



Short Curriculum Vitae: Aglaia Pappa

Current Position: Associate Professor of Molecular Physiology

Undergraduate Education: BSc Biology, Aristotle University of Thessaloniki

PhD in Biological Chemistry/Pharmacology, Medical School, University of Ioannina, Greece

Post-graduate Education: Postdoctoral studies in Molecular Biology/Toxicology. School of Pharmacy, University of Colorado Health Sciences Center, Denver, Colorado, USA

Postdoctoral studies in Molecular Pharmacology. Laboratory of Natural products, Center for Organic and Medicinal Chemistry, Research Triangle Institute (RTI), Research Triangle Park, North Carolina, USA

Molecular targets and mechanisms of action of natural-products bioactive compounds underlying health-promoting properties

Mechanisms and signaling of cellular responses to oxidative stress

Cell death pathways

The role of aldehyde dehydrogenases in cell homeostasis and disease pathogenesis

Development of novel approaches for the prevention and therapy of cancer (nanoparticle delivery systems, hyperthermia, probiotics)

Areas of Interest

Distinctions

Current Funding

Representative publications (last 5 years)

Member of the Editorial Board of *Chemico-Biological Interactions* and *Toxicology Mechanisms and Methods* - Referee in scientific journals

Grant Evaluator in National and International Study Section Panels

OPENSCREEN-GR: “An Open-Access Research Infrastructure of Target-Based Screening Technologies and Chemical Biology for Human and Animal Health, Agriculture and Environment” (MIS 5002691), Action “Reinforcement of the Research and Innovation Infrastructure”, funded by the Operational Programme “Competitiveness, Entrepreneurship and Innovation” (NSRF 2014-2020) and co-financed by Greece and the European Union. Total budget: 3,013,258 €
Scientific Coordinator: Kletsas D, Institute of Biosciences and Applications National Centre for Scientific Research "Demokritos".

HORIZON 2020 Funding Call. “Novel, Sustainable Marine Bio-surfactant/Bio-Emulsifiers for Commercial Exploitation” (Proposal MARISURF, Topic: BG-03- 2014, Call Identifier: H2020-BG-2014-2). Total budget: 5,000,000 €
Scientific Coordinator: Prof. S. Euston, Heriot Watt University, School of Life Sciences, UK.

Mitsiogianni M, Mantso T, Trafalis DT, Rupasinghe HPV, Zoumpourlis V, Franco R, Botaitis S, **Pappa A**, Panayiotidis MI. Allyl isothiocyanate regulates lysine acetylation and methylation marks in an experimental model of malignant melanoma. *Eur J Nutr*. 2019 doi: 10.1007/s00394-019-01925-6

Mitsiogianni M, Amery T, Franco R, Zoumpourlis V, **Pappa A**, Panayiotidis MI. From chemo-prevention to epigenetic regulation: The role of isothiocyanates in skin cancer prevention. *Pharmacol Ther*. 2018, 190:187-201.

Fitsiou E, Mitropoulou G, Spyridopoulou K, Vamvakias M, Bardouki H, Galanis

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- A, Chlichlia K, Kourkoutas Y, Panayiotidis MI, **Pappa A.** Chemical Composition and Evaluation of the Biological Properties of the Essential Oil of the Dietary Phytochemical *Lippia citriodora*. *Molecules*. 2018, 23(1).
- Chondrou P, Karapetsas A, Kioussi DE, Tsela D, Tiptiri-Kourpeti A, Anestopoulos I, Kotsianidis I, Bezirtzoglou E, **Pappa A.**, Galanis A. Lactobacillus paracasei K5 displays adhesion, anti-proliferative activity and apoptotic effects in human colon cancer cells. *Benef Microbes*. 2018, 24:1-10.
- Spyridopoulou K, Tiptiri-Kourpeti A, Lampri E, Fitsiou E, Vasileiadis S, Vamvakias M, Bardouki H, Goussia A, Malamou-Mitsi V, Panayiotidis MI, Galanis A, **Pappa A.**, Chlichlia K. Dietary mastic oil extracted from *Pistacia lentiscus* var. chia suppresses tumor growth in experimental colon cancer models. *Sci Rep*. 2017, 7(1):3782.
- Powers R, Lei S, Anandhan A, Marshall DD, Worley B, Cerny RL, Dodds ED, Huang Y, Panayiotidis MI, **Pappa A.**, Franco R. Metabolic Investigations of the Molecular Mechanisms Associated with Parkinson's Disease. *Metabolites*. 2017, 7(2).
- Voulgaridou GP, Tsochantaridis I, Mantso T, Franco R, Panayiotidis MI, **Pappa A.** Human aldehyde dehydrogenase 3A1 (ALDH3A1) exhibits chaperone-like function. *Int J Biochem Cell Biol*. 2017, 89:16-24.
- Anestopoulos I, Sfakianos AP, Franco R, Chlichlia K, Panayiotidis MI, Kroll DJ, **Pappa A.** A Novel Role of Silibinin as a Putative Epigenetic Modulator in Human Prostate Carcinoma. *Molecules*. 2016, 22(1).
- Fitsiou E, Anestopoulos I, Chlichlia K, Galanis A, Kourkoutas I, Panayiotidis MI, **Pappa A.** Antioxidant and Antiproliferative Properties of the Essential Oils of *Satureja thymbra* and *Satureja parnassica* and their Major Constituents. *Anticancer Res*. 2016, 36(11):5757-5763.
- Fitsiou E, Mitropoulou G, Spyridopoulou K, Tiptiri-Kourpeti A, Vamvakias M, Bardouki H, Panayiotidis MI, Galanis A, Kourkoutas Y, Chlichlia K, **Pappa A.** Phytochemical Profile and Evaluation of the Biological Activities of Essential Oils Derived from the Greek Aromatic Plant Species *Ocimum basilicum*, *Mentha spicata*, *Pimpinella anisum* and *Fortunella margarita*. *Molecules*. 2016, 21(8).
- Anandhan A, Lei S, Levytskyy R, **Pappa A.**, Panayiotidis MI, Cerny RL, Khalimonchuk O, Powers R, Franco R. Glucose Metabolism and AMPK Signaling Regulate Dopaminergic Cell Death Induced by Gene (α -Synuclein)-Environment (Paraquat) Interactions. *Mol Neurobiol*. 2017, 54(5):3825-3842.
- Voulgaridou GP, Kiziridou M, Mantso T, Chlichlia K, Galanis A, Koukourakis MI, Franco R, Panayiotidis MI, **Pappa A.** Aldehyde dehydrogenase 3A1 promotes multi-modality resistance and alters gene expression profile in human breast adenocarcinoma MCF-7 cells. *Int J Biochem Cell Biol*. 2016, 77(Pt A):120-128.
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- Anestopoulos I, Kavo A, Tentes I, Kortsaris A, Panayiotidis M, Lazou A, **Pappa A.** Silibinin protects H9c2 cardiac cells from oxidative stress and inhibits phenylephrine-induced hypertrophy: potential mechanisms. *J Nutr Biochem*. 2013, 24(3):586-94.
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