

## CMA Citations 2016

1. Prévôt, T.D. et al., 2016. Roles of Hippocampal Somatostatin Receptor Subtypes in Stress Response and Emotionality. *Neuropsychopharmacology*. Available at: <https://www.nature.com/npp/journal/vaop/ncurrent/full/npp2016281a.html>.
2. Rappeneau, V. et al., 2016. Disruption of the Glutamate–Glutamine Cycle Involving Astrocytes in an Animal Model of Depression for Males and Females. *Frontiers in Behavioral Neuroscience*, 10. Available at: <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC5147055/>.
3. Wang, X.-F. et al., 2016. Agmatine Prevents Adaptation of the Hippocampal Glutamate System in Chronic Morphine-Treated Rats. *Neuroscience Bulletin*, 32(6), pp.523–530.
4. Bisht, R. et al., 2016. Ex vivo investigation of ocular tissue distribution following intravitreal administration of connexin43 mimetic peptide using the microdialysis technique and LC-MS/MS. *Drug Delivery and Translational Research*, 6(6), pp.763–770.
5. Su, F. et al., 2016. The Harmful Effects of Hypertonic Sodium Lactate Administration in Hyperdynamic Septic Shock. *Shock: Injury, Inflammation, and Sepsis: Laboratory and Clinical Approaches*, 46(6), pp.663–671.
6. Rocha, J.N. & Rocha, J.N., 2016. Extracellular adenosine 5'-triphosphate concentrations changes in rat spinal cord associated with the activation of urinary bladder afferents. A microdialysis study. *Einstein (São Paulo)*, 14(4), pp.541–546.
7. Cao, F., Zhang, L. & Tian, Y., 2016. A novel N-doped carbon nanotube fiber for selective and reliable electrochemical determination of ascorbic acid in rat brain microdialysates. *Journal of Electroanalytical Chemistry*, 781, pp.278–283.
8. Zhao, X.-E. et al., 2016. Sensitive and accurate determination of neurotransmitters from in vivo rat brain microdialysate of Parkinson's disease using in situ ultrasound-assisted derivatization dispersive liquid–liquid microextraction by UHPLC-MS/MS. *RSC Advances*, 6(110), pp.108635–108644.
9. Bentzer, P. & Grände, P.-O., 2016. Isolated Brain Trauma in Cats Triggers Rapid Onset of Hypovolemia. *Neurocritical Care*, pp.1–7.
10. O'Leary, A. et al., 2016. Antidepressants differentially affect striatal amphetamine-stimulated dopamine and serotonin release in rats with high and low novelty-oriented behaviour. *Pharmacological Research*, 113, Part B, pp.739–746.
11. Marciniak, E. et al., 2016. Hypothalamic-pituitary GnRH/LH axis activity is affected by salsolinol in sheep during lactation: Effects of intracerebroventricular infusions of salsolinol and its antagonizing analogue. *Theriogenology*, 86(8), pp.1931–1938.
12. Bundgaard, C. et al., 2016. Selegiline induces a wake promoting effect in rats which is related to formation of its active metabolites. *Pharmacology Biochemistry and Behavior*, 150–151, pp.147–152.
13. Breuer, T. et al., 2016. Kinetics of ventilation-induced changes in diaphragmatic metabolism by bilateral phrenic pacing in a piglet model. *Scientific Reports*, 6. Available at: <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC5069624/>.
14. La Favor, J.D. & Burnett, A.L., 2016. A microdialysis method to measure in vivo hydrogen peroxide and superoxide in various rodent tissues. *Methods*, 109, pp.131–140.
15. Møller, L.L.V. et al., 2016. Decreased spontaneous activity in AMPK  $\alpha$ 2 muscle specific kinase dead mice is

- not caused by changes in brain dopamine metabolism. *Physiology & Behavior*, 164, Part A, pp.300–305.
16. Wang, Y. et al., 2016. Effects of realgar on GSH synthesis in the mouse hippocampus: Involvement of system XAG<sup>-</sup>, system XC<sup>-</sup>, MRP-1 and Nrf2. *Toxicology and Applied Pharmacology*, 308, pp.91–101.
  17. Prokai, L. et al., 2016. Mass spectrometric analysis of carisoprodol and meprobamate in rat brain microdialysates. *Journal of Mass Spectrometry*, 51(10), pp.900–907.
  18. Justo, L.A. et al., 2016. Effects and mechanism of action of isatin, a MAO inhibitor, on in vivo striatal dopamine release. *Neurochemistry International*, 99, pp.147–157.
  19. Kołosowska, K. et al., 2016. The role of IL-1 $\beta$  and glutamate in the effects of lipopolysaccharide on the hippocampal electrical kindling of seizures. *Journal of Neuroimmunology*, 298, pp.146–152.
  20. Ramírez-Jarquín, U.N. & Tapia, R., 2016. Neuropathological characterization of spinal motor neuron degeneration processes induced by acute and chronic excitotoxic stimulus in vivo. *Neuroscience*, 331, pp.78–90.
  21. Besson, M. et al., 2016. Alterations in alpha5\* nicotinic acetylcholine receptors result in midbrain- and hippocampus-dependent behavioural and neural impairments. *Psychopharmacology*, 233(18), pp.3297–3314.
  22. Herrera, A. et al., 2016. Aminochrome induces dopaminergic neuronal dysfunction: a new animal model for Parkinson's disease. *Cellular and Molecular Life Sciences*, 73(18), pp.3583–3597.
  23. Fujii, N., Louie, J.C., et al., 2016. K<sup>+</sup> channel mechanisms underlying cholinergic cutaneous vasodilation and sweating in young humans: roles of KCa, KATP, and KV channels? *American Journal of Physiology - Regulatory, Integrative and Comparative Physiology*, 311(3), pp.R600–R606.
  24. Rozov, S.V. et al., 2016. Altered Electroencephalographic Activity Associated with Changes in the Sleep-Wakefulness Cycle of C57BL/6J Mice in Response to a Photoperiod Shortening. *Frontiers in Behavioral Neuroscience*, 10. Available at: <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC5005378/>.
  25. Martín-García, E. et al., 2016. Differential Control of Cocaine Self-Administration by GABAergic and Glutamatergic CB1 Cannabinoid Receptors. *Neuropsychopharmacology*, 41(9), pp.2192–2205.
  26. Yang, Y. et al., 2016. In situ eNOS/NO up-regulation—a simple and effective therapeutic strategy for diabetic skin ulcer. *Scientific Reports*, 6. Available at: <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4958962/>.
  27. Alsulimani, H.H., Kim, J. & Sani, S.N., 2016. Microdialysis-directed Intra-tumor Pharmacokinetic Modeling of Methotrexate in Mice and Humans. *Journal of Pharmacy & Pharmaceutical Sciences*, 19(2), pp.239–251.
  28. Thyron, L., Portelli, J., et al., 2016. Disruption, but not overexpression of urate oxidase alters susceptibility to pentylentetrazole- and pilocarpine-induced seizures in mice. *Epilepsia*, 57(7), pp.e146–e150.
  29. Beggiato, S. et al., 2016. Functional role of striatal A2A, D2, and mGlu5 receptor interactions in regulating striatopallidal GABA neuronal transmission. *Journal of Neurochemistry*, 138(2), pp.254–264.
  30. Gottås, A. et al., 2016. Pharmacokinetics of heroin and its metabolites in vitreous humor and blood in a living pig model. *Forensic Toxicology*, 34(2), pp.277–285.
  31. Pigatto, M.C. et al., 2016. Population Pharmacokinetic Modeling of Etoposide Free Concentrations in Solid Tumor. *Pharmaceutical Research*, 33(7), pp.1657–1670.
  32. Iwata, M. et al., 2016. Psychological Stress Activates the Inflammasome via Release of Adenosine Triphosphate and Stimulation of the Purinergic Type 2X7 Receptor. *Biological Psychiatry*, 80(1), pp.12–22.
  33. Brandhonneur, N. et al., 2016. PBPK model of methotrexate in cerebrospinal fluid ventricles using a combined microdialysis and MRI acquisition. *European Journal of Pharmaceutics and Biopharmaceutics*, 104, pp.117–130.

34. Christmas, K.M. et al., 2016. Sustained cutaneous vasoconstriction during and following cryotherapy treatment: Role of oxidative stress and Rho kinase. *Microvascular Research*, 106, pp.96–100.
35. Xie, F. et al., 2016. Transdermal permeation of drugs with differing lipophilicity: Effect of penetration enhancer camphor. *International Journal of Pharmaceutics*, 507(1–2), pp.90–101.
36. Kim, M. et al., 2016. Silica stationary phase-based on-line sample enrichment coupled with LC-MS/MS for the quantification of dopamine, serotonin and their metabolites in rat brain microdialysates. *Analytica Chimica Acta*, 923, pp.55–65.
37. Fujii, N., Meade, R.D., et al., 2016. Cutaneous blood flow during intradermal NO administration in young and older adults: roles for calcium-activated potassium channels and cyclooxygenase? *American Journal of Physiology - Regulatory, Integrative and Comparative Physiology*, 310(11), pp.R1081–R1087.
38. Xiao, B.-X. et al., 2016. Pharmacokinetic profiles of the five isoflavonoids from Pueraria lobata roots in the CSF and plasma of rats. *Journal of Ethnopharmacology*, 184, pp.22–29.
39. Zhang, W. et al., 2016. Effect of Jian-Pi-Zhi-Dong Decoction on striatal glutamate and  $\gamma$ -aminobutyric acid levels detected using microdialysis in a rat model of Tourette syndrome. *Neuropsychiatric Disease and Treatment*, 12, pp.1233–1242.
40. Schober, A. et al., 2016. Microdialysis Assessment of Cerebral Perfusion during Cardiac Arrest, Extracorporeal Life Support and Cardiopulmonary Resuscitation in Rats – A Pilot Trial. *PLOS ONE*, 11(5), p.e0155303.
41. Schneider, A., 2016. An Approach to Collect Non-Standard Microdialysis Compounds. *Chemistry & Biochemistry Undergraduate Honors Theses*. Available at: <http://scholarworks.uark.edu/chbcuht/16>.
42. Buchanan, R.J. et al., 2016. In vivo measurements of limbic glutamate and GABA concentrations in epileptic patients during affective and cognitive tasks: A microdialysis study. *Hippocampus*, 26(5), pp.683–689.
43. Young, M., 2016. Microdialysis Studies Using Porcine Pancreatic Elastase to Guide Mathematical Modeling of Microdialysis Sampling for in vivo Measurements. *Biomedical Engineering Undergraduate Honors Theses*. Available at: <http://scholarworks.uark.edu/bmeguht/29>.
44. Larsen, M.S. et al., 2016. Pharmacokinetic/Pharmacodynamic Relationship of Gabapentin in a CFA-induced Inflammatory Hyperalgesia Rat Model. *Pharmaceutical Research*, 33(5), pp.1133–1143.
45. Smith, J.A. et al., 2016. Equivalency challenge: Evaluation of Lipodox<sup>®</sup> as the generic equivalent for Doxil<sup>®</sup> in a human ovarian cancer orthotopic mouse model. *Gynecologic Oncology*, 141(2), pp.357–363.
46. Hosmann, A. et al., 2016. Cerebral and Peripheral Metabolism to Predict Successful Reperfusion After Cardiac Arrest in Rats: A Microdialysis Study. *Neurocritical Care*, 24(2), pp.283–293.
47. Newman, L.A. & Gold, P.E., 2016. Attenuation in rats of impairments of memory by scopolamine, a muscarinic receptor antagonist, by mecamylamine, a nicotinic receptor antagonist. *Psychopharmacology*, 233(5), pp.925–932.
48. Emmanouilidou, E. et al., 2016. GABA transmission via ATP-dependent K<sup>+</sup> channels regulates  $\alpha$ -synuclein secretion in mouse striatum. *Brain*, 139(3), pp.871–890.
49. Vazquez-DeRose, J. et al., 2016. Hypocretin/orexin antagonism enhances sleep-related adenosine and GABA neurotransmission in rat basal forebrain. *Brain Structure and Function*, 221(2), pp.923–940.
50. Patik, J.C. et al., 2016. Impaired endothelium independent vasodilation in the cutaneous microvasculature of young obese adults. *Microvascular Research*, 104, pp.63–68.
51. Rottbøll, L.A.H. & Friis, C., 2016. Penetration of antimicrobials to pulmonary epithelial lining fluid and muscle and impact of drug physicochemical properties determined by microdialysis. *Journal of Pharmacological and Toxicological Methods*, 78, pp.58–65.
52. Thyron, L., Raedt, R., et al., 2016. Uric acid is released in the brain during seizure activity and increases

- severity of seizures in a mouse model for acute limbic seizures. *Experimental Neurology*, 277, pp.244–251.
53. Cavus, I. et al., 2016. 50 Hz hippocampal stimulation in refractory epilepsy: Higher level of basal glutamate predicts greater release of glutamate. *Epilepsia*, 57(2), pp.288–297.
  54. Abrahamsson, P. et al., 2016. Outcome of microdialysis sampling on liver surface and parenchyma. *Journal of Surgical Research*, 200(2), pp.480–487.
  55. Baioni, N.E. 1993-, 2016. *Development Toward Fluorescence Imaging of Microdialysis Sampling Diffusion Profiles*. Thesis. Available at: <http://uarkive.uark.edu:8080/xmlui/handle/10826/1334>.
  56. Cremers, T.I.F.H. et al., 2016. Development of a Rat Plasma and Brain Extracellular Fluid Pharmacokinetic Model for Bupropion and Hydroxybupropion based on Microdialysis Sampling, and Application to Predict Human Brain Concentrations. *Drug Metabolism and Disposition*, p.dmd.115.068932.
  57. Lindqvist, A. et al., 2016. In vivo Functional Evaluation of Increased Brain Delivery of the Opioid Peptide DAMGO by Glutathione-PEGylated Liposomes. *Pharmaceutical Research*, 33(1), pp.177–185.
  58. Huang, Z. et al., 2016. AC105 Increases Extracellular Magnesium Delivery and Reduces Excitotoxic Glutamate Exposure within Injured Spinal Cords in Rats. *Journal of Neurotrauma*, 34(3), pp.685–694.
  59. Dominguez, G. et al., 2016. Alcohol withdrawal induces long-lasting spatial working memory impairments: relationship with changes in corticosterone response in the prefrontal cortex. *Addiction Biology*, p.n/a-n/a.
  60. Klaus, R. et al., 2016. An Exploratory Microdialysis Study to Assess the Ocular Pharmacokinetics of Ciprofloxacin Eye Drops in Rabbits. *Journal of Ocular Pharmacology and Therapeutics*, 32(6), pp.390–395.
  61. Wei, N. et al., 2016. Determination of dopamine, serotonin, biosynthesis precursors and metabolites in rat brain microdialysates by ultrasonic-assisted in situ derivatization–dispersive liquid–liquid microextraction coupled with UHPLC-MS/MS. *Talanta*, 161, pp.253–264.
  62. Hwa, L.S. et al., 2016. Dissociation of  $\mu$ -opioid receptor and CRF-R1 antagonist effects on escalated ethanol consumption and mPFC serotonin in C57BL/6J mice. *Addiction Biology*, 21(1), pp.111–124.
  63. Fragale, J.E.C. et al., 2016. Dysfunction in amygdala–prefrontal plasticity and extinction-resistant avoidance: A model for anxiety disorder vulnerability. *Experimental Neurology*, 275, Part 1, pp.59–68.
  64. Hernández, G. et al., 2016. Effects of dexmedetomidine and esmolol on systemic hemodynamics and exogenous lactate clearance in early experimental septic shock. *Critical Care*, 20, p.234.
  65. Kasper, J.M. et al., 2016. Gamma-Aminobutyric Acidergic Projections From the Dorsal Raphe to the Nucleus Accumbens Are Regulated by Neuromedin U. *Biological Psychiatry*, 80(11), pp.878–887.
  66. Hasselquist, N.J. et al., 2016. Greater carbon allocation to mycorrhizal fungi reduces tree nitrogen uptake in a boreal forest. *Ecology*, 97(4), pp.1012–1022.
  67. Battisti, U.M. et al., 2016. “Heart-cut” bidimensional achiral-chiral liquid chromatography applied to the evaluation of stereoselective metabolism, in vivo biological activity and brain response to chiral drug candidates targeting the central nervous system. *Journal of Chromatography A*, 1443, pp.152–161.
  68. He, Y. et al., 2016. In situ derivatization-ultrasound-assisted dispersive liquid–liquid microextraction for the determination of neurotransmitters in Parkinson’s rat brain microdialysates by ultra high performance liquid chromatography-tandem mass spectrometry. *Journal of Chromatography A*, 1458, pp.70–81.
  69. Jiang, S. et al., 2016. Investigation of signaling molecules and metabolites found in crustacean hemolymph via in vivo microdialysis using a multifaceted mass spectrometric platform. *ELECTROPHORESIS*, 37(7–8), pp.1031–1038.
  70. Thors, L. et al., 2016. In vitro human skin penetration model for organophosphorus compounds with different physicochemical properties. *Toxicology in Vitro*, 32, pp.198–204.
  71. Ortega, J., Meana, J.J. & Callado, L., 2016. In Vivo Brain Microdialysis of Monoamines. In R. Luján & F.

- Ciruela, eds. *Receptor and Ion Channel Detection in the Brain*. Neuromethods. Springer New York, pp. 415–434. Available at: [http://dx.doi.org/10.1007/978-1-4939-3064-7\\_25](http://dx.doi.org/10.1007/978-1-4939-3064-7_25).
72. Yan, X. et al., 2016. LC–MS/MS assay of ropinirole in rat biological matrices: elimination of lysoglycerophosphocholines-based matrix effect. *Bioanalysis*, 8(17), pp.1823–1835.
  73. Miguelez, C. et al., 2016. L-DOPA elicits non-vesicular releases of serotonin and dopamine in hemiparkinsonian rats in vivo. *European Neuropsychopharmacology*, 26(8), pp.1297–1309.
  74. Yokobori, S. et al., 2016. Microdialysis as Clinical Evaluation of Therapeutic Hypothermia in Rat Subdural Hematoma Model. In F. H. Kobeissy et al., eds. *Injury Models of the Central Nervous System*. Methods in Molecular Biology. Springer New York, pp. 413–431. Available at: [http://dx.doi.org/10.1007/978-1-4939-3816-2\\_23](http://dx.doi.org/10.1007/978-1-4939-3816-2_23).
  75. Llidó, A. et al., 2016. Neonatal finasteride administration decreases dopamine release in nucleus accumbens after alcohol and food presentation in adult male rats. *Behavioural Brain Research*, 309, pp.44–50.
  76. Fang, Z. et al., 2016. Pluronic P85-coated poly(butylcyanoacrylate) nanoparticles overcome phenytoin resistance in P-glycoprotein overexpressing rats with lithium-pilocarpine-induced chronic temporal lobe epilepsy. *Biomaterials*, 97, pp.110–121.
  77. Zhang, S. et al., 2016. Protective effect of melatonin on soluble A $\beta$ 1–42-induced memory impairment, astrogliosis, and synaptic dysfunction via the Musashi1/Notch1/Hes1 signaling pathway in the rat hippocampus. *Alzheimer's Research & Therapy*, 8, p.40.
  78. Qi, D. et al., 2016. Quantification of Dopamine in Brain Microdialysates with High-Performance Liquid Chromatography–Tandem Mass Spectrometry. *Analytical Sciences*, 32(4), pp.419–424.
  79. Herrik, K.F. et al., 2016. The 5-HT6 receptor antagonist idalopirdine potentiates the effects of acetylcholinesterase inhibition on neuronal network oscillations and extracellular acetylcholine levels in the rat dorsal hippocampus. *Neuropharmacology*, 107, pp.351–363.
  80. Bergh, M.S.-S. et al., 2016. Validated methods for determination of neurotransmitters and metabolites in rodent brain tissue and extracellular fluid by reversed phase UHPLC–MS/MS. *Journal of Chromatography B*, 1028, pp.120–129.