Paraskevi Kosmidou, MSc

Scientific Technical Personnel
Institute of Chemical Biology (ICB/NHRF)
Work Phone: +30 210 7273745
E-mail: vkosmidou@eie.gr
Website:
http://eie.gr/nhrf/institutes/icb/research_groups/PintzasAlexander_group_en.html

Key skills Extensive practical experience in using laboratory equipment and computer software, ability to work both independently and cooperatively in a team environment and good communication skills

Education

1998-1999: Master of Science (MSc) in Medical Molecular Genetics, University of Aberdeen, UK
1995-1998: Bachelor of Science (BSc Honours) in Genetics, University of Wales, Cardiff, UK

Work experience

2006-present: Scientific Technical Personnel in Laboratory of Signal-Mediated Gene Expression, Institute of Chemical Biology, National Hellenic Research Foundation, Athens
Key techniques: DNA, RNA and protein extraction, PCR, RT, real-time PCR, NGS, cell culture, Western Blotting, Flow Cytometry, Confocal Microscopy

2001-2006: Research Assistant in Team 78 (Cancer Genome Project), Wellcome Trust Genome Campus, Hinxton, Cambridge, UK
Key techniques: Cell culture, DNA extraction, PCR, Sanger Sequencing, Sequencing analysis

2000-2001: Assistant Scientific Classifier in Medicines Control Agency, London, UK
Key area of the job: Data entry onto the Agency's Product License User System

Participation in EU research consortia:

- 2009-2013: "EpiDiaCan" Development of sensitive methodologies for exploitation of early epigenetic marker diagnosis in major types of cancer. FP7 EU-Cooperation – Theme "Health".
- 2006-2010: "Oncodeath" Resistant determinants and sensitization of solid tumour cells to death receptor related therapies: combination of TRAIL with other therapeutic molecules. EU-Combating Cancer.

Participation in National funded grants:

- 2018-2021: HNPM "Hellenic Network for Precision Medicine", a national network for precision oncology.
- 2017-2020: "STHENOS-b", Targeted therapeutic approaches against degenerative diseases with special focus on cancer and ageing-optimisation of the targeted bioactive molecules. National Strategic Reference Framework. "Competitiveness, entrepreneurship and innovation".
- 2013-2015:"STHENOS", Targeted therapeutic approaches against degenerative diseases, with special focus on cancer and ageing. National Strategic Reference Framework, Action "Developmental Projects of Research Organisations- Kripis".
- 2012-2015: "THERACAN", Exploiting molecular pathways of apoptotic cell death for the rational design of therapeutic strategies for colon cancer. National Strategic Reference Framework, Action "Co-operation II".
- 2010-2015: "POM", PIK3CA Oncogenic Mutations in Breast and Colon Cancers: Development of Targeted Anticancer Drugs and Diagnostics. National Strategic Reference Framework, Action "Co-operation".

Publications

1. Koumaki K et al. BRAF paradox breakers PLX8394, PLX7904 are more effective against BRAFV600E CRC cells compared with the BRAF inhibitor PLX4720 and shown by detailed pathway analysis. Biochim Biophys Acta Mol Basis Dis, 1867, (4): 166061. doi:10.1016/j.bbadis.2020.166061 (2021).
2. Kosmidou V et al. Noxa upregulation and a 5-gene apoptotic biomarker panel in colorectal cancer. Eur J Clin Invest, 51, (1):e13353. doi:10.1111/eci.13353 (2021).
3. Devetzi M et al. Death receptor 5 (DR5) and a 5-gene apoptotic biomarker panel with significant differential diagnostic potential in colorectal cancer. Sci Rep, 6: doi:10.1038/srep36532 (2016).
4. Kosmidou V et al. Tumor heterogeneity revealed by KRAS, BRAF and PIK3CA pyrosequencing: KRAS and PIK3CA intratumor mutation profile differences and their therapeutic implications. Hum Mutat, 35, 329-340 (2014).

5. Ferraro A et al. Epigenetic regulation of miR-21 in colorectal cancer: ITGB4 as a novel miR-21 target and a three-gene network (miR-21-ITGB4-PCDC4) as predictor of metastatic tumor potential. Epigenetics 9, 129-141 (2014).
6. Ferraro A et al. EZH2 is regulated by ERK/AKT and targets integrin alpha2 gene to control Epithelial-Mesenchymal Transition and anoikis in colon cancer cells. Int J Biochem Cell Biol, 45, 243-254 (2013).
7. Oikonomou E et al. TRAIL receptor upregulation and the implication of KRAS/BRAF mutations in human colon cancer tumours. Int. J. Cancer, 125, 2127-2135 (2009).
8. Hunter C et al. A hypermutation phenotype and somatic MSH6 mutations in recurrent human malignant gliomas after alkylator chemotherapy. Can Res., 66, 3987-3991 (2006).
9. Bignell G et al. Sequence analysis of the protein kinase gene family in human testicular germ-cell tumours of adolescents and adults. Genes, Chrom and Cancer, 45, 42-46 (2006).
10. Ikediobi ON et al. Mutation analysis of 24 known cancer genes in the NCI-60 cell line set. Mol Cancer Ther 5(11):2606-12 (2006).
11. Davies H et al. Somatic mutations of the protein kinase gene family in human lung cancer. Cancer Research, 65(17), 7591-7595 (2005).
12. Stephens P et al. A screen of the complete protein kinase gene family reveals diverse patterns of somatic mutations in human breast cancer. Nature Genetics, 37, 590-592 (2005).
13. Stephens P et al. Intragenic ERBB2 kinase mutations in tumours. Nature, 431, 525-526 (2004).
14. Davies H et al. Mutations of the BRAF gene in human cancer. Nature, 417, 949-954 (2002).