203. Hartman RL, Brown TL, Milavetz G, Spurgin A, Gorelick DA, Gaffney G, **Huestis MA**. Effect of Blood Collection Time on Measured Δ^9 -Tetrahydrocannabinol Concentrations: Implications for Driving Interpretation and Drug Policy. *Clinical Chemistry*. 2016 Feb;62(2):367-77.
204. Stroud LR, Papandonatos GD, Salisbury AL, Phipps MG, **Huestis MA**, Niaura R, Padbury JF, Marsit C, Lester B. Epigenetic regulation of placental NR3C1: Mechanism underlying prenatal programming of infant neurobehavior by maternal smoking. *Child Development*. 2016 Jan-Feb;87(1):49-60.
205. Andås HT, Enger A, Øiestad ÅML, Vindenes V, Christophersen AS, **Huestis MA**, Øiestad EL. Extended detection of amphetamine and methamphetamine in oral fluid. *Therapeutic Drug Monitoring*. 2016 Feb;38(1):114-9. 2015 Sep 22. [Epub ahead of print]
206. Vaupel DB, Schindler CW, Chefer S, Belcher AM, Ahmet I, Scheidweiler KB, **Huestis MA**, Stein EA. Delayed emergence of methamphetamine's enhanced cardiovascular effects in nonhuman primates during protracted methamphetamine abstinence. *Drug Alcohol Dependence*. 2016 Feb 1;159:181-9.
207. Marin SJ, Chang A, Doyle K, Concheiro-Guisan M, **Huestis MA**, Johnson-Davis KL. One hundred false-positive amphetamine specimens analyzed by liquid chromatography time-of-flight mass spectrometry. *Journal Analytical Toxicology*. 2016 Jan-Feb;40(1):37-42. Epub 2015 Sep 4.
208. Ellefsen KN, Wohlfarth A, Swortwood MJ, Diao XX, Concheiro M, **Huestis MA**. 4-methoxy- α -PVP: *In silico* metabolite prediction, assessment of metabolic stability with human liver microsomes and metabolite identification after human hepatocyte incubation with high resolution-mass spectrometry. *Forensic Toxicology*. 2016;34:61-75. Epub 2015 August 5.
209. Diao X, Wohlfarth A, Pang S, Scheidweiler KB, **Huestis MA**. High-resolution mass spectrometry for characterizing the metabolism of synthetic cannabinoids THJ-018 and its 5-fluoro analog THJ-2201 following human hepatocytes incubation. *Clinical Chemistry*. 2016 Jan;62(1):157-69.
210. Swortwood MJ, Carlier J, Ellefsen KN, Wohlfarth A, Diao X, Concheiro-Guisan M, Kronstrand R, **Huestis MA**. In vitro, In vivo and In silico Metabolic Profiling of α -pyrrolidinopentiothiophenone, a Novel Thiophene Stimulant. *Bioanalysis*. 2016 Jan;8(1):65-82.

211. **Huestis MA.** (December 2015). Cannabis and Driving Risk: Legalization Brings Urgent Need for More Evidence on Effects. *Clinical and Forensic Toxicology News* (Quarterly, AACC/CAP), 5–9. Available from <https://www.aacc.org/publications/clinical-and-forensic-toxicology-news>.
212. **Huestis MA**, Smith ML. Cannabinoids Pharmacology, Abuse, and Addiction. In: *Neuroscience in the 21st Century*, 2nd edition Donald W Pfaff, Nora D Volkow (Eds.) 2015. <http://www.springer.com/us/book/9781461419969> (accessed 12/30/15)
213. Battal D, Barnes AJ, Martin TM, Klette KL, **Huestis MA**. Urine mescaline screening with a biochip array immunoassay and quantification by gas chromatography-mass spectrometry. *Therapeutic Drug Monitoring*. 2015 Dec;37(6):805-1.
214. **Huestis MA**. Deterring Driving Under the Influence of Cannabis. *Addiction*. 2015 Nov;110(11):1697-8.
215. Dupont RL, Shea CL, Barthwell AG, Baxter LE, Beaubier A, Bertholf RE, Brown L, Clark KJ, Cone EJ, Costantino A, Croughan J, DePriest AZ, Dubois PJ, Elian A, ElSohly MA, Farah JR, Femino J, Ferguson J, Fortner NA, Galbais-Reig D, George MP, Gitlow S, Gold MS, Goldberger BA, Hambleton S, Heit H, **Huestis MA**, Levy S, Martin DM, Miller M, Moore C, Neshin SF, Parr MS, Reisfield G, Rokosz GJ, Sack D, Selavka CM, Shelton L, Skipper G, Tsung M, Tsung-Megason BT, Wetterau N, Willette RE. Drug Testing: A White Paper of the American Society of Addiction Medicine (ASAM). © Copyright 2013 American Society of Addiction Medicine Inc., Chevy Chase, MD.
216. Barnes AJ, Spinelli E, Young S, Martin TM, Kleete KL, **Huestis MA**. Validation of an ELISA synthetic cannabinoids urine assay. *Therapeutic Drug Monitoring*. 2015 Oct;37(5):661-9.
217. **Huestis MA**. Cannabis-Impaired Driving: A Public Health and Safety Concern. *Clinical Chemistry*. 2015 Oct;61(10):1223-5.
218. Castaneto MS, Wohlfarth A, Pang S, Zhu M, Scheidweiler KB, Kronstrand R, **Huestis MA**. Identification of AB-FUBINACA metabolites in human hepatocytes and urine using high-resolution mass spectrometry. *Forensic Toxicology*. 2015;33:295-310.
219. Hartman RL, Anizan S, Jang M, Brown TL, Yun K, Gorelick DA, Milavetz G, Spurgin A, Gaffney G, **Huestis MA**. Cannabinoid disposition in oral fluid after controlled vaporizer administration with and without alcohol. *Forensic Toxicology*. 2015;33:620-278.
220. Lee D, Bergamaschi MM, Milman G, Barnes AJ, Queiroz RHC, Vandrey R, **Huestis MA**. Plasma cannabinoid pharmacokinetics after controlled smoking and *ad-libitum* cannabis smoking in chronic frequent users. *Journal Analytical Toxicology*. 2015 Oct;39(8):580-7.
221. Smith LM, Diaz S, LaGasse LL, Wouldes T, Derauf C, Newman E, Arria A, **Huestis MA**, Haning W, Strauss A, Della Grotta S, Dansereau LM, Neal C, Lester BM. Developmental and behavioral consequences of prenatal methamphetamine exposure: a review of the Infant Development, Environment, and Lifestyle (IDEAL) Study. *Neurotoxicology Teratology*. 2015 Sep-Oct;51:35-44.
222. Newmeyer MN, Concheiro M, da Costa JL, LoDico C, Gorelick DA, **Huestis MA**. Simultaneous Plasma and Oral Fluid Morphine and Codeine Concentrations after Controlled Administration of Poppy Seeds with Known Opiate Content. *Forensic Toxicology*. 2015;33:235-243.

223. Hartman RL, Brown TL, Milavetz G, Spurgin A, Pierce RS, Gorelick DA, Gaffney G, **Huestis MA**. Cannabis Effects on Driving Lateral Control With and Without Alcohol. *Drug Alcohol Dependence*. 2015 Sep 1;154:25-37.
224. Ellefsen KN, da Costa JL, Concheiro M, Anizan S, Barnes AJ, Pirard S, Gorelick DA, **Huestis MA**. Cocaine and metabolite concentrations in DBS and venous blood after controlled intravenous cocaine administration. *Bioanalysis*. 2015 Sep;7(16):2041-56.
225. Desrosiers NA, Scheidweiler KB, **Huestis MA**. Quantification of Six Cannabinoids and Metabolites in Oral Fluid by Liquid Chromatography-Tandem Mass Spectrometry. *Drug Testing Analysis*. 2015 Aug;7(8):684-94.
226. Himes SK, Tassiopoulos K, Yogev R, **Huestis MA**, for the Pediatric HIV/AIDS Cohort Study (PHACS). Antiretroviral Drugs in Meconium: Detection for Different Gestational Periods of Exposure. *Journal Pediatrics*. 2015 Aug;167(2):305-11.
227. Tanner J-A*, Novalen M*, Jatlow P, **Huestis MA**, Murphy SE, Kaprio J, Kankaanpää A, Galanti L, Stefan C, George TP, Benowitz NL, Lerman C, Tyndale RF. Nicotine Metabolite Ratio (3-hydroxycotinine/cotinine) in Plasma and Urine by Different Analytical Methods and Laboratories: Implications for Clinical Implementation. *Cancer Epidemiology, Biomarkers & Prevention*. 2015 Aug;24(8):1239-46.
228. Ellefsen KN, Concheiro M, Suzuki M, Rice KC, Elmore J, Baumann MH, **Huestis MA**. Quantification of methylone and metabolites in human and rat plasma by liquid chromatography-tandem mass spectrometry. *Forensic Toxicology*. 2015;33:202-212.
229. Himes SK, Wu JW, Jacobson DL, Tassiopoulos K, Hazra R, Kacanek D, Van Dyke RB, Rich KC, Siberry GK, **Huestis MA** for the Pediatric HIV/AIDS Cohort Study (PHACS). Meconium Tenofovir Concentrations and Growth and Bone Outcomes in Prenatally Tenofovir Exposed HIV-Uninfected Children. *Pediatric Infectious Disease Journal*. 2015 Aug;34(8):851-7.
230. Concheiro M, Newmeyer MN, da Costa JL, Flegel R, Gorelick DA, **Huestis MA**. Morphine and Codeine in Oral Fluid after Controlled Poppy Seed Administration. *Drug Testing Analysis* 2015 Jul;7(7):586-91.
231. Hartman RL, Brown TL, Milavetz G, Spurgin A, Gorelick DA, Gaffney G, **Huestis MA**. Controlled cannabis vaporizer administration: blood and plasma cannabinoids with and without alcohol. *Clinical Chemistry*. 2015;61(6):850-869.
232. Lee D, Vandrey R, Mendu DR, Murray JA, Barnes AJ, **Huestis MA**. Oral fluid cannabinoids in chronic frequent cannabis smokers during ad libitum cannabis smoking. *Drug Testing Analysis*. 2015 Jun;7(6):494-501.
233. Spinelli E, Barnes AJ, Young S, Castaneto M, Martin TM, Klette KL, **Huestis MA**. Performance Characteristics of an ELISA Screening Assay for Urinary Synthetic Cannabinoids. *Drug Testing Analysis*. 2015 Jun;7(6):467-74.
234. Castaneto MS, Scheidweiler KB, Gandhi A, Wohlfarth A, Klette KL, Martin TM, **Huestis MA**. Quantitative urine confirmatory testing for synthetic cannabinoids in randomly collected urine specimens. *Drug Testing Analysis*. 2015 Jun;7(6):483-93.

235. Concheiro M, Castaneto M, Kronstrand R, **Huestis MA**. Simultaneous determination of 40 novel psychoactive stimulants in urine by liquid chromatography-high resolution mass spectrometry and library matching. *Journal Chromatography A*. 2015 June 5;1397:32-42.
236. Himes SK, Huo Y, Siberry GK, Williams PL, Rice ML, Sirois PA, Frederick T, Hazra R, **Huestis MA**. Pediatric HIV/AIDS Cohort Study. Meconium Atazanavir Concentrations and Early Language Outcomes in HIV-Exposed, Uninfected Infants with Prenatal Atazanavir Exposure. *Journal Acquired Immune Deficiency Syndromes*. 2015 June 1;69(2):178-186.
237. Castaneto MS, Barnes AJ, Concheiro M, Klette KL, Martin TA, **Huestis MA**. Biochip array technology immunoassay performance and quantitative confirmation of designer piperazines for urine workplace drug testing. *Analytical Bioanalytical Chemistry*. 2015 June;407:4639-4648.
238. Manini AF, Yiannoulos G, Bergamaschi MM, Hernandez S, Olmedo R, Barnes AJ, Winkel G, Sinha R, Jutras-Aswad D, **Huestis MA**, Hurd YL. Safety and pharmacokinetics of oral cannabidiol when administered concomitantly with intravenous fentanyl in humans. *Journal Addiction Medicine*. 2015 May-Jun;9(3):204-210.
239. Newmeyer MN, Concheiro M, da Costa JL, Flegel R, Gorelick DA, **Huestis MA**. Oral fluid with three modes of collection and plasma methamphetamine and amphetamine enantiomer concentrations after controlled intranasal l-methamphetamine administration. *Drug Testing Analysis*. 2015 May;47(2):124-74.
240. Castaneto MS, Wohlfarth A, Desrosiers NA, Hartman RL, Gorelick DA, **Huestis MA**. Synthetic cannabinoids pharmacokinetics and detection methods in biological matrices. *Drug Metabolism Reviews*. 2015 May;47(2):124-74.
241. Desrosiers NA, Ramaekers JG, Chauchard E, Gorelick DA, **Huestis MA**. Smoked Cannabis' Psychomotor and Neurocognitive Effects in Occasional and Frequent Smokers. *Journal Analytical Toxicology*. 2015 May;39(4):251-61.
242. Wohlfarth A, Castaneto M, Zhu M, Pang S, Scheidweiler KB, Kronstrand R, **Huestis MA**. Pentyindole/pentyindazole synthetic cannabinoids and their 5-fluoro analogs produce different primary metabolites: Metabolite profiling for AB-PINACA and 5F-AB-PINACA. *AAPS Journal*. 2015 May;17(3):660-77.
243. Schuetze P, Lessard J, Colder CR, Maiorana N, Eiden RD, **Huestis MA**, Henrie J. Physiological reactivity during object manipulation among cigarette-exposed infants at 9 months of age. *Neurotoxicology Teratology*. 2015 Mar-Apr;48:64-8.
244. Kwako LE, Spagnolo PA, Schwandt ML, Thorsell A, George DT, Momenan R, Rio DE, **Huestis MA**, Anizan SA, 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 Mar 13;40:1053-63.
245. Eiden RD, Molnar DS, Grander DA, Colder CR, Schuetze P, **Huestis MA**. Prenatal Tobacco Exposure and Infant Stress Reactivity: Role of Child Sex and Maternal Behavior. *Developmental Psychobiology*. 2015 Mar;57(2):212-25.
246. Himes SK, Dukes KA, Tripp T, Petersen J, Raffo C, Burd L, Odendaal H, Elliott AJ, Hereld D, Signore C, Willinger M, **Huestis MA**, Prenatal Alcohol in SIDS and Stillbirth (PASS) Network. Clinical Sensitivity and Specificity of Meconium Fatty Acid Ethyl Ester, Ethyl Glucuronide, and

- Ethyl Sulfate for Detecting Maternal Drinking During Pregnancy. *Clinical Chemistry*. 2015 Mar;61(3):523-32.
247. Gandhi AS, Wohlfarth A, Zhu M, Pang S, Castaneto M, Scheidweiler KB, **Huestis MA**. High-resolution mass spectrometric metabolite profiling of a novel synthetic designer drug, N-(adamantan-1-yl)-1-(5-fluoropentyl)-1*H*-indole-3-carboxamide (STS-135) using cryopreserved human hepatocytes and assessment of metabolic stability with human liver microsomes. *Drug Testing Analysis*. 2015 Mar;7(3):187-98.
 248. Wohlfarth A, Scheidweiler KB, Castaneto M, Gandhi A, Desrosiers NA, Klette KL, Martin TM, **Huestis MA**. Urinary prevalence, metabolite detection rates, temporal patterns and evaluation of suitable LC- MS/MS targets to document synthetic cannabinoid intake in US military urine specimens. *Clinical Chemistry Laboratory Medicine*. 2015 Feb 1;53(3):423-34.
 249. Anizan S, Bergamaschi MM, Barnes AJ, Milman G, Desrosiers N, Lee D, Gorelick DA, **Huestis MA**. Impact of oral fluid collection device on cannabinoid stability following smoked cannabis. *Drug Testing Analysis*. 2015 Feb;7(2):114-20.
 250. Scheidweiler KB, Jarvis MJY, **Huestis MA**. Non-targeted SWATH Acquisition for Identifying 47 Synthetic Cannabinoid Metabolites in Human Urine by Liquid Chromatography-High Resolution Tandem Mass Spectrometry. *Analytical Bioanalytical Chemistry*. 2015 Jan;407(3):883-97.
 251. **Huestis MA**, Smith ML. Cannabinoid Pharmacokinetics and Disposition in Alternative Matrices. In *Handbook of Cannabis*, 1st Ed., Roger Pertwee editor, Oxford, Oxford Press 2014:296-318.
 252. **Huestis MA**. Commentary on Drug Addiction or False Conviction? *Clinical Chemistry*. 2014 Dec;60(12):1484-5.
 253. Kuwabara H, Heishman SJ, Brasic JR, Contoreggi C, Cascella N, Mackowick KM, Taylor R, Rousset O, Willis W, **Huestis MA**, Concheiro M, Wand G, Wong DF, Volkow N. Mu Opioid Receptor Binding Correlates with Nicotine Dependence and Reward in Smokers. *PLOS One*. 2014 Dec 10;9(12):e113694.
 254. Castaneto MS, Desrosiers NA, Ellefsen K, Anizan S, Martin TM, Klette KL, **Huestis MA**. Method validation of the Biochip Array Technology for synthetic cannabinoids detection in urine. *Bioanalysis*. 2014 Nov;6(21):2919-30.
 255. Castaneto MS, Gorelick DA, Desrosiers NA, Hartman RL, Pirard S, **Huestis MA**. Synthetic Cannabinoids: Epidemiology, Pharmacodynamics, and Clinical Implications. *Drug Alcohol Dependence*. 2014 Nov 1;144C:12-41.
 256. Hartman RL, **Huestis MA**. Letter to the Editor "Trends in Alcohol and Other Drugs Detected in Fatally Injured Drivers in the United States, 1999-2010. *American Journal Epidemiology*. 2014 Oct 15;180(8):862-3.
 257. Smith ML, Nichols DC, Underwood P, Fuller Z, Moser MA, Flegel R, Gorelick DA, Newmeyer MN, Concheiro M, **Huestis MA**. Methamphetamine and Amphetamine Isomer Concentrations in Human Urine following Controlled Vicks VapoInhaler Administration. *Journal Analytical Toxicology*. 2014 Oct;38(8):524-7.

258. Stroud LR, Papandonatos GD, Rodriguez D, McCallum M, Salisbury AL, Phipps MG, Lester B, **Huestis MA**, Niaura R, Padbury JF, Marsit CJ. Maternal smoking during pregnancy and infant stress response: Test of a prenatal programming hypothesis. *Psychoneuroendocrinology*. 2014 Oct;48:29-40.
259. Ellefsen KN, Concheiro M, Beck O, Gorelick DA, Pirard S, **Huestis MA**. Quantification of cocaine and metabolites in exhaled breath by liquid chromatography high resolution-mass spectrometry following controlled administration of intravenous cocaine. *Analytical Bioanalytical Chemistry*. 2014 Oct;406(25):6213-23.
260. Newmeyer MN, Desrosiers NA, Lee D, Mendu DR, Barnes AJ, Gorelick DA, **Huestis MA**. Cannabinoid disposition in oral fluid after controlled cannabis smoking in frequent and occasional smokers. *Drug Testing Analysis*. 2014 Oct;6(10):1002-10.
261. Abar B, LaGasse LL, Wouldes T, Derauf C, Newman E, Shah R, Smith LM, Arria AM, **Huestis MA**, DellaGrotta, Dansereau LM, Wilcox T, Neal CR, Lester BM. Cross-national comparison of prenatal methamphetamine exposure on infant and early child physical growth: a natural experiment. *Prevention Science*. 2014 Oct;15(5):767-76.
262. Newmeyer MN, Concheiro M, **Huestis MA**. Rapid quantitative chiral amphetamines liquid chromatography-tandem mass spectrometry: method in plasma and oral fluid with a cost-effective chiral derivatizing reagent. *Journal Chromatography A*. 2014 Sep 5;1358:68-74.
263. Himes SK, **Huestis MA**. Letter to the Editor Regarding "Cannabinoids in Exhaled Breath following Controlled Administration of Smoked Cannabis." *Clinical Chemistry*. 2014 Sep;60(9):1236-7.
264. Himes SK, LaGasse LL, Derauf C, Newman E, Smith LM, Arria AM, Della Grotta SA, Dansereau LM, Abar B, Neal CR, Lester BM, **Huestis MA**. Risk of Neurobehavioral Disinhibition in Prenatal Methamphetamine-Exposed Young Children with Positive Hair Toxicology Results. *Therapeutic Drug Monitoring*. 2014 Aug;36(4):535-43.
265. Barnes AJ, Young S, Spinelli E, Martin TM, Klette K, **Huestis MA**. Evaluation of a Homogenous Enzyme Immunoassay for the Detection of Synthetic Cannabinoids in Urine. *Forensic Science International*. 2014 Aug;241:27-34.
266. Smith ML, Nichols DC, Underwood P, Fuller Z, Moser MA, LoDico CL, Gorelick DA, Newmeyer MN, Concheiro M, **Huestis MA**. Morphine and codeine concentrations in human urine following controlled poppy seeds administration of known opiate content. *Forensic Science International*. 2014 Aug;241:87-90.
267. Desrosiers NA, G, Mendu DR, Lee D, Barnes AJ, Gorelick DA, **Huestis MA**. Cannabinoids in oral fluid by on-site immunoassay screening and by GC-MS using two different oral fluid collection devices. *Analytical Bioanalytical Chemistry*. 2014 Jul;406(17):4117-28.
268. Ellefsen KN, Anizan S, Castaneto MS, Desrosiers NA, Martin TM, Klette KL, **Huestis MA**. Validation of the only commercially available immunoassay for synthetic cathinones in urine: Randox Drugs of Abuse V Biochip Array Technology. *Drug Testing Analysis*. 2014 Jul;6(7-8):728-38.

269. Diaz SD, Smith LM, LaGasse LL, Derauf C, Newman E, Hah R, Arria A, **Huestis MA**, Della Grotta S, Dansereau LM, Neal C, Lester BM. Effects of prenatal methamphetamine exposure on behavioral and cognitive findings at 7.5 years from the Infant Development, Environment and Lifestyle (IDEAL) study. *Journal Pediatrics*. 2014 Jun;164(6):1333-1338.
270. Gandhi AS, Zhu M, Pang S, Wohlfarth A, Scheidweiler KB, **Huestis MA**. Metabolite Profiling of RCS-4, a Novel Synthetic Cannabinoid Designer Drug, using Human Hepatocyte metabolism and TOF-MS. 2014 Jun;6(11):1471-1485.
271. Lee D, Schroeder JR, Karschner EL, Goodwin RS, Hirvonen J, Gorelick DA, **Huestis MA**. Cannabis withdrawal in chronic, frequent cannabis smokers during sustained abstinence within a closed residential environment. *American Journal Drug Abuse*. 2014 May-Jun;23(3):234-42.
272. Wohlfarth A, Pang S, Zhu M, Gandhi AS, Scheidweiler KB, **Huestis MA**. Metabolism of RCS-8, a synthetic cannabinoid with cyclohexyl structure, in human hepatocytes by high-resolution mass spectrometry. *Bioanalysis*. 2014 May;6(9):1187-200.
273. Anizan S, Ellefsen K, Concheiro M, Suzuki M, Rice KC, Baumann MH, **Huestis MA**. MDPV and metabolites quantification in human and rat plasma by liquid chromatography-high resolution mass spectrometry. *Analytica Chimica Acta*. 2014 May 27;827:54-63.
274. Barnes AJ, Scheidweiler KB, **Huestis MA**. Quantification of 11-Nor-9-Carboxy- Δ^9 -Tetrahydrocannabinol in Human Oral Fluid by Gas Chromatography-Tandem Mass Spectrometry. *Therapeutic Drug Monitoring*. 2014 Apr;36(2):225-33.
275. Milman G, Bergamaschi M, Lee D, Mendu DR, Barnes AJ, Vandrey R, **Huestis MA**. Plasma cannabinoid concentrations during Dronabinol pharmacotherapy for cannabis dependence. *Therapeutic Drug Monitoring*. 2014 Apr;36(2):218-24.
276. Desrosiers NA, Himes SK, Scheidweiler KB, Concheiro-Guisan M, Gorelick DA, **Huestis MA**. Phase I and II Cannabinoid Disposition in Blood and Plasma of Occasional and Frequent Smokers Following Controlled Smoked Cannabis. *Clinical Chemistry*. 2014 Apr;60(4):631-43.
277. Wouldes TA, LaGasse L, **Huestis MA**, Della Grotta S, Dansereau L, Lester BM. Prenatal methamphetamine exposure and neurodevelopmental outcomes in children from 1 to 3 years. *Neurotoxicology Teratology*. 2014 Mar-Apr;42:77-84.
278. Himes SK, Concheiro M, Scheidweiler KB, **Huestis MA**. 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 Bioanalytical Chemistry*. 2014 Mar;406(7):1945-55.
279. Wohlfarth A, Gandhi AS, Pang S, Zhu M, Scheidweiler KB, **Huestis MA**. Metabolism of Synthetic Cannabinoids PB-22 and its 5-Fluoro Analog, 5F-PB-22, by Human Hepatocyte Incubation and High-Resolution Mass Spectrometry. *Analytical Bioanalytical Chemistry*. 2014 Feb;406(6):1763-80.
280. Desrosiers NA, Lee D, Concheiro-Guisan M, Scheidweiler KB, Gorelick DA, **Huestis MA**. Urinary Cannabinoids Disposition in Occasional and Frequent Smokers: Is THC-glucuronide in Sequential Urine Samples a Marker of Recent Use in Frequent Smokers? *Clinical Chemistry*.

2014 Feb;60(2):361-72.

281. Anizan S, **Huestis MA**. The potential role of oral fluid in anti-doping testing. *Clinical Chemistry*. 2014 Feb;60(2):307-22.
282. Hartman RL, Desrosiers NA, Barnes AJ, Yun K, Scheidweiler KB, Kolbrich-Spargo EA, Gorelick DA, Goodwin RS, **Huestis MA**. 3,4-Methylenedioxymethamphetamine (MDMA) and Metabolites Disposition in Blood and Plasma Following Controlled Oral Administration. *Analytical Bioanalytical Chemistry*. 2014 Jan;406(2):587-99. Epub 2013 Nov 15.
283. Scheidweiler KB, **Huestis MA**. Simultaneous Quantification of 20 Synthetic Cannabinoids and 21 Metabolites, and Semi-quantification of 12 Alkyl Hydroxy Metabolites in Human Urine by Liquid Chromatography-Tandem Mass Spectrometry. *Journal Chromatography A*. 2014 Jan 31;1327:105-17.
284. Concheiro M, Baumann MH, Scheidweiler KB, Rothman RB, Marrone GF, **Huestis MA**. Nonlinear pharmacokinetics of ($\pm$)3,4-methylenedioxymethamphetamine (MDMA) and its pharmacodynamic consequences in the rat. *Drug Metabolism Disposition*. 2014 Jan;42(1):119-25.
285. Desrosiers NA, Scheidweiler KB, Concheiro-Guisan M, Gorelick DA, **Huestis MA**. In vitro stability of free and glucuronidated cannabinoids in urine following controlled smoked cannabis. *Analytical Bioanalytical Chemistry*. 2014 Jan;406(3):785-92.
286. Bergamaschi MM, Queiroz RHC, Chagas MHN, Linares IMP, Arrais KC, Oliveira DCG, Queiroz ME, Nardi AE, **Huestis MA**, Hallak JEC, Zuardi AW, Moreira FA, Crippa JAS. Rimonabant effects on anxiety induced by simulated public speaking in healthy humans: a preliminary report. *Human Psychopharmacology: Clinical Experimental*. 2014 Jan;29(1):94-9.
287. Koola MM, Gorelick DA, McMahon RP, Liu F, **Huestis MA**, Linthicum J, Feldman SM, Warren KR, Wehring HJ, Kelly DL. Psychiatric Symptom Differences in People with Schizophrenia Associated with Substantial Lifetime Substance Use but no current Substance Use Disorder. *Schizophrenia Research*. 2014 Jan;152(1):315-6.
288. Lee D, **Huestis MA**. Current knowledge on cannabinoids in oral fluid. *Drug Testing Analysis*. 2014 Jan-Feb;6(1-2):88-111.
289. **Huestis MA**. Marijuana. In B. Levine, Principles of forensic toxicology, 4th Edition, AACC Press, Washington, D.C. 2013.
290. Himes SK, Scheidweiler KB, Beck O, Gorelick DA, Desrosiers NA, **Huestis MA**. Cannabinoids in exhaled breath following controlled administration of smoked cannabis. *Clinical Chemistry*. 2013 Dec;59(12):1780-9.
291. Castaneto MS, Barnes AJ, Scheidweiler KB, Schaffer M, Rogers KK, Stewart D, **Huestis MA**. Identifying methamphetamine exposure in children. *Therapeutic Drug Monitoring*. 2013 Dec;35(6):823-30.
292. Lee D, Vandrey R, Mendu DR, Anizan S, Milman G, Murray JA, Barnes AJ, **Huestis MA**. Oral fluid cannabinoids in chronic cannabis smokers during oral Δ^9 -tetrahydrocannabinol (THC) therapy and smoked cannabis challenge. *Clinical Chemistry*. 2013 Dec;59(12):1770-9.

293. Concheiro M, Anizan S, Ellefsen K, **Huestis MA**. Simultaneous quantification of 28 synthetic cathinones and metabolites in urine by liquid chromatography-high resolution mass spectrometry. *Analytical Bioanalytical Chemistry*. 2013 Nov;405(29):9437-48.
294. Wohlfarth A, Pang S, Zhu M, Gandhi AS, Scheidweiler KB, Liu H-F, **Huestis MA**. First metabolic profile of XLR-11, a novel synthetic cannabinoid, using human hepatocytes and high-resolution mass spectrometry. *Clinical Chemistry*. 2013 Nov;59(11):1638-48.
295. Gandhi AS, Zhu M, Pang S, Wohlfarth A, Scheidweiler KB, Liu H-F, **Huestis MA**. First characterization of AKB-48 metabolism, a novel synthetic cannabinoid, using human hepatocytes and high resolution mass spectrometry. *AAPS Journal*. 2013 Oct;15(4):1091-8.
296. Anizan S, Milman G, Desrosiers N, Barnes AJ, Gorelick DA, **Huestis, MA**. Oral Fluid Cannabinoid Concentrations Following Controlled Smoked Cannabis in Chronic Frequent and Occasional Smokers. *Analytical Bioanalytical Chemistry*. 2013 Oct;405(26):8451-61.
297. Gorelick DA, Goodwin RS, Schwilke E, Schroeder JR, Schwoppe DM, Kelly DL, Ortemann-Renon C, Bonnet D, **Huestis MA**. Around-the-clock oral THC effects on sleep in male chronic daily cannabis smokers. *American Journal Addictions*. 2013 Sep-Oct;22(5):510-4.
298. Hahn B, Harvey AN, Concheiro-Guisan M, **Huestis MA**, Holcomb HH, Gold JM. A Test of the Cognitive Self-Medication Hypothesis of Tobacco Smoking in Schizophrenia. *Biological Psychiatry*. 2013 Sep 15;74(6):436-43.
299. Abar B, LaGasse LL, DeRauf C, Newman E, Shah R, Smith LM, Arria A, **Huestis MA**, DellaGrotta S, Dansereau LM, Neal C, Lester BM. Examining the relationships between prenatal methamphetamine exposure, early adversity, and child neurobehavioral disinhibition. *Psychology Addictive Behaviors*. 2013 Sep;27(3):662-73.
300. Lee D, Vandrey R, Milman G, Bergamaschi M, Mendu DR, Murray JA, Barnes AJ, **Huestis MA**. Oral fluid/plasma ratios following controlled oral THC and smoked cannabis administration. *Analytical Bioanalytical Chemistry*. 2013 Sep;405(23):7269-79.
301. **Huestis MA**, Cone EJ, Pirnay SO, Umbricht A and Preston KL. Intravenous buprenorphine and norbuprenorphine pharmacokinetics in humans. *Drug Alcohol Dependence*. 2013 Aug 1;132(3):258-62.
302. Muniyappa R, Sable S, Ouwerkerk R, Mari A, Gharib AM, Walter M, Courville A, Hall G, Chen KY, Volkow ND, Kunos G, **Huestis MA**, Skarulis MC. Metabolic effects of chronic cannabis smoking. *Diabetes Care*. 2013 Aug;36(8):2415-22.
303. Concheiro M, Lee D, Lendoiro E, **Huestis MA**. Simultaneous quantification of Δ^9 -tetrahydrocannabinol, 11-nor-9-carboxy-tetrahydrocannabinol, cannabidiol, cannabinol in oral fluid by microflow-liquid chromatography-high resolution mass spectrometry. *Journal Chromatography A*. 2013 Jul 5; 1297:123-30.
304. Scheidweiler KB, Himes SK, Chen X, Liu H-F, **Huestis MA**. 11-Nor-9-Carboxy- Δ^9 -Tetrahydrocannabinol Quantification in Human Oral Fluid by Liquid Chromatography- Tandem Mass Spectrometry. *Analytical Bioanalytical Chemistry*. 2013 Jul;405(18):6019-27.
305. Lee D, Karschner EL, Milman G, Barnes AJ, Goodwin RS, **Huestis MA**. Can oral fluid cannabinoid testing monitor medication compliance and/or cannabis smoking during oral THC

- and oromucosal Sativex® administration? *Drug Alcohol Dependence*. 2013 Jun 1;130(1-3):68-76.
306. Scheidweiler KB, Schwoppe DM, Karschner EL, Desrosiers NA, Gorelick DA, **Huestis MA**. In Vitro Stability of Free and Glucuronidated Cannabinoids in Blood and Plasma Following Controlled Smoked Cannabis. *Clinical Chemistry*. 2013, 59:7;1108-1117.
307. Kirlic N, Newman E, LaGasse LL, Derauf C, Shah R, Smith LM, Arria AM, **Huestis MA**, Haning W, Strauss A, DellaGrotta S, Dansereau LM, Abar B, Neal CR, Lester BM. Cortisol Reactivity in Two-Year-Old Children Prenatally Exposed to Methamphetamine. *Journal Studies Alcohol Drugs*. 2013 May;74(3):447-51.
308. Himes SK, Stroud LR, Scheidweiler KB, Niaura RS, **Huestis MA**. Prenatal tobacco exposure, tobacco biomarkers in meconium and neonatal growth outcomes. *Journal Pediatrics*. 2013 May;162(5):970-5.
309. Eiden RD, Homish GG, Colder CR, Schuetze P, Gray TR, **Huestis MA**. Changes in smoking patterns during pregnancy. *Substance Use Misuse*. 2013 May;48(7):513-22.
310. Bergamaschi MM, Barnes AJ, Queiroz RHC, Hurd Y, **Huestis MA**. Impact of enzyme and alkaline hydrolysis on CBD concentration in urine. *Analytical Bioanalytical Chemistry*. 2013 May;405(14):4679-89.
311. Desrosiers N, Barnes AJ, Hartman RL, Scheidweiler KB, Kolbrich-Spargo EA, Gorelick DA, Goodwin RS, **Huestis MA**. Oral fluid and plasma 3,4-methylenedioxymethamphetamine (MDMA) and metabolite correlation after controlled oral MDMA administration. *Analytical Bioanalytical Chemistry*. 2013 May;405(12):4067-76.
312. Wohlfarth A, Scheidweiler KB, Chen X, Liu HF, **Huestis MA**. Qualitative Confirmation of 9 Synthetic Cannabinoids and 20 Metabolites in Human Urine Using LC-MS/MS and Library Search. *Analytical Chemistry*. 2013 Apr 2;85(7):3730-8.
313. Bergamaschi MM, Karschner EL, Goodwin RS, Scheidweiler KB, Hirvonen J, Queiroz RHC, **Huestis MA**. Impact of prolonged cannabinoid excretion in chronic daily cannabis smokers' blood on "per se" drugged driving laws. *Clinical Chemistry*. 2013 Mar;59(3):519-26.
314. Hartman RL, **Huestis MA**. Cannabis effects on driving skills. *Clinical Chemistry*. 2013 Mar;59(3):478-92.
315. Himes SK, Scheidweiler KB, Tassiopoulos K, Kacanek D, Hazra R, Borek N, Rich KC, and **Huestis MA**. Development and validation of the first liquid chromatography-tandem mass spectrometry assay for simultaneous quantification of multiple antiretrovirals in meconium. *Analytical Chemistry*. 2013 Feb 5;85(3):1896-904.
316. Vandrey R, Stitzer ML, Mintzer MZ, **Huestis MA**, Murray JA, Lee D. The dose effects of short-term dronabinol (oral THC) maintenance in daily cannabis users. *Drug Alcohol Dependence*. 2013 Feb 1;128(1-2):64-70.
317. Warren KR, Buchanan RW, Feldman S, Conley RR, Linthicum J, Ball MP, Liu F, McMahon RP, Gorelick DA, **Huestis MA**, Kelly DL. Effects of the cannabinoid-1 receptor antagonist/inverse agonist rimonabant on satiety signaling in overweight people with schizophrenia: a randomized, double-blind, pilot study. *Journal of Clinical Psychopharmacology* 2013 Feb;33(1):118-20.

318. Kiblawi ZN, Smith LM, LaGasse LL, Derauf C, Newman E, Shah R, Arria A, **Huestis M**, DellaGrotta S, Dansereau LM, Neal C, Lester B. The effect of prenatal methamphetamine exposure on attention as assessed by continuous performance tests: results from the Infant Development, Environment, and Lifestyle study. *Journal Developmental Behavioral Pediatrics*. 2013 Jan;34(1):31-7.
319. Gorelick DA, Goodwin RS, Schwilke E, Schwoppe DM, Darwin WD, Kelly DL, McMahon RP, Liu F, Ortemann-Renon C, Bonnet D, **Huestis MA**. Tolerance to Subjective and Cardiovascular effects of high-dose oral delta-9-tetrahydrocannabinol and plasma cannabinoid concentrations in male daily cannabis smokers. *Journal Analytical Toxicology* 2013 Jan-Feb;37(1):11-6. Epub 2012 Oct 16.
320. Twomey JE, Lagasse LL, Derauf C, Newman E, Shah R, Smith LM, Arria A, **Huestis MA**, DellaGrotta S, Roberts M, Dansereau L, Neal C, Lester B. Prenatal methamphetamine exposure, home environment and primary caregiver risk factors predict child behavior problems at five years. *American Journal Orthopsychiatry*. 2013 Jan;83(1):64-72.
321. Wouldes T, LaGasse LL, Derauf C, Newman E, Shah RZ, Smith LM, Arria AM, **Huestis MA**, Della Grotta S, Wilcox T, Neal CR, Jr., Lester BM. Co-morbidity of substance use disorder and psychopathology in women who use methamphetamine during pregnancy in the US and New Zealand. *Drug Alcohol Dependence*. 2013 Jan 1;127(1-3):101-7. Epub 2012 Jul 11.
322. Wu M, LaGasse LL, Wouldes T, Arria AM, Wilcox T, Derauf C, Newman E, Shah R, Smith LM, Neal C, **Huestis MA**, Della Grotta, Lester B. Predictors of inadequate prenatal care in methamphetamine-using mothers in New Zealand and the United States. *Maternal Child Health Journal*. 2012 Apr;17(3):566-75.
323. Zanotti-Fregonara P, Hirvonen J, Lyoo CH, Zoghbi SS, Rallis-Frutos D, **Huestis MA**, Morse C, Pike VW, Innis RB. Population-based input function modeling for [18F]FMPEP-d2, an inverse agonist radioligand for cannabinoid CB1 receptors: validation in clinical studies. *PLOS One*. 2013;8(4). Epub 2013 Apr 5.
324. Bosker WM, Karschner EL, Lee D, Goodwin RS, Hirvonen J, Innis RB, Theunissen EL, Kuypers KPC, **Huestis MA**, Ramaekers JG. Psychomotor function in chronic cannabis smokers during sustained abstinence. *PLOS One*. 2013;8(1). Epub 2013 Jan 2.
325. Schuetze P, Eiden RD, Colder CR, Gray TR, **Huestis MA**. Physiological regulation at 9 months in infants prenatally exposed to cigarettes. *Infancy*. 2013;18(2):233-255.
326. **Huestis MA**, Cannabis. In: Kwong TC, Magnani BJ, Rosano T, Shaw L, ed. *The Clinical Toxicology Laboratory – Contemporary Practice of Poison Evaluations*. 2nd Edition. Washington, D.C.: AACC Press, (2013), pp119-137.
327. Liles BD, Newman E, Lagasse LL, Derauf C, Shah R, Smith LM, Arria AM, **Huestis MA**, Haning W, Strauss A, DellaGrotta S, Dansereau LM, Neal C, Lester BM. Perceived child behavior problems, parenting stress, and maternal depressive symptoms among prenatal methamphetamine users. *Child Psychiatry Human Development*. 2012 Dec;43(6):943-57. Epub 2012 May 3.
328. Scheidweiler KB, Desrosiers N, **Huestis MA**. Simultaneous quantification of free and glucuronidated cannabinoids in human urine by liquid chromatography-tandem mass spectrometry. *Clinica Chimica Acta*. 2012 Nov 20;413(23-24):1839-47. Epub 2012 Jul 6.

329. Desrosiers NA, Lee D, Schwoppe DM, Milman G, Barnes AJ, Gorelick DA, **Huestis MA**. On-site test for cannabinoids in oral fluid. *Clinical Chemistry*. 2012 Oct;58(10):1418-25. Epub 2012 Aug 21.
330. Karschner EL, Schwoppe DM, Schilke EW, Goodwin RS, Kelly DL, Gorelick DA, **Huestis MA**. Predictive model accuracy in estimating last $\Delta(9)$ -tetrahydrocannabinol (THC) intake from plasma and whole blood cannabinoid concentrations in chronic, daily cannabis smokers administered subchronic oral THC. *Drug Alcohol Dependence*. 2012 Oct 1;125(3):313-9. Epub 2012 Mar 29.
331. Derauf C, Lagasse LL, Smith LM, Newman E, Shah R, Neal CR, Arria AM, **Huestis MA**, DellaGrotta S, Dansereau LM, Lin H, Lester BM. Prenatal methamphetamine exposure and inhibitory control among young school-age children. *Journal Pediatrics*. 2012 Sep;161(3):452-9. Epub 2012 Mar 15.
332. Haymond S, Saenger AK, Free HM, Hicks JM, **Huestis MA**, Horvath R, Fantz CR. Altering the landscape for women in clinical chemistry: perspectives from multigenerational leaders. *Clinical Chemistry*. 2012 Jul;58(7):1082-5. Epub 2012 May 23.
333. Ropero-Miller J, **Huestis MA**, Stout PR. Cocaine Analytes in Human Hair: Evaluation of Concentration Ratios in Different Cocaine Sources, Drug-User Populations, and Surface-Contaminated Specimens. *Journal Analytical Toxicology*. 2012 Jul;36(6):390-8. Epub 2012 May 16.
334. Schwoppe DM, Bosker WM, Ramaekers JG, Gorelick DA, **Huestis MA**. Psychomotor performance, subjective and physiological effects and whole blood d9-tetrahydrocannabinol concentrations in heavy, chronic cannabis smokers following acute smoked cannabis. *Journal Analytical Toxicology*. 2012 Jul;36(6):405-12. Epub 2012 May 15.
335. Lee D, Milman G, Schwoppe DM, Barnes AJ, Gorelick DA, **Huestis MA**. Cannabinoid stability in authentic oral fluid after controlled cannabis smoking. *Clinical Chemistry*. 2012 Jul;58(7):1101-9. Epub 2012 Apr 24.
336. Smith LM, Paz MS, Lagasse LL, Derauf C, Newman E, Shah R, Arria A, **Huestis MA**, Haning W, Strauss A, Della Grotta S, Dansereau LM, Neal C, Lester BM. Maternal depression and prenatal exposure to methamphetamine: neurodevelopmental findings from the infant Development, Environment, And Lifestyle (IDEAL) study. *Depression Anxiety*. 2012 Jun;29(6):515-22. Epub 2012 May 3.
337. Himes SK, Goodwin RS, Rock CM, Jones HE, Johnson RE, Wilkins DG, **Huestis MA**. Methadone and metabolites in hair of methadone-assisted pregnant women and their infants. *Therapeutic Drug Monitoring*. 2012 Jun;34(3):337-344.
338. Hirvonen J, Goodwin RS, Li CT, Terry GE, Zoghbi SS, Morse C, Pike VW, Volkow ND, **Huestis MA***, Innis RB*. Reversible and regionally selective downregulation of brain cannabinoid CB1 receptors in chronic daily cannabis smokers. *Molecular Psychiatry*. 2012 Jun;17(6):642-9. Epub 2011 Jul 12. *(authors contributed equally to manuscript)
339. Scheidweiler KB, Shakleya DM, **Huestis MA**. Simultaneous quantification of nicotine, cotinine, trans-3'-hydroxycotinine, norcotinine and mecamylamine in human urine by liquid chromatography-tandem mass spectrometry. *Clinica Chimica Acta*, 2012 Jun 14;413(11-12):978-84. Epub 2012 Feb 27.

340. Shah R, Diaz SD, Arria A, LaGasse LL, Derauf C, Newman E, Smith LM, **Huestis MA**, Haning W, Strauss A, Della Grotta S, Dansereau LM, Roberts MB, Neal C, Lester BM. Prenatal methamphetamine exposure and short-term maternal and infant medical outcomes. *American Journal Perinatology* 2012 May;29(5):391-400. Epub 2012 Mar 7.
341. Poletti AE, Cone EJ, Gorelick DA, **Huestis MA**. Incorporation of methamphetamine and amphetamine in human hair following controlled oral methamphetamine administration. *Analytica Chimica Acta*. 2012 May 13;726:35-43. Epub 2012 Jan 31.
342. LaGasse LL, Derauf C, Smith LM, Newman E, Shaw R, Neal C, Arria A, **Huestis M**, Della Grotta S, Lin H, Dansereau L, Lester B. Prenatal methamphetamine exposure and childhood behavior problems at 3 and 5 years of age. *Pediatrics*. 2012 Apr;129(4):681-8. Epub 2012 Mar 19.
343. Lee D, Schwoppe DM, Milman G, Barnes AJ, Gorelick DA, **Huestis MA**. Cannabinoid disposition in oral fluid following controlled smoked cannabis. *Clinical Chemistry*. 2012 Apr;58(4):748-56. Epub 2012 Jan 24.
344. Milman G, Schwoppe DM, Gorelick DA, and **Huestis MA**. Cannabinoids and Metabolites in Expecterated Oral Fluid Following Controlled Smoked Cannabis *Clinica Chimica Acta*. 2012 Apr 11;413(7-8):765-70. Epub 2012 Jan 20.
345. Boggs DL, Kelly DL, McMahon RP, Gold JM, Gorelick DA, Linthicum J, Conley RR, Liu F, Waltz J, **Huestis MA**, Buchanan RW. Rimonabant for neurocognition in schizophrenia: a 16-week double blind randomized placebo controlled trial. *Schizophrenia Research*. 2012 Feb;134(2-3):207-10. Epub 2011 Dec 3.
346. Rose EJ, Ross TJ, Salmeron BJ, Lee M, Shakleya DM, **Huestis MA**, Stein EA. Chronic exposure to nicotine is associated with reduced reward-related activity in the striatum but not the midbrain. *Biological Psychiatry*. 2012 Feb 1;71(3):206-13. Epub 2011 Oct 26.
347. Schwaninger AE, Meyer MR, Barnes AJ, Kolbrich-Spargo EA, Gorelick DA, Goodwin RS, **Huestis MA**, Maurer HH. Stereoselective urinary MDMA (ecstasy) and metabolites excretion kinetics following controlled MDMA administration to humans. *Biochemical Pharmacology*. 2012 Jan 1;83(1):131-8. Epub 2011 Sep 29.
348. Zabaneh R, Smith LM, LaGasse LL, Derauf C, Newman E, Shah R, Haning W, Arria A, **Huestis MA**, Strauss A, Della Grotta S, Dansereau LM, Lin H, Lester BM. The effects of prenatal methamphetamine exposure on childhood growth patterns from birth to three years of age. *American Journal Perinatology*. 2012 Mar;29(3):203-10. Epub 2011 Aug 4.
349. Goodwin RS, Gorelick DA, Schwilke E, Schwoppe DM, Darwin WD, Kelly DL, Schroeder JR, Ortemann-Renon C, Bonnet D, **Huestis MA**. CB1-cannabinoid receptor antagonist effects on cortisol in cannabis-dependent men. *American Journal Drug Alcohol Abuse*. 2012 Jan;38(1):114-9. Epub 2011 Jul 29.
350. Donovan DM, Bigelow GE, Brigham GS, Carroll KM, Cohen AJ, Gardin JG, Hamilton JA, **Huestis MA**, Hughes JR, Lindblad R, Marlatt GA, Preston KL, Selzer JA, Somoza EC, Wakim PG, Wells EA. Primary outcome indices in illicit drug dependence treatment research: systematic approach to selection and measurement of drug use endpoints in clinical trials. *Addiction*. 2012 Jan;38(1):114-9. Epub 2011 Jul 29.
351. Schwaninger AE, Meyer MR, Barnes AJ, Kolbrich-Spargo EA, Gorelick DA, Goodwin RS,

- Huestis MA**, Maurer HH. Urinary excretion kinetics of 3,4-methylenedioxymethamphetamine (MDMA, ecstasy) and its phase I and phase II metabolites in humans following controlled MDMA administration. *Clinical Chemistry*. 2011 Dec;57(12):1748-56. Epub 2011 Oct 6.
352. Eiden RD, Leonard KE, Homish GG, Colder CR, Schuetze P, Gray TR, **Huestis MA**. Anger, hostility, and aggression as predictors of persistent smoking during pregnancy. *Journal Studies Alcohol Drugs*. 2011 Nov;72(6):926-32.
353. **Huestis MA**, Mazzoni I, Rabin O. Cannabis in sport: Anti-doping perspective. *Sports Medicine*. 2011 Nov 1;41(11):949-66.
354. Holland MG, Schwoppe DM, MS; Stoppacher R, Gillen SB, **Huestis MA**. Postmortem redistribution of Δ^9 -tetrahydrocannabinol (THC), 11-hydroxy-THC (11-OH-THC), and 11-nor-9-carboxy-THC (THCCOOH). *Forensic Science International*. 2011 Oct 10;212(1-3):247-51. Epub 2011 Jul 20.
355. Concheiro M, Jones HE, Johnson RE, Choo RE, **Huestis MA**. Preliminary buprenorphine sublingual tablet pharmacokinetic data in plasma, oral fluid, and sweat during treatment of opioid-dependent pregnant women. *Therapeutic Drug Monitoring*. 2011 Oct;33(5):619-26.
356. Scheidweiler KB, Marrone GF, Shakleya DM, Singleton EG, Heishman SJ, **Huestis MA**. Oral fluid nicotine markers to assess smoking status and recency of use. *Therapeutic Drug Monitoring*. 2011 Oct;33(5):609-18.
357. Schwoppe DM, Karschner EL, Gorelick DA, **Huestis MA**. Identification of recent cannabis use: whole blood and plasma free and glucuronidated cannabinoid pharmacokinetics following controlled smoked cannabis administration. *Clinical Chemistry*. 2011 Oct;57(10):1406-14. Epub 2011 Aug 11.
358. Gorelick DA, Goodwin RS, Schwilke E, Schwoppe DM, Darwin WD, Kelly DL, McMahon RP, Liu F, Ortemann-Renon C, Bonnet D, **Huestis MA**. Antagonist-elicited cannabis withdrawal in humans. *J Clinical Psychopharmacology* 2011 Oct;31(5):603-612.
359. Barnes AJ, Scheidweiler KB, Kolbrich-Spargo EA, Gorelick DA, Goodwin RS, **Huestis MA**. MDMA and metabolite disposition in expectorated oral fluid after controlled oral MDMA administration. *Therapeutic Drug Monitoring* 2011 Oct;33(5):602-608.
360. Schuetze P, Eiden RD, Colder CR, Gray TR, **Huestis MA**. Physiological regulation in cigarette exposed infants: an examination of potential moderators. *Neurotoxicology Teratology*. 2011 Sep;33(5):567-74. Epub 2011 Jul 21.
361. Schwoppe DM, Scheidweiler KB, **Huestis MA**. Direct quantification of cannabinoids and cannabinoid glucuronides in whole blood by liquid chromatography–tandem mass spectrometry. *Analytical Bioanalytical Chemistry*. 2011 Sep;401(4):1273-83. Epub 2011 Jul 5.
362. Lee D, Milman G, Barnes AJ, Goodwin RS, Hirvonen J, **Huestis MA**. Oral Fluid cannabinoids in chronic, daily cannabis smokers during prolonged, monitored abstinence. *Clinical Chemistry*. 2011 Aug;57(8):1127-36. Epub 2011 Jun 15.
363. De Castro A, Jones HE, Johnson RE, Gray TR, Shakleya DM, **Huestis MA**. Methadone, cocaine, opiates and metabolite disposition in umbilical cord and correlations to maternal methadone dose and neonatal outcomes. *Therapeutic Drug Monitoring*. 2011 Aug;33(4):443-52.
364. Schwaninger AE, Meyer MR, **Huestis MA**, Maurer HH. Development and full validation of LC-

- HRMS and GC-NICI-MS methods for stereoselective determination of methylenedioxy-methamphetamine (MDMA) and its phase I and II metabolites in human urine. *Journal Mass Spectrometry*. 2011 Jul;46(7):603-14.
365. Marrone GF, Shakleya DM, Scheidweiler KB, Singleton EG, **Huestis MA**, Heishman SJ. Relative performance of common biochemical indicators in detecting cigarette smoking. *Addiction*. 2011 Jul;106(7):1325-34. Epub 2011 May 27.
366. **Huestis MA**, Verstraete A, Kwong TC, Morland J, Vincent MJ, de la Torre R. Q & A Oral Fluid Testing: Promises and Pitfalls. *Clinical Chemistry*. 2011 Jun;57(6):805-10. Epub 2011 Feb 24.
367. Derauf C, LaGasse L, Smith L, Shah R, Arria A, **Huestis M**, Newman E, Haning W, Strauss A, Della Grotta S, Dansereau L, Lin H, Lester B. Infant temperament and high risk environment relate to behavior problems and language in toddlers. *Journal Developmental Behavioral Pediatrics*. 2011 Feb-Mar;32(2):125-35.
368. Milman M, Barnes AJ, Schwoppe DM, Schwilke EW, Goodwin RS, Kelly DL, Gorelick DA, **Huestis MA**. Cannabinoids and metabolites in expectorated oral fluid after eight days of controlled around-the clock oral THC administration. *Analytical Bioanalytical Chemistry*. 2011 Aug;401(2):599-607. Epub 2011 Jun 3.
369. Scheidweiler KB, Ladenheim B, Barnes AJ, Cadet JL, **Huestis MA**. ($\pm$)-3,4-Methylenedioxymethamphetamine and metabolite disposition in plasma and striatum of wild-type and multidrug resistance protein 1a knock-out mice. *Journal Analytical Toxicology*. 2011;35(7):470-80.
370. Karschner EL, Darwin WD, Goodwin RS, Wright S, **Huestis MA**. Plasma cannabinoid pharmacokinetics following controlled oral Δ^9 -tetrahydrocannabinol and oromucosal cannabis extract administration. *Clinical Chemistry*. 2011 Jan;57(1):66-75. Epub 2010 Nov 15.
371. Karschner EL, Darwin WD, McMahon RP, Liu F, Wright S, Goodwin RS, **Huestis MA**. Subjective and physiological effects after controlled Sativex and oral THC administration. *Clinical Pharmacology Therapeutics*. 2011 Mar;89(3):400-7. Epub 2011 Feb 2.
372. de Castro A, Jones, HE, Johnson RE, Gray TR, Shakleya DM, **Huestis MA**. Maternal methadone dose, placental methadone concentrations and neonatal outcomes. *Clinical Chemistry*. 2011 Mar;57(3):449-58. Epub 2011 Jan 18.
373. Concheiro M, Shakleya DM, **Huestis MA**. Simultaneous analysis of buprenorphine, methadone, cocaine, opiates, nicotine and metabolites in sweat by liquid chromatography tandem mass spectrometry. *Analytical Bioanalytical Chemistry*. 2011 Apr;400(1):69-78. Epub 2010 Dec 2.
374. Kelly DL, Gorelick DA, Conley RR, Boggs DL, Linthicum J, Liu F, Feldman S, Ball MP, Richardson CM, Gold JM, Wehring HJ, Kearns AM, McMahon RP, **Huestis MA**, Heishman SJ, Warren KR, Buchanan RW. Effects of the cannabinoid-1 receptor antagonist rimonabant on psychiatric symptoms in overweight patients with schizophrenia: a randomized, double-blind pilot study. *Journal Clinical Psychopharmacology*. 2011 Feb;31(1):86-91.
375. Smith LM, Lagasse LL, Derauf C, Newman E, Shah R, Haning W, Arria A, **Huestis M**, Strauss A, Della Grotta S, Dansereau L, Lin H, Lester BM. Motor and cognitive outcomes through three years of age in children exposed to prenatal methamphetamine. *Neurotoxicology Teratology* 2011 33:176-184.

376. Schwilke EW, Gullberg RG, Darwin WD, Chiang N, Cadet JL, Gorelick DA, Pope HG, **Huestis MA**. Differentiating new cannabis use from residual urinary cannabinoid excretion in chronic, daily cannabis users. *Addiction*. 2011 Mar;106(3):499-506. Epub 2010 Dec 6.
377. Gray TR, Dams R, Choo RE, Jones HE, **Huestis MA**. Methadone disposition in oral fluid during pharmacotherapy for opioid-dependence. *Forensic Science International*. 2011 Mar 20;206(1-3):98-102. Epub 2010 Jul 27.
378. Sutherland MT, Ross TJ, Shakleya DM, **Huestis MA**, Stein EA. Chronic smoking, but not acute nicotine administration, modulates neural correlates of working memory. *Psychopharmacology*. 2011 Jan;213(1):29-42. Epub 2010 Sep 23.
379. Delaney-Black V, Chiodo LM, Hannigan JH, Greenwald MK, Janisse J, Patterson G, **Huestis MA**, Partridge RT, Ager J, Sokol RJ. Prenatal and postnatal cocaine exposure predict teen cocaine use. *Neurotoxicology Teratology*. 2011 Jan-Feb;33(1):110-9. Epub 2010 Jul 6.
380. Lagasse LL, Woudes T, Newman E, Smith LM, Shah RZ, Derauf C, **Huestis MA**, Arria AM, Grotta SD, Wilcox T, Lester BM. Prenatal methamphetamine exposure and neonatal neurobehavioral outcome in the USA and New Zealand. *Neurotoxicology Teratology*. 2011 Jan-Feb;33(1):166-75. Epub 2010 Jul 6.
381. Gray TR, Choo RE, Concheiro M, Williams E, Elko A, Jansson LM, Jones HE, **Huestis MA**. Prenatal methadone exposure, meconium biomarker concentrations and neonatal abstinence syndrome. *Addiction*, 2010 Dec:105(12); 2151-2159. Epub 2010 Sep 20.
382. Delaney-Black V, Chiodo LM, Hannigan JH, Greenwald MK, Janisse J, Patterson G, **Huestis MA**, Partridge RT, Sokol RJ. Just say "I don't": Lack of concordance between teen self-report and biologic measures of illicit drug use. *Pediatrics*, 2010 Nov:126(5); 887-893. Epub 2010 Oct 25.
383. Concheiro M, Jones, HE, Johnson RE, Choo RE, Shakleya DM, **Huestis MA**. Umbilical cord monitoring of in utero drug exposure to buprenorphine and correlation with maternal dose and neonatal outcomes. *Journal Analytical Toxicology*, 2010 Oct:34(8); 498-505.
384. Scheidweiler, KB, Kolbrich Spargo EA, Kelly TL, Cone EJ, Barnes AJ, **Huestis MA**. Pharmacokinetics of cocaine and metabolites in human oral fluid and correlation with plasma concentrations following controlled administration. *Therapeutic Drug Monitoring*, 2010 Oct;32(5) 628-37. Epub 2010 Sep 1.
385. Copersino ML, Boyd SJ, Tashkin DP, **Huestis MA**, Heishman SJ, Dermand JC, Simmons MS, Gorelick DA. Sociodemographic characteristics of cannabis smokers and the experience of cannabis withdrawal. *American Journal Drug Alcohol Abuse*, 2010 Nov;36(6):311-9. Epub 2010 Aug 3.
386. Concheiro M, Gray TE, Shakleya DM, **Huestis MA**. High throughput simultaneous analysis of buprenorphine, methadone, cocaine, opiates, nicotine, and metabolites in oral fluid by liquid chromatography tandem mass spectrometry. *Analytical Bioanalytical Chemistry*, 2010 Sep;398(2):915-24. Epub 2010 Jul 23.
387. Gray TR, Eiden RD, Leonard KE, Connors GJ, Shisler S, **Huestis MA**. Identifying prenatal cannabis exposure and effects of concurrent tobacco exposure on neonatal growth. *Clinical Chemistry*, 2010 Sep;56(9):1442-50. Epub 2010 Jul 13.

388. **Huestis MA**. Marijuana. In B. Levine, Principles of Forensic Toxicology, 3rd Edition, AACC Press, Washington, D.C. 2010.
389. Nguyen D, Smith LM, Lagasse LL, Derauf C, Grant P, Shah R, Arria A, **Huestis MA**, Haning W, Strauss A, Della Grotta S, Liu J, Lester BM. Intrauterine growth of infants exposed to prenatal methamphetamine: results from the infant development, environment, and lifestyle study. *Journal Pediatrics*, 2010 Aug;157(2):337-9. Epub 2010 Jun 8.
390. Milman G, Barnes AJ, Schwoppe DM, Schwilke EW, Darwin WD, Goodwin RS, Kelly DL, Gorelick DA, **Huestis MA**. Disposition of cannabinoids in oral fluid following controlled around-the-clock oral THC administration. *Clinical Chemistry*, 2010 Aug;56(8):1261-9. Epub 2010 Jun 8.
391. Gray TR, Barnes AW, **Huestis MA**. Effect of hydrolysis on identifying prenatal cannabis exposure. *Analytical Bioanalytical Chemistry*, 2010 July; 397(6):2335-2347. Epub 2010 Jun 2.
392. Gray TR, Eiden RD, Leonard KE, Connors G, Shisler S, **Huestis MA**. Nicotine and metabolites in meconium as evidence of maternal cigarette smoking during pregnancy and predictors of neonatal outcome. *Nicotine Tobacco Research*, 2010 Jun;12(6):658-64. Epub 2010 Apr 28.
393. Milman G, Schwoppe DM, Schwilke EW, Darwin WD, Kelly DL, Goodwin RS, Gorelick DA, **Huestis MA**. Oral fluid and plasma cannabinoid ratios after around-the-clock controlled oral delta-9-tetrahydrocannabinol administration. *Clinical Chemistry*. 2010 Nov;57(11):1597-606. Epub 2011 Aug 29.
394. Barnes AW, Brunet BR, Choo RE, Mura P, Johnson RE, Jones, HE, **Huestis MA**. Excretion of methadone in sweat of pregnant women throughout gestation after controlled methadone administration. *Therapeutic Drug Monitoring*, 2010 Aug;32(4):497-503.
395. Schwoppe DM, Milman G, **Huestis MA**. Validation of an enzyme immunoassay for detection and semi-quantification of cannabinoids in oral fluid. *Clinical Chemistry*, 2010 Jun;56(6):1007-14. Epub 2010 Apr 1.
396. Karschner EL, Barnes AJ, Lowe RH, Scheidweiler KB, **Huestis MA**. Validation of a two-dimensional gas chromatography mass spectrometry method for the simultaneous quantification of cannabidiol, Δ^9 -Tetrahydrocannabinol (THC), 11-Hydroxy-THC and 11-nor-9-Carboxy-THC in Plasma. *Analytical Bioanalytical Chemistry*, 2010 May;397(2):603-11. Epub 2010 Mar 20.
397. Gray TR, Kelly T, LaGasse LL, Smith LM, Derauf C, Grant P, Shah R, Arria A, Haning W, Della Grotta S, Strauss A, Lester BM, and **Huestis MA**. New meconium biomarkers of prenatal methamphetamine exposure increase identification of affected neonates? *Clinical Chemistry*, 2010 May;56(5):856-60. Epub 2010 Feb 25.
398. Milman G, Barnes AW, Lowe RW, **Huestis MA**. Simultaneous quantification of cannabinoids and metabolites in oral fluid by two-dimensional gas chromatography mass spectrometry. *Journal Chromatography A*, 2010 Feb 26; 1217(9): 1513-1521. Epub 2010 Jan 4.
399. Della Grotta S, LaGasse LL, Arria AM, Derauf C, Grant P, Smith LM, Shah R, **Huestis M**, Liu J, Lester BM. Patterns of methamphetamine use during pregnancy: results from the Infant Development, Environment, and Lifestyle (IDEAL) Study. *Maternal Child Health Journal*, 2010 Jul;14(4):519-27. Epub 2009 Jun 30.

400. Concheiro M, Jones HE, Johnson RE, Choo R, Shakleya DM, **Huestis MA**. Maternal buprenorphine dose, placenta buprenorphine and metabolite concentrations and neonatal outcomes. *Therapeutic Drug Monitoring*, 2010 Apr;32(2):206-15.
401. Smith ML, Shimomura E, Paul BD, Cone EJ, Darwin WD, **Huestis MA**. Urinary excretion of ecgonine and five other cocaine metabolites following controlled oral, intravenous, intranasal and smoked administration of cocaine. *Journal Analytical Toxicology*, 2010; 34(2): 57-63.
402. Concheiro M, Jones H, Johnson RE, Shakleya DM, **Huestis MA**. Confirmatory analysis of buprenorphine, norbuprenorphine, and glucuronide metabolites in plasma by LCMSMS. Application to umbilical cord plasma from buprenorphine-maintained pregnant women. *Journal of Chromatography B Analytical Technology Biomedical Life Sciences*, 2010 Jan 1;878(1):13-20.
403. Shakleya DM, Dams R, Choo RE, Jones H, **Huestis MA**. Simultaneous liquid chromatography-mass spectrometry quantification of urinary opiates, cocaine and metabolites in opiate-dependent pregnant women in methadone maintenance treatment. *Journal Analytical Toxicology*, 2010 Jan-Feb; 34(1):17-25.
404. Brunet BR, Barnes AJ, Choo RE, Mura P, Jones HE, **Huestis MA**. Monitoring pregnant women's illicit opiate and cocaine use with sweat testing. *Therapeutic Drug Monitoring*, 2010 Feb; 32(1):40-49.
405. Scheidweiler KB, Ladenheim B, Cadet JL, **Huestis MA**. Mice lacking multidrug resistance protein 1a show altered dopaminergic responses to methylenedioxymethamphetamine (MDMA) in striatum. *Neurotoxicology Research* 2010 Aug;18(2):200-9. Epub 2009 Oct 23.
406. Westin AW, **Huestis MA**, Aarstad K, Spigset O. Urinary excretion of 11-nor-9-carboxy- Δ^9 -tetrahydrocannabinol in a pregnant woman following heavy chronic cannabis use. *Journal Analytical Toxicology*. 2009 Nov/Dec 33(9):610-614.
407. **Huestis MA**. A new ultraperformance-tandem mass spectrometry oral fluid assay for 29 illicit drugs and medications. *Clinical Chemistry*. 2009 Dec;55(12):2079-81. Epub 2009 Oct 15.
408. Shakleya, DM, **Huestis MA**. Optimization and validation of a liquid chromatography-tandem mass spectrometry method for simultaneous quantification of nicotine, cotinine, *trans*-3'-hydroxycotinine and norcotinine in human oral fluid. *Analytical Bioanalytical Chemistry*, 2009 Dec; 395(7):2349-2357. Epub 2009 Oct 18.
409. Schwilke EW, Schwoppe DM, Karschner EL, Lowe RH, Darwin WD, Kelly DL, Goodwin RS, Gorelick DA, **Huestis MA**. Δ^9 -Tetrahydrocannabinol (THC), 11-hydroxy-THC and 11-nor-9-carboxy-THC plasma pharmacokinetics during and after continuous high-dose oral THC. *Clinical Chemistry*, 2009 Dec; 55(12):2180-2189. Epub 2009 Oct 15.
410. Bosker WM and **Huestis MA**. Oral fluid testing for drugs of abuse. *Clinical Chemistry*, 2009 Nov; 55(11):1910-1931. Epub 2009. Sep 10.
411. Shakleya, DM, **Huestis MA**. Simultaneous and sensitive measurement of nicotine, cotinine, *trans*-3'-hydroxycotinine and norcotinine in human plasma by liquid chromatography-tandem mass spectrometry. *Journal of Chromatography B Analytical Technology Biomedical Life Sciences* 2009 Nov 1; 877(29): 3537-3542. Epub 2008 Aug 28.
412. de Castro A, Concheiro M, Shakleya DM, **Huestis MA**. Development and validation of a liquid chromatography mass spectrometry assay for the simultaneous quantification of methadone,

- cocaine, opiates and metabolites in human umbilical cord. *Journal of Chromatography B. Analytical Technology Biomedical Life Sciences*, 2009 Oct 1: 877(27):3065-3071. Epub 2009 Jul 24.
413. Karschner EL, Schwilke EW, Lowe RH, Darwin WD, Herning RI, Cadet JL, **Huestis MA**. Implications of plasma Δ^9 -tetrahydrocannabinol (THC), 11-hydroxy-THC and 11-nor-9-carboxy-THC concentrations in chronic cannabis smokers. *Journal Analytical Toxicology*, 2009 Oct; 33(8): 469-77.
 414. Baumann MH, Zolkowska D, Kim I, Scheidweiler KB, Rothman RB, **Huestis, MA**. Effects of Dose and Route of Administration on Pharmacokinetics of ($\pm$)-3,4-Methylenedioxymethamphetamine (MDMA) in the Rat. *Drug Metabolism Disposition*, 2009 Nov; 37(11): 2163-2170. Epub 2009 Aug 13.
 415. de Castro A, Concheiro M, Shakleya DM, **Huestis MA**. Simultaneous Quantification of Methadone, Cocaine, Opiates, and Metabolites in Human Placenta by Liquid Chromatography Mass Spectrometry. *Journal Analytical Toxicology*, 2009 Jun; 33(5): 243-252.
 416. Abraham TT, Barnes AJ, Lowe RH, Kolbrich-Spargo EA, Milman, G, Pirnay SO, Gorelick DA, Goodwin RS, **Huestis MA**. Urinary MDMA, MDA, HMMA and HMA excretion following controlled MDMA administration to humans. *Journal Analytical Toxicology*, 2009 Oct; 33(8) 439-446.
 417. Gray TR, Lagasse LL, Smith LM, Derauf C, Grant P, Shah R, Arria AM, Della Grotta SA, Strauss A, Haning WF, Lester BM, **Huestis MA**. Identification of prenatal amphetamines exposure by maternal interview and meconium toxicology in the infant development, environment and lifestyle (IDEAL) study. *Therapeutic Drug Monitoring*, 2009;31(6):769-775
 418. **Huestis MA**. Human Cannabinoid Pharmacokinetics. In: Didier M. Lambert, ed. Cannabinoids in Nature and Medicine, VHCA, Verlag Helvetica Chimica Acta, Zurich, Switzerland and WILEY-VCH, Verlag GmbH and Co. KGaA, Weinheim, Federal Republic of Germany, 2009, pp. 187–221.
 419. Lowe RH, Abraham TT, Darwin WD, Herning R, Cadet JL, **Huestis, MA**. Extended urinary delta 9 tetrahydrocannabinol excretion in chronic cannabis users precludes use as a biomarker of new drug exposure. *Drug Alcohol Dependence*, 2009 May; 105:24-32.
 420. Karschner EL, Schwilke EW, Lowe RH, Darwin WD, Pope HG Jr., Herning R, Cadet JL, **Huestis MA**. Do delta 9-tetrahydrocannabinol concentrations indicate use in chronic cannabis users? *Addiction*, 2009;104, 2041-2048.
 421. Smith ML, Barnes AJ, **Huestis MA**. Identifying new cannabis use with urine creatinine-normalized THCCOOH concentrations and time intervals between specimen collections. *Journal Analytical Toxicology*, 2009 May; 33(4):185-9.
 422. Mueller M, Kolbrich E, Peters F, Maurer H, McCann U, **Huestis MA**, Ricaurte GA. Direct comparison of ($\pm$) 3, 4-Methylenedioxymethamphetamine (MDMA, “Ecstasy”) disposition and metabolism in humans and squirrel monkeys. *Therapeutic Drug Monitoring*, 2009 June; 31(3):367-73.
 423. Concheiro M, Shakleya DM, **Huestis MA**. Simultaneous quantification of buprenorphine, norbuprenorphine, buprenorphine-glucuronide and norbuprenorphine-glucuronide in human

- umbilical cord by liquid chromatography tandem mass spectrometry. *Forensic Science International*, 2009 July 1; 188(1-3):144-51. Epub 2009 Apr 29.
424. Schwilke EW, Karschner EL, Lowe RH, Gordon AM, Cadet JL, Herning RI, **Huestis MA**. Intra- and inter-subject whole blood/plasma cannabinoid ratios determined by 2-dimensional, electron impact-gas chromatography mass spectrometry with cryofocusing. *Clinical Chemistry*, 2009 June; 55(6):1188-95. Epub 2009 Mar 5.
 425. Paz MS, Smith LM, LaGasse LL, Derauf C, Grant P, Shah R, Arria A, **Huestis M**, Haning W, Strauss A, Grotta SD, Liu J, Lester BM. Maternal depression and neurobehavior in newborns prenatally exposed to methamphetamine. *Neurotoxicology Teratology*, 2009 May-June;31(3):177-82. Epub 2008 Dec 3.
 426. Shakleya DM, **Huestis MA**. Simultaneous quantification of nicotine, opioids, cocaine, and metabolites in human fetal postmortem brain by liquid chromatography tandem mass spectrometry. *Analytical Bioanalytical Chemistry*, 2009 Apr; 393(8): 1957-65. Epub 2009 Feb. 21.
 427. Kacinko SL, Jones HE, Johnson RE, Choo RE, Concheiro M, **Huestis MA**. Urinary excretion of buprenorphine, norbuprenorphine, buprenorphine-glucuronide, and norbuprenorphine-glucuronide in pregnant women receiving buprenorphine maintenance treatment. *Clinical Chemistry*, 2009 June; 55(6): 1177-87. Epub 2009 March 26.
 428. Concheiro-Guisan M, Shakleya DM, **Huestis MA**. Simultaneous quantification of buprenorphine, norbuprenorphine, buprenorphine-glucuronide and norbuprenorphine-glucuronide in human placenta by liquid chromatography tandem mass spectrometry. *Analytical Bioanalytical Chemistry*, 2009 May; 394(2):513-22. Epub 2009 Feb 27.
 429. Gray TR, Shakleya DM, **Huestis MA**. A liquid chromatography tandem mass spectrometry method for the simultaneous quantification of twenty drugs of abuse and metabolites in human meconium, *Analytical Bioanalytical Chemistry*, 2009. Apr; 393(8):1977-90. Epub 2009 Feb 26.
 430. Gray TR, Kelly T, LaGasse LL, Smith LM, Derauf C, Haning W, Grant P, Shah, R, Arria A, Strauss A, Lester BM, **Huestis MA**. Novel biomarkers of prenatal methamphetamine exposure in human meconium. *Therapeutic Drug Monitoring*, 2009 Feb; 31(1):70-5.
 431. Mueller M, Kolbrich-Spargo EA, Peters FT, **Huestis MA**, Ricaurte GA, Maurer HH. Hydrolysis of 3,4-methylenedioxymethamphetamine (MDMA) metabolite conjugates in human, squirrel monkey, and rat plasma. *Analytical Bioanalytical Chemistry*, 2009;393(6-7):1607-17. Epub 2009 Jan 30.
 432. Barnes AJ, De Martinis BS, Gorelick DA, Goodwin RS, Kolbrich EA, **Huestis MA**. Disposition of MDMA and metabolites in human sweat following controlled MDMA administration. *Clinical Chemistry*, 2009; 55 (3):454-462.
 433. Mueller M, Peters FT, **Huestis MA**, Ricaurte GA, Maurer HH. Simultaneous liquid chromatographic-electrospray ionization mass spectrometric quantification of 3,4-methylenedioxymethamphetamine (MDMA, ecstasy) and its metabolites 3,4-dihydroxymethamphetamine, 4-hydroxy-3-methoxymethamphetamine and 3,4-methylenedioxyamphetamine in squirrel monkey and human plasma after acidic conjugate cleavage. *Forensic Science International*, 2009; 184:64-68. Epub 2009 Jan 7.
 434. Hahn B, Ross TJ, Wolkenberg FA, Shakleya DM, **Huestis MA**, Stein EA. Performance effects of

nicotine during selective attention, divided attention and simple stimulus detection: an fMRI study. *Cerebral Cortex*, 2009 Sep; 19(9): 1990-2000. Epub 2008 Dec 10.

435. **Huestis MA**, Smith ML. Pharmacokinetics and pharmacodynamics of drugs abused in driving In: *Drugs, Driving and Traffic Safety*. Verster JC, Pandi-Perumal SR, Ramaekers JG, de Gier JJ, eds., Birkhauser, Verlag, Switzerland, 2009, pp. 151-185.
436. Goodwin RS, Darwin WD, Chiang CN, Shih M, Li S-H, **Huestis MA**. Urinary elimination of 11-nor-9-carboxy-delta9-tetrahydrocannabinol in cannabis users during continuously monitored abstinence. *Journal Analytical Toxicology* 2008;32:562– 6.
437. **Huestis MA**. Cannabinoids. In: Roper-Miller JD, Goldberger BA, Eds. Handbook of workplace drug testing, 2nd Ed. Washington, DC: AACC Press, 2009:355–82
438. Gray TR, Magri R, Shakleya D, **Huestis MA**. Meconium nicotine and metabolites by LC-MS/MS: Differentiation of passive and non-exposure, and correlation with neonatal outcome measures. *Clinical Chemistry*, 2008 Dec; 54(12):2018-27.
439. Scheidweiler KB, Barnes AJ, **Huestis MA**. A validated gas chromatographic-electron impact ionization mass spectrometric method for methamphetamine, methylenedioxymethamphetamine (MDMA), and metabolites in mouse plasma and brain. *Journal Chromatography B*. 2008 Dec 15;876(2):266-76. Epub 2008 Nov 7.
440. Balíková MA, **Huestis MA**. (2008). Forensic aspects of pharmacokinetics and pharmacodynamics of cannabinoids: Assessment of traffic safety. *Adiktologie*, (8)3, 218-235.
441. Lee CT, Chen L, Hayashi T, Tsai SY, Sanchez JF, Errico SL, Amable R, Su TP, Lowe RH, **Huestis MA**, Shen J, Becker KG, Geller H, Freed WJ. A mechanism for the inhibition of neural progenitor cell proliferation by cocaine. *PLOS Medicine*, 2008 Jun 10;5(6): e117.
442. Kacinko SL, Concheiro M, Shakleya DM, **Huestis MA**. Development and validation of a liquid chromatography-tandem mass spectrometry assay for the simultaneous quantification of buprenorphine, norbuprenorphine, and metabolites in human urine. *Analytical Bioanalytical Chemistry*, 2008 Nov; 392(5):903-11.
443. Kacinko SL, Jones HE, Johnson RE, Choo RE, **Huestis MA**. Correlation of maternal buprenorphine dose, buprenorphine and metabolite concentrations in meconium with neonatal outcomes. *Clinical Pharmacology Therapeutics*, 2008 Nov; 84(5):604-12.
444. Kanneganti P, **Huestis MA**, Kolbrich EA, Goodwin RS, Ziegelstein RC, Gorelick DA. Signal-averaged electrocardiogram in physically healthy, chronic 3,4-methylenedioxymethamphetamine (MDMA) users. *American Journal Drug Alcohol Abuse*, 2008; 34(6):712-20.
445. Brunet BR, Barnes AJ, Scheidweiler KB, Mura P, **Huestis MA**. Development and validation of a solid-phase extraction gas chromatography-mass spectrometry method for the simultaneous quantification of methadone, heroin and cocaine and metabolites in sweat. *Analytical Bioanalytical Chemistry*, 2008 Sep; 392(1-2):115-27.
446. Kelly T, Gray TR, **Huestis MA**. Development and validation of a liquid chromatography-atmospheric pressure chemical ionization-tandem mass spectrometry method for simultaneous analysis of ten amphetamine-, methamphetamine- and 3,4-methylenedioxymethamphetamine-related (MDMA) analytes in human meconium. *Journal Chromatography B*, 2008 May 15; 867(2): 194-204.

447. Walsh JM, Verstraete A, **Huestis MA**, Mørland J. Guidelines for research on drugged driving. *Addiction*, 2008 Aug; 103(8): 1258-68.
448. Elkashef A, Vocci F, **Huestis M**, Haney M, Budney A, Gruber A, E-Gubaly, N. Marijuana neurobiology and treatment. *Substance Abuse*, 2008; 29(3):17-29.
449. Gray TR, Shakleya DM, **Huestis MA**. Quantification of nicotine, cotinine, trans-3'-hydroxycotinine, nornicotine and norcotinine in human meconium by liquid chromatography tandem mass spectrometry. *Journal Chromatography B Analytical Technology Biomedical Life Sciences* 2008, 863: 107-114.
450. Kolbrich EA, Goodwin RS, Gorelick DA, Hayes RJ, Stein EA, **Huestis MA**. Plasma pharmacokinetics of MDMA following controlled oral administration to young adults. *Therapeutic Drug Monitoring*, 2008 June; 30(3):320-332.
451. Smith LM, LaGasse LL, Derauf C, Grant P, Shah, R, Arria A, **Huestis M**, Haning W, Strauss A, Della Grotta S, Fallone M, Liu J, Lester BM. Prenatal methamphetamine use and neonatal neurobehavioral outcome. *Neurotoxicology Teratology*, 2008, 30:20-28.
452. Lehrmann E, Afanador ZR, Deep-Soboslay A, Gallegos G, Darwin WD, Lowe RH, Barnes AJ, **Huestis MA**, Cadet JL, Herman MM, Hyde TM, Kleinman JE, Freed WJ. Postmortem diagnosis and toxicological validation of illicit substance abuse. *Addiction Biology*, 2008 Mar; 13(1):105-17. Epub 2008 Jan 14.
453. Jansson LM, Choo RE, Velez M, Harrow C, Schroeder J, Shakleya DM, **Huestis MA**. Methadone maintenance and breastfeeding in the neonatal period-In Reply. *Pediatrics*, 2008 April;121(4):869-870.
454. Jansson LM, Choo RE, Velez M, Harrow C, Schroeder J, Shakleya DM, **Huestis MA**. Methadone maintenance and breastfeeding in the neonatal period. *Pediatrics*, 2008 Jan; 121(1):106-14.
455. Kolbrich EA, Goodwin RS, Gorelick DA, Hayes RJ, Stein EA, **Huestis MA**. Physiological and subjective responses to controlled oral MDMA administration. *Journal Clinical Psychopharmacology*, 2008, 28:432-440.
456. Kolbrich EA, Lowe RH, **Huestis MA**. Two-dimensional gas chromatography/electron impact-mass spectrometry with cryofocusing for the sensitive, specific and simultaneous quantification of 3,4-methylenedioxymethamphetamine (MDMA), 3,4-methylenedioxyamphetamine (MDA), 4-hydroxy-3-methoxymethamphetamine (HMMA), 4-hydroxy-3-methoxyamphetamine (HMA), and 3,4-methylenedioxyethylamphetamine (MDEA) in human plasma. *Clinical Chemistry*, 2008, 54:379-387.
457. **Huestis MA**, Scheidweiler KB, Saito T, Fortner N, Abraham T, Gustafson RA, Smith ML. Excretion of delta-9-tetrahydrocannabinol in sweat. *Forensic Science International*, 2008, 174:173-177.
458. Kacinko SL, Shakleya DM, **Huestis MA**. Validation and application of a method for the determination of buprenorphine, norbuprenorphine, and their glucuronide conjugates in human meconium. *Analytical Chemistry*, 2008, 80(1):246-252.

459. Barnes AJ, Smith ML, Kacinko SL, Schwilke EW, Cone EJ, Moolchan ET, **Huestis MA**. Excretion of methamphetamine and amphetamine in human sweat following controlled oral methamphetamine administration. *Clinical Chemistry*, 2008, 54:172-180.
460. Jansson LM, Choo R, Velez ML, Lowe R, **Huestis MA**. Methadone maintenance and long-term lactation. *Breastfeeding Medicine*. 2008 Mar; 3(1):34-7.
461. Goodwin RS, Wilkins DG, Averin O, Choo RE, Schroeder JR, Jasinski DR, Johnson RE, Jones HE, **Huestis MA**. Buprenorphine and norbuprenorphine in hair of pregnant women and their infants after controlled buprenorphine administration. *Clinical Chemistry*, 2007, 53(12): 2136-2143.
462. Abraham T, Lowe RH, Pirnay SO, Darwin WD, **Huestis MA**. Simultaneous GC/EI-MS determination of $\Delta 9$ -tetrahydrocannabinol, 11-hydroxy- $\Delta 9$ -tetrahydrocannabinol, and 11-nor-9-carboxy- $\Delta 9$ -tetrahydrocannabinol in human urine following tandem enzyme – alkaline hydrolysis. *Journal Analytical Toxicology*, 2007, 31:477-485.
463. **Huestis MA**, Darwin WD, Shimomura E, Lalani SA, Trinidad DV, Jenkins AJ, Cone EJ, Jacobs AJ, Smith ML, Paul BD. Cocaine and metabolites urinary excretion after controlled smoked administration. *Journal Analytical Toxicology*, 2007, 31:462-468.
464. **Huestis MA**, Boyd SJ, Heishman SJ, Preston KL, Bonnet D, Le Fur, G, Gorelick DA. Single and multiple doses of rimonabant antagonize acute effects of smoked cannabis in male cannabis users. *Psychopharmacology*, 2007, 194(4):505-515.
465. **Huestis MA**. Human cannabinoid pharmacokinetics. *Chemistry & Biodiversity*, 2007, 4:1770-1804.
466. Lowe RH, Karschner EL, Schwilke EW, Barnes AJ, **Huestis MA**. Simultaneous quantification of D9-tetrahydrocannabinol (THC), 11-hydroxy-D9-tetrahydrocannabinol (11-OH-THC), and 11-nor-D9-tetrahydrocannabinol-9-carboxylic acid (THCCOOH) in human plasma using two-dimensional GC, cryofocusing, and EI-MS. *Journal Chromatography A*, 2007, 1163:318-327.
467. Shakleya DM, Jansson LM, **Huestis MA**. Validation of a LC-APCI-MS/MS method for the quantification of methadone, 2-ethylidene-1,5-dimethyl-3,3-diphenylpyrrolidine (EDDP) and 2-ethyl-5-methyl-3,3-diphenylpyrrolidine (EMDP) in infant plasma following protein precipitation. *Journal Chromatography B Analytical Technology Biomedical Life Sciences* 2007, 856:267-272.
468. Choo RE, Jansson LM, Scheidweiler K, **Huestis MA**. A validated liquid chromatography atmospheric pressure chemical ionization tandem mass spectrometric method for the quantification of methadone and 2-ethylidene-1,5-dimethyl-3,3-diphenylpyrrolidine (EDDP) and 2-ethyl-5-methyl-3,3-diphenylpyrrolidine (EMDP) in human breast milk. *Journal Analytical Toxicology*, 2007, 31:265-269.
469. Gray TR, **Huestis MA**. Bioanalytical procedures for monitoring in utero drug exposure. *Analytical Bioanalytical Chemistry*, 2007, 388:1455-1465.
470. Smith ML, Vorce SP, Holler JM, Shimomura E, Magluilo J, Jacobs AJ, **Huestis MA**. Modern instrumental methods in forensic toxicology. *Journal Analytical Toxicology*, 2007, 31(5):237-253, 8A-9A.
471. Cone EJ, **Huestis MA**. Interpretation of oral fluid tests for drugs of abuse. *Annals of the New York Academy of Sciences*, 2007, 1098:51-103.

472. Hahn B, Ross TJ, Yang Y, Kim I, **Huestis MA**, Stein EA. Nicotine enhances visuospatial attention by deactivating areas of the resting brain default network. *Journal Neuroscience*, 2007, 27:3477-3489.
473. Derauf C, LaGasse L, Grant P, Shah R, Smith LM, Arria A, **Huestis M**, Haning W, Strauss A, Della Grotta S, Liu J, Lester B. Demographic and psychosocial characteristics of mothers using methamphetamine during pregnancy: preliminary results of the infant development, environment and lifestyles study (IDEAL). *American Journal Drug Alcohol Abuse*, 2007, 33(2):281-289.
474. **Huestis MA**, Gustafson RA, Moolchan ET, Barnes A, Bourland JA, Sweeney SA, Hayes EF, Carpenter PM, Smith ML. Cannabinoid concentrations in hair from documented cannabis users. *Forensic Science International*, 2007 Jul 4; 169(2-3):129-136. Epub 2006 Sep 11.
475. De Martinis BS, Barnes AJ, Scheidweiler KL, **Huestis MA**. Development and validation of a disk solid phase extraction and gas chromatography-mass spectrometry method for MDMA, MDA, HMMA, HMA, MDEA, methamphetamine and amphetamine in sweat. *Journal Chromatography B*, 2007 Jun 1; 852(1-2):450-458. Epub 2007 Feb 15.
476. Jansson LM, Choo RE, Velez M, Harrow C, Schroeder J, **Huestis MA**. Concentrations of methadone in breast milk and plasma in the immediate perinatal period. *Journal Human Lactation*, 2007 May; 23(2):184-190.
477. **Huestis MA**, Cone EJ. Methamphetamine disposition in oral fluid, plasma, and urine. *Annals New York Academy of Sciences*, 2007 Mar, 1098:104-121.
478. Dams R, Choo RE, Lambert WE, Jones H, **Huestis MA**. Oral fluid as an alternative matrix to monitor opiate and cocaine use in substance-abuse treatment patients. *Drugs Alcohol Dependence*, 2007 Mar 16; 87(2-3):258-267.
479. Frances, RJ, Umbricht A, **Huestis MA**, Cone EJ. Effects of high-dose intravenous buprenorphine in experienced opioid abusers. *Yearbook of Psychiatry and Applied Mental Health*, Volume 2006, pp. 99-100.
480. **Huestis MA**, Smith ML. Modern analytical technologies for the detection of drug abuse and doping. Review Article. *Drug Discovery Today: Technologies* 3(1): 49-57, 2006.
481. Lehrmann E, Colantuoni C, Deep-Soboslay A, Becker KG, Lowe R, **Huestis MA**, Hyde TM, Kleinman JE, Freed WJ. Transcriptional changes common to human cocaine, cannabis and phencyclidine abuse. *PLoS ONE*, 2006 Dec. 27;1:e114.
482. Cone EJ, Sampson-Cone A, **Huestis MA**. Interpreting alternative matrix test results. In: Steven B. Karch, Ed. Drug Abuse Handbook, CRC Press, Boca Raton, Florida, 2006, pp. 814-828.
483. Caplan YH, **Huestis MA**. Drugs in the workplace. In: Steven B. Karch, ed. Drug abuse handbook, CRC Press, Boca Raton, Florida, 2006, pp. 731-735.
484. **Huestis MA**, Smith ML. Human cannabinoid pharmacokinetics and interpretation of cannabinoid concentrations in biological fluids and tissues. In: Mahmoud A. ElSohly, ed. Marijuana and the cannabinoids, Humana Press, Totowa, New Jersey, 2006, pp. 205-236.

485. Pirnay SO, Abraham TT, **Huestis MA**. Sensitive gas chromatography-mass spectrometry method for simultaneous measurement of MDEA, MDMA, and metabolites HMA, MDA, and HMMA in human urine. *Clinical Chemistry*, 2006 Sep; 52(9):1728-1734. Epub 2006 Jul 20.
486. Pirnay SO, Abraham TT, Lowe RH, **Huestis MA**. Selection and optimization of hydrolysis conditions for the quantification of urinary metabolites of MDMA. *Journal Analytical Toxicology*, 2006 Oct; 30(8): 563-569.
487. Smith LM, LaGasse LL, Derauf C, Grant P, Shah R, Arria A, **Huestis M**, Haning W, Strauss A, Della Grotta S, Liu J, Lester BM. The infant development, environment, and lifestyle study: Effects of prenatal methamphetamine exposure, polydrug exposure and poverty on intrauterine growth. *Pediatrics*, 2006, 118: 1149-1156.
488. Kim I, **Huestis MA**. A validated method for the determination of nicotine, cotinine, *trans*-3'-hydroxycotinine, and norcotinine in human plasma using solid-phase extraction and liquid chromatography-atmospheric pressure chemical ionization-mass spectrometry. *Journal Mass Spectrometry*, 2006 Jun; 41(6): 815-821.
489. Arria AM, Derauf C, LaGasse LL, Grant P, Shah R, Smith L, Haning W, **Huestis M**, Strauss A, Della Grotta S, Liu J, Lester B. Methamphetamine and other substance use during pregnancy: Preliminary estimates from the infant development, environment and lifestyle (IDEAL) study. *Maternal Child Health Journal*, 2006 May, 10(3): 293-302.
490. Kolbrich EA, Barnes AJ, Gorelick DA, Boyd SJ, Cone EJ, **Huestis MA**. Major and minor metabolites of cocaine in human plasma following controlled subcutaneous cocaine administration. *Journal Analytical Toxicology*, 2006 Oct; 30(8): 501-510.
491. Goodwin RS, Gustafson RA, Barnes A, Nebro W, Moolchan ET, **Huestis MA**. Delta-9-tetrahydrocannabinol, 11-hydroxy-delta-9-tetrahydrocannabinol and 11-nor-9-carboxy-delta-9-tetrahydrocannabinol in human plasma following controlled oral administration of cannabinoids. *Therapeutic Drug Monitoring*, 2006 Aug; 28(4): 545-551.
492. **Huestis MA**, ElSohly M, Nebro W, Barnes A, Gustafson RA, Smith ML. Estimating time of last oral ingestion of cannabis from plasma concentrations of THC and THCCOOH concentrations. *Therapeutic Drug Monitoring*, 2006 Aug; 28(4):540-544.
493. Schwilke EW, Barnes AJ, Kacinko SL, Cone EJ, Moolchan ET, **Huestis MA**. Opioid disposition in human sweat after controlled oral codeine administration. *Clinical Chemistry*, 2006 Aug; 52(8):1539-45. Epub 2006 Jun 1.
494. Copersino ML, Boyd SJ, Tashkin DP, **Huestis MA**, Heishman SJ, Derauf JC, Simmons MS, Gorelick DA. Quitting among non-treatment-seeking marijuana users: reasons and changes in other substance use. *American Journal Addictions*, 2006 Jul-Aug; 15(4):297-302.
495. Scheidweiler KB, **Huestis MA**. A validated gas chromatographic-electron impact ionization mass spectrometric method for methylenedioxymethamphetamine (MDMA), methamphetamine and metabolites in oral fluid. *Journal Chromatography B*, 2006 May 1; 835(1-2): 90-99. Epub 2006 Mar 31.
496. Yang W, Barnes AJ, Ripple MG, Fowler DR, Cone EJ, Moolchan ET, Chung H, **Huestis MA**. Simultaneous quantification of methamphetamine, cocaine, codeine, and metabolites in skin by positive chemical ionization gas chromatography-mass spectrometry. *Journal Chromatography B*, 2006 Apr 3; 833(2):210-218. Epub 2006 Feb 24.

497. Gorelick DA, Heishman SJ, Preston KL, Nelson RA, Moolchan ET, **Huestis MA**. The cannabinoid CB1 receptor antagonist rimonabant attenuates the hypotensive effect of smoked marijuana in male smokers. *American Heart Journal*, 2006 Mar; 151(3):754.e1-754.e5.
498. Lowe RH, Barnes AJ, Lehrmann E, Freed WJ, Kleinman JE, Hyde TM, Herman MM, **Huestis MA**. A validated positive chemical ionization GC/MS method for the identification and quantification of amphetamine, opiates, cocaine and metabolites in human postmortem brain. *Journal Mass Spectrometry*, 2006 Feb; 41(2):175-184.
499. Copersino ML, Boyd SJ, Tashkin DP, **Huestis MA**, Heishman SJ, Dermand JC, Simmons MS and Gorelick DA. Cannabis withdrawal among non-treatment-seeking cannabis users. *American Journal Addictions*, 2006 Jan; 15(1):8-14.
500. Richardson GA, **Huestis MA** and Day NL. Assessing in utero exposure to cannabis and cocaine. In: David C. Bellinger, ed. Human developmental neurotoxicology, Taylor and Francis Group, New York, New York, 2006, pp. 287-302.
501. **Huestis MA**, Barnes A, Smith ML. Estimating the time of last cannabis use from plasma delta9-tetrahydrocannabinol and 11-nor-9-carboxy-delta9-tetrahydrocannabinol concentrations. *Clinical Chemistry*, 2005, 51(12):2289-95.
502. Paul BD, Lalani S, Bosy T, Jacobs AJ and **Huestis MA**. Concentration profiles of cocaine, pyrolytic methyl ecgonidine, and thirteen metabolites in human blood and urine: Determination by gas chromatography-mass spectrometry. *Biomedical Chromatography*, 2005, 19:677-688.
503. Kim I, Wtsadik A, Choo RE, Jones HE and **Huestis MA**. Usefulness of salivary trans-3'-hydroxycotinine concentration and trans-3'hydroxycotinine/cotinine ratio as biomarkers of cigarette smoke in pregnant women. *Journal Analytical Toxicology*, 2005 Oct; 29(7):689-695.
504. **Huestis MA**. Pharmacokinetics and metabolism of the plant cannabinoids. In: Handbook of Experimental Pharmacology, vol. 168 (Cannabinoids); Ed. R. Pertwee, 2005, pp, 657-690. Review.
505. Murphy CM and **Huestis MA**. LC-ESI-MS/MS analysis for the quantification of morphine, codeine, morphine-3- β -D-glucuronide, morphine-6- β -D-glucuronide, and codeine-6- β -D-glucuronide in human urine. *Journal of Mass Spectrometry*, 2005 Nov; 40(11):1412-1416. Erratum in: *Journal Mass Spectrometry* 2005 Jan;40(1):70-4.
506. Kacinko SL, Barnes AJ, Schwilke EW, Cone EJ, Moolchan ET and **Huestis MA**. Disposition of cocaine and its metabolites in human sweat following controlled cocaine administration. *Clinical Chemistry*, 2005 Nov; 51(11): 2085-2094.
507. Jones HE, Johnson RE, Jasinski DR, O'Grady KE, Chisholm CA, Choo RE, Crocetti M, Dudas R, Harrow C, **Huestis MA**, Jansson LM, Lantz M, Lester BM and Milio L. Buprenorphine versus methadone in the treatment of pregnant opioid-dependent patients: Effects on the neonatal abstinence syndrome. *Drug Alcohol Dependence*, 2005 Jul; 79(1):1-10.
508. Scheidweiler KB, Cone EJ, Moolchan ET and **Huestis MA**. Dose-related distribution of codeine, cocaine, and metabolites into human hair following controlled oral codeine and subcutaneous cocaine administration. *Journal Pharmacology Experimental Therapeutics*, 2005, 313:909-915.

509. Moolchan ET, Zimmerman D, Sehnert SS, Zimmerman D, **Huestis MA** and Epstein DH. Recent marijuana blunt smoking impacts carbon monoxide as a measure of adolescent tobacco abstinence. *Substance Use Misuse*, 2005; 40(2):231-40.
510. Murphy CM and **Huestis MA**. Liquid chromatography-electrospray ionization-tandem mass spectrometry analysis for the quantification of buprenorphine, norbuprenorphine, norbuprenorphine-3-B-D-glucuronide and buprenorphine-3-B-D-glucuronide in human plasma. *Journal Mass Spectrometry*, 2005 Jan;40(1): 70-74.
511. Boyd SJ, Tashkin DP, **Huestis MA**, Heishman SJ, Deraud JC, Simmons MS and Gorelick DA. Strategies for quitting among non-treatment-seeking marijuana smokers. *American Journal Addictions*, 2005, 14:35-42.
512. Choo RE, Murphy CM, Jones HE and **Huestis MA**. Determination of methadone, 2-ethylidene-1,5-dimethyl-3,3-diphenylpyrrolidine, 2-ethyl-5-methyl-3,3-diphenylpyrrolidine and methadol in meconium by liquid chromatography atmospheric pressure chemical ionization tandem mass spectrometry. *Journal Chromatography B*, 2005, 814:369-373.
513. Kim I, Darwin WD and **Huestis MA**. Simultaneous determination of nicotine, cotinine, norcotinine, and trans-3'-hydroxycotinine in human oral fluid using solid phase extraction and gas chromatography-mass spectrometry. *Journal Chromatography B*, 2005 Jan 25; 814(2):233-240.
514. Boyd SJ, Tashkin DP, **Huestis M**, Heishman SJ, Deraud JC, Simmons MS and Gorelick DA. Strategies for quitting among non-treatment-seeking marijuana smokers. American Journal on Addictions 2005 Jan-Feb; 14(1):35-42, (Abridged version published as Strategies de sevrage utilisees par les fumeurs de cannabis non demandeurs d'un traitement. *Alcoholologie et Addictologie*, 2004, 26:323-326.
515. Lester B, LaGasse L, Smith LM, Derauf C, Grant P, Shah R, Arria A, **Huestis M** and Liu J. Prenatal exposure to methamphetamine and child development. *Epidemiologic Trends Drug Abuse*, 2005, Vol. II: 1-4.
516. Choo RE and **Huestis MA**. Oral fluid as a diagnostic tool. *Clinical Chemistry Laboratory Medicine*, 2004; 42(11):1273-1287. Review.
517. Umbricht A, **Huestis MA**, Cone EJ and Preston K. Effects of high dose intravenous buprenorphine in experienced opioid abusers. *Journal Clinical Psychopharmacology*, 2004 Oct; 24(5):479-87.
518. Kim I, Oyler JM, Moolchan ET, Cone EJ and **Huestis MA**. Urinary pharmacokinetics of methamphetamine and its metabolite, amphetamine following controlled oral administration to humans. *Therapeutic Drug Monitoring*, 2004 Dec; 26(6):664-672.
519. Choo RE, **Huestis MA**, Schroeder JR, Shin AS and Jones HE. Neonatal abstinence syndrome in methadone-exposed infants is altered by level of prenatal tobacco exposure. *Drug Alcohol Dependence*, 2004 Sep 6; 75(3):253-260.
520. Saito T, Wtsadik A, Scheidweiler K, McCain M, Fortner N, Takeichi S and **Huestis MA**. Validated gas chromatographic-negative ion chemical ionization mass spectrometric method for delta-9-tetrahydrocannabinol in sweat patches. *Clinical Chemistry*, 2004 Nov; 50(11):2083-2090. Epub 2004 Jul 22.

521. **Huestis MA** and Cone EJ. Relationship of delta-9-tetrahydrocannabinol in oral fluid to plasma after controlled administration of smoked cannabis. *Journal Analytical Toxicology*, 2004, 28:394-399.
522. Scheidweiler KB and **Huestis MA**. Simultaneous quantification of opiates, cocaine and metabolites in hair by LC-APCI-MS/MS. *Analytical Chemistry*, 2004 Aug 1; 76(15):4358-4363.
523. Kacinko SL, Barnes AJ, Kim I, Moolchan ET, Wilson L, Cooper GA, Reid C, Baldwin D, Hand CW and **Huestis MA**. Performance characteristics of the Cozart Rapiscan oral fluid drug testing system for opiates in comparison to ELISA and GC/MS following controlled codeine administration. *Forensic Science International*, 2004 Apr 20; 141(1):41-48.
524. Gustafson RA, Kim I, Stout PR, Klette KL, George MP, Moolchan ET, Levine B and **Huestis MA**. Urinary pharmacokinetics of 11-nor-9-carboxy-delta-9-tetrahydrocannabinol after controlled oral delta-9-tetrahydrocannabinol administration. *Journal Analytical Toxicology*, 2004 Apr; 28(3):160-167.
525. **Huestis MA**. Marijuana. In B. Levine, Principles of Forensic Toxicology, 2nd Edition, AACC Press, Washington, D.C. 2003, pp. 229-244.
526. Gustafson RA, Moolchan ET, Barnes A, Levine B and **Huestis MA**. Validated method for the simultaneous determination of delta-9-tetrahydrocannabinol (THC), 11-hydroxy-THC and 11-nor-9-carboxy-THC in human plasma using solid phase extraction and gas chromatography-mass spectrometry with positive chemical ionization. *Journal Chromatography B*, 2003 Dec. 5; 798(1):145-154.
527. Kim I, Barnes AJ, Schepers R, Moolchan ET, Wilson L, Cooper G, Reid C, Hand C and **Huestis M**. Sensitivity and specificity of the Cozart microplate EIA cocaine oral fluid at proposed screening and confirmation cutoffs. *Clinical Chemistry*, 2003 Sep; 49(9): 1498-1503.
528. Gustafson RA, Levine B, Stout PR, Klette KL, George MP, Moolchan ET and **Huestis MA**. Urinary cannabinoid detection times after controlled oral administration of delta-9-tetrahydrocannabinol to humans. *Clinical Chemistry*, 2003 Jul; 49(7):1114-1124.
529. Dams R, **Huestis MA**, Lambert WE, Murphy CM. Matrix effect in bio-analysis of illicit drugs with LC-MS/MS influence of ionization type, sample preparation, and biofluid. *Journal American Society Mass Spectrometry*, 2003 Nov; 14(11):1290-1294.
530. Barnes AJ, Kim I, Schepers R, Moolchan ET, Wilson L, Cooper G, Reid C, Hand C and **Huestis MA**. Sensitivity, specificity and efficiency in detecting opiate use in oral fluid with the Cozart opiate microplate EIA and GC-MS following controlled codeine administration. *Journal Analytical Toxicology*, 2003 Oct; 27(7):402-407.
531. Dams R, Murphy CM, Lambert WE, **Huestis MA**. Urine drug testing for opioids, cocaine and metabolites by direct injection liquid chromatography/tandem mass spectrometry. *Rapid Communications Mass Spectrometry*, 2003, 17:1665-1670.
532. Kolbrich EA, Kim I, Barnes AJ, Moolchan ET, Wilson L, Cooper GA, Reid C, Baldwin D, Hand CW, **Huestis MA**. Cozart Rapiscan oral fluid drug testing system: An evaluation of sensitivity, specificity, and efficiency for cocaine detection compared to ELISA and GC/MS following controlled cocaine administration. *Journal Analytical Toxicology*, 2003 Oct; 27(7):407-411.

533. Cone EJ, Sampson-Cone AH, Darwin WD, **Huestis MA** and Oyler JM. Urine testing for cocaine abuse: Metabolic and excretion patterns following different routes of administration, and methods for detection of false negative results. *Journal Analytical Toxicology*, 2003 Oct; 27(7): 386-401.
534. Preston KL, Epstein DH, Davoudzadeh D and **Huestis MA**. Methadone and metabolite urine concentrations in patients maintained on methadone. *Journal Analytical Toxicology*, 2003 Sep; 27(6):332-341.
535. Dams R, Murphy CM, Choo RE, Lambert WE, De Leenheer AP and **Huestis MA**. LC-atmospheric pressure chemical ionization-MS/ MS analysis of multiple illicit drugs, methadone, and their metabolites in oral fluid following protein precipitation. *Analytical Chemistry*, 2003 Feb 15;75(4):798-804.
536. Pope HG, Jr., Gruber AJ, Hudson JI, Cohane G, **Huestis MA** and Yurgelun-Todd D. Early-onset cannabis use and cognitive deficits: what is the nature of the association? *Drug Alcohol Dependence*, 2003 Apr 1; 69(3):303-310.
537. Lehrmann E, Oyler J, Vawter MP, Hyde TM, Kalachana B, Kleinman JE, **Huestis MA**, Becker KG and Freed WJ. Transcriptional profiling in the human prefrontal cortex: evidence for two activational states associated with cocaine abuse. *Pharmacogenomics Journal*, 2003; 3(1):27-40.
538. Schepers RJF, Oyler JM, Joseph RE, Jr., Cone EJ, Moolchan ET and **Huestis MA**. Methamphetamine and amphetamine pharmacokinetics in oral fluid and plasma following controlled oral methamphetamine administration to human volunteers. *Clinical Chemistry*, 2003 Jan; 49(1):121-132.
539. Dams R, Murphy CM, Choo RE, Lambert WE, **Huestis MA**. Comparative study of simplified sample preparation on ionization efficiency of ESI and APCI and development of a sensitive LC-MS/MS method for the analysis of multiple drugs of abuse in biological fluids. *Proceedings of the International Association of Forensic Toxicologists*, Paris, France, 2002, p. 197.
540. **Huestis MA**. Controlled drug administration studies of high-dose buprenorphine in humans, In P Kintz, Buprenorphine Therapy of Opiate Addiction, Humana Press, Totowa, NJ, pp.13-49, 2002.
541. Preston KL, Epstein DH, Cone EJ, Wtsadik AT, **Huestis MA** and Moolchan ET. Urinary elimination of cocaine metabolites in chronic cocaine users during cessation. *Journal Analytical Toxicology*, 2002 Oct; 26(7):393-400.
542. Pope HG, Jr., Gruber AJ, Hudson JI, **Huestis MA** and Yurgelun-Todd D. Cognitive measures in long-term cannabis users. *Journal Clinical Pharmacology*, 2002 Nov; 42(11 Suppl):41S-47S. Review.
543. Oyler JM, Cone EJ, Joseph RE, Jr., Moolchan ET and **Huestis MA**. Duration of detectable methamphetamine and amphetamine excretion in urine after controlled oral administration of methamphetamine to humans. *Clinical Chemistry*, 2002 Oct; 48(10):1703-1714.
544. Kim I, Barnes AJ, Oyler JM, Schepers R, Joseph RE, Jr., Cone EJ, Lafko D, Moolchan ET and **Huestis MA**. Plasma and oral fluid pharmacokinetics and pharmacodynamics following oral codeine administration. *Clinical Chemistry*, 2002, 48:1486-1497.

545. **Huestis MA** and Choo, RE. Drug abuse's smallest victims: in utero drug exposure. *Forensic Science International*, 2002 Aug 14; 128(1-2):20-30. Review.\
546. **Huestis MA**. Cannabis (Marijuana) – effects on human performance and behavior. *Forensic Science Review*, 2002, 14:15-60.
547. LeBeau MA, Christenson RH, Levine B, Darwin WD and **Huestis MA**. Intra- and interindividual variations in urinary concentrations of endogenous gamma-hydroxybutyrate (GHB). *Journal Analytical Toxicology*, 2002 Sep; 26(6):340-346.
548. Steckley SL, Darwin WD, **Huestis MA**, Henningfield JE and Pickworth WB. Eclipse can deliver crack cocaine. *Nicotine Tobacco Research*, 2002; 4 Suppl 2: S189-190.
549. Huang W, Moody DE, Andrenyak DM, Smith EK, Foltz RL, **Huestis MA** and Newton JF. Simultaneous determination of delta-9-tetrahydrocannabinol and 11-nor-9-carboxy-delta-9-tetrahydrocannabinol in human plasma by solid phase extraction and gas chromatography – negative ion chemical ionization – mass spectrometry. *Journal Analytical Toxicology*, 2001 Oct; 25(7):531-537.
550. Lyons TP, Okano CK, Kuhnle JA, Bruins MR, Darwin WD, Moolchan ET and **Huestis MA**. A comparison of Roche kinetic interaction of microparticles in solution (KIMS) assay for cannabinoids and GC-MS analysis for 11-nor-carboxy-delta-9-tetrahydrocannabinol. *Journal Analytical Toxicology*, 2001 Oct; 25(7):559-564.
551. Krasnova IN, Ladenheim B, Jayanthi S, Oyler J, Moran TH, **Huestis MA** and Cadet JL. Amphetamine-induced toxicity in dopamine terminals in CD-1 and C57BL/6J mice complex roles for oxygen-based species and temperature regulation. *Neuroscience*, 2001, 107(2):265-274.
552. Spanbauer AC, Casseday S, Davoudzadeh D, Preston KL and **Huestis MA**. Detection of opiate use in a methadone maintenance treatment population with the CEDIA 6-acetylmorphine and CEDIA DAU opiate assays. *Journal Analytical Toxicology*, 2001 Oct; 25(7):515-519.
553. **Huestis MA**, Gorelick DA, Heishman SJ, Preston KL, Nelson RA, Moolchan ET and Frank RA. Blockade of smoked marijuana effects in humans by the oral CB1-selective cannabinoid receptor antagonist SR141716. *Archives General Psychiatry*, 2001 Apr; 58(4):322-328.
554. Woods AS and **Huestis MA**. A study of peptide-peptide interaction by matrix-assisted laser desorption/ionization. *Journal Mass Spectrometry*, 2001 Jan; 12(1):88-96.
555. Lester BM, ElSohly M, Wright LL, Smeriglio VL, Verter J, Bauer CR, Shankaran S, Bada HS, Walls HC, **Huestis MA**, Finnegan LP and Maza PL. The maternal lifestyle study: Drug use by meconium toxicology and maternal self-report. *Pediatrics*, 2001 Feb; 107(2):309-317.
556. Pope HG, Jr., Gruber AJ, Hudson JI, **Huestis MA** and Yurgelun-Todd D. Neuropsychological performance in long-term cannabis users. *Archives General Psychiatry*, 2001 Oct; 58(10):909-915.
557. Poletini A and **Huestis MA**. Simultaneous determination of buprenorphine, norbuprenorphine and buprenorphine glucuronide in plasma by liquid chromatography-tandem mass spectrometry. *Journal of Chromatography B: Biomedical Sciences and Applications*, 2001, Apr 25; 754(2):447-459.
558. **Huestis MA**, Marijuana. The Clinical Toxicology Laboratory – Contemporary Practice of Poison

- Evaluation. Eds. Kwong T, Magnani B, Rosano T, Orsulak P, Shaw L. 2001 AACC Press, Washington, D.C.
559. Ladenheim B, Krasnova IN, Deng X, Oyler J, Poletti A, Moran TH, **Huestis MA** and Cadet JL. Methamphetamine-induced neurotoxicity is attenuated in transgenic mice with a null mutation for interleukin-6 (IL-6). *Molecular Pharmacology*, 2000 Dec; 58(6):1247-1256.
 560. Oyler JM, Cone EJ, Joseph RE, Jr. and **Huestis MA**. Identification of hydrocodone in human urine following controlled codeine administration. *Journal Analytical Toxicology*, 2000 Oct; 24(7):530-535.
 561. **Huestis MA**, Cone, EJ, Wong CJ, Umbricht A and Preston KL. Monitoring opiate use in substance abuse treatment patients by sweat and urine testing. *Journal Analytical Toxicology*, 2000 Oct; 24(7):509-521.
 562. Moolchan ET, Cone EJ, Wtsadik A, **Huestis MA** and Preston KL. Cocaine and metabolite elimination patterns in chronic cocaine users during cessation: plasma and saliva analysis. *Journal Analytical Toxicology*, 2000 Oct; 24(7):458-466.
 563. **Huestis MA**. Marijuana, In B. Levine, Principles of Forensic Toxicology, AACC Press, Washington, D. C. 1999, pp. 246-264.
 564. Preston KL, **Huestis MA**, Wong CJ, Umbricht A, Goldberger BA and Cone EJ. Monitoring cocaine use in substance-abuse-treatment patients by sweat and urine testing. *Journal Analytical Toxicology*, 1999 Sep; 23(5):313-322.
 565. **Huestis MA**, Oyler JM, Cone EJ, Wtsadik AT, Schoendorfer D and Joseph RE, Jr. Sweat testing for cocaine, codeine and metabolites by gas chromatography mass spectrometry. *Journal Chromatography B*, 1999 Oct 15;733(1-2):247-264. Review.
 566. Nath N, Wright J, Darwin WD, **Huestis MA** and Eldefrawi M. A rapid reusable fiber optic biosensor for detecting cocaine metabolites in urine. *Journal Analytical Toxicology*, 1999, 23:460-467.
 567. **Huestis MA** and Cone E. Alternative testing matrices. In Karch, S. Handbook of Drug Abuse, CRC Press, Boca Raton, FL, pp. 799-857, 1998.
 568. **Huestis MA** and Cone EJ. Urinary excretion half-life of 11-nor-9-carboxy- Δ^9 -tetrahydrocannabinol in Humans. *Therapeutic Drug Monitoring*, 1998 Oct; 20(5):570-576.
 569. **Huestis MA**, Cone EJ, Wong CJ, Silverman K and Preston KL. Efficacy of sweat patches to monitor cocaine and opiate use during treatment. National Institute on Drug Abuse Research Monograph, 1998.
 570. **Huestis MA** and Cone EJ. Differentiating new marijuana use from residual drug excretion in occasional marijuana users. *Journal Analytical Toxicology*, 1998 Oct; 22(6):445-454.
 571. Goldberger BA, **Huestis MA** and Wilkins DG. Commonly practiced quality control and quality assurance procedures for gas chromatography/mass spectrometry analysis in forensic urine drug-testing laboratories. *Forensic Science Review*, 1997, 9:59-80.
 572. **Huestis MA**. Technical and legal aspects of drugs of abuse testing in hair. In Kintz, P. Drug testing in hair, CRC Press, Boca Raton, FL, pp. 5-15, 1996.

573. **Huestis MA**, Mitchell JM and Cone EJ. Urinary excretion profiles of 11-nor-9-carboxy- Δ^9 -tetrahydrocannabinol in humans after single smoked doses of marijuana. *Journal Analytical Toxicology*, 1996 Oct; 20(6):441-452.
574. **Huestis MA**. Judicial acceptance of hair tests for substances of abuse in the United States courts: scientific, forensic, and ethical aspects. *Therapeutic Drug Monitoring*, 1996 Aug;18(4):456-459.
575. **Huestis MA**. To accept or not to accept, that is the question: hair testing results in the American courts, In: Hair Analysis in Forensic Toxicology, RA de Zeeuw, I Al Hosani, S Al Munthiri, A Maqbool (Eds.), *Proceedings of the 1995 International Conference and Workshop for Hair Analysis in Forensic Toxicology*, Abu Dhabi, UAE, 1995, pp. 467-481.
576. **Huestis MA** and Cone E. Drug test findings resulting from unconventional drug exposure. In: *Handbook of Workplace Drug Testing*, RH Liu, BA Goldberger (Eds.), AACC Press, Washington, DC, 1995, pp. 289-320.
577. Goldberger BA and **Huestis MA**. GC/MS: Quality assurance/quality control procedures for forensic urine drug testing laboratories. 1995, Hewlett Packard, pp. 1-11.
578. **Huestis MA**, Mitchell JM and Cone EJ. Detection times of marijuana metabolites in urine by immunoassay and GC/MS. *Journal Analytical Toxicology*, 1995 Oct; 19(6):443-449.
579. Wilkins DG, Haughey H, Cone EJ, **Huestis MA**, Foltz R and Rollins D. Quantitative analysis of delta-9-tetrahydrocannabinol, 11-Hydroxyl-delta-tetrahydrocannabinol and 11-nor-carboxy-delta-9-tetrahydrocannabinol in human hair by negative-chemical ionization mass spectrometry. *Journal Analytical Toxicology*, 1995 Oct, 19:483-491.
580. Jenkins AJ, Darwin WD, **Huestis MA**, Cone EJ and Mitchell JM. Validity testing of the accuPINCH™ THC test. *Journal Analytical Toxicology*, 1995 Jan-Feb; 19(1):5-12.
581. **Huestis MA**. Drug monograph: Marijuana. SOFT/AAFS committees on driving under the influence of drugs. *The DRE* 1994, 6:2-23.
582. **Huestis MA**, Mitchell JM and Cone EJ. Lowering the federally mandated cannabinoid immunoassay cutoff increases true positive results. *Clinical Chemistry*, 1994 May; 40(5):729-733.
583. Cone EJ, **Huestis MA** and Mitchell JM. Do consecutive urine catches differ in marijuana metabolite concentration? *Journal Analytical Toxicology*, 1993 May-Jun; 17(3):186-187. No abstract available.
584. **Huestis MA**. Pharmacology and toxicology of marijuana. *Therapeutic Drug Monitoring*, 1993, 14:131.
585. Jenkins AJ, Mills LC, Darwin WD, **Huestis MA**, Cone EJ and Mitchell JM. Validity testing of the EZ-SCREEN® cannabinoid test. *Journal Analytical Toxicology*, 1993 Sep; 17(5):292-298.
586. **Huestis MA** and Cone EJ. Concerning blood cannabinoids and the effect of residual THCCOOH on calculated exposure time. *Journal Analytical Toxicology*, 1993, 17:313-316.
587. Cone EJ and **Huestis MA**. Relating blood concentrations of tetrahydrocannabinol and metabolites to pharmacologic effects and time of marijuana usage. *Therapeutic Drug Monitoring*, 1993 Dec; 15(6): 527-532. Review.

588. **Huestis MA** and Cone, EJ. Estimation of the time of marijuana use from a single plasma cannabinoid sample. *Proceedings of the International Association of Forensic Toxicologists*, Fukuoka, Japan, 1992, pp. 334-336.
589. **Huestis MA**, Sampson A, Holicky B, Henningfield JE and Cone EJ. Characterization of the absorption phase of marijuana smoking. *Clinical Pharmacology Therapeutics*, 1992 Jul; 52(1):31-41.
590. **Huestis MA**, Henningfield JE and Cone EJ. Blood cannabinoids: I. Absorption of THC and formation of 11-OH-THC and THCCOOH during and after marijuana smoking. *Journal Analytical Toxicology*, 1992 Sep-Oct; 16(5):276-282.
591. **Huestis MA**, Henningfield JE, Cone EJ. Blood cannabinoids II: Models for the prediction of time of marijuana exposure from plasma concentrations of Δ -9-tetrahydrocannabinol (THC) and 11-nor-9-carboxy- Δ -9-tetrahydrocannabinol (THCCOOH). *Journal Analytical Toxicology*, 1992 Sep-Oct; 16(5):283-290.
592. **Huestis MA**, Cone EJ. Profile of acute marijuana use: Forensic implications. The International Association of Forensic Toxicologists. *Proceedings of the International Association of Forensic Toxicologists*, Copenhagen, Denmark, June 24-27, 1991, p.240-245.
593. **Huestis MA**, Heishman SJ, Cone EJ. Profile of repeated marijuana exposure; plasma and saliva THC levels, performance, physiological and subjective effects following smoking in a controlled clinical setting. *Proceedings of the International Association of Forensic Toxicologists*, Perth, Australia, October 19-23, 1990, p.404-417.
594. Heishman SJ, **Huestis MA**, Henningfield JE, Cone EJ. Acute and residual effects of marijuana: profiles of plasma THC levels, physiological, subjective, and performance measures. *Pharmacology, Biochemistry Behavior*, 1990 Nov; 37(3):561-565.
595. Cone EJ and **Huestis MA**. Urinary excretion of commonly abused drugs following unconventional means of administration. *Forensic Science Review*, 1989, 1:122-139.

ABSTRACTS (Only includes abstracts and invited lectures through 2015, too many to include)

1. **Huestis MA**. Bringing the power of science to bear on drug abuse and addiction. US Food and Drug Administration. White Oak, MD. November 9, 2015.
2. **Huestis MA**. Novel psychoactive substances: the new face of drug abuse. Drugs of abuse and mental diseases. 1st Zardi Gori Foundation conference. Milan, Italy. November 5-6, 2015.
3. Andersson M, Scheidweiler KB, Sempio C, Barnes A, **Huestis MA**. Quantification of 11 Cannabinoids & Metabolites in Human Urine by Liquid Chromatography Tandem Mass Spectrometry. Society of Forensic Toxicologists (SOFT) Meeting. Atlanta, GA. October 18-23, 2015.
4. Diao X, Wohlfarth A, Pang S, Scheidweiler KB, **Huestis MA**. Metabolism of Synthetic Cannabinoids THJ-018 and its 5-Fluoro Analog THJ-2201 Following Human Hepatocytes Incubation and High-resolution Mass Spectrometry. Society of Forensic Toxicologists (SOFT) Meeting. Atlanta, GA. October 18-23, 2015.
5. Sempio C, Swortwood MJ, Andersson M, Scheidweiler KB, **Huestis MA**. Extended cannabinoid stability in authentic oral fluid after controlled cannabis smoking. Society of Forensic Toxicologists (SOFT) Meeting. Atlanta, GA. October 18-23, 2015.

6. Hartman RL, Brown TL, Milavetz G, Spurgin A, Gorelick DA, Gaffney G, **Huestis MA**. Cannabis and Low-Dose Alcohol Effects on Longitudinal Control in Simulated Driving After Controlled Administration. Society of Forensic Toxicologists (SOFT) Meeting. Atlanta, GA. October 18-23, 2015.
7. Hartman RL, Desrosiers NA, Brown TL, Milavetz G, Spurgin A, Gorelick DA, Gaffney G, **Huestis MA**. Comparing Smoked and Vaporized Cannabinoid Disposition in Blood and Oral Fluid. Society of Forensic Toxicologists (SOFT) Meeting. Atlanta, GA. October 18-23, 2015.
8. Newmeyer MN, Scheidweiler KB, Barnes AB, **Huestis MA**. Direct Quantification of Cannabinoids, Metabolites, and Glucuronides in Blood by Disposable Pipette Extraction and Liquid Chromatography-Tandem Mass Spectrometry. Society of Forensic Toxicologists (SOFT) Meeting. Atlanta, GA. October 18-23, 2015.
9. Newmeyer MN, Taylor ME, Swortwood MJ, Coffay AO, Woodward T, **Huestis MA**. Preliminary psychophysical task performance after controlled oral cannabis administration. Society of Forensic Toxicologists (SOFT) Meeting. Atlanta, GA. October 18-23, 2015.
10. Scheidweiler K, Kronstrand R, **Huestis MA**. Screening for synthetic cannabinoids via non-targeted liquid chromatography-quadrupole/time-of-flight high-resolution mass spectrometry. Society of Forensic Toxicologists (SOFT) Meeting. Atlanta, GA. October 18-23, 2015.
11. Sempio C, Swortwood MJ, Andersson A, Scheidweiler KB and **Huestis MA**. Extended Cannabinoid Stability in Authentic Oral Fluid after Controlled Cannabis Smoking. Society of Forensic Toxicologists (SOFT) Meeting. Atlanta, GA. October 18-23, 2015.
12. Swortwood MJ, Scheidweiler KB, Wiegand SL, and **Huestis MA**. Simultaneous, direct quantification of plasma buprenorphine, naloxone and phase I and II metabolites by LC-MS/MS. Society of Forensic Toxicologists Annual Meeting. Atlanta, GA. October 2015.
13. Swortwood MJ, Carlier J, Ellefsen KN, Wohlfarth A, Kronstrand R, **Huestis MA**. Metabolic Profiling of α -PVT, a Novel Stimulant Thiophenyl Analog. Society of Forensic Toxicologists (SOFT) Meeting. Atlanta, GA. October 18-23, 2015.
14. Ellefsen KN, Concheiro M, Elmore J, Suzuki M, Rice KC, Baumann MH, **Huestis MA**. Pharmacodynamics and pharmacokinetics of methylone in rats. Society of Forensic Toxicologists (SOFT) Meeting. Atlanta, GA. October 18-23, 2015.
15. Castaneto M, Barnes AJ, Concheiro M, Klette K, Martin TM, **Huestis MA**. Biochip array technology immunoassay performance and quantitative confirmation of designer piperazines for US military urine workplace drug testing. Society of Forensic Toxicologists (SOFT) Meeting. Atlanta, GA. October 18-23, 2015.
16. **Huestis MA**. Novel psychoactive substances: synthetic cannabinoids. Intoxications with new drugs: epidemiology, detection, toxicokinetics and treatment. 14th International Congress of Therapeutic Drug Monitoring and Clinical Toxicology. Rotterdam, The Netherlands. October 11-15, 2015.
17. **Huestis MA**. Early detection of synthetic cannabinoids. 14th International Congress of Therapeutic Drug Monitoring and Clinical Toxicology. Rotterdam, The Netherlands. October 11-15, 2015.

18. **Huestis MA.** Alternative sampling strategies in toxicology. 14th International Congress of Therapeutic Drug Monitoring and Clinical Toxicology. Rotterdam, The Netherlands. October 11-15, 2015.
19. **Huestis MA,** Concheiro M, Scheidweiler KB, Anizan S, Lehner KR, Bukhari MO, Suzuki M, Rice KC, Baumann MH. In Vivo Toxicokinetics of Novel Psychoactive Substances in Rats (NPS) in Rats. Toxicology Letters 10/2015;238:S23-24.
20. **Huestis MA.** Effects of Drugs on Human Performance: Cannabis. Borkenstein Course. Tempe, AZ. September 13-18, 2015
21. 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. The International Association of Forensic Toxicologists (TIAFT) Annual Meeting. Florence, Italy. August 30-September 4, 2015.
22. Ellefsen KN, da Costa LJ, Concheiro M, Anizan S, Barnes AJ, Pirard S, Gorelick, DA and **Huestis MA.** Cocaine and metabolites concentrations in dried blood spots and venous blood after Controlled intravenous cocaine administration. The International Association of Forensic Toxicologists (TIAFT) Annual Meeting. Florence, Italy. August 30-September 4, 2015.
23. Hartman RL, Brown TL, Milavetz G, Spurgin A, Gorelick DA, Gaffney G, **Huestis MA.** Controlled vaporized cannabis, with and without alcohol: subjective Effects and blood cannabinoid disposition. The International Association of Forensic Toxicologists (TIAFT) Annual Meeting. Florence, Italy. August 30-September 4, 2015.
24. Swortwood MJ, Ellefsen KN, Wohlfarth A, Concheiro M, and **Huestis MS.** First metabolic profile of PV8, a novel synthetic cathinone, by high-resolution mass spectrometry (HRMS). The International Association of Forensic Toxicologists (TIAFT) Annual Meeting. Florence, Italy. August 30-September 4, 2015.
25. Wohlfarth A, Roman M, Karlsson M, Kugelberg F, **Huestis MA,** Kronstrand R. Metabolism of 25i-NBoME and 25C-NBoME, two synthetic hallucinogens, in mice and correlation with authentic human urine samples. The International Association of Forensic Toxicologists (TIAFT) Annual Meeting. Florence, Italy. August 30-September 4, 2015.
26. **Huestis MA.** National Institute on Drug Abuse's Research Portfolio. Drug Recognition and Impairment Research Meeting. National Institute of Justice. August 24, 2015.
27. Pan JF, Mann R, Brands B, Stoduto G, Wickens C, Burston J, **Huestis MA,** Le Foll B. Preliminary Report on the Residual Effects of Cannabis on Young Drivers' Performance of Driving-related Skills. College on Problems of Drug Dependence Phoenix, AZ June 13-16, 2015.
28. Trigo JM, Lagzdins D, Rehm J, Selby P, Gamaledin I, Fischer B, Barnes A, **Huestis MA,** Le Foll B. Effects of Fixed or Self-titrated Dosages of Sativex on Cannabis Users. College on Problems of Drug Dependence Phoenix, AZ June 13-16, 2015.
29. Burston J, Mann R, Le Foll B, Stoduto G, Wickens C, Pan JF, **Huestis MA,** Brands B. Acute Effects of Cannabis on Young Drivers' Performance of Driving-related Skills. CPDD Phoenix, AZ June 13-16, 2015.

30. **Huestis MA.** Marijuana and Driving. Drug Impaired Driver Training for Law Enforcement and Prosecution Professionals. California District Attorneys Association. Long Beach, CA. June 2, 2015.
31. **Huestis MA.** Pharmacology of synthetic cannabinoids & cathinones. Prince Sultan Military Medical City National Guard Hospital. Riyadh, Kingdom of Saudi Arabia. May 27, 2015.
32. **Huestis MA.** Oral fluid drug testing: finding its niche. Prince Sultan Military Medical City National Guard Hospital. Riyadh, Kingdom of Saudi Arabia. May 28, 2015.
33. **Huestis MA.** Mass spectrometry applications for novel psychoactive substances. Prince Sultan Military Medical City National Guard Hospital. Riyadh, Kingdom of Saudi Arabia. May 28, 2015.
34. **Huestis MA.** Chronic daily cannabis smoking: neuroadaptation, residual cannabis excretion, and psychomotor impairment. King Faisal Specialist Hospital. Riyadh, Kingdom of Saudi Arabia. May 25, 2015.
35. **Huestis MA.** Pharmacodynamics and pharmacokinetics of novel psychoactive substances. 1st regional TIAFT meeting of the commonwealth of independent states and the Central Asia “Problems of forensic and clinical toxicology.” Tashkent, Uzbekistan. May 14-16, 2015.
36. Himes SK, Dukes KA, Tripp T, Peterson J, Raffo C, Burd L, Odendaal H, Elliott AJ, Hereld D, Signore C, Willinger M, **Huestis MA**, for the Prenatal Alcohol in SIDS and Stillbirth (PASS) Network. Meconium Fatty Acid Ethyl Ester, Ethyl Glucuronide, and Ethyl Sulfate Sensitivity and Specificity to Detect Maternal Drinking During Pregnancy. Mass Spectrometry: Applications to the Clinical Lab, San Diego, CA. March 28-April 1, 2015.
37. **Huestis MA**, Scheidweiler KB, Himes SK. Mass spectrometry toxicology applications: Method development and validation, troubleshooting, triaging instrumentation, tips, tricks and lessons learned. Mass Spectrometry: Applications to the Clinical Lab, San Diego, CA. March 28-April 1, 2015.
38. Stroud L, Papandonatos G, Salisbury A, Lopez L, Phipps M, **Huestis MA**, Niaura R, Padbury J, Marsit C, Lester B. Maternal Smoking and Trajectories of Infant Neurobehavior: Epigenetic Regulation of Placental NR3C1 as a Potential Mechanism. 2015 SRCD Biennial Meeting. Philadelphia PA. March 19-21, 2015.
39. **Huestis MA.** Anti-doping Testing for Novel Psychoactive Substances. New Developments in Doping Detection. PittCon, New Orleans, LA. March 9, 2015.
40. Ellefsen K, Swortwood M, Wohlfarth A, Concheiro M, **Huestis MA.** 4-methoxy- α -PVP: *In silico* metabolite prediction, assessment of metabolic stability with human liver microsomes and metabolite identification after human hepatocyte incubation with high resolution-mass spectrometry. American Academy of Forensic Sciences Annual Conference. Orlando, FL. February 16-21, 2015.
41. Himes SK, Scheidweiler KB, Fairley S, Filis P, Douglas A, O’Shaughnessy PJ, Iredale JP, Hay D, Fowler PA, **Huestis MA.** Ethyl glucuronide, ethyl sulfate, and nicotine and metabolites quantified in human fetal liver from electively terminated pregnancies. The American Academy of Forensic Sciences, Orlando, FL. February 16-21, 2015.

42. Hartman RL, Jang M, Spurgin AL, Yun K, Gorelick DA, Milavetz G, Brown TL, Gaffney G, **Huestis MA**. Cannabinoid disposition in oral fluid after controlled cannabis vaporizer administration. The American Academy of Forensic Sciences, Orlando, FL. February 16-21, 2015.
43. **Huestis MA**. Mechanisms of impact of cannabis and other drugs on driver performance: an overview. Technical Consultation of drug use and road safety. World Health Organization. December 17-18, 2014.
44. Pariyadath V, Rashid G, Kolbrich-Spargo EA, Ross TJ, Gorelick DA, **Huestis MA**, Stein EA. Acute MDMA administration modulates behavioral adaptation during evaluation of risk via posterior cingulate function. American College on Neuropsychopharmacology. Phoenix, AZ. December 7-11, 2014.
45. **Huestis MA**. Marijuana: From the street to the clinic. Cannabis and new psychoactive substances. Norwegian Institute of Public Health. Oslo, Norway. December 3, 2014.
46. **Huestis MA**. Mass spectrometry vs novel psychoactive substances. Cannabis and new psychoactive substances. Norwegian Institute of Public Health. Oslo, Norway. December 3, 2014.
47. Hartman RL, Brown TL, Spurgin A, Gorelick DA, Milavetz G, Gaffney G, **Huestis MA**. Cannabis and Low-Dose Alcohol Effects on Standard Deviation of Lateral Position (Lane Weaving) in Simulated Driving After Controlled Administration. The International Association of Forensic Toxicology (TIAFT) annual conference. Buenos Aires, Argentina. November 7-15, 2014.
48. Wohlfarth A, Pang S, Zhu M, Scheidweiler KB, Castaneto M, Kronstrand R, **Huestis MA**. Pentyindole/pentyindazole synthetic cannabinoids and their 5-fluoro analogs produce different predominant metabolites: metabolite profiling for AB-PINACA and 5F-ABPINACA. The International Association of Forensic Toxicology (TIAFT) annual conference. Buenos Aires, Argentina. November 7-15, 2014.
49. Wohlfarth A, Pang S, Zhu M, Scheidweiler KB, Castaneto M, Kronstrand R, **Huestis MA**. AH-7921, A Designer Synthetic Opioid: In Silico predication, Metabolic Stability Assessment with Human Liver Microsomes, Human Hepatocyte Metabolite Identification by High-Resolution Mass Spectrometry and Confirmation in an Authentic Urine Specimen. The International Association of Forensic Toxicology (TIAFT) annual conference. Buenos Aires, Argentina. November 7-15, 2014.
50. Ellefsen K, Concheiro M, Beck O, Gorelick D, Pirard S, **Huestis MA**. Quantification of cocaine and metabolites in exhaled breath by liquid chromatography-high-resolution mass spectrometry following controlled administration of intravenous cocaine. Society of Forensic Toxicologists Annual Conference (SOFT). Grand Rapids, October 19-24, 2014.
51. Hartman RL, Anizan S, Jang M, Brown TL, Yun K, Gorelick DA, Milavetz G, Gaffney G, **Huestis MA**. Draeger® DrugTest 5000 On-Site Oral Fluid Cannabinoid Screening Performance after Cannabis Vaporization. Society of Forensic Toxicologists Annual Conference (SOFT). Grand Rapids, MI. October 19-24, 2014.
52. Ellefsen K, Anizan S, Castaneto MS, Desrosiers NA, Martin TM, Klette K, **Huestis MA**. Validation of the Only Commercially Available Immunoassay for Synthetic Cathinones in Urine:

Randox Drugs of Abuse V Biochip Array Technology. Society of Forensic Toxicologists Annual Conference (SOFT). Orlando, FL. October 27-November 1, 2013.

53. Newmeyer MN, Concheiro M, da Costa JL, Flegel R, LoDico C, Gorelick DA, **Huestis MA**. Plasma and Oral Fluid Morphine and Codeine Concentrations after Controlled Poppy Seed Administration of Known Opiate Content. Society of Forensic Toxicologists Annual Conference (SOFT). Grand Rapids, October 19-24, 2014.
54. Smith ML, Haak DA, Nadeau RJ, Moser MA, LoDico C, Gorelick DA, Newmeyer MN, Concheiro M, **Huestis MA**. Morphine and Codeine Concentrations in Human Urine following Controlled Poppy Seeds Administration of Known Opiate Content. Society of Forensic Toxicologists Annual Conference (SOFT). Grand Rapids, October 19-24, 2014.
55. Smith ML, Haak DA, Nadeau RJ, Moser MA, Flegel R, Gorelick DA, Newmeyer MN, Concheiro M, Madeleine S, **Huestis MA**. Urinary Methamphetamine and Amphetamine Isomer Concentrations Following Controlled Vicks VapoInhaler Administration. Society of Forensic Toxicologists Annual Conference (SOFT). Grand Rapids, October 19-24, 2014.
56. Huestis MA. Controlled drug administration studies guiding interpretation of oral fluid test results. Oral fluid testing: basic science and practical applications. Society of Forensic Toxicologists Annual Conference (SOFT). Grand Rapids, October 19-24, 2014.
57. Castaneto M, Wohlfarth A, Pang S, Zhu M, Scheidweiler K, **Huestis MA**. Urinary Markers for AB-FUBINACA Intake Determined by Human Hepatocytes Incubation ns High-Resolution Mass Spectrometry. Society of Forensic Toxicologists Annual Conference (SOFT). Grand Rapids, October 19-24, 2014.
58. Anizan S, Concheiro M, Lehner KR, Bukhari MO, Suzuki M, Rice KC, Baumann MH, **Huestis MA**. Linear pharmacokinetics of 3,4-methylenedioxypyrovalerone (MDPV) and its metabolites in the rat: relationship to pharmacodynamic effects. Society of Forensic Toxicologists Annual Conference (SOFT). Grand Rapids, October 19-24, 2014.
59. Desrosiers NA, Ramaekers JG, Gorelick DA, **Huestis MA**. Psychomotor Effects in Occasional and Frequent Smokers Following Controlled Smoked Cannabis. Society of Forensic Toxicologists Annual Conference (SOFT). Grand Rapids, October 19-24, 2014.
60. Scheidweiler KB, Himes SK, Desrosiers NA, **Huestis MA**. Stability of Free and Glucuronidated Cannabinoids in Blood and Plasma Gray-Top Sodium Fluoride Tubes and Stored in Polypropylene Tubes Following Controlled Smoked Cannabis. Society of Forensic Toxicologists Annual Conference (SOFT). Grand Rapids, October 19-24, 2014.
61. Ellefsen K, Concheiro M, Beck O, Gorelick DA, Pirard S, **Huestis MA**. Quantification of Cocaine and Metabolites in Exhaled Breath by Liquid Chromatography by High Resolution Mass Spectrometry Following Controlled Administration of Intravenous Cocaine. Society of Forensic Toxicologists Annual Conference (SOFT). Grand Rapids, October 19-24, 2014.
62. Smith ML, Haak DA, Nadeau RJ, Moser MA, Flegel R, Gorelick DA, Newmeyer MN, Concheiro M, Swortwood MJ, **Huestis MA**. Urinary Methamphetamine and Amphetamine Isomer Concentrations Following Controlled Vicks VapoInhaler Administration. Society of Forensic Toxicologists Annual Conference (SOFT). Grand Rapids, October 19-24, 2014.
63. **Huestis MA**. Mass spectrometry vs designer synthetic cannabinoids. World Forensic Festival, Seoul, Korea. October 12-18, 2014.

64. **Huestis MA.** Method development for metabolites of new psychoactive substances. World Forensic Festival, Seoul, Korea. October 12-18, 2014.
65. **Huestis MA.** Marijuana: From the Street to the Clinic. Korea Basic Science Institute, Chungnam National University. Daejeon, Korea. October 13, 2014.
66. **Huestis MA.** Determining Human Metabolism of Designer Drugs with Human Hepatocytes & High Resolution-Mass Spectrometry. American Association for Clinical Chemistry. Chicago, IL. July 27-31, 2014.
67. **Huestis MA.** Defining the Role of Oral Fluid Testing in Clinical & Forensic Settings. American Association for Clinical Chemistry. Chicago, IL. July 27-31, 2014.
68. **Huestis MA.** Oral fluid testing finds its niche. Ghent symposium on alternative sampling strategies in toxicology and therapeutic drug monitoring. Ghent, Belgium. September 18-19, 2014.
69. **Huestis MA.** Determining Human Metabolism of Designer Drugs with Human Hepatocytes & High Resolution-Mass Spectrometry. American Association for Clinical Chemistry. Chicago, IL. July 27-31, 2014.
70. **Huestis MA.** Mass Spectrometry vs Designer Synthetic Cannabinoids. 9th International Symposium on Advances in Legal Medicine (ISALM). Fukuoka, Japan. June 16-20, 2014.
71. Gandhi AS, Zhu M, Pang S, Wohlfarth A, Scheidweiler KB, **Huestis MA.** Characterizing the Novel Synthetic Cannabinoid, RCS-4's Metabolism – Human Hepatocytes Applicability in Clinical and Forensic Drug Testing. American Society for Mass Spectrometry. Baltimore, MD. June 15-19, 2014.
72. Hirvonen J, Zanotti-Fregonara P, Gorelick DA, Rallis-Frutos D, Morse C, Zoghbi SS, Pike VW, **Huestis MA**, Innis RB. Decreased cannabinoid CB₁ receptor binding in tobacco smokers examined with positron emission tomography. The 10th International Symposium on Functional NeuroReceptor Mapping of the Living Brain. Amsterdam, The Netherlands. May 21-24, 2014.
73. Eze N, Smith LM, LaGasse LL, Derauf C, Newman E, Shah R, Arria A, **Huestis MA**, DellaGrotta SA, Dansereau LM, Neal C, Lester BM. IDEAL Community Research Network. Childhood Behavioral Problems And Early Adversity In School-Aged Children With Prenatal Methamphetamine Exposure: 7.5 Year Follow Up From The Infant Development, Environment, and Lifestyle (IDEAL) study. Pediatric Academic Societies and Asian Society for Pediatric Research Joint Meeting. Vancouver, Canada. May 3-6, 2014.
74. **Huestis MA.** Characterizing Metabolic Profiles of Synthetic Cannabinoids: Human Hepatocyte Incubation & High-Resolution Mass Spectrometry. Trends in New Drugs & Drug Abuse. Helsinki, Finland. April 7, 2014.
75. **Huestis MA.** Chronic Frequent Cannabis Smoking: Pharmacokinetics, Neuroadaptation & Impaired Performance. Trends in New Drugs & Drug Abuse. Helsinki, Finland. April 7, 2014.
76. **Huestis MA.** Designer drugs: the emerging face of drug abuse. The annual congress of the international association of law and forensic sciences (IALFS), Dubai, United Arab Emirates. April 1-3, 2014.
77. **Huestis MA.** Mass spectrometry vs designer synthetic cannabinoids. Mass Spectrometry: Applications to the Clinical Laboratory. San Diego, CA. March 1-5, 2014.

78. Himes SK, Concheiro M, Scheidweiler KB, **Huestis MA**. LC/MS/MS quantification of ethyl glucuronide and ethyl sulfate in meconium. The American Academy of Forensic Sciences, Seattle, WA. February 17-21, 2014.
79. **Huestis MA**. Screening and confirmation of cannabimimetics. Designer drug detection in forensic toxicology: From basics to brilliant! The American Academy of Forensic Sciences, Seattle, WA. February 17-21, 2014.
80. Newmeyer MN, Concheiro M, da Costa JL, Gorelick DA, **Huestis MA**. Plasma and Oral Fluid l-Methamphetamine Concentrations After Controlled Vicks[®] VapoInhaler[™] Administration. American Academy of Forensic Sciences (AAFS) Annual Meeting. Seattle, WA. February 17-22, 2014.
81. **Huestis MA**. Toxicology. Interdisciplinary symposium: Fostering the next generation of forensic scientists: mentoring in the 21st century. American Academy of Forensic Sciences (AAFS) Annual Meeting. Seattle, WA. February 17-22, 2014.
82. Spinelli E, Barnes AJ, Da Costa JL, **Huestis MA**. Performance characteristics of the Neogen ELISA screening assay for detection of synthetic cannabinoids in urine. American Academy of Forensic Sciences (AAFS) Annual Meeting. Seattle, WA. February 17-22, 2014.
83. Desrosiers NA, Scheidweiler KB, Lee D, Concheiro-Guisan M, Gorelick DA, **Huestis MA**. In vitro free and glucuronidated cannabinoid stability in authentic urine following controlled smoked cannabis. American Academy of Forensic Sciences (AAFS) Annual Meeting. Seattle, WA. February 17-22, 2014.
84. **Huestis MA**. Prenatal tobacco exposure biomarkers- neonatal outcomes predictors. Tobacco and reproductive health: enhancing the science base. Bethesda, MD. January 21-22, 2014.
85. **Huestis MA**. Designer drugs: the new face of drug abuse. 9th Congresso Regional Latinoamericano de TIAFT. URU-TIAFT 2013. Montevideo, Uruguay. November 1-8, 2013.
86. **Huestis MA**. Chronic daily cannabis smoking: neuroadaptation, residual cannabinoid excretion and psychomotor impairment. 9th Congresso Regional Latinoamericano de TIAFT. URU-TIAFT 2013. Montevideo, Uruguay. November 1-8, 2013.
87. Ellefsen KN, Anizan S, Castaneto MS, Desrosiers NA, Martin TM, Klette K, **Huestis MA**. Validation of the only commercially available immunoassay for synthetic cathinones in urine: Randox Drugs of Abuse V Biochip Array Technology. Society of Forensic Toxicologists Annual Conference (SOFT). Orlando, FL. October 27-November 1, 2013.
88. Concheiro-Guisan M, Baumann MH, Scheidweiler KB, **Huestis MA**. Nonlinear plasma pharmacokinetics of MDMA and major metabolites in rats and accompanying short term pharmacodynamic effects. Society of Forensic Toxicologists Annual Conference (SOFT). Orlando, FL. October 27-November 1, 2013.
89. Castaneto MS, Desrosiers NA, Ellefsen K, Anizan S, Martin TM, Klette K, **Huestis MA**. Validation of the Randox Drugs of Abuse V Biochip Array Technology for Detection and Semi-quantification of Synthetic Cannabinoids in Urine. Society of Forensic Toxicologists Annual Conference (SOFT). Orlando, FL. October 27-November 1, 2013.

90. Scheidweiler KB, **Huestis, MA**. Quantification of synthetic cannabinoids in urine by liquid chromatography tandem mass spectrometry. Society of Forensic Toxicologists Annual Conference (SOFT). Orlando, FL. October 27-November 1, 2013.
91. Bergamaschi MM, Barnes AJ, Queiroz RHC, Hurd YL, Huestis MA. Enzymatic hydrolysis optimization for urinary cannabidiol. Society of Forensic Toxicologists Annual Conference (SOFT). Orlando, FL. October 27-November 1, 2013.
92. Desrosiers NA, Ramaekers JG, Gorelick DA, **Huestis MA**. Psychomotor Effects in Occasional & Frequent Smokers After Controlled Smoked Cannabis. Society of Forensic Toxicologists Annual Conference (SOFT). Orlando, FL. October 27-November 1, 2013.
93. Scheidweiler KB, Himes SK, Desrosiers NA, Pirard Janne d'Othee S, **Huestis MA**. In Vitro Stability of Free and Glucuronidated Cannabinoids in Blood and Plasma Collected in Gray-top Sodium Fluoride Tubes Following Controlled Smoked Cannabis. Society of Forensic Toxicologists Annual Conference (SOFT). Orlando, FL. October 27-November 1, 2013.
94. Hartman RL, Gorelick DA, Brown TL, Compton R, Smither D, Gaffney G, **Huestis MA**. Cannabinoids Disposition in Blood Following Controlled Cannabis Administration by Volcano[®] Vaporizer. Society of Forensic Toxicologists Annual Conference (SOFT). Orlando, FL. October 27-November 1, 2013.
95. Himes SK, LaGasse LL, Derauf C, Newman E, Smith LM, Arria AM, Della Grotta SA, Dansereau LM, Abar B, Neal CR, Lester BM, **Huestis MA**. Risk for neurobehavioral disinhibition in prenatal methamphetamine-exposed young children with positive hair toxicology results. Society of Forensic Toxicologists, Orlando, FL. October 28-November 1, 2013.
96. Newmeyer MN, Concheiro M, **Huestis MA**. Chiral Separation of Plasma Amphetamines Enantiomers by LC-MS/MS with Precolumn Derivatization. Society of Forensic Toxicologists Annual Conference (SOFT). Orlando, FL. October 27-November 1, 2013.
97. Scheidweiler KB, Wohlfarth A, Gandhi AS, He X, Chen X, Liu HF, **Huestis MA**. Development and evaluation of a high-throughput screening method for synthetic cannabinoids/metabolites in urine with Q-TOF mass spectrometer and multiplexed LCs. Society of Forensic Toxicologists Annual Conference (SOFT). Orlando, FL. October 27-November 1, 2013.
98. Desrosiers NA, Himes SK, Concheiro-Guisan M, Scheidweiler KB, Gorelick DA, **Huestis MA**. Phase I and II cannabinoids disposition in blood of chronic, frequent and occasional smokers following controlled smoked cannabis. Society of Forensic Toxicologists, Orlando, FL. October 28-November 1, 2013.
99. Gandhi AS, Zhu M, Pang S, Wohlfarth A, Scheidweiler KB, Liu HF, **Huestis MA**. Identification of metabolites of AKB-48, a novel synthetic cannabinoid, using human hepatocytes and high resolution mass spectrometry. Society of Forensic Toxicologists Annual Conference (SOFT). Orlando, FL. October 27-November 1, 2013.
100. Wohlfarth A, Pang S, Zhu M, Scheidweiler KB, **Huestis MA**. Rapid identification of RCS-8 metabolites by human hepatocyte incubation and high resolution mass spectrometry. Society of Forensic Toxicologists Annual Conference (SOFT). Orlando, FL. October 27-November 1, 2013.

101. Huestis MA. Differences between occasional and chronic frequent cannabis smokers. Marijuana: old drug, new data. Society of Forensic Toxicologists Annual Conference (SOFT). Orlando, FL. October 27-November 1, 2013.
102. Scheidweiler KB, Himes SK, Chen X, Liu HF, **Huestis MA**. 11-Nor-9-carboxy- Δ^9 -tetrahydrocannabinol quantification in human oral fluid by liquid chromatography-tandem mass spectrometry. International Association of Therapeutic Drug Monitoring and Clinical Toxicology, Salt Lake City, UT. September 22-26, 2013.
103. **Huestis MA**. Utility of oral fluid in clinical toxicology. International Association of Therapeutic Drug Monitoring and Clinical Toxicology, Salt Lake City, UT. September 22-26, 2013.
104. **Huestis MA**. Advances in anti-doping drug testing. Is oral fluid the answer to identifying in-competition drug use in sport? International Association of Therapeutic Drug Monitoring and Clinical Toxicology, Salt Lake City, UT. September 22-26, 2013.
105. **Huestis MA**. Cannabinoids. Joint meeting of the California Association of Toxicologists and the Southwestern Association of Toxicologists. Las Vegas, NV. September 20-21, 2013.
106. Hartman RL, Nemeth D, Nemeth D, M. Salamone, Schantz P, Fellows J, Mahoney K, Kadlec L, **Huestis MA**, Beno JM. Drug Recognition Expert (DRE) Success Rates in Western New York. The International Association of Forensic Toxicology (TIAFT) annual conference. Funchal, Madeira, Portugal. August 31-September 7, 2013.
107. **Huestis MA**. Designer drugs: the new face of drug abuse. The International Association of Forensic Toxicology (TIAFT) annual conference. Funchal, Madeira, Portugal. August 31-September 7, 2013.
108. Bergamaschi M, Hirvonen J, Karschner E, Goodwin R, Scheidweiler K, Queiroz R, **Huestis MA**. Prolonged cannabinoid excretion in chronic daily cannabis smokers; blood during sustained abstinence. The International Association of Forensic Toxicology (TIAFT) annual conference. Funchal, Madeira, Portugal. August 31-September 7, 2013.
109. Concheiro M, Lee D, Lendoiro E, **Huestis MA**. Simultaneous quantification of delta9-tetrahydrocannabinol (THC), 11-nor-9-carboxy-THC, cannabidiol and cannabinol in oral fluid by microflow-liquid chromatography-high resolution mass spectrometry. The International Association of Forensic Toxicology (TIAFT) annual conference. Funchal, Madeira, Portugal. August 31-September 7, 2013.
110. Desrosiers NA, Milman G, Mendu D, Lee D, Barnes AJ, Schwoppe DM, Gorelick DA, **Huestis MA**. Evaluation of the On-site Draeger DrugTest 5000 in Occasional and Chronic Frequent Smokers Following Controlled Cannabis Smoking. 20th International Council on Alcohol, Drugs and Traffic Safety Conference. Queensland, Australia. August 26-29, 2013.
111. Wohlfarth A, Gandhi A, Scheidweiler KL, Castaneto M, Desrosiers NA, Spinelli E, Young S, Barnes AJ, **Huestis MA**. Automated and semi-automated screening, LCMSMS confirmation and human hepatocyte high resolution metabolism studies of synthetic cannabinoids. 20th International Council on Alcohol, Drugs and Traffic Safety Conference. Queensland, Australia. August 26-29, 2013.

112. **Huestis MA**, Lee D, Desrosiers NA, Milman G, Gorelick DA. Oral Fluid Cannabinoids: How Analyte and Cutoff Selection Impact Drug Interpretation. 24th International Symposium on Pharmaceutical and Biomedical Analysis. Bologna, Italy. June 28-July 4, 2013.
113. Anizan S, Ellefsen K, Concheiro M, **Huestis MA**. Development and Validation of a Liquid-Chromatography-High Resolution Mass Spectrometry Method for the Simultaneous Analysis of 28 Cathinones in Urine. American Society of Mass Spectrometry Annual Conference (ASMS), Minneapolis, June 6-9, 2013.
114. Wohlfarth A, Gandhi A, Pang S, Zhu M, Liu H-F, **Huestis MA**. Rapid Generation Of Synthetic Cannabinoid “Metabolite Fingerprint” Following Human Hepatocyte Metabolism And High Resolution Mass Spectrometry. American Society of Mass Spectrometry Annual Conference (ASMS), Minneapolis, June 6-9, 2013.
115. Koola MM, McMahon RP, Liu F, Gorelick DA, Buchanan RW, **Huestis MA**, Linthicum J, Feldman S, Kelly DL. Clinical Characteristics in People with Schizophrenia Enrolling in a Clinical Trial with or without Lifetime Substance Use. Society for Clinical Trials. Boston, MA. May 19 - 22, 2013.
116. Desrosiers NA, Scheidweiler KB, Lee D, Concheiro M, Gorelick DA, **Huestis MA**. In Vitro Free and Glucuronidated Cannabinoid Stability in Authentic Urine following Controlled Smoked Cannabis. American Academy for Forensic Sciences (AAFS) Annual Meeting. Washington, DC. February 18-22, 2013.
117. **Huestis MA**. Developments in emerging and designer drug markets 2013: Assessment of testing approaches for large scale designer drug testing. American Academy for Forensic Sciences (AAFS) Annual Meeting. Washington, DC. February 18-22, 2013.
118. **Huestis MA**, Wohlfarth A, Hartman RL, Desrosiers NA. Current Research Initiatives in Toxicology at the National Institute on Drug Abuse. American Academy for Forensic Sciences (AAFS) Annual Meeting. Washington, DC. February 18-22, 2013.
119. Anizan S, Milman G, Desrosiers N, Barnes AJ, Gorelick DA, **Huestis MA**. Δ^9 -Tetrahydrocannabinol, 11-nor-9-carboxy-tetrahydrocannabinol, Cannabidiol, Cannabinol and 11-hydroxy-tetrahydrocannabinol in Oral Fluid Following Controlled, Smoked Cannabis in Frequent and Occasional Smokers. American Academy for Forensic Sciences (AAFS) Annual Meeting. Washington, DC. February 18-22, 2013.
120. Himes SK, Scheidweiler KB, Beck O, Desrosiers NA, **Huestis, MA**. Cannabinoids in Exhaled Breath Following Controlled Administration of Cannabis. American Academy for Forensic Sciences (AAFS) Annual Meeting. Washington, DC. February 18-22, 2013.
121. Lee D, Karschner EL, Milman G, Barnes AJ, Goodwin RS, **Huestis MA**. Can oral fluid cannabinoid testing differentiate cannabis smoking from intake of oral THC and oromucosal Sativex administration? American Academy for Forensic Sciences (AAFS) Annual Meeting. Washington, DC. February 18-22, 2013.
122. Concheiro M, Jones HE, Johnson RE, R Choo R, **Huestis MA**. Sweat as Alternative Matrix to Monitor Buprenorphine Compliance, and Opioids, Cocaine and Tobacco Use in Opioid-Dependent Pregnant Women. American Academy for Forensic Sciences (AAFS) Annual Meeting. Washington, DC. February 18-22, 2013.

123. **Huestis MA.** Quantification methods for THCCOOH in oral fluid and why it is important to monitor this analyte. Mass spectrometry: Applications to the clinical laboratory. San Diego, CA. February 9-13, 2013.
124. **Huestis MA.** Chronic Daily Cannabis Smoking: Neuroadaptation, Residual Cannabinoid Excretion & Psychomotor Impairment. Philippine Forensic Drug Testing Society. January 24, 2013.
125. **Huestis MA.** Oral fluid drug testing. Philippine Forensic Drug Testing Society. January 24, 2013.
126. **Huestis MA.** Synthetic cannabinoids. Philippine Forensic Drug Testing Society. January 24, 2013.
127. **Huestis MA.** Chronic Daily Cannabis Smoking: Neuroadaptation, Residual Cannabinoid Excretion & Psychomotor Impairment. Philippine forensic drug testing society. January 24, 2013.
128. Holcomb H, West J, Rowland L, Boggs D, Wittenberg G, Lee M, **Huestis MA**, Gorelick D: Neural response to visual nicotine cues in smokers: what predicts signal magnitude? Presented at 46th annual Winter Conference on Brain Research, Breckenridge, CO, January 27, 2013.
129. Lee D, **Huestis MA.** Cannabinoid disposition in oral fluid: quantification, pharmacokinetics and interpretation. Eastern Analytical Symposium. Somerset, NJ. November 12-15, 2012.
130. Himes SK, Scheidweiler KB, Tassiopoulos K, Kacanek D, Hazra R, Borek N, Rich KC, and **Huestis MA**, for the Pediatric HIV/AIDS Cohort Study (PHACS). Development of the First Liquid Chromatography-Tandem Mass Spectrometry Assay for Antiretroviral Medications in Meconium. The International AIDS Conference. Washington, DC. July 22-27, 2012.
131. Desrosiers NA, Himes SK, Concheiro M, Scheidweiler KB, Gorelick DA, **Huestis MA.** Phase I and II Cannabinoid Disposition in Blood of Chronic, Frequent and Occasional Smokers Following Controlled Smoked Cannabis. Society of Forensic Toxicologists (SOFT) Annual Meeting. Boston, MA. July 1-6, 2012.
132. Concheiro M, Jones HE, Johnson RE, R Choo R, **Huestis MA.** Oral fluid as an alternative matrix to monitor buprenorphine compliance, and opioids, cocaine and tobacco use in opioid-dependent pregnant women. Society of Forensic Toxicologists (SOFT) Annual Meeting. Boston, MA. July 1-6, 2012.
133. Lee D, Schwoppe DM, Milman G, Barnes AJ, Gorelick DA, **Huestis MA.** Cannabinoids stability in authentic oral fluid collected by expectoration and with the Quantisal device after controlled cannabis smoking? Society of Forensic Toxicologists (SOFT) Annual Meeting. Boston, MA. July 1-6, 2012.
134. Bergamaschi MM, Milman G, Lee D, Mendu D, Barnes A, Queiroz R, Vandrey R, **Huestis MA.** Cannabinoid plasma concentrations in chronic daily cannabis smokers during ad-libitum smoking. Society of Forensic Toxicologists (SOFT) Annual Meeting. Boston, MA. July 1-6, 2012.
135. Milman G, Bergamaschi MM, Lee D, Mendu DR, Barnes AJ, Vandrey R, **Huestis MA.** Dose-Dependent Plasma Cannabinoid Concentrations after Controlled Oral Synthetic THC and Smoked Cannabis Administration in Chronic Daily Smokers. Society of Forensic Toxicologists (SOFT) Annual Meeting. Boston, MA. July 1-6, 2012.
136. Himes SK, Stroud L, Scheidweiler KB, Niaura R, **Huestis MA.** Prenatal Tobacco Exposure, Tobacco Biomarkers in Meconium and Infant Outcomes. Society of Forensic Toxicologists (SOFT) Annual Meeting. Boston, MA. July 1-6, 2012.

137. Scheidweiler KB, Desrosiers NA, **Huestis MA**. Simultaneous quantification of free and glucuronidated cannabinoids in human urine by liquid chromatography tandem mass spectrometry. Society of Forensic Toxicologists (SOFT) Annual Meeting. Boston, MA. July 1-6, 2012.
138. Castaneto M, Barnes AJ, Scheidweiler KB, Schaffer M, Rogers K, Stewart D and **Huestis MA**. What is the best biological matrix in identifying methamphetamine environmental exposure in endangered children? Society of Forensic Toxicologists (SOFT) Annual Meeting. Boston, MA. July 1-6, 2012.
139. Desrosiers NA, Scheidweiler KB, Schwoppe DM, Karschner EL, Gorelick DA, and **Huestis MA**. In Vitro Stability of Cannabinoids and Cannabinoid Glucuronides in Authentic Whole Blood and Plasma Following Controlled Smoked Cannabis. Society of Forensic Toxicologists (SOFT) Annual Meeting. Boston, MA. July 1-6, 2012.
140. Bosker WM, Karschner EL, Lee D, Goodwin RS, Hirvonen J, Innis RB, Theunissen EL, Kuypers KPC, Ramaekers JG, **Huestis MA**. Sustained abstinence improves psychomotor function in chronic daily cannabis smokers. Society of Forensic Toxicologists (SOFT) Annual Meeting. Boston, MA. July 1-6, 2012.
141. **Huestis MA**. The Effects of Cannabis on Driving Skills. Society of Forensic Toxicologists (SOFT) Annual Meeting. Boston, MA. July 1-6, 2012.
142. Huestis MA. Current research initiatives related to DUID and oral fluid testing. Strategies for expanding DUID testing: Is oral fluid the way ahead? Society of Forensic Toxicologists (SOFT) Annual Meeting. Boston, MA. July 1-6, 2012.
143. **Huestis MA**. Advances in oral fluid testing for monitoring illicit drug use. XXXIII Nordic Congress in Clinical Chemistry. Reykjavik, Iceland. June 12-15, 2012.
144. Eiden RD, Granger DA, Schuetze P, Gray TR, **Huestis MA**. Prenatal and Postnatal Cigarette Exposure: Effects on Stress Reactivity at 9 months of Age. International Conference on Infant Studies. Minneapolis, MN. June 7 - 9, 2012.
145. Schuetze P, Eiden RD, Maiaroana N, Gray TR, **Huestis MA**. Physiological Responses during a Focused Attention Task in a Sample of Cigarette-Exposed Infants. International Conference on Infant Studies. Minneapolis, MN. June 7 - 9, 2012.
146. Desrosiers NA, Lee D, Scheidweiler KB, Schwoppe DM, Gorelick DA, **Huestis MA**. In Vitro Free and Glucuronidated Cannabinoid Stability in Authentic Urine Following Controlled Smoked Cannabis. 50th Annual Meeting of The International Association of Forensic Toxicologists (TIAFT). Hamamatsu, Japan. June 3-8, 2012.
147. Gorelick DA, Holcomb HH, Boggs DL, Wittenberg GF, West JT, Lee MR, **Huestis MA**. fMRI-guided transcranial magnetic stimulation (TMS) to reduce cue-induced nicotine craving. Society of Biological Psychiatry 67th annual convention. Philadelphia, PA. May 5, 2012.
148. Kiblawi ZN, Smith LM, LaGasse LL, Derauf C, Newman E, Shah R, Arria A, **Huestis MA**, Della Grotta SA, Dansereau LM, Neal C and Lester BM, IDEAL Community Research Network. The Effect of Prenatal Methamphetamine Exposure on Attention as Assessed by Continuous Performance Tests: Results from the Infant Development, Environment, and Lifestyle (IDEAL) Study. SPR annual meeting. San Francisco, CA. April 16-20, 2012.
149. Kirlic N, Newman E, LaGasse LL, Derauf C, Shah R, Smith LM, Arria AM, **Huestis MA**, Haning

- W, Strauss A, Della Grotta S, Dansereau LM, Abar B, Neal C, and Lester BM. Cortisol Reactivity in Two-Year-Old Children Prenatally Exposed to Methamphetamine. The 2012 American Association for the Advancement of Science - Southwestern and Rocky Mountain Division (AAAS-SWARM) - 86th annual meeting. Tulsa, OK. March 31- April 4, 2012.
150. Twomey J, LaGasse L, Derauf C, Newman E, Shah R, Smith L, Arria A, **Huestis MA**, Haning W, Strauss A, DellaGrotta S, Roberts M, Lester B. Prenatal Methamphetamine Exposure, Home Environments, Primary Caregiver Risk Factors as Predictors of Child Behavior Problems. Zero to Three National Training Institute, National Harbor, MD, December 9, 2011.
 151. Buchanan RW, Boggs DL, Robert R. Conley RR, Gorelick DA, McMahon RP, Gold JM, Waltz J, **Huestis MA**, Kelly DL. A Pilot Study Evaluating the Cognitive Effects of Rimonabant in People with Schizophrenia. American College of Neuropsychopharmacology. Waikoloa, Hawaii. December 4-8, 2011.
 152. Tao R, Lipska BK, Ye T, Li C, Deep-Soboslay A, Shakleya DM, **Huestis MA**, Weinberger DR, Kleinman JE and Hyde TM. Nicotine-associated gene expression changes during development of the human prefrontal cortex. Society for Neuroscience. Washington, DC. November 12-16, 2011.
 153. **Huestis MA**. Toxicology of Cannabis. Australasian Association of Clinical Biochemists. Sydney, Australia. October 10-13-2011.
 154. **Huestis MA**. Toxicology- The Laboratory of the Future. Australasian Association of Clinical Biochemists. Sydney, Australia. October 10-13-2011.
 155. **Huestis MA**. Regulation of Drugs of Abuse Testing in the United States. Toxicology Forum-Satellite meeting. Sydney, Australia. October 14, 2011.
 156. **Huestis MA**. Cannabinoids: Acute vs Chronic Intake & Measurement in Alternative Matrices. Toxicology Forum-Satellite meeting. Sydney, Australia. October 14, 2011.
 157. Schwaninger AE, Meyer MR, Barnes AJ, Kolbrich-Spargo EA, Gorelick DA, Goodwin RS, **Huestis MA**, Maurer HH. Stereoselective Urinary Excretion Kinetics of MDMA and Controlled MDMA Administration to Humans. The International Association of Therapeutic Drug Monitoring and Clinical Toxicology. Stuttgart, Germany. October 2- 6, 2011.
 158. Concheiro M, Jones HE, Johnson RE, Choo R, **Huestis MA**. Buprenorphine sublingual tablet pharmacokinetics in plasma, oral fluid and sweat during treatment of opioid-dependent pregnant women. The International Association of Therapeutic Drug Monitoring and Clinical Toxicology. Stuttgart, Germany. October 2- 6, 2011.
 159. Huestis, MA. Limitations of meconium testing for drugs of abuse in meconium. The International Association of Therapeutic Drug Monitoring and Clinical Toxicology. Stuttgart, Germany. October 2- 6, 2011.
 160. Schwoppe DM, Karschner EL, Scheidweiler KB, Gorelick DA, **Huestis, MA**. In vitro stability of cannabinoids and cannabinoid glucuronides in authentic whole blood and plasma specimens following controlled smoked cannabis. Joint SOFT-TIAFT International Conference and Exposition. San Francisco, CA. September 25-30, 2011.
 161. Himes SK, Goodwin RS, Rock CM, Jones HE, Johnson RE, Wilkins DG and **Huestis MA**. Methadone and Metabolites in Hair of Methadone-Maintained Pregnant Women and Their Infants. Joint SOFT-TIAFT International Conference and Exposition. San Francisco, CA.

September 25-30, 2011.

162. Lee D, Schwoppe DM, Milman G, Barnes AJ, Gorelick DA, **Huestis MA**. Δ^9 -Tetrahydrocannabinol (THC), 11-nor-9-carboxy-THC (THCCOOH), cannabidiol (CBD) and cannabinol (CBN) in oral fluid following controlled, smoked cannabis. Joint SOFT-TIAFT International Conference and Exposition. San Francisco, CA. September 25-30, 2011.
163. Bergamaschi MM, Milman G, Lee D, Mendu DR, Barnes A, Queiroz RHC, Vandrey R, **Huestis MA**. Cannabinoid plasma concentrations in chronic daily cannabis smokers during ad-libitum smoking. Joint SOFT-TIAFT International Conference and Exposition. San Francisco, CA. September 25-30, 2011.
164. Desrosiers NA, Schwoppe DM, Lee D, Milman G, Gorelick DA, **Huestis MA**. Oral fluid cannabinoids: window of detection, sensitivity, specificity and efficiency of the Draeger DrugTest® 5000 after controlled smoked cannabis administration. Joint SOFT-TIAFT International Conference and Exposition. San Francisco, CA. September 25-30, 2011.
165. Desrosiers NA, Barnes AJ, Hartman RL, Scheidweiler KB, Kolbrich-Spargo EA, Gorelick DA, Goodwin RS, and **Huestis MA**. Oral Fluid and Plasma 3,4-Methylenedioxymethamphetamine (MDMA) and Metabolite Correlation after Controlled Oral MDMA Administration. Joint SOFT-TIAFT International Conference and Exposition. San Francisco, CA. September 25-30, 2011.
166. Schwaninger AE, Meyer MR, Barnes AJ, Kolbrich-Spargo EA, Gorelick DA, Goodwin RS, **Huestis MA**, Maurer HH. Urinary Excretion Kinetics of MDMA and its Phase II Metabolites Following Controlled MDMA Administration to Humans. 49th. Joint SOFT-TIAFT International Conference and Exposition. San Francisco, CA. September 25-30, 2011.
167. Hartman RL, NA, Barnes AJ, Kolbrich-Spargo EA, Scheidweiler KB, DA, Goodwin RS, Stein EA, **Huestis MA**. Acute Oral MDMA Effects on Immediate, Short Term & Delayed Memory. Joint SOFT-TIAFT International Conference and Exposition. San Francisco, CA. September 25-30, 2011.
168. Scheidweiler KB, Abraham TT, Barnes AJ, Kolbrich Spargo EA, Gorelick DA, Goodwin RS, **Huestis MA**. 3,4-Methylenedioxymethamphetamine (MDMA) and metabolites in oral fluid collected with the Intercept® device and by expectoration following controlled oral MDMA administration. Joint SOFT-TIAFT International Conference and Exposition. San Francisco, CA, September 25-30, 2011.
169. Karschner EL, Schwoppe DM, Gorelick DA, **Huestis MA**. Free and glucuronide conjugate plasma cannabinoid pharmacokinetics after *ad libitum* smoking of a 6.8% Δ^9 -tetrahydrocannabinol cigarette. Joint SOFT-TIAFT International Conference and Exposition. San Francisco, CA. September 25-30, 2011.
170. **Huestis MA**. Issues relating to oral fluid-based drug testing, and the importance of controlled drug administration studies as basis for result interpretation. American Association for Clinical Chemistry. Atlanta, GA July 24-28, 2011.
171. Baggott MJ, Li L, Galloway GP, **Huestis MA**, Scheidweiler KB, Barnes AJ, Mendelson J. Pharmacokinetics of oral 3,4-methylenedioxyamphetamine in humans. The College on Problems of Drug Dependence (CPDD). Hollywood, FL. June 18-23, 2011.
172. **Huestis MA**. Drugs of abuse testing, from urine to oral fluid: scientific and legal ramifications. International Federation of Clinical Chemistry and Laboratory Medicine (IFCC). Berlin,

Germany. May 15-19, 2011

173. Schwoppe DM, Scheidweiler KB, **Huestis MA**. Direct LC/MS/MS quantification of plasma cannabinoids and their glucuronides. American Academy of Forensic Sciences Annual Meeting. Chicago, IL. February 21-26, 2011.
174. Lee D, Milman G, Barnes AJ, Goodwin RS, Hirvonen J, **Huestis MA**. Oral fluid cannabinoids in chronic, daily cannabis smokers during sustained, monitored abstinence. American Academy of Forensic Sciences Annual Meeting. Chicago, IL. February 21-26, 2011.
175. **Huestis MA**. K2 and beyond: a synthetic cannabinoid primer. Cannabinoid pharmacology. American Academy of Forensic Sciences Annual Meeting. Chicago, IL. February 21-26, 2011.
176. **Huestis MA**. Eleven sections: one academy- current perspectives on the state of relevant, reliable, valid forensic science in a multidisciplinary context. Toxicology. American Academy of Forensic Sciences Annual Meeting. Chicago, IL. February 21-26, 2011.
177. Kiblawi ZN, Smith LM, LaGasse, LL, Derauf C, Newman E, Shah R, Arria AM, **Huestis M**, Haning W, Strauss A, Della Grotta S, Lynne M Dansereau LM, Lester BM. Prenatal Methamphetamine Use and Neonatal and Infant Neurobehavioral Outcome: Results from the Infant Development, Environment, and Lifestyle Study. WSPR annual meeting. Carmel, CA. Jan 26-29, 2011.
178. **Huestis MA**. Cannabinoids: neurobiology, pharmacology and pharmacokinetics following acute and chronic exposure Parts I & II. Seminars in Forensic Toxicology: Ethanol and Marijuana. American College of Medical Toxicology. San Francisco, CA. December 13-14, 2010.
179. **Huestis MA**. What is the mechanism of neurocognitive impairment in chronic daily cannabis users? Cannabinoids Session 1: as the smoke clears: Clinical and preclinical evaluations of cannabis dependence and withdrawal. American College of Neuropsychopharmacology (ACNP). Miami Beach, FL. December 5-9, 2010.
180. Schwoppe DM, Holland MG, Gillen S, Stoppacher R, **Huestis MA**. Postmortem redistribution of Δ^9 -tetrahydrocannabinol (THC), 11-hydroxy-THC (11-OH-THC), and 11-nor-9-carboxy-THC (THCCOOH). Society of Forensic Toxicologists (SOFT) Meeting. Richmond, VA. October 18-22, 2010.
181. Karschner EL, Darwin WD, Goodwin RS, Wright S, **Huestis MA**. Plasma cannabinoid pharmacokinetics following controlled Sativex[®] and oral THC administration. Society of Forensic Toxicologists (SOFT) Meeting. Richmond, VA. October 18-22, 2010.
182. Lee D, Milman G, Barnes AJ, **Huestis MA**. Δ^9 -Tetrahydrocannabinol (THC), 11-hydroxy-THC (11-OH-THC), 11-nor-9-carboxy-THC (THCCOOH), cannabidiol (CBD) and cannabinol (CBN) concentrations in oral fluid collected by expectoration and the Quantisal[™] device. Society of Forensic Toxicologists (SOFT) Meeting. Richmond, VA. October 18-22, 2010.
183. Milman G, Schwilke EW, Schwoppe DM, Barnes AJ, Goodwin RS, Kelly DL, Gorelick DA, **Huestis MA**. Oral Fluid/Plasma Cannabinoid Ratios Following Around-the-clock Multiple Controlled Oral THC Doses. Society of Forensic Toxicologists (SOFT) Meeting. Richmond, VA. October 18-22, 2010.
184. Scheidweiler KB, Abraham TT, Barnes AJ, Kolbrich Spargo EA, Gorelick DA, Goodwin RS, **Huestis MA**. 3,4-Methylenedioxymethamphetamine (MDMA) and metabolites distribution in

oral fluid collected using Intercept® device following controlled oral MDMA administration. Society of Forensic Toxicologists (SOFT) Meeting. Richmond, VA. October 18-22, 2010.

185. Gray TR, Barnes AJ, **Huestis MA**. Effect of hydrolysis on identifying prenatal cannabis exposure. Society of Forensic Toxicologists (SOFT) Meeting. Richmond, VA. October 18-22, 2010.
186. **Huestis MA**. Interpretation of whole blood, plasma and urine cannabinoid results Part 1 and 2. Marijuana pharmacology-practical applications for the forensic toxicologist. Society of Forensic Toxicologists (SOFT) Meeting. Richmond, VA. October 18-22, 2010.
187. de Castro A, Jones HE, Johnson RE, Gray TR, Shakleya DM, **Huestis MA**. Methadone and EDDP Disposition in Umbilical Cord and Correlations with Maternal Dose and Neonatal Outcomes. Society of Forensic Toxicologists (SOFT) Meeting. Richmond, VA. October 18-22, 2010.
188. Concheiro M, Jones HE, Johnson RE, Choo R, Shakleya DM, **Huestis MA**. Umbilical Cord monitoring of in utero drug exposure to buprenorphine, and correlation with maternal dose and neonatal outcomes. Society of Forensic Toxicologists (SOFT) Meeting. Richmond, VA. October 18-22, 2010.
189. Schwilke EW, Gullberg RG, Darwin WD, Chiang CN, Cadet JL, Gorelick DA, Pope HG, **Huestis MA**. Society of Forensic Toxicologists (SOFT) Meeting. Richmond, VA. October 18-22, 2010.
190. Huestis MA. LCMSMS method validation 2010. Society of Forensic Toxicologists (SOFT) Meeting. Richmond, VA. October 18-22, 2010.
191. Huestis MA. The past, present and future of forensic toxicology. Society of Forensic Toxicologists (SOFT) Meeting. Richmond, VA. October 18-22, 2010.
192. Boggs, Kelly, Gorelick DA, McMahon, Gold, **Huestis MA**, Buchanan. A Pilot Study Evaluating the Neuropsychological Effects of Rimonabant in People with Schizophrenia. International Congress on Schizophrenia Research Meeting. Minneapolis, Minnesota. September 20-21, 2010.
193. **Huestis MA**. Advances in the identification of in utero drug exposure and relationship to neonatal outcomes. UK and Ireland Association of Forensic Toxicologists. Glasgow, Scotland, September 6-7, 2010.
194. **Huestis MA**. Paired oral fluid and whole blood cannabinoids from the National Roadside Study. International Council on Alcohol, Drugs and Traffic Safety (ICADTS)- T2010. Oslo, Norway August 22-26, 2010.
195. Concheiro M, Shakleya DM, **Huestis MA**. Simultaneous analysis of buprenorphine, methadone, cocaine, opiates, nicotine and metabolites in sweat by liquid chromatography tandem mass spectrometry. The International Association of Forensic Toxicologists. Bonn, Germany. August 29-September 3, 2010.
196. De Castro A, Shakleya DM, Johnson RE, Choo RE, Jones HE, **Huestis MA**. Correlations for maternal methadone dose, placental methadone and EDDP concentrations, and neonatal outcomes. The International Association of Forensic Toxicologists. Bonn, Germany. August 29-September 3, 2010.
197. Barnes AJ, Spargo EAK, Scheidweiler KB, Gorelick DA, Goodwin RS, **Huestis MA**. MDMA

and metabolite disposition in expectorated oral fluid following controlled oral MDMA administration. The International Association of Forensic Toxicologists. Bonn, Germany. August 29-September 3, 2010.

198. **Huestis MA**, Lacey JH, Kelley-Baker T, Romero E, Barnes AJ, Coulter C, Moore C. Paired Oral Fluid and Whole Blood Cannabinoids From the National Roadside Study. International Council on Alcohol, Drugs and Traffic Safety. Oslo, Norway. August 21-26, 2010.
199. **Huestis MA**. Clinical pharmacokinetics of two newer pain management drugs, methadone and buprenorphine. American Association for Clinical Chemistry. Anaheim, CA July 25-29, 2010.
200. Zabaneh R, LaGasse LL, Derauf C, Newman E, Shah R, Smith LM, Arria AM, **Huestis MA**, Della Grotta S, Liu J, and Lester BM. Prenatal Exposure to Methamphetamine and Maternal Depression: Neurodevelopmental Findings from the Infant Development, Environment, and Lifestyle (IDEAL) Study. Pediatric Academic Societies annual meeting. Vancouver, Canada. May 1-4, 2010.
201. **Huestis MA**. Alternative Matrices. 4th International Conference of the Forensic Medicine Authority. Cairo, Egypt. April 20-22, 2010.
202. **Huestis MA**. Chronic Cannabis Use. 4th International Conference of the Forensic Medicine Authority. Cairo, Egypt. April 20-22, 2010.
203. **Huestis MA**. Updates on toxicology research and technology advances to improve research on drugged driving. Drugged driving: future research directions. Rockville, MD. March 10, 2010.
204. Kelly DL, Gorelick DA, McMahon RP, Boggs DL, Linthicum J, Liu F, Feldman S, Ball MP, Richardson CM, Conley RR, Gold JM, Wehring HJ, Kearns AM, **Huestis MA**, Warren K, Heishman SJ, Buchanan RW. Effects of the Cannabinoid-1 Receptor Antagonist Rimonabant on Psychiatric Symptoms in Overweight People with Schizophrenia: A Randomized, Double Blind Pilot Study. The American College of Neuropsychopharmacology Meeting. Hollywood, FL. December 6-10, 2009.
205. **Huestis MA**. Challenges and achievements in in utero drug exposure. Neuropsychopharmacology Research Program, IMIM. Barcelona, Spain. December 2, 2009.
206. **Huestis MA**. Alternative biological matrices: unique insights into human drug exposure. Neuropsychopharmacology Research Program, IMIM. Barcelona, Spain. December 2, 2009.
207. **Huestis MA**. Cannabinoids - Neurobiology, Pharmacology and Pharmacokinetics Following Acute and Chronic Exposure. American College of Medical Toxicology. Baltimore, MD. November 19, 2009.
208. Schwoppe DM. Cannabinoids in oral fluid. American College of Medical Toxicology 1st Forensic Course: Ethanol and Marijuana. Baltimore, MD. Nov 18-19, 2009.
209. **Huestis MA**. What is the mechanism of cognitive impairment following long-term cannabis use? Pharmacokinetic aspects of acute & chronic cannabis exposure. The Scripps Research Institute. La Jolla, CA. November 4, 2009.
210. Schwoppe DM, Milman G, **Huestis MA**. Validation of enzyme immunoassay for semi-quantification of cannabinoids in oral fluid. Society of Forensic Toxicologists Annual Meeting. Oklahoma City, OK. October 19-23, 2009.

211. Karschner EL, Barnes AJ, Lowe RH, Scheidweiler KB, **Huestis MA**. A two-dimensional gas chromatography/electron-impact mass spectrometry method for the simultaneous detection of cannabidiol, Δ^9 -tetrahydrocannabinol (THC), 11-hydroxy-THC (11-OH-THC) and 11-nor-9-carboxy-THC (THCCOOH). Society of Forensic Toxicologists Annual Meeting. Oklahoma City, OK. October 19-23, 2009.
212. Gray TR, Shakleya DM, Brunet BR, Dams R, Choo RE, Jones HE, **Huestis MA**. Comparing the efficacy of sweat testing to urine and oral fluid analysis for identifying opiate relapse in methadone-maintained opioid-dependent pregnant women. Society of Forensic Toxicologists Annual Meeting. Oklahoma City, OK. October 19-23, 2009.
213. Concheiro M, Gray TR, Shakleya DM, **Huestis MA**. High throughput simultaneous analysis of buprenorphine, methadone, cocaine, opiates, nicotine and metabolites in oral fluid by liquid chromatography tandem mass spectrometry. Society of Forensic Toxicologists Annual Meeting. Oklahoma City, OK. October 19-23, 2009.
214. Schwoppe DM, Milman G, **Huestis MA**. Enzyme immunoassay validation for detection of cannabinoids in oral fluid. Society of Forensic Toxicologists Annual Meeting. Oklahoma City, OK. October 19-23, 2009.
215. Milman G, Barnes AJ, Schwilke EW, Goodwin RS, Gorelick DA, Kelly D, **Huestis MA**. Cannabinoid concentrations in oral fluid after controlled around the clock oral synthetic THC (Marinol®) administration. Society of Forensic Toxicologists Annual Meeting. Oklahoma City, OK. October 19-23, 2009.
216. Shakleya DM, **Huestis MA**. Detection of Nicotine, Cotinine, *trans*-3'-Hydroxycotinine and Norcotinine in Human Oral Fluid by LCMSMS. Society of Forensic Toxicologists Annual Meeting. Oklahoma City, OK. October 19-23, 2009.
217. **Huestis MA**. Driving under the influence of drugs: a complex, global public health problem. XVI Brazilian Congress of Toxicology. Belo Horizonte, Brasil. October 12, 2009.
218. **Huestis MA**. Advantages and disadvantages of alternative matrices in Forensic Toxicology. XVI Brazilian Congress of Toxicology, Belo Horizonte, Brasil. October 12, 2009.
219. Schwoppe DM, Schwilke EW, Kelly DL, Goodwin RS, Gorelick DA, **Huestis MA**. Whole blood total cannabinoids during multiple daily oral THC dosing. The International Association of Therapeutic Drug Monitoring and Clinical Toxicology. Montreal, Canada. October 3-8, 2009.
220. Karschner EL, Schwoppe DM, Schwilke EW, Gorelick DA, Goodwin RS, Lowe RH, Kelly DL, **Huestis MA**. Whole Blood/Plasma Ratios in Ten Chronic Cannabis Users After Frequent Oral THC Administration. The International Association of Therapeutic Drug Monitoring and Clinical Toxicology. Montreal, Canada. October 3-8, 2009.
221. Gray TR, Shakleya DM, **Huestis MA**. Simultaneous quantification of twenty common drugs of abuse and metabolites in human meconium by LCMSMS. The International Association of Therapeutic Drug Monitoring and Clinical Toxicology. Montreal, Canada. October 3-8, 2009.
222. Concheiro M, Jones H, Shakleya D, **Huestis MA**. Placenta for monitoring in *utero* drug exposure to buprenorphine and their correlation with neonatal outcomes. The International Association of Therapeutic Drug Monitoring and Clinical Toxicology. Montreal, Canada. October 3-8, 2009.

223. **Huestis MA.** Hot Topics in Drugs of Abuse (Plenary Lecture). The International Association of Therapeutic Drug Monitoring and Clinical Toxicology. Montreal, Canada. October 3-8, 2009.
224. Gray TR, Kelly TL, LaGasse LL, Smith LM, Derauf C, Haning WF, Grant P, Shah R, Arria AM, Strauss A, Lester BM, **Huestis MA.** Monitoring maternal methamphetamine use by self-report and meconium toxicology in the Infant Development, Environment and Lifestyle Study. International Association of Therapeutic Drug Monitoring and Clinical Toxicology. Montreal, Canada. October 3-9, 2009.
225. **Huestis MA.** New insights into the pharmacokinetics of MDMA and related drugs. International Association of Therapeutic Drug Monitoring and Clinical Toxicology. Montreal, Canada. October 3-9, 2009.
226. Roper-Miller JD, Stout PR, **Huestis MA**, Cone EJ, Mitchell JM, Baylor MR. Interpreting Hair Analysis in Cocaine-User Populations and Surface-Contaminated Specimens. Can you differentiate? American Society of Crime Laboratory Directors (ASCLD) Annual Meeting. Anaheim, CA. September 13-17, 2009.
227. de Castro A, Concheiro M, Shakleya DM, **Huestis MA.** Liquid chromatography-ion trap-mass spectrometry assay for the simultaneous determination of methadone, cocaine, opiates and metabolites in human umbilical cord. The International Association of Forensic Toxicologists. Geneva, Switzerland. August 23-28, 2009.
228. Sasaki TA, Gray TR, **Huestis MA.** Metabolite ID using a hybrid triple quadrupole-linear ion trap LCMSMS instrument. The International Association of Forensic Toxicologists. Geneva, Switzerland. August 23-28, 2009.
229. Westin AA, **Huestis MA**, Aarstad K, Spigse O. Urine monitoring following heavy intake of cannabis in a pregnant woman – new intake or not? The International Association of Forensic Toxicologists. Geneva, Switzerland. August 23-28, 2009.
230. **Huestis MA.** Cannabis Testing in Sport. The International Association of Forensic Toxicologists. Geneva, Switzerland. August 23-28, 2009.
231. Gray TR, Eiden RD, **Huestis MA.** Prenatal tobacco exposure, meconium nicotine biomarkers and infant outcomes. The International Association of Forensic Toxicologists. Geneva, Switzerland. August 23-28, 2009.
232. Baumann MH, Zolkowska D, Kim I, Scheidweiler KB, Rothman RB and **Huestis MA.** Non-linear kinetics of (+)-3,4-methylenedioxymethamphetamine (MDMA) in rats. 71st annual meeting of the College on Problems of Drug Dependency (CPDD). Reno, NV. June 20-25, 2009.
233. Scheidweiler KB, Ladenheim B, Cadet JL, **Huestis MA.** Mice lacking multidrug resistance protein 1a show altered dopaminergic responses to methylenedioxymethamphetamine in the striatum. 71st annual meeting of the College on Problems of Drug Dependency (CPDD). Reno, NV. June 20-25, 2009.
234. Concheiro M, Shakleya D, **Huestis MA.** Comparison of placenta, umbilical cord and meconium for detection of fetal buprenorphine exposure. 71st annual meeting of the College on Problems of Drug Dependency (CPDD). Reno, NV. June 20-25, 2009.
235. Gray TR, LaGasse LL, Smith LM, Derauf C, Haning W, Grant P, Shah R, Arria AM, Strauss A, Lester BM, and **Huestis MA.** Monitoring Methamphetamine Use by Maternal Self-Report and

Meconium Toxicology in the Infant Development, Environment and Lifestyle (IDEAL) Study. Pediatric Academic Societies Annual Meeting. Baltimore, MD, May 2009.

236. Derauf C, LaGasse L, Smith L, Newman E, Shah R, Arria A, **Huestis, M.** DellaGrotta, S; Liu, J; and Lester, B. Infant Temperament and High Risk Parenting Related to Behavior Problems and Language in High Risk Toddlers. Pediatric Academic Societies Annual Meeting. Baltimore, MD, May 2009.
237. Huestis MA. Advances in Monitoring In Utero Drug Exposure. Italian Society of Forensic Sciences. Florence, Italy. April 20-25, 2009.
238. Arria A. Drug-using Mothers, Roles and risks of stimulants. The Infant Development, Environment and Lifestyle (IDEAL) Network. Cracked but not Broken Conference. Vancouver, BC. April 18, 2009.
239. **Huestis MA.** Advances in Monitoring In Utero Drug Exposure (Plenary Lecture). Gruppo Tossicologi Forensi Italiani GTFI – SIMLA. Florence, Italy. April 24, 2009.
240. Gray TR, Shakleya DM and **Huestis MA.** Simultaneous quantification of twenty common drugs of abuse and metabolites in human meconium by LCMSMS. American Academy of Forensic Sciences Annual Meeting. Denver, CO. February 14-23, 2009.
241. Zabaneh R, Smith LM, LaGasse L, Derauf C, Grant P, Shah R, Arria A, **Huestis MA**, Haning W, Strauss A, Della Grotta S, Liu J, Lester B. The effects of prenatal methamphetamine use on newborn health: results from the Infant Development, Environment and Lifestyle Study (IDEAL). Western Society for Pediatric Research (WSPR). Carmel, CA. January 28 - 31, 2009.
242. Nguyen D, Smith L, LaGasse C, Derauf P, Grant R, Shah R, Arria A, **Huestis MA**, Haning W, Strauss A, Della Grotta S, Liu J, Lester B. Intrauterine growth of infants exposed to prenatal methamphetamine: results from the Infant Development, Environment and Lifestyle Study (IDEAL). Western Society for Pediatric Research (WSPR). Carmel, CA. January 28 - 31, 2009.
243. Nguyen D, Smith LM, LaGasse L, Derauf C, Grant P, Shah R, Arria A, **Huestis MA**, Haning W, Strauss A, Della Grotta S, Liu J, Lester B. Intrauterine growth of infants exposed to prenatal methamphetamine: results from the Infant Development, Environment and Lifestyle Study (IDEAL). Western Society for Pediatric Research (WSPR). Carmel, CA. January 28 - 31, 2009.
244. Zabaneh R, Smith L, LaGasse L, Derauf C, Grant P, Shah R, Arria A, **Huestis M**, Haning W, Strauss A, DellaGrotta S, Liu J, and Lester B. The effects of prenatal methamphetamine use on newborn health: results from the Infant Development, Environment and Lifestyle Study (IDEAL). Western Society for Pediatric Research (WSPR). Carmel, CA. January 28 - 31, 2009.
245. **Huestis MA.** Measurement of secondhand smoke exposure in animals and humans- when (continuum of exposure), where (laboratory versus natural environment) and how (technology). Drug abuse vulnerability and neurodevelopmental effects of early exposure to secondhand tobacco smoke: Methodological issues and research priorities. Bethesda, MD. January 13, 2009.
246. Shakleya DM, **Huestis MA.** LCMSMS Technology Platforms for Forensic Toxicology. Indian Pharmaceutical Association Conference, New Delhi, India December 9-13, 2008.
247. **Huestis MA.** Predictors for current adolescent drug use. National Institute on Drug Abuse Prenatal Drug Exposure Adolescent Drug Use Follow-Up. Rockville, MD. November 20-21, 2008.

248. **Huestis MA.** Pharmacodynamics and pharmacokinetics of Cannabis. California Criminalistics Institute. Los Angeles, CA. November 14, 2008.
249. Kacinko SL, Jones HE, Johnson RE, Choo RE, **Huestis MA.** Correlations between maternal buprenorphine dose, meconium buprenorphine and metabolite concentrations and neonatal outcomes. Society of Forensic Toxicologists (SOFT) Annual Meeting. Phoenix, AZ. October 25-31, 2008.
250. Concheiro M, Shakleya DM, **Huestis MA.** A Novel Method for Simultaneous Quantification of Buprenorphine, Norbuprenorphine, Buprenorphine Glucuronide and Norbuprenorphine Glucuronide in Human Placenta by Liquid Chromatography Tandem Mass Spectrometry. Society of Forensic Toxicologists (SOFT) Annual Meeting. Phoenix, AZ. October 25-31, 2008.
251. Roper-Miller JD, **Huestis MA,** Cone EJ, Mitchell JM, Baylor MR, Meaders MA and Stout PR. Cocaine analytes in human hair I: Evaluation of concentration ratios in drug user populations. Society of Forensic Toxicologists (SOFT) Annual Meeting. Phoenix, AZ. October 25-31, 2008.
252. **Huestis MA.** Marijuana and driving impairment. Effects of drugs on human performance and behavior- a Borkenstein sampler. Society of Forensic Toxicologists (SOFT) Annual Meeting. Phoenix, AZ. October 25-31, 2008.
253. Abraham TT, Milman G, Lowe RH, Kolbrich EA, Pirnay SO, Gorelick DA, Goodwin RS and **Huestis, MA.** Urinary MDMA, MDA, HMMA, and HMA excretion following controlled MDMA administration to human subjects. Society of Forensic Toxicologists (SOFT) Annual Meeting. Phoenix, AZ. October 25-31, 2008.
254. de Castro A, Shakleya DM and **Huestis MA.** A novel validated method for quantification of methadone and its main metabolite, 2-Ethylidene-1,5-dimethyl-3,3-diphenylpyrrolidine (EDDP) in human placenta by LCMSMS. Society of Forensic Toxicologists (SOFT) Annual Meeting. Phoenix, AZ. October 25-31, 2008.
255. Smith ML, Darwin WD, Shimomura E, Cone EJ, Paul BD and **Huestis MA.** Methylecgonidine and ecgonidine in urine following four different routes of cocaine administration. Society of Forensic Toxicologists (SOFT) Annual Meeting. Phoenix, AZ. October 25-31, 2008.
256. Gray TR, Kelly T, LaGasse L, Smith L, Derauf C, Haning W, Grant P, Shah R, Arria A, Strauss A, Lester B and **Huestis MA.** Novel biomarkers of prenatal methamphetamine exposure and correlations with self-reported trimester, frequency and route of administration. Society of Forensic Toxicologists (SOFT) Annual Meeting. Phoenix, AZ. October 25-31, 2008.
257. Shakleya DM, and **Huestis MA.** Simultaneous quantification of nicotine, opioids, cocaine and metabolites in human postmortem brain by liquid chromatography tandem mass spectrometry. Society of Forensic Toxicologists (SOFT) Annual Meeting. Phoenix, AZ. October 25-31, 2008.
258. Schwoppe DM, Schwilke EW, Karschner EL, Lowe RH, Kelly DL, Goodwin RS, Gorelick DA and **Huestis MA.** Whole blood cannabinoids in daily cannabis users during eight days of controlled multiple oral THC doses. Society of Forensic Toxicologists (SOFT) Annual Meeting. Phoenix, AZ. October 25-31, 2008.
259. Karschner EL, Schwilke EW, Schwoppe DM, Lowe RH, Kelly DL, Goodwin RS, Gorelick, DA and **Huestis MA.** Plasma cannabinoid concentration in six chronic cannabis users after frequent oral THC administration. Society of Forensic Toxicologists (SOFT) Annual Meeting. Phoenix, AZ. October 25-31, 2008.

260. Concheiro M, Shakleya DM and **Huestis MA**. A novel method for simultaneous quantification of buprenorphine, norbuprenorphine, buprenorphine glucuronide and norbuprenorphine glucuronide in human placenta by liquid chromatography tandem mass spectrometry. Society of Forensic Toxicologists (SOFT) Annual Meeting. Phoenix, AZ. October 25-31, 2008.
261. Milman G, Lowe RH and **Huestis MA**. Simultaneous identification and quantification of *cannabis sativa* cannabinoids and metabolites in oral fluid. Society of Forensic Toxicologists (SOFT) Annual Meeting. Phoenix, AZ. October 25-31, 2008.
262. Kacinko SL, Jones HE, Johnson RE, Choo RE, and **Huestis MA**. Urinary excretion of buprenorphine pregnant opioid-dependent women receiving buprenorphine pharmacotherapy. Society of Forensic Toxicologists (SOFT) Annual Meeting. Phoenix, AZ. October 25-31, 2008.
263. Hahn B, Ross TJ, Wolkenberg FA, Shakleya DM, **Huestis MA** and Stein EA. Neuroanatomical correlates of performance enhancement by nicotine under conditions of selective attention, divided attention and stimulus detection. 14th Annual Meeting of the Organization for Human Brain Mapping. Melbourne, Australia. June 15-19, 2008.
264. **Huestis MA**, Gray TR, Kelly T, Lagasse L, Smith L, Derauf C, Grant P, Shah R, Arria A, Haning W, Strauss A and Lester B. Novel biomarkers of *in utero* methamphetamine exposure in meconium. The International Association of Forensic Toxicologists Annual Meeting. Fort de France, Martinique. June 2-7, 2008.
265. Brunet BR, Barnes AJ, Scheidweiler KB and **Huestis MA**. Method development and validation for analysis of methadone, heroin, cocaine and metabolites in sweat patches by solid phase extraction and GC/MS. The International Association of Forensic Toxicologists Annual Meeting. Fort de France, Martinique. June 2-7, 2008.
266. **Huestis MA**, Smith ML. Distinguishing new cannabis exposure in occasional users by time intervals between positive urine specimens. The International Association of Forensic Toxicologists Annual Meeting. Fort de France, Martinique. June 2-7, 2008.
267. Nguyen, D; Smith, L; LaGasse, L; Derauf, C; Grant, P; Shah, R; Arria A; Huestis, M; Haning, W; Strauss, A; DellaGrotta, S; Liu J; and Lester, B. Intrauterine Growth Of Infants Exposed To Prenatal Methamphetamine: Results From The Infant Development, Environment And Lifestyle (IDEAL) Study. Western Society Pediatric Research (WSPR) Meeting. Carmel, CA. January 30-February 2, 2008.
268. Sheng L, Smith L, LaGasse LL, Derauf C, Newman E, Shah R, Arria A, **Huestis M**, DellaGrotta S, Liu J. Prenatal methamphetamine (MA) exposure and motor development at 12 and 36 months: preliminary results of the infant development, environment, and lifestyle (IDEAL) study. Western Society Pediatric Research (WSPR) Meeting. Carmel, CA. January 30-February 2, 2008.
269. Tejani Z, LaGasse LL, Derauf C, Newman E, Shah R, Smith L, Arria A, **Huestis M**, DellaGrotta S, Liu J, Lester BM. Prenatal methamphetamine (MA) exposure and growth at 12, 24, and 36 months: preliminary results from the infant development, environment, and lifestyle (IDEAL) study. Western Society Pediatric Research (WSPR) Meeting. Carmel, CA. January 30-February 2, 2008.
270. Zabaneh, R; Smith, L; LaGasse, L; Derauf, C; Grant, P; Shah, R; Arria, A; Huestis, M; Haning, W; Strauss, A; DellaGrotta, S; Liu, J; and Lester B. The Effects of Prenatal Methamphetamine

Use On Newborn Health: Results from the Infant Development, Environment And Lifestyle (IDEAL) Study. Western Society Pediatric Research (WSPR) Meeting. Carmel, CA. January 30-February 2, 2008.

271. Karschner EL, Schwilke EW, Lowe RH, Darwin WD, **Huestis MA**. Plasma cannabinoid concentrations in daily cannabis users during seven days of monitored abstinence. American Academy of Forensic Sciences (AAFS) Annual Meeting. Washington, DC. February 18-22, 2008.
272. Kolbrich EA, Goodwin RS, Gorelick DA, Hayes RJ, Stein EA, **Huestis MA**. MDMA, HMMA, MDA, HMA plasma pharmacokinetics in humans following controlled MDMA Administration. American Academy of Forensic Sciences (AAFS) Annual Meeting. Washington, DC. February 18-22, 2008.
273. Schwilke EW, Karschner EL, Lowe RH, Darwin WD, **Huestis MA**. Whole blood/plasma cannabinoid ratios in daily cannabis users after multiple years of frozen storage. American Academy of Forensic Sciences (AAFS) Annual Meeting. Washington, DC. February 18-22, 2008.
274. Kacinko SL, Jones HE, Johnson RE, Choo RE, Shakleya DM and **Huestis MA**. Disposition of buprenorphine and norbuprenorphine in human meconium. American Academy of Forensic Sciences (AAFS) Annual Meeting. Washington, DC. February 18-22, 2008.
275. Darwin WD, Goodwin RS, Chiang NN, Shih ML, Cadet JL, Herning RI, Bolla K, Gustafson RA, **Huestis MA**. Urinary elimination of 11-nor-9-carboxy-delta-9-tetrahydrocannabinol in cannabis users during continuously monitored abstinence. American Academy of Forensic Sciences (AAFS) Annual Meeting. Washington, DC. February 18-22, 2008.
276. Shakleya DM, Dams R, Choo R, Jones H and **Huestis MA**. Simultaneous LC-MS/MS quantification of opiate, cocaine and metabolites in urine of pregnant substance-abuse treatment participants. American Academy of Forensic Sciences (AAFS) Annual Meeting. Washington, DC. February 18-22, 2008.
277. Lowe RH, Abraham TT and **Huestis MA**. A two dimensional-cryofocusing GC/EI-MS method for determination of Δ^9 -tetrahydrocannabinol, 11-hydroxy- Δ^9 -tetrahydrocannabinol, and 11-nor-9-carboxy- Δ^9 -tetrahydrocannabinol in human urine. American Academy of Forensic Sciences (AAFS) Annual Meeting. Washington, DC. February 18-22, 2008.
278. Barnes AJ, DeMartinis BS, Goodwin RS, Gorelick DA, Kolbrich EA, **Huestis MA**. Disposition of MDMA and metabolites in human sweat following controlled MDMA administration. American Academy of Forensic Sciences (AAFS) Annual Meeting. Washington, DC. February 18-22, 2008.
279. Abraham TT, Lowe RH, Darwin WD, Cadet JL, Herning RI, Bolla K and **Huestis MA**. Excretion of 11-hydroxy-delta-9-tetrahydrocannabinol (11-OH-THC), and 11-nor-delta-9-tetrahydrocannabinol-9-carboxylic acid (THCCOOH) in urine from chronic cannabis users during monitored abstinence. American Academy of Forensic Sciences (AAFS) Annual Meeting. Washington, DC. February 18-22, 2008.
280. Gray TR, Magri R, Shakleya DM, Darwin WD and **Huestis MA**. Disposition of nicotine and metabolites in human meconium following *in utero* tobacco exposure. American Academy of Forensic Sciences (AAFS) Annual Meeting. Washington, DC. February 18-22, 2008.

281. **Huestis MA**, Shakleya DM, Choo R, Velez ML, Harrow C, Schroeder JR, Jansson LM. Methadone disposition in human breast milk and plasma in the immediate perinatal period. American Academy of Forensic Sciences (AAFS) Annual Meeting. Washington, DC. February 18-22, 2008.
282. Newman E, Risch EC*, LaGasse LL, Derauf C, Shah R, Smith LM, Arria A, **Huestis MA**, DellaGrotta S, Liu J, and Lester BM. Methamphetamine abuse, trauma history, and child abuse potential. Poster presented at European Conference on Traumatic Stress. Opatajia, Croatia. June 2007.
283. **Huestis MA**. Women leading healthcare: the government perspective. Healthcare Businesswomen's Association. Washington, DC. December 7, 2007.
284. Abraham TT, Lowe RH, Pirnay SO, Darwin WD and **Huestis MA**. Simultaneous GC/EI-MS determination of delta-9-tetrahydrocannabinol, 11-hydroxy-delta-9-tetrahydrocannabinol, and 11-nor-9-carboxy-delta-9-tetrahydrocannabinol in human urine following tandem enzyme-alkaline hydrolysis. Society of Forensic Toxicologists (SOFT) Annual Meeting. Raleigh-Durham, NC. October 15-19, 2007.
285. **Huestis MA**, Lowe RH and Abraham TT. Detection times of delta-9-tetrahydrocannabinol (THC), 11-hydroxy-delta-9-tetrahydrocannabinol (11-OH-THC), and 11-nor-delta-9-tetrahydrocannabinol-9-carboxylic acid (THCCOOH) in urine from chronic cannabis users during abstinence. Society of Forensic Toxicologists (SOFT) Annual Meeting. Raleigh-Durham, NC. October 15-19, 2007.
286. Darwin WD, Herning RI, Bolla K, Cadet JL and **Huestis MA**. Human urinary elimination of 11-nor-9-carboxy-delta-9-tetrahydrocannabinol (THCCOOH) by gender. Society of Forensic Toxicologists (SOFT) Annual Meeting. Raleigh-Durham, NC. October 15-19, 2007.
287. Shakleya DM, Jansson LM and **Huestis MA**. Validation of a LC-APCI-MS/MS method for quantification of methadone, 2-ethylidene-1,5-dimethyl-3,3-diphenylpyrrolidine (EDDP) and 2-ethyl-5-methyl-3,3-diphenylpyrrolidine (EMDP) in infant plasma following protein precipitation. Society of Forensic Toxicologists (SOFT) Annual Meeting. Raleigh-Durham, NC. October 15-19, 2007.
288. Gray TR, Shakleya DM and **Huestis MA**. A novel method for detection and quantification of nicotine and metabolites in human meconium by LC-MS/MS using atmospheric pressure chemical ionization. Society of Forensic Toxicologists (SOFT) Annual Meeting. Raleigh-Durham, NC. October 15-19, 2007.
289. Kacinko SL, Shakleya DM and **Huestis MA**. Validation and application of a novel method for the determination of buprenorphine, norbuprenorphine and their glucuronide conjugates in human meconium. Society of Forensic Toxicologists (SOFT) Annual Meeting. Raleigh-Durham, NC. October 15-19, 2007.
290. Schwilke EW, Karschner EL, Lowe RH, Darwin WD and **Huestis MA**. Whole blood cannabinoids in daily cannabis users during seven days of monitored abstinence. Society of Forensic Toxicologists (SOFT) Annual Meeting. Raleigh-Durham, NC. October 15-19, 2007.
291. Scheidweiler KB and **Huestis MA**. A validated gas chromatographic-electron impact ionization mass spectrometric method for methylenedioxymethamphetamine, methamphetamine and their

- metabolites in mouse plasma. Society of Forensic Toxicologists (SOFT) Annual Meeting. Raleigh-Durham, NC. October 15-19, 2007.
292. Kolbrich EA, Lowe RH and **Huestis MA**. Two-dimensional GC/EI-MS with cryofocusing for sensitive and specific quantification of MDMA, MDA, HMMA, HMA, and MDEA in human plasma. Society of Forensic Toxicologists (SOFT) Annual Meeting. Raleigh-Durham, NC. October 15-19, 2007.
 293. **Huestis MA**, De Martinis BS, Goodwin RS, Gorelick DA, Kolbrich EA and Barnes AJ. Disposition of MDMA and metabolites in human sweat following controlled MDMA administration. 10th International Congress of Therapeutic Drug Monitoring & Clinical Toxicology (IATDMCT) Annual Meeting. Nice, France. September 10-15, 2007.
 294. Schwilke EW, Lowe RH, Karschner EL, **Huestis MA**. Stability of D9-Tetrahydrocannabinol (THC), 11-Hydroxy-D9-tetrahydrocannabinol (11-OH-THC), and 11-nor-D9-Tetrahydrocannabinol-9-carboxylic Acid (THCCOOH) in Whole Blood. International Council Alcohol Drugs and Traffic Safety and The International Association of Forensic Toxicologists meeting, Seattle, WA. August 26-30, 2007.
 295. Lehrmann E, Darwin WD, Deep-Soboslay A, Lowe RH, Becker KG, Hyde TM, **Huestis MA**, Kleinman JE and Freed WJ. Transcriptional correlates of substance abuse in human postmortem brain. International Drug Abuse Research Society (IDARS) Meeting. Merida, NM. August 14-17, 2007.
 296. Newman E, Risch EC, LaGasse LL, Derauf C, Shah R, Smith LM, Arria A, **Huestis M**, DellaGrotta S, Liu J and Lester BM. Methamphetamine abuse, trauma history, and child abuse potential. European Traumatic Stress Studies Conference. Opatija, Croatia. June 5-9, 2007.
 297. **Huestis MA**, Shakleya DM, Choo R, Velez ML, Harrow C, Schroeder JR, Jansson LM. Methadone disposition in human breast milk and plasma in the immediate perinatal period. American Academy of Forensic Sciences (AAFS) Annual Meeting. Washington, DC. February 18-22, 2007.
 298. Francis RJ, Umbricht A, Huestis MA, Cone EJ. Effects of High-Dose Intravenous Buprenorphine in Experienced Opioid Users. Yearbook of Psychiatry and Applied Mental Health. 2006:99-100.
 299. Kim I and **Huestis MA**. Simultaneous SPE and LC-APCI-MS assay for nicotine, cotinine, trans-3'-hydroxycotinine and norcotinine in plasma. Society of Forensic Toxicologists (SOFT) Annual Meeting. Austin, TX. October 3-7, 2006.
 300. Abraham TT, Lowe RH, Pirnay SO, Darwin WD, **Huestis MA**. Simultaneous GC/EI-MS Determination of Δ^9 -Tetrahydrocannabinol, 11-Hydroxy- Δ^9 -tetrahydrocannabinol, and 11-Nor-9-carboxy- Δ^9 -tetrahydrocannabinol in Human Urine Following Tandem Enzyme – Alkaline Hydrolysis. Society of Forensic Toxicologists (SOFT) Annual Meeting. Austin, TX. October 3-7, 2006.
 301. Kolbrich EA, Goodwin RS, Gorelick DA, Hayes RJ, Stein EA and **Huestis MA**. Physiological and subjective effects following controlled administration of oral MDMA to young adult MDMA users. Society of Forensic Toxicologists (SOFT) Annual Meeting. Austin, TX. October 3-7, 2006.

302. Karschner EL, Lowe RH, Schwilke EW and **Huestis MA**. Concurrent quantification of delta-9-tetrahydrocannabinol (11-OH-THC), and 11-nor-9-carboxy-delta-9-carboxy-delta-9-tetrahydrocannabinol (THC-COOH) in human plasma using two-dimensional gas chromatography, cryofocusing, and EI-mass spectrometry. Society of Forensic Toxicologists (SOFT) Annual Meeting. Austin, TX. October 3-7, 2006.
303. Kacinko SL and **Huestis MA**. Preliminary evaluation of three commercially available immunoassays for the semi-quantitative analysis of buprenorphine in urine. Society of Forensic Toxicologists (SOFT) Annual Meeting. Austin, TX. October 3-7, 2006.
304. Pirnay SO, Abraham TT, Lowe RH and **Huestis M**. Selection and optimization of hydrolysis conditions for the quantification of urinary metabolites of MDMA. Society of Forensic Toxicologists (SOFT) Annual Meeting. Austin, TX. October 3-7, 2006.
305. Pirnay SO, Abraham TT and **Huestis MA**. Validated gas chromatography/mass spectrometry method for the simultaneous quantification of 3,4-methylenedioxy-N-ethylamphetamine (MDEA), 3,4-methylenedioxymethamphetamine (MDMA), 4-hydroxy-3-methoxymethamphetamine (HMMA), 3,4-methylenedioxyamphetamine (MDA), and 4-hydroxy-3-methoxyamphetamine (HMA) in human urine. Society of Forensic Toxicologists (SOFT) Annual Meeting. Austin, TX. October 3-7, 2006.
306. Lowe RH, Karschner EL, Schwilke EW, Barnes AJ, Huestis MA. Simultaneous quantification of Delta9-tetrahydrocannabinol, 11-hydroxy-Delta9-tetrahydrocannabinol, and 11-nor-Delta9-tetrahydrocannabinol-9-carboxylic acid in human plasma using two-dimensional gas chromatography, cryofocusing, and electron impact-mass spectrometry. Society of Forensic Toxicologists (SOFT) Annual Meeting. Austin, TX. October 3-7, 2006.
307. Choo RE, Jones HE, Schroeder JR and **Huestis MA**. Maternal methadone dose, methadone meconium concentrations, severity of neonatal abstinence syndrome and other birth outcomes. The International Association of Forensic Toxicologists Annual Meeting. Ljubljana, Slovenia. August 26-September 1, 2006.
308. De Martinis BS, Barnes AJ, Scheidweiler KB, **Huestis MA**. Method Development and Validation for Analysis of Amphetamine, Methamphetamine, Methylenedioxy Derivatives and Metabolites in Sweat Patches using Disk Solid Phase Extraction and Gas Chromatography-Mass Spectrometry. The International Association of Forensic Toxicologists Annual Meeting. Ljubljana, Slovenia. August 26-September 1, 2006.

309. Gorelick DA, Copersino ML, Boyd SJ, Taskin DP, **Huestis MA**, Heishman SJ, Simmons MS, Dermand JC. Influence of Demographic Characteristics on Quitting of Cannabis Smoking. International Cannabis Research Society. Tihany, Hungary June 24-28, 2006.
310. Gorelick DA, Copersino ML, Boyd SJ, Tashkin DP, **Huestis MA**, Heishman SJ, Simmons MS and Dermand JC. Influence of demographic characteristics on quitting of cannabis smoking. College on the Problems of Drug Dependence (CPDD) Annual Meeting. Scottsdale, AZ. June 17-22, 2006.
311. Copersino MR, Boyd SJ, Tashkin DP, **Huestis MA**, Heishman SJ, Dermand JC, Simmons MS and Gorelick DA. Gender differences in the experience of spontaneous cannabis quitting. College on the Problems of Drug Dependence (CPDD) Annual Meeting. Scottsdale, AZ. June 17-22, 2006.
312. Afanador ZR, Deep-Soboslay A, Gallegos G, **Huestis MA**, Lowe RH, Barnes AJ, Hyde TM, Kleinman JE, Lehrmann E and Freed WJ. Reliability of diagnostic information and validation by toxicological testing in postmortem drug abuse cases. College on the Problems of Drug Dependence (CPDD) Annual Meeting. Scottsdale, AZ. June 17-22, 2006.
313. Hayes RJ, Ross TJ, Kurup PK, Kolbrich EA, **Huestis MA** and Stein EA. Neural correlates of semantic category decisions: response to parametric manipulation of semantic executive load. Human Brain Mapping Annual Meeting. Florence, Italy. June 11-15, 2006.
314. Hahn B, Ross TJ, Kim I, **Huestis MA** and Stein EA. Nicotine deactivates areas of the default brain network in response to endogenous cueing of visuospatial attention. Human Brain Mapping Annual Meeting. Florence, Italy. June 11-15, 2006.
315. **Huestis MA**. Current status of drugs of abuse testing in oral fluid. Analytica Conference. Munich, Germany. April 25-28, 2006.
316. Choo RE, Averin O, Johnson RE, Jones HE, Jasinski DP, Wilkins D, **Huestis MA**. Buprenorphine and norbuprenorphine concentrations in the hair of opiate-dependent pregnant women and their newborn infants. American Association of Forensic Science Annual Meeting. Seattle, WA. February 20-25, 2006.
317. Lowe RH, Barnes AJ, Lehrmann E, Freed WJ, Kleinman JE, Hyde TM, Herman MM and **Huestis MA**. A validated PCI GC/MS method for the quantification of amphetamine, opiates, cocaine and metabolites in human postmortem brain. American Association of Forensic Sciences Annual Meeting. Seattle, WA. February 20-25, 2006.

318. Paz MS, Smith LM, LaGasse LL, Derauf C, Grant P, Shah R, Arria A, **Huestis M**, Haning W, Strauss A, Della Grotta S, Fallone M, Liu J and Lester BM. Maternal depression and prenatal exposure to methamphetamine: preliminary neonatal neurodevelopmental findings from the Infant Development, Environment, and Lifestyle Study (IDEAL). Western Society for Pediatric Research Meeting. Carmel, CA. February 1-4, 2006. *Journal of Investigative Medicine* 54(1): S92, 2006.
319. Lehrmann E, Hope BT, Lowe R, Darwin D, Barnes A, **Huestis MA**, Cadet JL, Colantuoni C, Kolachana B, Afanador Z, Gallegos G, Deep-Soboslay A, Becker KG, Kleinman JE, Weinberger DR, Hyde TM, Freed WJ. Regulation of the CCK-B receptor in human drug abuse. Society for Neuroscience Annual Meeting. Washington, DC. November 12-16, 2005.
320. Scheidweiler KB, **Huestis MA**. Monitoring of ecstasy (MDMA) and three metabolites in oral fluid. Society for Neuroscience Annual Meeting. Washington, DC. November 12-16, 2005.
321. Rock CM, Averin O, Day JE, Johnson RE, Jones HE, Jasinski DR, **Huestis MA**, Wilkins DG. Detection of methadone and two major metabolites in the hair of pregnant women and their infants. Society of Forensic Toxicologists (SOFT). Nashville, TN. October 17-21, 2005.
322. Wtsadik A, Kim I, Choo RE, Jones HE and **Huestis MA**. Nicotine, cotinine, trans-3'-hydroxycotinine, and norcotinine as biomarkers of tobacco smoke exposure in oral fluid of pregnant smokers. Society of Forensic Toxicologists (SOFT). Nashville, TN. October 17-21, 2005.
323. Kolbrich EA, Kelly TL, Barnes AJ, Kim I, Moolchan ET, Cone EJ and **Huestis MA**. Saliva/plasma ratios of cocaine, ecgonine methyl ester and benzoylecgonine following controlled cocaine administration. Society of Forensic Toxicologists (SOFT). Nashville, TN. October 17-21, 2005.
324. Barnes AJ, Kacinko SL, Schwilke EW, Cone EJ, Moolchan ET, **Huestis MA**. Methamphetamine and Amphetamine Disposition in Human Sweat Following Controlled Oral Methamphetamine Administration. Society of Forensic Toxicologists (SOFT). Nashville, TN. October 17-21, 2005.
325. Kacinko SL, Barnes AJ, Schwilke EW, Cone EJ, Moolchan ET and **Huestis MA**. Detection rates, dose-concentration relationships, and reproducibility of cocaine, benzoylecgonine, and ecgonine methyl ester in human sweat following controlled cocaine administration. Society of Forensic Toxicologists (SOFT). Nashville, TN. October 17-21, 2005.

326. Barnes AJ, Kacinko SL, Schwilke EW, Cone EJ, Moolchan ET and **Huestis MA**. Methamphetamine and amphetamine disposition in human sweat following controlled oral methamphetamine administration. Society of Forensic Toxicologists (SOFT). Nashville, TN. October 17-21, 2005.
327. Runkle JL, Lowe RH, Abraham TT, Barnes AJ and **Huestis MA**. Optimization of glucuronide hydrolysis for improved recovery of 11-hydroxy-delta-9-tetrahydrocannabinol in urine. Society of Forensic Toxicologists (SOFT). Nashville, TN. October 17-21, 2005.
328. Darwin WD, Shimomura ET, Lalani SA, Trinidad DV, Paul BD, Jenkins AJ, Jacobs AJ, Cone EJ and **Huestis MA**. Cocaine and metabolites in urine after controlled smoked, intravenous and oral cocaine administration. Society of Forensic Toxicologists (SOFT). Nashville, TN. October 17-21, 2005.
329. Smith ML, Nebro W, Barnes A, Gustafson RA and **Huestis MA**. Estimating time of last oral ingestion of cannabis from plasma THC and THCCOOH concentrations. The International Association of Forensic Toxicologists (TIAFT). Seoul, Korea. August 29-September 2, 2005.
330. Kim I, Wtsadik A, Choo RE, Jones HE and **Huestis MA**. Usefulness of salivary *trans*-3'-hydroxycotinine/cotinine ratio of biomarkers of cigarette smoke in pregnant women. The International Association of Forensic Toxicologists (TIAFT). Seoul, Korea. August 29-September 2, 2005.
331. LaGasse LL, Derauf C, Grant P, Smith LM, Shah R, Arria A, **Huestis MA**, Haning W, Strauss A, DellaGrotta S, Fallone M, Liu J and Lester B. Prenatal methamphetamine exposure and neonatal cry acoustic analysis in the infant development, environment, and lifestyle study. Society for Research in Child Development 2005 Biennial Meeting. Atlanta, GA. April 2005.
332. Lehrmann E, Colantuoni C, Gallegos G, Deep-Soboslay A, Becker KG, Wood WH, **Huestis MA**, Barnes A, Kleinman JE, Weinberger DR, Hyde TM and Freed WJ. Patterns for transcription in human orbitofrontal cortex in drug abuse: changes in the CCK-B Receptor. American College of Neuropsychopharmacology (ACNP) Annual Meeting. San Juan, PR. December 12-16, 2004.
333. Lehrmann E, Colantuoni C, Gallegos G, Deep-Soboslay A, Becker KG, Wood WH, III, **Huestis MA**, Barnes A, Kleinman JE, Weinberger DR, Hyde TM and Freed WJ. Evaluating transcriptional profiles in postmortem orbitofrontal cortex from drug abuse cases using

microarrays, toxicology and patient history. 2004 Society for Neuroscience Meeting. San Diego, CA. October 23-27, 2004.

334. **Huestis MA**. Basic Principles of Forensic Toxicology-Part 2, Marijuana. 2004 Joint Meeting of the Society of Forensic Toxicologists (SOFT) and The International Association of Forensic Toxicologists (TIAFT). Washington, DC. August 28-September 3, 2004.
335. Choo RE, **Huestis MA**, Schroeder JR and Jones HE. Neonatal abstinence syndrome in methadone-exposed infants is altered by level of prenatal tobacco exposure. 2004 Joint Meeting of the Society of Forensic Toxicologists (SOFT) and The International Association of Forensic Toxicologists (TIAFT). Washington, DC. August 28-September 3, 2004.
336. Kacinko SL, Barnes AJ, Schwilke EW, Oyler JM, Cone EJ, Moolchan ET and **Huestis MA**. Disposition of cocaine and metabolites in human sweat following controlled cocaine administration. 2004 Joint Meeting of the Society of Forensic Toxicologists (SOFT) and The International Association of Forensic Toxicologists (TIAFT). Washington, DC. August 28-September 3, 2004.
337. Darwin WD, Gustafson RA, Sklerov J, Fritch D, Jacobs A, Blum K, Niedbala S, Moolchan ET and **Huestis MA**. Cannabinoid analysis of oral fluids collected from clinical subjects following oral tetrahydrocannabinol (THC) administration (hemp oil and dronabinol). 2004 Joint Meeting of the Society of Forensic Toxicologists (SOFT) and The International Association of Forensic Toxicologists (TIAFT). Washington, DC. August 28-September 3, 2004.
338. Nebro W, Barnes A, Gustafson RA, Moolchan ET and **Huestis MA**. Delta-9-tetrahydrocannabinol (THC), 11-hydroxy-delta-9-tetrahydrocannabinol (11-OH-THC) and 11-nor-9-carboxy-delta-9-tetrahydrocannabinol (THCCOOH) in human plasma following oral administration of hemp oil. 2004 Joint Meeting of the Society of Forensic Toxicologists (SOFT) and The International Association of Forensic Toxicologists (TIAFT). Washington, DC. August 28-September 3, 2004.
339. Cone EJ and **Huestis MA**. Disposition of delta-9-tetrahydrocannabinol in oral fluid and plasma after controlled administration of smoked cannabis. 2004 Joint Meeting of the Society of Forensic Toxicologists (SOFT) and The International Association of Forensic Toxicologists (TIAFT). Washington, DC. August 28-September 3, 2004.
340. Scheidweiler KB, Cone EJ, Joseph RE and **Huestis MA**. Dose-related distribution of codeine, cocaine and metabolites into human hair following controlled oral codeine and subcutaneous cocaine administration. 2004 Joint Meeting of the Society of Forensic Toxicologists (SOFT)

and The International Association of Forensic Toxicologists (TIAFT). Washington, DC. August 28-September 3, 2004.

341. Wtsadik AT, Scheidweiler K, Saito T, Gustafson RA, Moolchan ET and **Huestis MA**. Delta-9-tetrahydrocannabinol (THC) in sweat prior to and following controlled oral administration of hemp oil and Marinol to cannabis users. 2004 Joint Meeting of the Society of Forensic Toxicologists (SOFT) and The International Association of Forensic Toxicologists (TIAFT). Washington, DC. August 28-September 3, 2004.
342. Kim I, Darwin WD and **Huestis MA**. Simultaneous assay for nicotine and its metabolites in oral fluid by SPE and GC/MS/EL. 2004 Joint Meeting of the Society of Forensic Toxicologists (SOFT) and The International Association of Forensic Toxicologists (TIAFT). Washington, DC. August 28-September 3, 2004.
343. Zhao Z, Liu J, LaGasse LL, Derauf C, Grant P, Shah R, Arria A, Haning W, Smith LM, Lester B and **Huestis MA**. Methamphetamine and amphetamine concentrations in meconium of neonates of women enrolled in the IDEAL study of in utero methamphetamine exposure. 2004 Joint Meeting of the Society of Forensic Toxicologists (SOFT) and The International Association of Forensic Toxicologists (TIAFT). Washington, DC. August 28-September 3, 2004.
344. Schwilke EW, Barnes AJ, Kacinko SL, Oyler JM, Cone EJ, Moolchan ET and **Huestis MA**. Opioid disposition in human sweat following controlled oral codeine administration. 2004 Joint Meeting of the Society of Forensic Toxicologists (SOFT) and The International Association of Forensic Toxicologists (TIAFT). Washington, DC. August 28-September 3, 2004.
345. **Huestis MA**, Preston KL, Heishman SJ, Boyd SJ, Mondick J, Bonnet D and Gorelick DA. Antagonism of inhaled cannabis by single and multiple doses of SR141716 (rimonabant) in male subjects with a history of cannabis use. International Cannabinoid Research Society. Paestum, Italy. June 22-27, 2004.
346. Gorelick DA, Copersino M, Boyd SJ, Tashkin DP, **Huestis MA**, Heishman SJ, Dermand JC and Simmons MS. Cannabis withdrawal among non-treatment-seeking cannabis smokers. International Cannabinoid Research Society. Paestum, Italy. June 22-27, 2004.
347. Jones H, Johnson R, Jasinski D, O'Grady K, Chisholm C, Choo R, Crocetti M, Dudas R, Harrow C, **Huestis MA**, Jansson L, Lantz M, Lester B and Milio L. A randomized controlled study of buprenorphine and methadone in pregnant opioid-dependent patients: their effect on the neonatal abstinence syndrome (NAS). College on the Problems of Drug Dependence (CPDD). San Juan, PR. June 12-17, 2004.

348. **Huestis MA**. In utero drug exposure: identification, analysis, interpretation and outcome predictor. International Society of Addiction Medicine (ISAM). Helsinki, Finland. June 2-5, 2004.
349. Smith LM, LaGasse LL, Derauf C, Grant P, Shah R, Arria A, **Huestis MA**, Haning W, Strauss A, DellaGrotta S, Fallone M, Liu J and Lester B. Prenatal methamphetamine use and neonatal neurobehavioral outcome. The Pediatric Academic Society Meeting. San Francisco, CA. May 1-4, 2004.
350. Smith LM, LaGasse LL, Derauf C, Grant P, Shah R, Arria A, **Huestis MA**, Haning W, Strauss A, DellaGrotta S, Fallone M, Liu J and Lester B. Intrauterine growth of infants exposed to methamphetamine use. The Pediatric Academic Society Meeting. San Francisco, CA. May 1-4, 2004.
351. LaGasse LL, Derauf C, Grant P, Smith LM, Shah R, Arria A, **Huestis MA**, Haning W, Strauss A, DellaGrotta S, Fallone M, Liu J and Lester B. Prenatal methamphetamine exposure and neonatal cry acoustic analysis: preliminary results from the Infant Development, Environment and Lifestyle Study (IDEAL). The Pediatric Academic Society Meeting. San Francisco, CA. May 1-4, 2004.
352. Grant P, LaGasse LL, Derauf C, Shah R, Smith L, Arria A, Rawson R, **Huestis MA**, Strauss A, Haning W, DellaGrotta S, Liu J and Lester B. Prenatal methamphetamine use and maternal health care characteristics: preliminary results from the Infant Development Environment and Lifestyles Study (IDEAL). The Pediatric Academic Society Meeting. San Francisco, CA. May 1-4, 2004.
353. Derauf C, LaGasse LL, Grant P, Shah R, Smith L, Arria A, **Huestis MA**, Haning W, Strauss A, DellaGrotta S, Liu J and Lester BM. Demographic and psychosocial characteristics of mothers who used methamphetamine during pregnancy: preliminary results from the Infant Development, Environment and Lifestyle Study (IDEAL). The Pediatric Academic Society Meeting. San Francisco, CA. May 1-4, 2004.
354. Arria AM, Derauf C, LaGasse LL, Grant P, Shah R, Smith L, **Huestis MA**, Haning W, Strauss A, DellaGrotta S, Liu J and Lester B. Alcohol, tobacco and illicit drug use during pregnancy: preliminary estimates from the Infant Development, Environment and Lifestyle (IDEAL) Study. The Pediatric Academic Society Meeting. San Francisco, CA. May 1-4, 2004.

355. Smith LM, LaGasse LL, Derauf C, Grant P, Shah R, Arria A, **Huestis MA**, Haning W, Strauss A, DellaGrotta S, Fallone M, Liu J, Lester BM Prenatal methamphetamine (MA) use and neonatal neurobehavioral outcome: preliminary results from the Infant Development, Environment, and Lifestyle Study (IDEAL). The Pediatric Academic Society Meeting. San Francisco, CA. May 1-4, 2004.
356. **Huestis MA**. Quality control and quality assurance in forensic toxicology laboratories in the US. 23rd Annual Meeting of Japanese Association of Forensic Toxicology. Akita, Japan. April 22-24, 2004.
357. Moolchan ET, Robinson ML, Schroeder JR, **Huestis MA** and Ernst M. A randomized trial of the efficacy of the nicotine gum and patch for adolescent smokers. Society for Research on Nicotine and Tobacco. Scottsdale, AZ. February 18-21, 2004.
358. **Huestis MA**. Unlocking the significance of forensic toxicology results. The International Association of Forensic Toxicologists (TIAFT) 2003 Annual Meeting. Melbourne, Australia. November 16-20, 2003.
359. Saito T, Wtsadik A, Scheidweiler K, McCain M, Fortner N, Takeshi S and **Huestis MA**. Sweat analysis for delta-9-tetrahydrocannabinol (THC) by gas chromatography-negative ion chemical ionization-mass spectrometry. The International Association of Forensic Toxicologists (TIAFT) 2003 Annual Meeting. Melbourne, Australia. November 16-20, 2003.
360. Mondick J, Eddington N, Gorelick D, Heishman S, Preston K, Nelson R, Moolchan E, Newton J and **Huestis M**. An integrated pharmacokinetic/pharmacodynamic model the in vivo interaction of delta-9-tetrahydrocannabinol (THC) and SR141716, a cannabinoid CB1 receptor antagonist. American Association of Pharmaceutical Scientists (AAPS) Annual Meeting. San Jose, CA. October 20-24, 2003.
361. Kacinko SL, Barnes AJ, Kim I, Moolchan ET, Wilson L, Cooper GA, Reid C, Baldwin D, Hand CW and **Huestis MA**. Performance characteristics of the Cozart@ Rapiscan opiate oral fluid drug testing system in comparison to the Cozart@ microplate EIA opiate oral fluid kit and GC/MS following controlled codeine administration. Society of Forensic Toxicology (SOFT) Meeting. Portland, OR. October 20-24, 2003.
362. Kolbrich EA, Kim I, Barnes AJ, Moolchan ET, Wilson L, Cooper GA, Reid C, Baldwin D, Hand CW and **Huestis MA**. Cozart Rapiscan oral fluid drug testing system: an evaluation of sensitivity, specificity, and efficiency for cocaine detection compared to ELISA and GC/MS following controlled cocaine administration. Society of Forensic Toxicology (SOFT) Meeting. Portland, OR. October 20-24, 2003.

363. Kim I, Oyler JM, Moolchan ET, Cone EJ, Joseph RE, Jr. and **Huestis MA**. Urinary pharmacokinetics of methamphetamine and its metabolite, amphetamine following controlled oral administration to humans. Society of Forensic Toxicology (SOFT) Meeting. Portland, OR. October 20-24, 2003.
364. Gustafson RA, Moolchan ET, Barnes A, Levine B and **Huestis MA**. A validated method for the simultaneous determination of delta-9-tetrahydrocannabinol (THC), 11-hydroxy-THC and 11-nor-9-carboxy-THC in human plasma using solid phase extraction and gas chromatography-mass spectrometry with positive chemical ionization. Society of Forensic Toxicology (SOFT) Meeting. Portland, OR. October 20-24, 2003.
365. Darwin WD and **Huestis MA**. Simultaneous assay for nicotine, nor nicotine, cotinine, norcotinine, and 3-hydroxycotinine in oral fluid by SPE and GC/MS/MS. Society of Forensic Toxicology (SOFT) Meeting. Portland, OR. October 20-24, 2003.
366. Yang W, Barnes A, Moolchan ET, Chung H and **Huestis MA**. Simultaneous quantification of opiates, methamphetamine, cocaine, and metabolites in skin by positive chemical ionization gas chromatography/mass spectrometry. Society of Forensic Toxicology (SOFT) Meeting. Portland, OR. October 20-24, 2003.
367. Gustafson RA, Stout P, Klette K, George MP, Moolchan ET and **Huestis MA**. Controlled oral delta-9-tetrahydrocannabinol administration: detection rates and times in urine by CEDIA, Syva EMIT II, Microgenics DRI and GC/MS. Society of Forensic Toxicology (SOFT) Meeting. Portland, OR. October 20-24, 2003.
368. Cone EJ, Sampson-Cone AH, Darwin WD, **Huestis MA** and Oyler JM. Method for detection of cocaine metabolite in urine below conventional cutoff concentrations. Society of Forensic Toxicology (SOFT) Meeting. Portland, OR. October 20-24, 2003.
369. Nebro W, Gustafson RA, Moolchan ET, Barnes A, Levine B and **Huestis MA**. Comparison of delta-9-tetrahydrocannabinol, 11-hydroxy-tetrahydrocannabinol concentrations in human plasma following Escherichia coli β -glucuronidase hydrolysis. Society of Forensic Toxicology (SOFT) Meeting. Portland, OR. October 20-24, 2003.
370. Scheidweiler KB and **Huestis MA**. Simultaneous quantification of opiates, cocaine and metabolites in hair by LC-APCI-MS/MS. Society of Hair Testing Meeting. Crete, Greece. October 6-8, 2003.

371. **Huestis MA.** Cannabinoid (CB1) receptors and subjective effects of cannabis. International Brain Research Organization (IBRO) Meeting. Prague, Czech Republic. July 10-15, 2003.
372. Dams R, Murphy C, Lambert W and **Huestis MA.** Urine drug testing for multiple opioids, cocaine, and metabolites by direct injection LC-APCI-MS/MS. American Society of Mass Spectrometry. June 8-13, 2003.
373. Moolchan ET, Sehnert SS, Zimmerman DM, Russell S, Robinson M, Zimmerman D, Cadet JL, **Huestis MA** and Epstein D. Effect of recent marijuana smoking on CO as a measure of tobacco abstinence in adolescent smokers. The Committee on Problems of Drug Dependence. Bal Harbor, FL. June 14-19, 2003.
374. **Huestis MA.** Cannabis effects on human performance & behavior. California Association of Toxicologists and Southwestern Association of Toxicologists. Albuquerque, NM. May 2-3, 2003.
375. **Huestis MA.** Marijuana pharmacokinetics & interpretation of cannabinoid results. Canadian Society of Forensic Sciences. Vancouver, CA. March 26-29, 2003.
376. **Huestis MA,** Zigbuo E, Heishman SJ, Preston KL, Moolchan EM, Nelson RA, Newton JF and Gorelick DA. Determination of time of last exposure following controlled smoking of multiple marijuana cigarettes. Society of Forensic Toxicology. Detroit, MI. October 11-17, 2002.
377. Barnes AJ, Kim I, Schepers R, Moolchan ET, Oyler J, Wilson L, Cooper G, Reid C, Hand C and **Huestis MA.** Comparison of Cozart oral fluid opiate ELISA and GC/MS results following controlled administration of codeine sulphate. Society of Forensic Toxicology. Detroit, MI. October 11-17, 2002.
378. Dams R, Murphy C, Choo R, Lambert W and **Huestis MA.** An LC-APCI-MS/MS method for oral fluid and urine to monitor maternal drug use in a clinical in-utero drug exposure study. Society of Forensic Toxicology. Detroit, MI. October 11-17, 2002.
379. Dams R, Murphy C, Choo R, Lambert W and **Huestis MA.** Comparative study of simplified sample preparation on ionization efficiency of ESI and APCI and development of a sensitive LC-MS/MS method for the analysis of multiple drugs of abuse in biological fluids. The International Association of Forensic Toxicologists 40th International Meeting. Paris, France. August, 2002.

380. **Huestis MA**, Barnes AJ, Schepers R, Kim I, Moolchan ET, Oyler JM, Wilson L, Cooper G, Reid C and Hand C. Comparison of Cozart oral fluid cocaine ELISA and GC/MS results following controlled administration of cocaine HCl. The International Association of Forensic Toxicologists 40th International Meeting. Paris, France. August, 2002.
381. Gustafson RA, Stout P, George MP, Moolchan ET and **Huestis MA**. Controlled oral Δ^9 -tetrahydro-cannabinol administration: detection rates and times in urine by CEDIA[®], Syva[®] EMIT II, Microgenics[®] DRI and GC/MS. Tri Service Drug Testing Conference. Honolulu, HI. June 15-17, 2002.
382. Dams R, Murphy C, Choo R, Lambert W and **Huestis MA**. Development of a rugged and sensitive LC-APCI-MS/MS method combined with a simplified sample preparation for the comprehensive analysis of drugs of abuse in biological fluids. American Society of Mass Spectrometry. Orlando, FL. June 12-16, 2002.
383. Murphy C, Dams R and **Huestis MA**. Quantitative determination of buprenorphine, norbuprenorphine, buprenorphine-glucuronide, and norbuprenorphine-glucuronide in human plasma by protein precipitation LC-MS/MS. American Society of Mass Spectrometry. Orlando, FL. June 12-16, 2002.
384. Boyd S, Gorelick D, **Huestis MA**, Heishman S, Derman JC, Nides MA, Simmons MS and Tashkin D. Prevalence and persistence of withdrawal symptoms reported by a non-treatment sample of marijuana smokers. The Committee on Problems of Drug Dependence. Quebec, Canada. June 8-13, 2002.
385. Epstein DH, Davoudzadeh D, **Huestis MA** and Preston KL. Methadone levels exceed those of its main metabolite in spot urines from methadone-maintained outpatients. The Committee on Problems of Drug Dependence. Quebec, Canada. June 8-13, 2002.
386. Preston KL, Cone EJ, Wtsadik AT, Epstein DH, **Huestis MA** and Moolchan ET. Detection of cocaine metabolite in the urine of chronic cocaine users during cessation. The Committee on Problems of Drug Dependence. Quebec, Canada. June 8-13, 2002.
387. Gorelick DA, Heishman SJ, Preston KL, Nelson RA, Moolchan ET, Frank RA and **Huestis MA**. Blockade of effects of smoked marijuana in humans by the CB1-selective cannabinoid receptor antagonist. International Society of Behavioral Neuroscience. Capri, Italy. June 2002.
388. Boyd S, Gorelick D, **Huestis MA**, Heishman S, Derman JC, Simmons MS and Tashkin D. Quitting and relapse among non-treatment-seeking marijuana smokers. American Psychological Association. Philadelphia, PA. May 18-23, 2002.

389. **Huestis MA**. Is this driver impaired by drugs? Can blood drug concentrations and a DRE evaluation answer this question? American Academy of Forensic Sciences (AAFS). Atlanta, GA. February 11-16, 2002.
390. Wtsadik AT, Darwin WD, Moolchan ET, Price DA and **Huestis MA**. Peak delta-9-tetrahydrocannabinol (THC), 11-hydroxy-THC (11-OH-THC) & 11-nor-9-carboxy-THC (THCCOOH) excretion & detection times in human urine following controlled administration of smoked marijuana. American Academy of Forensic Sciences (AAFS). Atlanta, GA. February 11, 2002.
391. **Huestis MA**, Gorelick DA, Heishman SJ, Preston KL, Nelson RT, Moolchan ET and Frank RA. Blockade of physiological and subjective effects of smoked marijuana by the first CB1-selective cannabinoid receptor antagonist SR141716. American Academy of Forensic Sciences (AAFS). Atlanta, GA. February 11, 2002.
392. Evans RE, Jones HE, Shin A and **Huestis MA**. Relationship between in utero methadone exposure and neonatal outcomes. American Academy of Forensic Sciences (AAFS). Atlanta, GA. February 11, 2002.
393. **Huestis MA**. Cannabis. Is this driver impaired by drug? American Academy of Forensic Sciences (AAFS). Atlanta, GA. February 11, 2002.
394. Spanbauer AC, Casseday S, Davoudzadeh D, Preston KL and **Huestis MA**. Detection of opiate use in a methadone maintenance treatment population with the CEDIA DAU 6-acetylmorphine and CEDIA DAU opiate assay. Society of Forensic Toxicologists Meeting (SOFT). September 30-October 6, 2001.
395. Barnes AJ, Kim I, Schepers R, Oyler JM, Joseph RE, Jr., Cone EJ, Moolchan ET and **Huestis MA**. Cocaine and metabolite disposition in saliva and plasma after subcutaneous cocaine administration. Society of Forensic Toxicologists Meeting (SOFT). September 30-October 6, 2001.
396. Carter EJ, Wtsadik AT, Darwin WD, Pope HG, Jr., Gruber AJ and **Huestis MA**. Urinary excretion of Δ^9 -tetrahydrocannabinol (THC), 11-hydroxy-THC (11-OH-THC), and 11-nor-9-carboxy-THC (THCCOOH) in long term marijuana users. Society of Forensic Toxicologists Meeting (SOFT). September 30-October 6, 2001.

397. Oyler JM, Orenstein KC, Joseph R, Jr., Cone EJ, Moolchan ET and **Huestis MA**. Urinary methamphetamine and amphetamine detection times following controlled oral administration of methamphetamine. Society of Forensic Toxicologists Meeting (SOFT). September 30-October 6, 2001.
398. Gustafson RA, Taylor R, Moolchan ET and **Huestis MA**. Preliminary analysis of pharmacodynamic and physiological data after ingestion of oral delta-9-tetrahydrocannabinol. Society of Forensic Toxicologists Meeting (SOFT). September 30-October 6, 2001.
399. Kim I, Oyler JM, Barnes AJ, Joseph RE, Jr., Cone EJ, Moolchan ET and **Huestis MA**. Codeine and metabolite disposition in plasma and saliva after controlled oral codeine administration. Society of Forensic Toxicologists Meeting (SOFT). September 30-October 6, 2001.
400. **Huestis MA**. Plenary Lecture - drug abuse's smallest victims: in utero drug exposure. The International Association of Forensic Toxicologists 40th International Meeting. Prague, Czech Republic. August 26-30, 2001.
401. LeBeau MA, Darwin WD and **Huestis MA**. Intra- and inter-individual variations in urinary levels of endogenous GHB. The International Association of Forensic Toxicologists 40th International Meeting. Prague, Czech Republic. August 26-30, 2001.
402. Preston KL, Umbricht A, **Huestis MA** and Cone EJ. Intravenous buprenorphine: effects of 2 to 16 mg doses in nondependent opioid abusers. American Society for Clinical Pharmacology and Therapeutics. Orlando, FL. March 6-10, 2001.
403. **Huestis MA**, Heishman SJ, Preston KL, Moolchan ET, Nelson RT, Frank RA and Gorelick DA. Blockade of subjective effects of smoked marijuana by the first CB1-selective cannabinoid receptor antagonist SR141716. International Cannabinoid Research Society. El Escorial, Spain. June 28-30, 2001.
404. Gorelick DA, Heishman SJ, Preston KL, Moolchan ET, Nelson RT, Frank RA and **Huestis MA**. Blockade of cardiovascular effects of smoked marijuana in humans by the CB1-selective cannabinoid receptor antagonist SR141716. International Cannabinoid Research Society. El Escorial, Spain. June 28-30, 2001.
405. **Huestis MA**. Cocaine in hair: minimum detectable dose and dose-concentration relationships. Society of Hair Testing. Bordeaux, France. June 6-12, 2001.

406. Woods AS, **Huestis MA**, Koomen J, Gillig KJ, Russell DH, Fuhrer K, Gonin M and Schultz JA. The study of peptide-peptide interaction by Ion-Mobility MALDI. Association of Biomolecular Resource Facility (ABRF). San Diego, CA. February 24-28, 2001.
407. Woods AS, **Huestis MA**, Koomen K, Gillig KJ, Russell DH, Fuhre K, Gonin M and Schultz JA. The pH effect on peptide-peptide interaction and the complex conformation as measured by ion-mobility MALDI. Fourth European Meeting of the Protein Society. Paris, France. April 18-22, 2001.
408. Woods AS, **Huestis MA**, Koomen J, Ruotolo B, Gillig KJ, Russell DH, Fuhrer K, Gonin M and Schultz JA. A new insight in the detection of phosphorylated peptides. Protein Society Meeting. Philadelphia, PA. July 30, 2001.
409. Brown JR, Wtsadik A, Cone EJ, Preston KL, **Huestis MA** and Moolchan ET. Cocaine metabolite elimination patterns in chronic cocaine users during acute drug cessation. The Committee on Problems of Drug Dependence. Scottsdale, AZ. June 12-19, 2001.
410. Steckley SL, Darwin WD, **Huestis MA**, Henningfield JE and Pickworth W. Delivery of crack cocaine through eclipse cigarettes. Society of Research on Nicotine and Tobacco. Seattle, WA. March 22-26, 2001.
411. Gustafson RA, Okano C, Lyons TP, Bruins MR, Moolchan, ET and **Huestis MA**. Urinary excretion of 11-nor-9-carboxy- Δ^9 -tetrahydrocannabinol in humans after smoking. American Academy of Forensic Sciences. Seattle, WA. February 19-24, 2001.
412. **Huestis MA**. Disposition of drugs and metabolites in sweat. California Association of Toxicologists. San Diego, CA. November 10-11, 2000.
413. Evans (Choo) RE, **Huestis MA** and Oyler JM. Determination of methadone, EDDP and EMDP in meconium by GC-PCI-MS. Society of Forensic Toxicology. Milwaukee, WI. October 2-6, 2000.
414. Gustafson RA, George MP, Moolchan ET, Darwin WD, Faniyi J and **Huestis MA**. Preliminary findings on the ingestion of hemp seed oil and urine cannabinoid immunoassay screening results. Society of Forensic Toxicology. Milwaukee, WI. October 2-6, 2000.
415. Oyler JM, Schepers RJ F, Moolchan ET and **Huestis MA**. Disposition of methamphetamine and its metabolite, amphetamine, in urine following controlled drug administration. Society of Forensic Toxicology. Milwaukee, WI. October 2-6, 2000.

416. Darwin WD, Wtsadik AT, Oyler JM, Schepers RJF and **Huestis MA**. Simultaneous assay for delta-9-tetrahydrocannabinol (11-OH-THC) and 11-nor-9-carboxy-delta-9-tetrahydrocannabinol (THCCOOH) in human urine by GC/MS. Society of Forensic Toxicology, Milwaukee, Wisconsin, October 2-6, 2000.
417. **Huestis MA**, Schepers RJF, Joseph RE, Jr., Lafko DM, Basham AE, Moolchan ET and Oyler JM. Secretion of methamphetamine and amphetamine in sweat following controlled drug administration. Society of Forensic Toxicology. Milwaukee, WI. October 2-6, 2000.
418. Schepers RJF, Oyler JM, Evans RE, Joseph RE, Jr., Moolchan ET and **Huestis MA**. Disposition of methamphetamine and amphetamine in saliva and plasma following controlled oral drug administration to human volunteers. Society of Forensic Toxicology, Milwaukee, Wisconsin, October 2-6, 2000.
419. Poletti A, Cone EJ, Preston KL, Umbricht A and **Huestis MA**. Buprenorphine glucuronide plasma concentrations after high dose intravenous and sublingual buprenorphine administration. Society of Forensic Toxicology. Milwaukee, WI. October 2-6, 2000.
420. Wtsadik AT, Darwin WD, Moolchan ET, Oyler JM and **Huestis MA**. Excretion of Δ^9 -tetrahydrocannabinol (THC), 11-hydroxy- Δ^9 -tetrahydrocannabinol (11-OH-THC), and 11-nor-9-carboxy- Δ^9 -tetrahydrocannabinol (THCCOOH) in human urine following administration of smoked Marijuana. Society of Forensic Toxicology. Milwaukee, WI. October 2-6, 2000.
421. LeBeau M, Darwin WD and **Huestis MA**. Intra- and interindividual variations in urinary levels of endogenous GHB. Society of Forensic Toxicology. Milwaukee, WI. October 2-6, 2000.
422. Poletti A and **Huestis MA**. Simultaneous determination of buprenorphine, norbuprenorphine, and buprenorphine glucuronide in plasma by LC-MS-MS. The International Association of Forensic Toxicologists 38th International Meeting. Helsinki, Finland. August 13-17, 2000.
423. **Huestis MA**, Joseph RE, Jr., Evans RE, Schepers R, Moolchan E, Cone E and Oyler JM. Methamphetamine disposition in plasma, saliva and sweat after controlled drug administration. The International Association of Forensic Toxicologists 38th International Meeting, Helsinki, Finland, August 13-17, 2000.
424. **Huestis MA**, Heishman SJ, Preston KL, Moolchan ET, Nelson RA, Frank RA and Gorelick DA. SR141716, THC and THCCOOH pharmacokinetics in a study of the antagonism of smoked

cannabis by SR141716. International Cannabinoid Research Society. Baltimore, MD. June 23, 2000.

425. **Huestis MA**. Interpretation of cannabinoid concentrations in blood, urine, saliva, sweat, hair, and meconium. World Psychiatric Association. Paris, France. June 26-30, 2000.
426. **Huestis MA**. Controlled buprenorphine administration studies. American Academy of Forensic Sciences. Reno, NV. February 21-26, 2000.
427. Evans RE, Umbricht A, Preston KL, Cone EJ and **Huestis MA**. Effects of sublingual and intravenous buprenorphine on a divided attention performance task. American Academy of Forensic Sciences. Reno, NV. February 21-26, 2000.
428. Kintz P, **Huestis MA**, Bernhard W, Deveaux M and Marquet P. Workshop entitled "Pharmacology and toxicology of buprenorphine". American Academy of Forensic Sciences. Reno, NV. February 21-26, 2000.
429. **Huestis MA**. Toxicology and epidemiology of opiates. XI Brazilian Congress of Toxicology/ International Congress of Clinical Toxicology. San Paolo, Brazil. October 24-28, 1999.
430. **Huestis MA**. Driving under the influence. XI Brazilian Congress of Toxicology/ International Congress of Clinical Toxicology. San Paolo, Brazil. October 24-28, 1999.
431. Darwin WD, Oyler JM, Gorelick DA, Cone EJ and **Huestis MA**. Effects of infusion duration on plasma drug concentrations following intravenous (IV) cocaine administration. Society of Forensic Toxicology. San Juan, Puerto Rico. October 10-14, 1999.
432. Evans (Choo) RE, Joseph RE, Jr., **Huestis MA**, Moolchan ET, Cone EJ and Oyler JM. Methamphetamine disposition in saliva and plasma. Society of Forensic Toxicology. San Juan, Puerto Rico. October 10-14, 1999.
433. Okano C, Kuhnle J, Lyons T, Lukey B, Darwin WD and Huestis MA. A comparison of Roche kinetic interaction of microparticles in solution (KIMS[®]) assay for cannabinoids and GC/MS analysis for 11-nor-9-carboxy- delta 9-tetrahydrocannabinol. Society of Forensic Toxicology. San Juan, Puerto Rico. October 10-14, 1999.

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434. **Huestis MA**, Oyler JM, Cone EJ, Moolchan ET, Wtsadik A, Schoendorfer DW and Joseph RE, Jr. Sweat testing for cocaine and metabolites with hand-held and torso fast patches. Society of Forensic Toxicology. San Juan, Puerto Rico. October 10-14, 1999.
435. Moolchan ET, Wtsadik A, **Huestis MA**, Cone EJ and Preston, KL. Cocaine and metabolite elimination patterns in heavy cocaine users during cessation I: saliva and plasma analysis. Society of Forensic Toxicology. San Juan, Puerto Rico. October 10-14, 1999.
436. Wtsadik A, **Huestis MA**, Cone EJ, Preston KL and Moolchan, ET. Cocaine metabolite elimination patterns in chronic cocaine users during cessation. Society of Forensic Toxicology. San Juan, Puerto Rico. October 10-14, 1999.
437. Oyler JM, **Huestis MA** and Cone EJ. A dual derivatization GC/MS method for the simultaneous assay of methamphetamine, cocaine, codeine, phencyclidine, methadone, cyclazocine and metabolites. Society of Forensic Toxicology. San Juan, Puerto Rico. October 10-14, 1999.
438. Oyler JM, Cone EJ, **Huestis MA**, Schoendorfer DW, Moolchan ET and Joseph RE, Jr. Sweat testing for methamphetamine with the hand-held fast patch. Society of Forensic Toxicology. San Juan, Puerto Rico. October 10-14, 1999.
439. **Huestis MA**, Umbricht A, Preston KL and Cone EJ. Buprenorphine and norbuprenorphine plasma concentrations after high dose IV drug administration. The International Association of Forensic Toxicologists. Krakow, Poland. September 5-10, 1999.
440. **Huestis MA**. Marijuana, the effects of alcohol & drugs on human performance & behavior. Albany, NY. July 20-23, 1999.
441. Preston KL, **Huestis MA**, Wong CJ and Cone, EJ. Urine and sweat monitoring of illicit opiate use. American Society for Clinical Pharmacology and Therapeutics. San Antonio, TX. March 18-20, 1999.
442. **Huestis MA**, Umbricht A, Preston KL and Cone EJ. Safety of buprenorphine: ceiling effect for physiologic & subjective measures at high Intravenous Doses. AUSTOX. Sydney, Australia. November 16-18, 1998.
443. **Huestis MA**. Pharmacokinetics of cannabinoids in urine. AUSTOX. Sydney, Australia. November 16-18, 1998.

- 444. **Huestis MA**. Raising the opiate cutoffs. AUSTOX. Sydney, Australia. November 16-18, 1998.

- 445. **Huestis MA**. Marijuana: A forensic symposium. Pharmacokinetics and dosing: plasma/blood/saliva/urine concentration relationships. American Academy of Forensic Sciences. Orlando, FL. February 15-20, 1999.

- 446. **Huestis MA**, Umbricht A, Preston KL and Cone EJ. Safety of buprenorphine: Ceiling for cardio-respiratory and subjective effects at high IV doses. Society of Forensic Toxicology/ International Association of Forensic Toxicologists. Albuquerque, NM. October 5-9, 1998.

- 447. Heishman SJ, **Huestis MA** and Cone EJ. Lack of correlation between performance impairment and pharmacokinetic measures during the distribution phase following marijuana smoking. Society of Forensic Toxicology/ International Association of Forensic Toxicologists. Albuquerque, NM. October 5-9, 1998.

- 448. King B, Snyder F, Frank R, Preston KL, Heishman SJ, Gorelick DA, Nelson RA, Moolchan ET and **Huestis MA**. Recruitment of participants for human research studies on drugs of abuse. Society of Forensic Toxicology and The International Association of Forensic Toxicologists, Albuquerque, NM, October 5-9, 1998.

- 449. **Huestis MA**. Recent advances in human kinetics and disposition of marijuana. International Congress on Therapeutic Drug Monitoring and Clinical Toxicology, Liege, Belgium, October 21-25, 1998.

- 450. **Huestis MA** and Cone EJ. Within subject repeated measures of pharmacokinetic parameters after marijuana smoking. International Cannabinoid Research Society, La Grande Mott, France, July 22-25, 1998.

- 451. **Huestis MA**. THC/Opiates. Contemporary practice in clinical toxicology, Baltimore, MD. June 13-15, 1998.

- 452. **Huestis MA**, Umbricht A, Preston KL and Cone, EJ. Safety of buprenorphine: ceiling effect for subjective measures at high intravenous doses. The Committee on Problems of Drug Dependence. Scottsdale, AZ. June 12-19, 1998.

453. Umbrecht A, **Huestis MA**, Cone EJ and Preston KL. Safety of buprenorphine: no clinically relevant cardio-respiratory depression at high IV doses. The Committee on Problems of Drug Dependence. Scottsdale, AZ. June 12-19, 1998.
454. Preston KL, **Huestis MA**, Wong CJ and Cone, EJ. Urine and sweat monitoring of illicit opiate use. American Society for Clinical Pharmacology and Therapeutics. New Orleans, LA. March 30-April 1, 1998.
455. **Huestis MA**. Marijuana and medicine: pharmacokinetics of inhaled and oral preparations. International Conference on Marijuana for Medicine. New York, NY. March 20-21, 1998.
456. **Huestis MA**, Schwartz KL, Cone EJ and Preston KL. Urine and sweat exposure controlled with a sweat patch. American Academy of Forensic Sciences 50th Anniversary Meeting. San Francisco, CA. February 9-14, 1998.
457. **Huestis MA**, Schwartz KL, Cone EJ and Preston, KL. Urine and sweat monitoring of illicit opiate use. American Academy of Forensic Sciences 50th Anniversary Meeting. San Francisco, CA. February 9-14, 1998.
458. **Huestis MA**, Preston KL, Wong CJ and Cone EJ. Urine and sweat monitoring of illicit cocaine use. Society of Forensic Toxicology, Salt Lake City, UT, October 5-9, 1997.
459. **Huestis MA**, Preston KL, Wong CJ, Silverman K and Cone EJ. Urine and sweat monitoring of illicit cocaine use. International Association of Forensic Toxicologists. Padua, Italy. August 24-30, 1997.
460. **Huestis MA**, Cone EJ, Wong CJ, Silverman K and Preston KL. Efficacy of sweat patches to monitor cocaine and opiate use during treatment. The Committee on Problems of Drug Dependence. Nashville, TN. June 14-19, 1997.
461. **Huestis MA**, Yi KH and Cone EJ. Absorption, distribution and elimination kinetics of Δ^9 -tetrahydrocannabinol in the plasma of human subjects after marijuana smoking. American Academy of Forensic Sciences. New York, NY. Feb. 17-22, 1997.
462. **Huestis MA** and Cone EJ. Predicting new marijuana use from creatinine normalized 11-nor-9-carboxy- Δ^9 -tetrahydrocannabinol (THCCOOH) concentrations: criteria development and validation. Society of Forensic Toxicology. Denver, CO. October 14-19, 1996.

463. **Huestis MA**, Mitchell J and Cone EJ. Urinary excretion half-life of 11-nor-9-carboxy- Δ^9 -tetrahydrocannabinol (THCCOOH). International Association of Forensic Toxicologists. Interlaken, Switzerland. August 11-15, 1996.
464. **Huestis MA**. Relationship of performance effects to drug concentrations, American Association for Clinical Chemistry. Chicago, IL. August 1, 1996.
465. **Huestis MA**, Mitchell J and Cone EJ. Prolonged urinary excretion of marijuana metabolite. The Committee on Problems of Drug Dependence. San Juan, Puerto Rico. June 22-27, 1996.
466. **Huestis MA**, Cone EJ and Mitchell J. Human urinary excretion profiles of 11-nor-9-carboxy- Δ^9 -tetrahydrocannabinol in a controlled marijuana smoking study. American Academy of Forensic Sciences, Nashville, TN, February 19-24, 1996.
467. **Huestis MA**. Current approaches in forensic toxicology. American Academy of Forensic Sciences, Nashville, TN, February 19-24, 1996.
468. **Huestis MA**. To accept or not to accept, that is the question: hair test results in the American courts. International Conference and Workshop on Hair Analysis in Forensic Toxicology. Abu Dhabi, United Arab Emirates. November 21, 1995.
469. **Huestis MA** and Welch MJ. Interlaboratory studies for the analysis of hair for drugs of abuse: results from exercise V. International Conference and Workshop on Hair Analysis in Forensic Toxicology. Abu Dhabi, United Arab Emirates. November 21, 1995.
470. **Huestis MA**, Cone EJ and Mitchell J. Detection times of marijuana metabolites in urine by immunoassay and GC/MS. Society of Forensic Toxicology. Baltimore, MD. October 9-14, 1995.
471. Wilkins DG, Haughey HM, Cone EJ, **Huestis MA**, Foltz R and Rollins DE. Quantitative analysis of delta-9-tetrahydrocannabinol, 11-hydroxy-delta-9-tetrahydrocannabinol in human hair by negative-chemical ionization mass spectrometry. Society of Forensic Toxicology. Baltimore, MD. October 9-14, 1995.

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472. Haughey HM, Wilkins DG, Cone EJ, **Huestis MA** and Rollins DE. Quantitation of tetrahydrocannabinol and metabolites in human hair. College on Problems of Drug Dependence. Scottsdale, AZ. June 10-15, 1995.
473. **Huestis MA**, Mitchell J and Cone EJ. Detection times of marijuana metabolites in urine by immunoassay and GC/MS. American Academy Forensic Sciences. Seattle, WA. February 13-18, 1995.
474. **Huestis MA** and Cone EJ. Effects of acute Δ -9-tetrahydrocannabinol exposure on human plasma cortisol concentrations. American Academy Forensic Sciences. Seattle, WA. February 13-18, 1995.
475. **Huestis MA**. Medical toxicology. American Academy Forensic Sciences. Seattle, WA. February 13-18, 1995.
476. **Huestis MA** and Cone EJ. Effects of acute delta-9-tetrahydrocannabinol exposure on human plasma cortisol concentrations. Society of Forensic Toxicologists. Tampa, FL. October 31-November 4, 1994.
477. **Huestis MA**. Technical and legal issues of hair testing in the American courts. SOFT-HHS Conference on Drugs in Hair Testing, Tampa, FL. October 29-30, 1994.
478. **Huestis MA**. Drug analysis of unusual tissues: meconium, amniotic fluid, and breast milk. American Association for Clinical Chemistry. New Orleans, LA. July 18, 1994.
479. **Huestis MA**. Technical issues in drugs of abuse hair testing in the American courts. 2nd International Meeting on Clinical and Forensic Aspects of Hair Analysis. Genova, Italy. June 6-8, 1994.
480. **Huestis MA** and Cone EJ. Validation studies of commercial urine cannabinoid metabolites assays: I. sensitivity, specificity, and accuracy. American Academy of Forensic Sciences. San Antonio, TX. February 14-19, 1994.
481. **Huestis MA** and Cone EJ. Urine creatinine levels in random and daily urine collections in a controlled clinical study. Society of Forensic Toxicology. Phoenix, AZ. October 10-16, 1993.

Marilyn A. Huestis, Ph.D.

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482. **Huestis MA**. Drug analysis of unusual tissues: meconium, amniotic fluid, and breast milk. American Association for Clinical Chemistry. New York, NY. July 12, 1993.
483. **Huestis MA**. How to publish and present a scientific paper: designing the experiments. California Association of Toxicologists. Los Angeles, CA. May 7, 1993.
484. **Huestis MA**, Cone EJ and Mitchell J. Lowering the cannabinoid cutoff concentration results in increased efficiency and sensitivity for nine commercial immunoassays. American Academy of Forensic Sciences. Boston, MA. February 15-20, 1993.
485. **Huestis MA** and Cone EJ. Validation studies of commercial urine cannabinoid metabolites assays: I. sensitivity, specificity, and accuracy. American Academy of Forensic Sciences. San Antonio, TX. February 15-20, 1993.
486. Cone EJ, Darwin WD, **Huestis MA** and Wang WL. Cocaine and heroin analytes in arm and head hair of drug users. American Academy of Forensic Sciences. Boston, MA. February 15-20, 1993.
487. **Huestis MA**. Cannabinoids, forensic urine drug testing II. SAFMLS. Washington, DC. February 14, 1993.
488. **Huestis MA**, Henningfield JE and Cone EJ. Predictive models for estimating time of marijuana usage from plasma cannabinoid levels. Society of Forensic Toxicology. Cromwell, CT. October 11-16, 1992.
489. Cone EJ, Darwin WD, **Huestis MA** and Wang WL. Cocaine and heroin analytes in arm and head hair of drug users. Society of Forensic Toxicology. Cromwell, CT. October 11-16, 1992.
490. Jenkins AJ, Cone EJ, Darwin WD, **Huestis MA** and Mitchell J. Validity testing of the Hycor Accupinch THC test. Society of Forensic Toxicology. Cromwell, CT. October 11-16, 1992.
491. Hughes RO, Levine B, Smith ML, Dickerson S, **Huestis MA** and Cone EJ. Evaluation of commercial opiate assays as screening methods for hydromorphone and hydrocodone. American Academy of Forensic Sciences. New Orleans, LA. February 17-22, 1992.

Marilyn A. Huestis, Ph.D.

Page 108

492. Cone EJ, Mills L, Jenkins AJ, **Huestis MA**, Darwin WD and Mitchell J. Validity testing of the E-Z screen: cannabinoid enzyme immunoassay. American Academy of Forensic Sciences. New Orleans, LA. February 17-22, 1992.
493. **Huestis MA**, Dickerson S and Cone EJ. Can saliva THC levels be correlated to behavior? American Academy of Forensic Sciences. New Orleans, LA. February 17-22, 1992.
494. **Huestis MA**, Holicky B, Sampson A, Henningfield JE and Cone EJ. Absorption of THC and formation of 11-OH-THC and THCCOOH during marijuana smoking. Society of Forensic Toxicology. Montreal, Canada. September 23-27, 1991.
495. **Huestis MA** and Cone EJ. Profile of acute marijuana use: forensic implications. The International Association of Forensic Toxicologists 28th International Meeting. Copenhagen, Denmark. June 23-27, 1991.
496. **Huestis MA**, Sampson A, Holicky B, Henningfield J and Cone EJ. The fast action pharmacodynamics of marijuana smoking. The Committee on Problems of Drug Dependence. Palm Beach, FL. June 16-20, 1991.
497. **Huestis MA**, Cone EJ and Mitchell J. Sensitivity, specificity and accuracy of immunoassays for the detection of cocaine metabolites in urine at current and proposed NIDA cutoffs. American Academy of Forensic Sciences. Anaheim, CA. February 18-23, 1991.
498. **Huestis MA**, Heishman SJ and Cone EJ. Profile of repeated marijuana exposure; plasma and saliva THC levels, performance, physiological and subjective effects following smoking in a controlled clinical setting. The International Association of Forensic Toxicologists 27th International Meeting. Perth, Western Australia. October 19-23, 1990.
499. **Huestis MA** and Cone EJ. Time course of detection of salivary Δ^9 -THC levels during controlled clinical studies of marijuana smoking. The 2nd International Congress of Therapeutic Drug Monitoring and Toxicology. Barcelona, Spain. October 9-12, 1990.
500. **Huestis MA**, Heishman SJ and Cone EJ. Plasma and saliva THC levels and behavioral effects following repeated marijuana exposure. Society of Forensic Toxicology. Hicksville, NY. September 11-15, 1990.

APPENDIX B

Following is the evidence reviewed to formulate an opinion in this case

DOCUMENTS REVIEWED

- Case Documents:
 - Third Amended Complaint
 - Plaintiff's Initial Disclosures
 - Plaintiff's Answers to Defendant JOpen, LLC's First Set of Interrogatories, dated 1/2/2025
 - Plaintiff's Supplemental Responses to Requests for Production of Documents, dated 9/9/2025
 - Plaintiff's Supplemental Answers to Interrogatories, dated 9/9/2025
 - Plaintiff's Expert Reports, produced November 18, 2025
- Third Party Productions
 - St. Tammany Parish Sheriff's Office Incident Report, STPSO000001-18
 - St. Tammany Parish Coroner's Office Records
 - Crime Scene Photos produced by St. Tammany Parish Sheriff's Office
 - TRUEPILL000001-03
 - 911 call made by Kathleen Moller
 - NMS Labs Records
 - St. Tammany Fire District #4, Patient Care Record
 - Paradigm Health System (certification of lack of records)
 - ASPEN0000001-12
 - LIFENET000001-08
 - The following records from the Louisiana Organ Procurement Agency:
 - LNH Chart
 - Audio Recording of call between Kathleen Moller and LOPA Representative
 - Cardiectomy Report
 - Louisiana Organ and Tissue Donor Registry Verification
- HIPAA Compliant Authorization for Release of Protected Health Information/Records
- MOLLER_000023-24
- MOLLER_000025-26

- Obituary, Harmony Anne Moller, <https://www.dignitymemorial.com/obituaries/covington-la/harmony-moller-11148925>
- *Mother Blames Companies Behind Kratom for Daughter's Death*, LEGAL NEWSLINE, Chris Dickerson, https://www.legalnewsline.com/louisiana-record/mother-blames-companies-behind-kratom-for-daughters-death/article_7c3ae0f1-0293-548c-9556-fd7911ae275e.html (February 28, 2024)
- The following Facebook Posts
 - Mande's Restaurant, dated February 15, 2023, linking Harmony Moller Obituary, <https://www.dignitymemorial.com/obituaries/covington-la/harmony-moller-11148925>, and comments
 - Kathi Moller's post, dated August 6, 2023, and comments
 - Kathi Moller's post, dated February 8, 2023, and comments
 - Kathi Moller's post, dated April 13, 2024, and comments
 - Kathi Moller's post, dated April 12, 2024
 - Kathi Moller's post, dated December 5, 2023
 - Kathi Moller's post, dated November 12, 2023
 - Kathi Moller's post, dated April 7, 2023
 - Kathi Moller's comment on Mande's Restaurant's post, dated February 15, 2023

Kathi Moller's post, dated May 29, 2023, and comments