#### PERSONAL INFORMATION

SURNAME PANAGOPOULOU PANTAZI

NAME MARIA
DATE OF BIRTH 23/02/1988

PLACE OF RESIDENCE ALEXANDROUPOLI

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#### RESEARCH INTEREST

Maria Panagopoulou is a postdoctoral researcher in Laboratory of Pharmacology at the Medical School of the Democritus University of Thrace. Throughout her research activity she established scientific methodologies for analysing circulating biomarkers in several pathologies, especially in cancer. She has significant experience in molecular biology techniques. Her main research interests focus on identifying new biomarkers via machine learning and bioinformatic analysis and further evaluate them in clinical samples (tissue and liquid biopsy) for investigating their value for the clinical management of diseases. Her current research focus is the investigation of circulating cell free DNA in breast cancer in terms of quantity, integrity, structure and methylation profile and correlated them with important clinical parameters in order to establish novel multiparametric sensitive and specific biomarkers for breast cancer

# **CURRENT POSITION**

### 2019 -Present

# Postdoctoral Researcher in the Lab of Pharmacology, MED-DUTH.

Research: «Circulating cell free DNA: Different approaches for Liquid Biopsy analysis for the development of classifiers with clinical value on pharmacotherapy of cancer», PI: Ekaterini Alexiou-Chatzaki, participation in projects listed in research grant Table 1(no 2,3)

# **PREVIOUS POSITIONS**

05.2019-08.2019	Researcher/ Molecular markers in gastric cancer/ PI: Stylianos Kakolyris,					
	Oncolog Clinic, University General Hospital of Alexandroupolis, Greece					
	(UGHA).					
2014-2019	Medical Laboratory Scientific Officer (MLSO)/Clinical drug monitoring and					
	toxicological measurements (voluntary)/PI: Vangelis Manolopoulos, Laboratory					
	of Clinical Pharmacology, UGHA.					
	PhD candidate/Investigation of the predictive and prognostic value of epigenetic					
05.2017-07.2019	biomarkers in breast cancer and other gynecological malignancies/S.S.F (I.K.Y)					
	foundation, "Programm for dectorate scholarships for postgraduate studies of the					
	second-cycle (PhD)					
0	Researcher/Epigenetic biomarkers in plasma cell-free DNA of patients with					
05.2016-07.2017	breast cancer/PI: Stylianos Kakolyris/Oncology Clinic, UGHA.					
01.2016-04.2016	Researcher/BioEpi:"Detection and characterization of epigenetic biomarkers"/					
	PI: Ekaterini Alexiou-Chatzaki, Laboratory of Pharmacology, Department of					
	Medicine, Democritus University of Thrace, Greece (MED-DUTH).					
06.2014-10.2015	Researcher/BioPest:"Harmful Impacts of Plant Protection Products: Specialized					
	biomarkers in the Public Health service and Information Campaign"/PI: Ekaterini					
	Alexiou-Chatzaki/Lab of Pharmacology, MED-DUTH					
2012-2014	Researcher/ The effect of fibrotic agents on the intestinal mucosa as a target of					
2012 2011	therapeutic strategies in Crohn's disease / P.I:George Kolios/Lab of					
	Pharmacology MED-DUTH					
09.2013-02.2014	MLSO/ Microbiological - Biopathological laboratory, Alexandroupolis, Greece					
01.2012-07.2012	MLSO/ Clinical Embryology (voluntary)/P.I: George Galazios/ IVF unit, UGHA					
2010	Research assistant/Intersip on isolation and characterization of granulosa cells.					
	P.I:Vyron Asimakopoulos/ Laboratory of Reproductive Biology, MED-DUTH.					

### **EDUCATION**

2014-2019	<b>PhD</b> , Lab of Pharmacology, MED-DUTH Thesis: «Investigation of the predictive and prognostic value of epigenetic			
	biomarkers in breast cancer and other gynecological malignancies»,			
	Degree:10/10			
2012-2014	M.Sc in "Clinical Pharmacology and Therapeutics", MED-DUTH, Greece			
	Thesis: «The effect of fibrotic agents on the intestinal mucosa as a target of			
	therapeutic strategies in Crohn's disease», Degree: 10/10			
2006-2011	Integrated Master's degree in Biology (5 years education), Department of			
	Biological Applications and Technologies, School of Health Science, University			
	of Ioannina, Greece, Degree:6.97/10,			
	Thesis: "Cryopreservation of oocytes and embryos by the method of			
	vitrification", Degree:10/10			

### **SELECTED PUBLICATIONS**

- Circulating Cell-Free DNA in Breast Cancer: Searching for Hidden Information towards Precision Medicine,
   M. Panagopoulou, M. Esteller, E. Chatzaki, Cancers (Basel), 13, 2021, doi:0.3390/ cancers 13040728
   I.F:6.126
- Circulating cell free DNA in Breast cancer: size profiling, levels and methylation patterns lead to prognostic and predictive classifiers, **M. Panagopoulou**, M. Karaglani, I. Balgkouranidou, E. Biziota, T. Koukaki, E. Karamitrousis, E., Nena, I. Tsamardinos, G. Kolios, E. Lianidou, S. Kakolyris, E. Chatzaki, Oncogene, 38, 3387-3401, 2019, doi:10.1038/s41388-018-0660-y.**I.F:7.971**
- Circulating cell free DNA release in vitro: kinetics, size-profiling and cancer-related gene methylation, **M. Panagopoulou**, M. Karaglani, I. Balgkouranidou, C. Pantazi, G. Kolios, S. Kakolyris, E. Chatzaki, J Cell Physiol, 234, 14079-14089,2019, doi:10.1002/jcp.28097**I.F:5.546**
- Deciphering the methylation landscape in Breast cancer: diagnostic and prognostic biosignatures through Automated Machine Learning, **Panagopoulou**, **M\*.**, M. Karaglani\*, V. G. Manolopoulos, I. Iliopoulos and E. Chatzaki, *Cancers* **2021**, *13*(7), 1677; **I.F:6.126**
- Methylation status of Corticotropin Releasing Factor (CRF) Receptor genes in colorectal cancer, **Panagopoulou, M.,** A. Cheretaki, M. Karaglani, I. Balgkouranidou, E. Biziota, K. Amarantidis, N. Xenidis, S. Kakolyris, S. Baritaki and E. Chatzaki, Cancers(Basel),2021, under revision **I.F:6.126**
- Gene promoter methylation and protein expression of BRMS1 in uterine cervix in relation to highrisk HPV infection and cancer, **Panagopoulou M.**, Lambropoulou M., Balgkouranidou I., Nena E., Karaglani M., Nicolaidou C., Asimaki M., Agorastos T., Constantinidis Theoc., Constantinidis TC., Kolios G., Kakolyris S., Chatzaki E., Tumour Biol, 39, 1010-4283,2017, doi:10.1177/1010428317697557 **I.F:3.320**
- Corticotropin Releasing Factor Receptors in breast cancer: Expression and activity in hormone-dependent growth in vitro, Koureta, M., **Panagopoulou\***, **M.**, Karaglani\*, M., Balgkouranidou, I., Papadaki-Anastasopoulou, A., Zarouchlioti, C., Dekavallas, S., Kolios, G., Lambropoulou, M., Baritaki, S., Chatzaki E, Peptides, 129, 170316, 2020,doi:10.1016/j.peptides.2020.170316 **I.F:2.843**
- Are the Origins of Precision Medicine Found in the Corpus Hippocraticum? M. K. Konstantinidou, M. Karaglani, M. Panagopoulou, A. Fiska, E. Chatzaki, *Mol Diagn Ther* 21(6): 601-606 2017, doi:10.1007/s40291-017-0291-y IF: 3.180
- PAX1 methylation as an auxiliary biomarker for cervical cancer screening: a meta-analysis, Nikolaidis C., Nena E., **Panagopoulou M.**, Balgkouranidou I., Karaglani M., Chatzaki E., AgorastosT., Constantinidis TC, Cancer Epidemiol, 39, 682-6,2015,doi:10.1016/j.canep.2015.07.008 **I.F:2.17**
- Search for Pharmacoepigenetic Correlations in Type 2 Diabetes Under Sulfonylurea Treatment, Makrina Karaglani, Georgia Ragia, **Maria Panagopoulou**, Ioanna Balgkouranidou, Evangelia Nena, George Kolios, Nikolaos Papanas, Vangelis G. Manolopoulos, Ekaterini Chatzaki, Exp Clin Endocrinol Diabetes,127, 226-233,2018,doi:10.1055/s-0043-121265 **IF:2.058**
- Evaluation of a New Vitrification Protocol for Oocyte Cryopreservation, **Panagopoulou M.**, Charalabopoulos K., Papachristou DN., Tsakos E., Asimakopoulos B.,Human Genet Embryol,3:1,2013doi:10.4172/2161-0436.1000103 **I.F:1.040**

Publications:13 (1st author in 8 articles), Citations (Scopus):123, h-index (Scopus):6, sum I.F:40.92,

# **SELECTED CONFERENCES (OUT OF 31 PARTICIPATIONS)**

- 17th St. Gallen International Breast Cancer Conference 2021,17 21 March 2021, Switzerland, **Poster presentation**
- 16th Panhellenic conference of clinical chemistry,11 13 October 2018, Alexandroupoli, Greece, **Oral presentation**
- 10th Panhellenic conference of Greek Society of Basic and Clinical Pharmacology, 25-27 May 2018, Ioannina, Greece, **Oral presentation**
- 1st Panhellenic Simeonidio Congress for cancer research,19-20 January 2018, Thessaloniki, Greece, **Oral presentation**
- 8th Panhellenic conference of Greek HPV society,23-25 February 2018, Thessaloniki, Greece, **Oral presentation**
- 3rd International Symposium ACTC, 4-7 October, 2017, Rhode, Greece, Poster presentation
- Epigenomics & Novel Therapeutic Targets, 21-22May 2015, Boston, Poster presentation.

# FELLOWSHIP & AWARDS

2020-2021	Fellowship, NSRF 2014-2020 Support for Researchers with Emphasis on Young, Greece		
2017-2019	Fellowship, S.S.F (I.K.Y), "Programm for dectorate scholarships for postgraduate studies of		
	the second-cycle (PhD)		
2018	2 <sup>nd</sup> best award,16th Panhellenic conference of clinical chemistry		
2018	2 <sup>nd</sup> best award,8th Panhellenic conference of Greek HPV society		
2016	Distinction,9th Panhellenic Congress of Pharmacology		
2016	Award, 4th International conference ASET'16, Tailand		
2014	Best Online Announcement Award, 13th Panhellenic Conference on IBDs		

# TEACHING ACTIVITIES

**2015-** Teaching assistant, Pharmacology I & II laboratory lessons

**Present** 

# MEMBERSHIPS & REVIEWING ACTIVITIES

2019-2021	Reviewing for the journals: Cancer Management and Research, Archives of		
	Environmental and Occupational Health, European Journal of Gynaecological Oncology		
2012-Present	Member, Panhellenic Society of Bioscientists		
2015	Conference organization, 3 workshops and one conference on "Pesticites: Use and Health"		

### LIST OF RESEARCH GRANTS

A/A	Project Title	Funding source	Period	Role of the PI
1	Liquid Pancreas: A diagnostic liquid biopsy tool for the personalized management of type 2 diabetes.		03.2021- present	research
2	Structure, origin, and function of cell-free DNA: the hidden information towards precision pharmacotherapy			Postdoc research
3	DNA methylation as a minimally-invasive biomarker: development and validation of classifiers with prognostic and/or predictive clinical value in breast cancer therapy	Human Resources		Postdoc research

4	Investigation of the predictive and prognostic value of epigenetic biomarkers in breast cancer and other gynecological malignancies			PhD research
5	Detection of epigenetic biomarkers in plasma cell-free DNA of patients with breast cancer	DUTH Special Account (Research project sponsored by Pharmaceutical companies)	05.2016- 07.2017	research
6	Research on the prognostic role of different molecular markers in gastric cancer	DUTH Special Account (Research project sponsored by Pharmaceutical companies)		research
7	Biopest «Harmful Impacts of Plant Protection Products: Specialized biomarkers in the Public Health service and Information Campaign»			research
8	Bioepi «Detection and characterization of epigenetic biomarkers»	DUTH Special Account (Research project sponsored by Pharmaceutical companies)	01.2016- 04.2016	research