## KALLIOPI GKOUSKOU

## SHORT CURRICULUM VITAE

Kalliopi Gkouskou is **Assistant Professor of Biology & Genetics** at the National and Kapodistrian University of Athens (NKUA). Kalliopi received her BSc

in Biology from the University of Crete (2001) and MSc in «Molecular Biology and Biomedicine» Institute from the same (2003). Upon completion of her MSc training, she joined the Institute of Molecular Biology & Biotechnology (IMBB) in Heraklion as a PhD candidate. Her PhD on gene regulation by micronutrients was supported by a national grant and an EMBO scholarship that enabled her to complete part of the thesis at the Centro de Investigacion Principe Felipe in Valencia, Spain.



During 2009-2015 she was employed as a post-doctoral Research Fellow in IMBB and the University of Crete Medical School. As part of this post-doctoral work, she was trained in medical genetics applications in NKUA Medical School and attended intensive courses by the Swiss Society of Medical Genetics. Additionally, she was trained in genomic technologies at the Cancer Research Center of the University of Liverpool.

Having acquired a strong basic research background in Molecular Biology and Genetics, Dr Gkouskou established the SME Embiodiagnostics in 2015 with the ambition to provide innovative genetic services. During 2017-2021 she collaborated with the Department of Biology, NKUA Medical School as scientific associate on the development of specialized feedback algorithms that can individualize diet and lifestyle recommendations based on the unique genetic and phenotypic characteristics of an individual. Through this collaboration, scientific publications in important international journals have emerged.

Her research focuses on (1) Gene-diet interactions in the regulation of metabolism with an emphasis on obesity and diabetes (population studies and dietary interventions); (2) Basic mechanisms of regulation of metabolic pathways (by exploring brain organoids and omic technologies). (3) Education at the undergraduate and postgraduate level: from 2020 she teaches in the NKUA E-Learning program «Application of Genetics in Precision Nutrition» and from 2018 until 2021, she worked as a teaching fellow at the NKUA Medical School, participating in the organization and teaching of the undergraduate courses «Biology-Genetics» and «Applications of Biology in Regenerative Medicine».

ORCID ID: 0000-0002-8785-3051

## **Representative publications**

- [1] Gkouskou KK, Grammatikopoulou MG, Lazou E, Sanoudou D, Goulis DG, Eliopoulos AG. Genetically-guided medical nutrition therapy in type 2 diabetes mellitus and prediabetes: a series of n-of-1 superiority trials. *Front Nutr* 2022;0:772243.
- [2] Gkouskou K, Vasilogiannakopoulou T, Andreakos E, Davanos N, Gazouli M, Sanoudou D, Eliopoulos AG. COVID-19 enters the expanding network of apolipoprotein E4-related pathologies. *Redox Biol* 2021;41.
- [3] Gkouskou KK, Grammatikopoulou MG, Vlastos I, Sanoudou D, Eliopoulos AG. Genotype-guided dietary supplementation in precision nutrition. Nutr Rev 2021;79:1225–35.
- [4] Gkouskou K, Vlastos I, Karkalousos P, Chaniotis D, Sanoudou D, Eliopoulos AG. The "Virtual Digital Twins" Concept in Precision Nutrition. *Adv Nutr* 2020;11:1405–13.
- [5] Grammatikopoulou MG, Goulis DG, Gkiouras K, Theodoridis X, Gkouskou KK, Evangeliou A, et al. To Keto or Not to Keto? A Systematic Review of Randomized Controlled Trials Assessing the Effects of Ketogenic Therapy on Alzheimer Disease. Adv Nutr 2020;11:1583–602.
- [6] Gkouskou K, Fragiadakis GS, Voutsina A, Alexandraki D. Distinct associations of the Saccharomyces cerevisiae Rad9 protein link Mac1-regulated transcription to DNA repair. *Curr Genet* 2020;66:531–48.
- [7] Voutsina A, Fragiadakis GS, Gkouskou K, Alexandraki D. Synergy of Hir1, Ssn6, and Snf2 global regulators is the functional determinant of a Mac1 transcriptional switch in *S. cerevisiae* copper homeostasis. *Curr Genet* 2019;65:799–816.
- [8] Veneti Z, Gkouskou KK, Eliopoulos AG. Polycomb Repressor Complex 2 in Genomic Instability and Cancer. Int J Mol Sci 2017;18.
- [9] Gkouskou KK, Ioannou M, Pavlopoulos GA, Georgila K, Siganou A, Nikolaidis G, et al. Apolipoprotein A-I inhibits experimental colitis and colitis-propelled carcinogenesis. Oncogene 2016; 35:2496–505.
- [10] Gkouskou KK, Deligianni C, Tsatsanis C, Eliopoulos AG. The gut microbiota in mouse models of inflammatory bowel disease. *Front Cell Infect Microbiol* 2014;4.
- [11] Gkirtzimanaki K#, Gkouskou KK#, Oleksiewicz U, Nikolaidis G, Vyrla D, Liontos M, et al. TPL2 kinase is a suppressor of lung carcinogenesis. *Proc Natl Acad Sci U S A* 2013;110. (#1<sup>st</sup> co-authors)
- [12] Sideridou M, Zakopoulou R, Evangelou K, Liontos M, Kotsinas A, Rampakakis E, Gagos S, Kahata K, Grabusic K, **Gkouskou K** et al. Cdc6 expression represses Ecadherin transcription and activates adjacent replication origins. *J Cell Biol* 2011;195:1123–40.
- [13] Vougioukalaki M, Kanellis DC, Gkouskou K, Eliopoulos AG. Tpl2 kinase signal transduction in inflammation and cancer. *Cancer Lett* 2011;304:80–9.