

**Eleni T. Bairaktari, Ph.D., Eur Clin Chem**

**CURRICULUM VITAE**

**Present position:** Professor of Clinical Chemistry, Laboratory of Clinical Chemistry, Medical School University of Ioannina, Greece

Director of the Laboratory of Clinical Chemistry, University Hospital of Ioannina, Greece

**Address:** Laboratory of Clinical Chemistry, Medical School University of Ioannina, GR 451 10 Ioannina, GREECE  
Tel: +30 2651 07620, Fax: +30 2651 07871  
email: [ebairakt@uoi.gr](mailto:ebairakt@uoi.gr)

**Education**

1983 Degree in Chemistry, Department of Chemistry, Faculty of Natural Sciences, University of Thessaloniki, Thessaloniki, Greece  
1988 Doctoral Diploma in Organic Chemistry and Biochemistry, Laboratory of Organic Chemistry and Biochemistry, Faculty of Natural Sciences, University of Ioannina, Ioannina, Greece

**Research Interests:** Metabolomics applications in biomedical research and systems medicine using Nuclear Magnetic Resonance Spectroscopy (NMR). Identification of disease expressions associated with altered metabolic phenotypes, investigation of the underlying mechanisms and evaluation of emerging biomarkers.  
Analysis of the composition of biological fluids by conventional clinical chemistry methods.

**Scientific Publications:** 160 publications in peer-reviewed International Journals (see attached selected list of publications)  
h-index: 40  
382 presentations in International and National Congresses

**Other Qualifications:** European Register for Clinical Chemists (EurClinChem)  
60 Invited Lectures on Laboratory Medicine.  
20 Awards on Scientific Presentations on Laboratory Medicine and Medicine.  
Member of the Scientific or Organizing Committee in 22 Greek and Balkan Congresses on Laboratory Medicine.

**Membership** American Association for Clinical Chemistry (full member since 1997)  
Balkan Clinical Laboratory Federation (full member since 1996 and national representative of Greece since 2000)  
Greek Society of Clinical Chemistry - Clinical Biochemistry [full member since 1993, member of the Executive Board (2001-2003), member of the Educational and Scientific Committee and of the National Clinical Chemistry Registration Committee (since 2003)]  
Greek Chemical Society (full member since 1983)  
Hellenic Biochemical and Biophysical Society (full member since 1995)  
Hellenic Society of Atherosclerosis (full member since 1994)

## SELECTED PEER-REVIEWED PUBLICATIONS

1	Cung MT, Marraud M, Hadjidakis I, Bairaktari E, Sakarellos C, Kokla A, Tzartos S. Two-dimensional <sup>1</sup> H NMR study of synthetic peptides containing the main immunogenic region of the Torpedo acetylcholine receptor. <i>Biopolymers</i> 28: 465-478 (1989)
2	Bairaktari E, Mierke DF, Mammi S, Peggion E. Conformational studies by circular dichroism, <sup>1</sup> H NMR, and computer simulations of Bombolitins I and III in aqueous solution containing surfactant micelles. <i>Biochemistry US</i> 29: 10090-10096 (1990)
3	Pavlidis N, Kafele-Ezra J, Briassoulis E, Skarlos D, Kosmidis P, Seferiadis K, Bairaktari E, Bafaloukos D, Maravelias A, Theocharis K, Foutzilas G. Evaluation of six tumor markers in patients with Carcinoma of Unknown Primary. <i>Med Pediatr Oncol</i> 22: 162-167 (1994)
4	Andronikou S, Bairaktari E, Vasiliadou AD, Stefos T, Lolis D, Tsolas O, Lapatsanis PD. Clinical Significance of CK-isoenzymes for Fetal Asphyxia in women at Labor. <i>Fetal Diagn Ther</i> 10: 1-6 (1995)
5	Bairaktari E, Katopodis K, Siamopoulos KC, Tsolas O. Paraquat-induced renal injury studied by <sup>1</sup> H-NMR spectroscopy of urine. <i>Clin Chem</i> 44: 1256-1261 (1998)
6	Elisaf M, Bairaktari E, Katopodis K, Pappas M, Sferopoulos G, Tzallas Ch, Tsolas O, Siamopoulos KC. Effect of L-carnitine supplementation on lipid parameters in hemodialysis patients. <i>Am J Nephrol</i> 18: 416-421 (1998)
7	Bairaktari E, Liamis G, Tsolas O, Elisaf M. Partially reversible renal tubular damage in patients with obstructive jaundice. <i>Hepatology</i> 33:1365-9 (2001).
8	Bairaktari E, Seferiadis K, Liamis G, Psihogios N, Tsolas O, Elisaf M. Rhabdomyolysis-related renal tubular damage studied by proton Nuclear Magnetic Resonance spectroscopy of urine. <i>Clin Chem</i> 48:1106-9 (2002).
9	Bairaktari ET, Tzallas C, Kalantzidou M, Tselepis AD, Siamopoulos KC, Seferiadis KI, Elisaf MS. Evaluation of alternative calculation methods for determining low-density lipoprotein cholesterol (LDL-C) in hemodialysis patients. <i>Clin Biochem.</i> 37:937-40 (2004)
10	Psihogios NG, Kalaitzidis RG, Dimou S, Seferiadis KI, Siamopoulos KC, Bairaktari ET. Evaluation of tubulointerstitial lesions' severity in patients with glomerulonephritides: an NMR-based metabonomic study. <i>J Proteome Res.</i> 2007 Sep;6(9):3760-70.
11	Psihogios NG, Gazi IF, Elisaf MS, Seferiadis KI, Bairaktari ET. Gender-related and age-related urinalysis of healthy subjects by NMR-based metabolomics. <i>NMR Biomed.</i> 2008 Mar;21(3):195-207.
12	Kostara CE, Papathanasiou A, Cung MT, Elisaf MS, Goudevenos J, Bairaktari ET. Evaluation of established coronary heart disease on the basis of HDL and non-HDL NMR lipid profiling. <i>J Proteome Res.</i> 2010 Feb 5;9(2):897-911
13	Rizos D, Karababa P, Sarandakou A, Panagiotakis O, Haliassos A, Makris K, Psarra K, Bairaktari E, Spyropoulou P, Nikolou C, Galatsatos N, Trakas N, Ferderigou A, Seferiadis K; Greek National Clinical Chemistry Registration Commission. The organization of an educational program for specialists in clinical chemistry by the Greek Society of Clinical Chemistry-Clinical Biochemistry. <i>Biochem Med (Zagreb)</i> . 2011;21(1):30-7.
14	Kostara CE, Papathanasiou A, Psychogios N, Cung MT, Elisaf MS, Goudevenos J, Bairaktari ET. NMR-based lipidomic analysis of blood lipoproteins differentiates the progression of coronary heart disease. <i>J Proteome Res.</i> 2014 May 2;13(5):2585-98.
15	Kostara CE, Tsimihodimos V, Elisaf MS, Bairaktari ET. NMR-Based Lipid Profiling of High Density Lipoprotein Particles in Healthy Subjects with Low, Normal, and Elevated HDL-Cholesterol. <i>J Proteome Res.</i> 2017 Apr 7;16(4):1605-1616.
16	Kartsoli S, Kostara CE, Tsimihodimos V, Bairaktari ET, Christodoulou DK. Lipidomics in non-alcoholic fatty liver disease. <i>World J Hepatol.</i> 2020 Aug 27;12(8):436-450
17	Kordias D, Kostara CE, Papadaki S, Verigos J, Bairaktari E, Magklara A. Omics Analysis of Chemoresistant Triple Negative Breast Cancer Cells Reveals Novel Metabolic Vulnerabilities. <i>Cells.</i> 2022 Aug 31;11(17):2719. doi: 10.3390/cells11172719.
18	Dimou A, Tsimihodimos V, Bairaktari E. The Critical Role of the Branched Chain Amino Acids (BCAAs) Catabolism-Regulating Enzymes, Branched-Chain Aminotransferase (BCAT) and Branched-Chain $\alpha$ -Keto Acid Dehydrogenase (BCKD), in Human Pathophysiology. <i>Int J Mol Sci.</i> 2022 Apr 5;23(7):4022. doi: 10.3390/ijms23074022.
19	Altered RBC membrane lipidome: A possible etiopathogenic link for the microvascular impairment in Type 2 diabetes. Kostara CE, Tsiafoulis CG, Bairaktari ET, Tsimihodimos V.J Diabetes Complications. 2021 Oct;35(10):107998. doi: 10.1016/j.jdiacomp.2021.107998. Epub 2021 Jul 28.PMID: 34334328
20	Dimou A, Zachou K, Kostara C, Azariadis K, Giannoulis G, Lyberopoulou A, Bairaktari E, Dalekos GN. NMR-based metabolomic signature: An important tool for the diagnosis and study of pathogenesis of autoimmune hepatitis. <i>Hepatology.</i> 2024 Feb 5. doi: 10.1097/HEP.0000000000000767.