

Curriculum Vitae

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EDUCATION:

- 1980 **Bachelor of Science, B.S.** (Pharmacy)
Aristotle University of Thessaloniki, Thessaloniki, Greece.
- 1985 **Doctor of Philosophy, Ph.D.** (Neuropharmacology)
School of Medicine and School of Pharmacy, National and Kapodistrian
University of Athens, Athens, Greece.

POSTDOCTORAL TRAINING:

- 1987 Pharmacokinetics, "Agia Sofia" Hospital, Athens, Greece.
- 1990 Neurochemistry techniques (HPLC), University of Kuopio, Kuopio, Finland.
- 1990 Statistics, Dept of Biostatistics, University of Ioannina, Ioannina, Greece.
- 1991 Brain Dialysis, C.N.R.S./I.N.S.E.R.M., Neurobiologie des Regulation, College de France, Paris, France.
- 1992-1993 Enzymology and Molecular Pharmacology techniques. International Agency for Research on Cancer (IARC/WHO), Lyon, France.
- 1995 Advanced Course on Methods in Protein Structure Analysis, Halkidiki, Greece.
- 1996 Molecular Toxicology, International Agency for Research on Cancer (IARC/WHO), Lyon, France.
- 2000 Techniques in Experimental Schizophrenia, Neuroscience Center at St. Elizabeth's, National Institute of Mental Health, Bethesda, MD, USA.
- 2005 HPLC-based analysis of enzymatic activities. Department of Physiology and Pharmacology, School of Medicine, Karolinska Institutet, Stockholm, Sweden.
- 2008-2009. Molecular Enzymology, Metabolomics, Gene Regulation, Signal Transduction, Cell Cultures, Lipid Metabolism. NCI/NIH, Laboratory of Metabolism, Bethesda, MD, USA.

POST DOCTORAL FELLOWSHIP:

- Aug 1992-Oct 1993 International Agency for Research on Cancer (IARC/WHO),
Lyon, France.
- Jan 2008-Sept 2009 Laboratory of Metabolism, NCI/NIH, Bethesda, MD, USA.

SUPERVISION OF DOCTORAL DISSERTATIONS AND DIPLOMA THESIS:

- 2003-2007 «Depression: immunological and drug metabolizing profile of the FSL rats, a genetic animal model of depression: role of mirtazapine». Dr Olga Kotsovolou, pharmacist.
- 2005- «The role of dopamine in the regulation of the constitutive and B[α]P-induced states of CYP1A and CYP1B enzymes». Candidate: Panagiotis Harkitis, chemist.
- 2005- 2009 «The role of maternal deprivation stress in the regulation of hnRNPs and DARPP-32 in CNS- investigation of their involvement in the neurobiological substrate of schizophrenia». Dr Georgia Rentesi, biologist.
- 2006-2010 «Investigation of the role of adrenoceptor and dopaminergic signaling in the regulation of cytochromes CYP3A, CYP2C and CYP2D». Dr Evangelos P. Daskalopoulos, pharmacist.
- 2010- «Investigation of the role of oleuropeine in lipid homeostasis and myocardial ischemia-reperfusion: role of the peroxisome proliferator activated receptors PPARs». Candidate: Foteini Malliou, molecular biologist-geneticist.
- 1996- Supervisor of five diploma theses of undergraduate students of the Department of Molecular Biology, Democritus University of Thrace and the Department of Biological Applications and Technology, School of Health Sciences, University of Ioannina.

MEMBER OF THE ADVISORY COMMITTEE FOR THE PREPARATION OF DOCTORAL DISSERTATIONS:

- 2009-2013 Topic: "Development of techniques for the assessment of drug effect in the eye". Prepared by Dr Marianthe Sotiropoulou, biologist.
- 1998-2004 Topic: "Effect of drugs on the metabolism of ethanol". Prepared by Dr Peter Karamanakos, physician.
- 2006-2009 Topic: "The role of the CB1 cannabinoid receptor in the neurobiological actions of addictive drugs. Implications in Treatment". Prepared by Dr Olga Houliara, physician.

MEMBER OF THE EXAMINING COMMITTEE OF DOCTORAL DISSERTATIONS :

- 1996 Theme: "Biological role and regulatory factors of induction of aldehyde dehydrogenase-3". Dr Periklis Pappas, chemist.
- 1998 Theme: "Isolation of the Gonadotrophin Surge Attenuating Factor-GnSAF» Dr Aglaia Pappa, biologist.
- 1998 Theme: "Study of the effect of plant diterpenes and flavonoids in human leukemic cells" Dr Konstantinos Dimas, pharmacist.
- 1999 Theme: "Extrinsic and intrinsic regulation of hepatic xenobiotic metabolism" Dr Panagiotis Stephanou, biologist.
- 2000 Theme: "Psychosocial factors associated with the use of psychotropic drugs by secondary school students" Dr Athanasia Demetriou, psychologist.
- 2003 Theme: "Study of the alkaline neutralizing capacity to the skin surface in healthy subjects and in patients with various dermatological diseases" Dr. Mikel Nakuci, physician.
- 2007 Theme: "The survival of Dioscorides published handwritten remedies of Epirus" Dr Eftalia Tsagali, philologist.
- 2007 Theme: "Donakiosi (VIBRIO SPP) in fishfarming units" Dr Hercules Nousias, veterinarian.
- 2013 Theme: "Inhibition of growth factor -beta conversion and exclusion of the endothelin receptor in rats with pulmonary hypertension induced by monokrotalinin' Dr Aikaterini Megalou, physician.

AD HOC REVIEWER FOR JOURNALS AND BOOKS:

1. Drug Metabolism and Disposition
2. Molecular Carcinogenesis
3. Steroids
4. Stress
5. Journal of Pharmacology and Experimental Therapeutics
6. Human Genomics
7. Neurotoxicity Research
8. Basic Clin Pharmacol Toxicol.
9. Pharmacological Research
10. Color Atlas of Pharmacology, 3^d edition, (eds: Heinz Lüllmann, Klaus Mohr, Albrecht Ziegler, Detlef Bieger).
11. The FEBS Journal

MEMBER OF SCIENTIFIC ORGANIZATIONS:

1989- Hellenic Society of Pharmacology
1989- Hellenic Society for Neuroscience
1989- European Neuroscience Association (ENA)
1990- International Brain Research Organization (IBRO)
1993- International Union of Pharmacology (IUPHAR)
1996- Hellenic Society of Biochemistry
1996- European Biochemistry Organization (EBO)
2007- International Society for the Studies of Xenobiotics (ISSX).

RESEARCH FUNDING:

1. Grant: University of Ioannina, 1990.
2. Grant: University of Kuopio, Dept of Pharmacology and Toxicology, School of Pharmacy, Kuopio, Finland, Aug-Nov 1990.
3. Grant: Ganni Foundation, 2008-2009.
4. Research Project in the framework of Heraklitos (EPEAEK II, co-funding with EU 70% Number:18, 2000). Title: «Depression: Immunologic and Metabolic profile-role of antidepressants (experimental approach». (Budget: 32.760^E), *Coordinator*.
5. Research Project in the framework of PENED 2003 (Number: 03EΔ957) «Role of psychological stress in hnRNP and DARPP-32 expression in CNS- investigation of their involvement in the neurobiological background of schizophrenia». (co-funding with EU 70%, Budget: 60.000^E), *Coordinator*.
6. Research Project “Drugcheck” in the framework of the eTEN Call 2006/1. Title: «Study of the drug interactions: Cooperation between Greece, France, Slovenia and the Netherlands with the NOSIS Business Solution and Consulting Company», *Member*.
7. Research Project: The role of oeleuropein in cardioprotection, Hellenic Cardiological Society, Budget: 20.000^E, 2011, *Member*.
8. Research Project co-financed by the European Union (European Regional Development Fund-ERDF) and Greek national funds through the Operational Program “THESSALY- MAINLAND GREECE AND EPIRUS-2007-2013” of the National Strategic Reference Framework (NSRF 2007-2013; Number: 346985) Title: «Establishment of a center of excellence for the evaluation of pharmacological actions and toxicity of substances derived from plant products». (Budget 150.000^E), *Coordinator*.
9. Ανάπτυξη βάσης δεδομένων για τα φαρμακευτικά φυτά της Ηπείρου στην αγγλική. (Περιφέρεια Ηπείρου, Budget: 10.000^E). *Coordinator*.

PUBLICATIONS:

Articles in Peer Reviewed Journals:

1. Bikas N, Sfikaki A, Papadopoulou DZ and **Constandi M**. Brain dopamine and noradrenaline concentrations in reference to acquisition of conditioned avoidance behavior in intact and orchectomized rats. *Act. Endocr. Suppl.*, 265, 107: 9-11, 1984.
2. Sfikaki A, Malisianos Ch and **Constandi M**. Compensatory adrenal growth and conditioned avoidance response in relation to estrus cycle and metoclopramide induced constant diestrus. *Act. Endocr. Suppl.*, 265:12-14, 1984.
3. **Konstandi M** and Kafetzopoulos E. The effects of striatal or accumbens lesions on the amphetamine-induced abolition of latent inhibition. *Pharmacol. Biochem. & Beh.*, 44:751-754, 1993.
4. Sfikaki A, Galanopoulou P, **Konstandi M** and Tsakayannis D. Stress through handling for vaginal screening, serotonin and ACTH response to ether. *Pharmacol. Biochem. & Beh.* 53(4): 965-970, 1996.
5. **Konstandi M**, Sfikaki DA and Varonos DD. Effect of cyproheptadine hydrochloride on ingestive behaviors. *Pharmacological Research*, 33(1): 35-40, 1996.
6. **Konstandi M**, Koligianni A and Sfikakis DA. Effect of cyproheptadine treatment on conditioned avoidance response in female rats. *Gen. Pharmacology*, 27(8):1401-1403, 1996.
7. Camus-Radon AM, Raffalli F, Béréziat JC, McGregor D, **Konstandi M** and Lang MA. Liver injury and expression of cytochromes P450: Evidence that regulation of CYP2A5 is different from other major xenobiotic metabolizing CYP enzymes. *Toxicol. & App. Pharmacol.*, 138:140-148, 1996.
8. **Konstandi M** and Lang MA. Effect of cocaine on hepatic drug metabolism. *Eur. J. Int. Med.*, 7: 221-226, 1996.
9. **Konstandi M**, Pappas P, Johnson E, Lecklin A and Marselos M. Suppression of the Acquisition of Conditioned Avoidance Behavior in the Rat by 3-Methylcholanthrene. *Pharmacol. Biochem. & Behavior*, 56(4): 637-641, 1997.
10. **Konstandi M**, Pappas P, Johnson E, Lecklin A, Karageorgou M and Marselos M. Modification of Reproductive Function in the Rat by 3-Methylcholanthrene. *Pharmacological Research*, 35(2): 107-111, 1997.
11. **Konstandi M**, Marselos M, Camus-Radon AM, Johnson E and Lang MA. The role of stress in the regulation of drug metabolising enzymes in mice. *European Journal of Drug Metabolism and Pharmacokinetics*, 23(4): 483-490, 1998a.
12. **Konstandi M**, Kostakis D, Johnson E, Lang MA and Marselos M. Evidence of α_2 -adrenoceptor involvement in B[α]P induction processes of drug metabolising enzymes: the role of stress. *European Journal of Drug Metabolism and Pharmacokinetics*, 23(4): 491-495, 1998b.
13. Stephanou P, **Konstandi M**, Pappas P and Marselos M. Alterations in central monoaminergic neurotransmission induced by polycyclic aromatic hydrocarbons in rats. *European Journal of Drug Metabolism and Pharmacokinetics*, 23(4): 475-481, 1998.
14. Bezirtzoglou E, **Konstandi M**, Voidarou C, Kostakis D and Marselos M. Influence of psychological stress on fecal carriage of indicator bacteria. *Microecology and Therapy*, 28: 49-53, 1999.
15. **Konstandi M**, Johnson E, Lang MA, Malamas M and Marselos M. Noradrenaline,

- dopamine, serotonin: differential effects of psychological stress on brain biogenic amines in mice and rats. *Pharmacological Research*, 41(3): 341-346, 2000.
16. **Konstandi M**, Johnson E, Lang MA, Camus-Radon AM and M Marselos "Stress modulates the enzymatic inducibility by benzo[α]pyrene in the rat liver" *Pharmacological Research*, 43(3): 205-211, 2000.
 17. Charkitis P, Lang MA, Johnson E, Marselos M and **Konstandi M**. Involvement of D2 dopaminergic receptors in the modulation of hepatic drug metabolizing enzymes. *Review of Clinical Pharmacology and Pharmacokinetics*, 16:60-62, 2002.
 18. **Konstandi M**, Johnson EO, Marselos M, Kostakis D, Fotopoulos A, Lang MA, Stress-mediated modulation of B(α)P-induced hepatic CYP1A1: role of catecholamines. *Chemico-Biological Interactions*, 147: 65-77, 2004.
 19. Tsiotsias A, Voidarou C, Skoufos J, Simopoulos C, **Konstandi M**, Kostakis D and Bezirtzoglou E, Stress-induced alterations in intestinal microflora, *Microbial Ecology in Health and Disease*, 16: 28-31, 2004.
 20. Harkitis P, Tzimas P, Marselos M, Johnson EO and **Konstandi M**. Alterations in Brain neurotransmitters in B(α)P-exposed rats: role of D₂ receptors. *Review in Clinical Pharmacology and Pharmacokinetics*, 18:117-120, 2004.
 21. **Maria Konstandi**, Dimitris Kostakis, Panagiotis Harkitis, Marios Marselos, Elizabeth Ourania Johnson, Konstantinos Adamidis, Matti Alarik Lang, Role of adrenoceptor-linked signaling pathways in the regulation of *CYP1A1* gene expression. *Biochemical Pharmacology*, 69: 277-287, 2005.
 22. **Konstandi M**, Kostakis D, Harkitis P, Johnson EO, Marselos M, Adamidis K, Lang MA. Benzo(alpha)pyrene-induced up-regulation of CYP1A2 gene expression: role of adrenoceptor-linked signaling pathways. *Life Sciences* 79(4):331-41, 2006. **This article is included in the Comparative Toxicogenomics Database (CTD; <http://ctd.mdibl.org/>) of the NIEHS.**
 23. **Konstandi M**, Voidarou C, Papadaki E, Tsiotsias A, Kotsovolou O, Evangelou E, Bezirtzoglou E. Stress modifies the vaginal flora in cyclic female rats *Microbial Ecology in Health and Disease*, 18(3-4): 161-169, 2006.
 24. Johnson EO, **Konstandi M** and Moutsopoulos Ch. Hypothalamic-Pituitary-Adrenal Axis Function in Sjogren's Syndrome: Mechanisms of Neuroendocrine and Immune System Homeostasis *Ann N.Y. Acad. Sci.* 1088:41-51, 2006.
 25. Panagiotis Harkitis, Matti A. Lang, Marios Marselos, Andreas Fotopoulos, Albucharali Gihad and **Maria Konstandi**. D₂-receptor mediated alterations in the metabolic efficacy of the liver and other extrahepatic tissues. *Review of Clinical Pharmacology and Pharmacokinetics*, 20(2):171-173, 2006.
 26. **Maria Konstandi**, Panagiotis Harkitis, Kyriaki Thermos, Sven Ove Ogren, Elizabeth O. Johnson, Panagiotis Tzimas and Marios Marselos. Modification of inherent and drug-induced dopaminergic activity after exposure to benzo(α)pyrene. *Neurotoxicology* 28(4): 860-867, 2007.
 27. Daskalopoulos EP, Ingelman-Sundberg M, Lang MA, Marselos M, **Konstandi M**. Stress modifies testosterone and bufuralol metabolism in the rat liver *Review of Clinical Pharmacology and Pharmacokinetics*, 25(1):35-37, 2007.
 28. **Konstandi M**, Rentesi G, Marselos M, Lang MA. Pancreatic D₂-dopaminergic receptors regulate the insulin-induced down-regulation of cytochromes CYP2E1 and CYP2B1/2. *Review of Clinical Pharmacology and Pharmacokinetics*, 25(1):69-71, 2007.
 29. Bezirtzoglou E, Voidarou C, Papadaki A, Tsiotsias A, Kotsovolou O, **Konstandi M**. Hormone Therapy Alters the Composition of the Vaginal Microflora in Ovariectomized

- Rats. *Microbial Ecology*, 55(4): 751-759, 2008.
30. **Maria Konstandi**, Panagiotis Harkitis, Dimitris Kostakis, Marios Marselos, Elizabeth O Johnson and Matti A Lang. D₂-receptor linked signaling pathways regulate the expression of hepatic CYP2E1. *Life Sciences*, 82(1-2):1-10, 2008.
 31. **Konstandi M**, Lang MA, Kostakis D, Johnson EO, Marselos M. Predominant role of peripheral catecholamines in the stress-induced modulation of CYP1A2 inducibility by benzo(alpha)pyrene. *Basic Clin Pharmacol Toxicol.*, 102(1):35-44, 2008. ***This article is included in the Comparative Toxicogenomics Database (CTD; <http://ctdbase.org/>) of the NIEHS.***
 32. **Konstandi M**, Segos D, Galanopoulou P, Theocharis S, Zarros A, Lang MA, Marselos M, Liapi C. Effects of choline-deprivation on paracetamol- or phenobarbital-induced rat liver metabolic response. *J Appl Toxicol.*, 29(2): 101-109, 2009.
 33. Karamanakos PN, Trafalis DT, Geromichalos GD, Pappas P, Harkitis P, **Konstandi M**, Marselos M. Inhibition of rat hepatic CYP2E1 by quinacrine: molecular modeling investigation and effects on 4-(methyl nitrosamino)-1-(3-pyridyl)-1-butanone (NNK)-induced mutagenicity. *Arch Toxicol.*, 83(6):571-580, 2009.
 34. Rentesi G, Antoniu K, Marselos M, Fotopoulos A, Tzihand G and **Konstandi M**. Long Term Consequences of early maternal deprivation in serotonergic activity and HPA function in Adult Rat. *Neuroscience Letters*, 480(1):7-11, 2010.
 35. Kotsovolou O, Ingelman-Sundberg M, Lang MA, Marselos M, Overstreet DH, Papadopoulou-Daifoti Z, Johanson I, Fotopoulos A and **Konstandi M**. Hepatic drug metabolizing profile of Flinder's Sensitive Line rat model of depression. *Progress in Neuro-Psychopharmacology and Biological Psychiatry*, 34(6):1075-1084, 2010.
 36. Johnson EO, **Konstandi M**, Babis GC, Piagkou M, Soucacos PN. The plasma coagulation cascade: potential targets for novel anticoagulants in major lower limb surgery. *Curr Vasc Pharmacol.*, 9(1):3-10, 2011.
 37. Johnson EO, Calogero A, **Konstandi M**, Kamilaris Th, La Vignera, Chrousos G. Effects of Short- and Long-Duration Hypothyroidism on Hypothalamic-Pituitary-Adrenal Axis Function in Rats: in vitro and in situ studies. *Endocrine*, 42(3):684-693, 2012.
 38. Daskalopoulos EP, Malliou F, Rentesi G, Marselos M, Lang MA, **Konstandi M**. Stress is a critical player in CYP3A, CYP2C and CYP2D regulation: Role of adrenergic receptor signaling pathways. *Am J Physiol Endocrinol Metab*, 303(1):E40-54, 2012.
 39. Daskalopoulos EP, Lang MA, Marselos M, Malliou F and **Konstandi M**. D₂-dopaminergic receptor linked pathways: critical regulators of CYP3A, CYP2C and CYP2D. *Molecular Pharmacology*, 82(4):668-678, 2012.
 40. Johnson EO, Kamilaris Th, Calogero A, **Konstandi M**, Chrousos G. Effects of Short- and Long-Duration Hypothyroidism on Function of the Rat Hypothalamic-Pituitary-Adrenal Axis. *Journal of Endocrinological Investigation*, 36(2):104-110, 2013.
 41. Elizabeth O. Johnson, Aldo E. Calogero, **Maria Konstandi**, Themis C. Kamilaris, Sandro La Vignera, George P. Chrousos. Effects of Experimentally Induced Hyperthyroidism on Central Hypothalamic-Pituitary-Adrenal Axis Function in Rats: in vitro and in situ studies. *Pituitary*, 16(2):275-86, 2013.
 42. Rentesi G., Antoniou K., Marselos M., Syrrou M., Lang M.A. and **Konstandi M**. Early maternal deprivation stress induces long term effects on behavioral and neurobiological parameters in adult rats. *Behavioural Brain Research*, 244:29-37, 2013. ***This article is listed in the "Psychology Progress" that alerts scientists to breaking journal articles considered to represent the best in Psychology research.***
 43. **Konstandi M**, Cheng J, Gonzalez FJ. Sex steroid hormones regulate constitutive

- expression of Cyp2e1 in female mouse liver. *Am J Physiol Endocrinol Metab*, 304(10):E1118-28, 2013.
44. **Konstandi M.** Psychophysiological stress: a significant parameter in drug pharmacokinetics. *Expert Opin Drug Metab Toxicol*, 9(10):1317-1334, 2013.
 45. **Maria Konstandi**, Yatrik M. Shah, Tsutomu Matsubara and Frank J. Gonzalez. Role of PPAR α and HNF4 α in stress-mediated alterations in lipid homeostasis. *PLOS ONE*, 8(8):e70675, 2013.
 46. **Maria Konstandi**, Elizabeth O. Johnson, Matti A. Lang. Consequences of Psychophysiological Stress on Cytochrome P450-catalyzed Drug Metabolism. *Neuroscience & Biobehavioral Reviews*, 45: 149-167, 2014.
 47. Harkitis P, Daskalopoulos EP, Malliou F, Lang M, Marselos M, Fotopoulos A, Albucharali G and Konstandi M. Dopamine D₂-receptor antagonists down-regulate CYP1A1/2 and CYP1B1 in the rat liver. *PLOS ONE*, in press.

Chapters in Books and Monography:

1. Konstandi M. "Cyproheptadine hydrochloride effect on 24h water/food intake, urine output, active avoidance acquisition, estrous cycle and on the complementary adrenal growth after unilateral adrenalectomy" Doctoral Dissertation, Department of Pharmacology, School of Medicine and School of Pharmacy, National and Kapodistrian University of Athens, Athens, Greece, 1985.
2. "Drugs and Receptors of the CNS", Chapter in the selective subject "Molecular Pharmacology" for the students of the Medical School, University of Ioannina, 1995.
3. The writing of several chapters and the Diligence for the selective subject "Development of New Drugs" for the third year medical students of the Medical School, University of Ioannina, (1996-).
4. "The role of Biotechnology in the Development of New Drugs", Chapter in the book: "Biochemical Pharmacology and Toxicology", for the students of the Department of Biological Applications and Technology, University of Ioannina. (2006)
5. "Drugs for Cardiovascular Disorders", Chapters in the online version of the "Condensed Pharmacology", for the students of the Medical School, University of Ioannina; <http://ecourse.uoi.gr/login/index.php>, (2010-).
6. "The Biotechnology in the Development of New Drugs and Diagnostics ", Chapter for the e-book:" Biochemical Pharmacology: Principles of Pharmacokinetics and Pharmacodynamics", University of Ioannina (2012).
7. "Neuropharmacology", Chapter in the book Johnson EO. Neuroanatomy, Konstantaras Medical Publications, (ISBN: 978-960-6802-29-4), 2012.